



# Roto NX

The universal hardware system for modern windows and balcony doors

## german made

### What does that mean?



The company Roto with headquarters in Leinfelden-Echterdingen near Stuttgart is a German group of companies. Roto has grown robustly – organically and consistently.

Our common values represent an identity that has enabled Roto, as a German company, to become a service leader. The value structure of our company is based on three pillars:

- Continuity, consistency and reliability
- Experience, ambition to succeed and vision
- Knowledge, ability and German engineering skills

As a technological pioneer, Roto develops intelligent product solutions that feature impressively precise technology and long service life.

Production and environmental management as well as logistics, irrespective of the manufacturing country, are based on German values such as reliability, thoroughness and vision.

German precision in design and development as well as quality and process management guarantee that we can provide outstanding performance and high-quality services – worldwide.

The consistent implementation of German values in quality specifications and standards ensures that our partners and customers can place their trust in us. This is “german made”.



## Company



The company Roto, based in Leinfelden-Echterdingen near Stuttgart, is a German group of companies that is wholly owned by families descended from the company's founder, Wilhelm Frank.

The group comprises three independent divisions which develop and produce hardware systems, roof windows and stairs for the construction industry and offer sophisticated services relating to windows and doors.

The Roto name has represented an inventive spirit and technological progress in compatible components for the construction industry since 1935.

The Roto Group is active all over the world with an extensive business portfolio and around 5000 employees.

Roto works on the basis of clear management and conduct principles to secure the position of the group as a success story and to ensure continued success.

Roto is inspired by the needs and expectations of customers, whether you are a builder, planner, architect, manufacturer or retailer of windows and doors, or manufacturer or specialist retailer for roofing.

# Roto | Window and Door Technology

## Worldwide



## Europe



### Roto Frank Austria GmbH

Kalsdorf (AT)



### Roto Frank Belarus

Minsk (BY)



### Roto Frank S.A.

Zaventem (BE)



### Roto Frank GmbH

Dietikon (CH)



### Roto Frank Fenster- und Türtechnologie GmbH

Leinfelden / Velbert (DE)



### Roto Frank Estonia

Tallinn (EE)



### Roto Frank S.A.

Lliçà de Vall (ES)



### Roto Frank Ferrures S.A.S.

Saint-Avoid (FR)



### Roto Elzett Certa Kft.

Lövő / Sopron (HU)



### Roto Frank Italia

San Donà di Piave (IT)



### Roto Frank Lithuania

Vilnius (LT)



### Roto Frank Latvijā

Jūrmala (LV)





**Roto Frank**  
Warsaw (PL)



**Roto Romania S.R.L.**  
Bucharest (RO)



**OOO Roto Frank**  
Noginsk (RU)



**Roto Frank Ltd. Sti.**  
Istanbul (TR)



**Roto Frank Okucia Budowl-  
ane Sp. z o.o.**  
Kiev (UA)



Asia



**Roto Frank Building Materi-  
als Co. Ltd.**  
Beijing (CN)



**Roto Frank Indonesia**  
Jakarta (ID)



**Roto Frank Asia – Pacific Li-  
aison Office India**  
Mumbai (IN)



**Roto Frank Asia-Pacific Pte.  
Ltd.**  
Singapore (SG)



**Roto Frank Asia-Pacific Pte.  
Ltd.**  
Hanoi (VN)



America



**Roto Frank Latina SA**  
Buenos Aires (ARG)



**Roto Frank Brasil Ltd.**  
São José (BR)



**Fermax Componentes Ltd.**  
Colombo (BR)



**Roto Fasco Canada Inc.**  
Mississauga, Ontario (CA)



**Roto Frank Chile**  
Santiago (CL)



**Roto Frank of America Inc.**  
Chester (US)



= Sales

= Production / sales



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# 1 Information

## 1.1 General



### INFO

All dimensions stated in millimetres. Other values are specified.

The following markings are used in this document.

### 1.1.1 Product features

| Symbol | Meaning                       |
|--------|-------------------------------|
|        | Cropping range                |
|        | Protrusion                    |
|        | Hardware axis                 |
|        | Description                   |
|        | Base                          |
|        | Supporting pin                |
|        | Drill hole for supporting pin |
|        | DIN left / right              |
|        | Backset                       |
|        | Corner drive, integrated      |
|        | Rebate clearance              |
|        | Rebate depth                  |
|        | Colour                        |
|        | Colour code                   |
|        | Sash rebate width             |





| Symbol                                                                              | Meaning                                  |
|-------------------------------------------------------------------------------------|------------------------------------------|
|    | Sash rebate height                       |
|    | Sash weight                              |
|    | Size                                     |
|    | Fixed handle height                      |
|    | Centred / variable handle height         |
|    | Information                              |
|    | Fixed toggle lever position              |
|    | Centred / variable toggle lever position |
|  | Couplable                                |
|  | Length                                   |
|  | Ventilator position                      |
|  | Material number                          |
|  | Installation type                        |
|  | Lifting mishandling device               |
|  | Groove                                   |
|  | Surface                                  |
|  | Item                                     |
|  | Profile system                           |
|  | Number of welded-on strikers             |
|  | Number of locking cams                   |



| Symbol | Meaning                       |
|--------|-------------------------------|
|        | Type of locking cams          |
|        | Bullet catch                  |
|        | Security class                |
|        | Night ventilation, integrated |
|        | Blocking device               |
|        | System                        |
|        | Adjustment                    |

## 1.1.2 Opening types

| Symbol | Meaning                                                 |
|--------|---------------------------------------------------------|
|        | Turn-Only window                                        |
|        | Tilt-Only window                                        |
|        | Tilt&Turn window                                        |
|        | Tilt&Turn arched window                                 |
|        | Tilt&Turn pitched window                                |
|        | Tilt&Turn triangular window                             |
|        | Turn-Only / Turn-Only floating-mullion window           |
|        | Turn-Only / Tilt&Turn floating-mullion window           |
|        | Turn-Only / Tilt&Turn floating-mullion window with arch |
|        | Triple-sashed windows                                   |



### 1.1.3 Colours

| Colour code, Roto | Colour code, standard | Colour                 |
|-------------------|-----------------------|------------------------|
| R01.1             | –                     | Natural silver         |
| R01.2             | –                     | Nickel silver          |
| R01.3             | –                     | Titanium               |
| R01.4             | –                     | Chrome                 |
| R01.5             | –                     | Silver                 |
| R02.2             | RAL 7016              | Anthracite grey        |
| R03.1             | –                     | Brass matt             |
| R03.2             | –                     | Brass, polished        |
| R03.3             | –                     | Gold                   |
| R03.4             | –                     | Stainless-steel design |
| R04.1             | RAL 8019              | Grey brown             |
| R04.3             | –                     | Olive brown            |
| R04.4             | RAL 8022              | Black brown            |
| R05.3             | –                     | Medium bronze          |
| R05.4             | –                     | Dark bronze            |
| R05.5             | –                     | Bronze                 |
| R06.2M            | RAL 9005, matt        | Jet black, matt        |
| R06.2             | RAL 9005              | Jet black              |
| R06.4M            | –                     | Black, matt            |
| R07.1             | RAL 9010              | Pure white             |
| R07.2             | RAL 9016              | Traffic white          |
| R07.3             | RAL 9001              | Cream                  |
| SP. COL.          | SP. COL.              | Special colour         |
| R00.0             | Untreated             | Uncoated               |

#### Colour examples



R01.1



R01.2



R01.3



R03.1



R04.1



R04.4



R05.3



R05.5



R06.2



R07.2



#### INFO

Colours may deviate in the illustration.

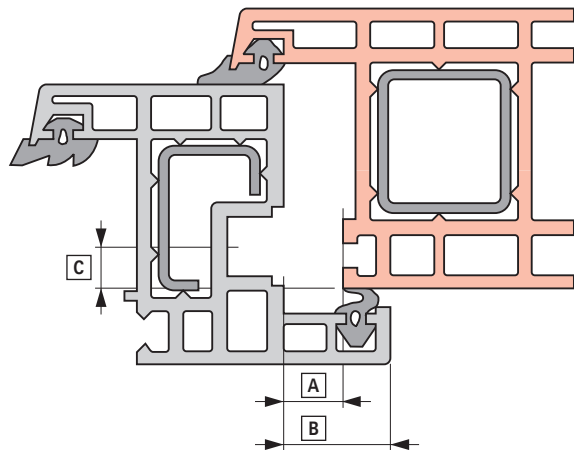
### 1.1.4 Abbreviations

| Abbreviation | Meaning                    |
|--------------|----------------------------|
| HA           | Hardware axis              |
| T-O          | Turn-Only sash             |
| DIN L / R    | DIN left / right           |
| T&T          | Tilt&Turn hardware         |
| SRW          | Sash rebate width          |
| SRH          | Sash rebate height         |
| S.kg         | Sash weight                |
| BSec         | Basic security             |
| Y            | Yes                        |
| kg           | Kilograms                  |
| VT           | Vertical tilting           |
| KU           | Couplable                  |
| Max.         | Maximum                    |
| mm           | Millimetres                |
| CL           | Centre lock                |
| N            | No                         |
| LMD          | Lifting mishandling device |
| Not sh.      | Not shown                  |
| RC           | Resistance class           |



| Abbreviation | Meaning     |
|--------------|-------------|
| SEC          | Security    |
| TF           | TiltFirst   |
| etc.         | et cetera   |
| e.g.         | For example |

### 1.1.5 System – PVC



| System   | Rebate clearance [A] | Overlap width [B] | Hardware axis [C] |
|----------|----------------------|-------------------|-------------------|
| 12/18-9  | 12 mm                | 18 mm             | 9 mm              |
| 12/18-13 |                      |                   | 13 mm             |
| 12/20-9  |                      | 20 mm             | 9 mm              |
| 12/20-13 |                      |                   | 13 mm             |
| 12/21-13 |                      | 21 mm             | 13 mm             |
| 12/22-13 |                      | 22 mm             | 13 mm             |

### 1.1.6 Copyright protection

The contents of this document are copyright-protected. This content can be used when working with the hardware. Any other use is not permitted without written permission of the manufacturer.

## 1.2 Roto NX



### One hardware system – limitless possibilities

Roto wouldn't be Roto if we didn't continuously improve. Roto has continuously developed the Tilt&Turn hardware across several product generations and, as a technological leader, has provided new impetus in the window and door market time and again for decades. We consistently focus on the needs of the market and our customers.

With Roto NX, we are now taking the next step and offering a new Tilt&Turn hardware system based on the proven Roto NT – with new features and functions that make the system a safe investment for the future. We retained what worked well and improved on many aspects. With Roto NX, we are presenting a future-proof hardware system that reflects the reliable market intuition and innovation of the global brand Roto and contributes to the success of our customers in the long term.

### New performance, new possibilities

Smart Home, burglary protection, comfort requirements, sound insulation, energy efficiency – these are the topics that are preoccupying the sector. Sometimes this requires ambitious ideas, such as TiltSafe (burglary inhibition in the tilt position in accordance with RC 2) for PVC, timber and aluminium windows. But sometimes even small changes can have a big impact. As a result of innovative further developments to individual components and assemblies, we were able to decisively improve our Tilt&Turn hardware again and prepare it for new challenges. For instance, Roto NX now makes it possible to cater to the trend for modern windows with ever larger glass surfaces. The focus on the benefits is always on efficiency, security, comfort and design.

### The safe choice – in every aspect

Roto NX provides tangible benefits: minimum production and installation effort, cost and time saving on storage and logistics, increased functional safety and therefore ultimately also less service work. In addition, not only window manufacturers enjoy economical benefits with Roto NX, but end consumers too thanks to optimised functionality and groundbreaking innovations, for example due to increased protection against burglary, improved design and higher room comfort and operating convenience. This means that Roto is the safe choice for everyone. And it also makes Roto NX the best Roto hardware system of all time – from the global market leader for all window manufacturers and installation companies, builders and property owners across the globe.



## 1.2.1 Always the right decision

The Roto NX Tilt&Turn hardware system is innovative in terms of its efficiency, security, comfort and design. The future-proof hardware for PVC, timber and aluminium windows offers tangible benefits for fabricators and end consumers.



### Efficiency

Roto NX stands for a high level of efficiency. The system guarantees simple and fast assembly during production and installation and reduces the storage and logistics expenditure. This saves time and money. In addition, Roto NX ensures a high product quality and long-term functionality. This all makes Roto a reliable partner – now and in the future.



### Comfort

Roto NX stands for increased comfort. The system impresses with a high level of operating convenience, simple handling and ideal functionality. Roto NX also improves the living comfort – for example by optimised ventilation properties for a balanced room climate or through incorporation into the home automation.



### Security

Roto NX stands for a high level of security. The new TiltSafe components offer advanced burglary protection – now even in the tilt position (burglary inhibition in accordance with RC 2). Working with the hardware itself is also becoming safer and permits higher loads even in the standard version, for example. The product quality and the breadth and depth of the range additionally ensure maximum reliability and decision making certainty.



### Design

Roto NX stands for contemporary design and ensures an attractive appearance from all angles, for example due to elegant cover caps, sophisticated powder coatings and concealed screws on the surface-mounted hinge sides. In addition, the system allows a modern room design with large glass surfaces thanks to its high loads.

## 10-year warranty

The toughest testing requirements that Roto places on its products have a significant impact on the durability of the hardware. The systematic quality checks with the most stringent testing requirements ensure that each individual Roto NX component meets our quality standards. Only this example quality management allows us to set a pioneering standard: the 10-year performance warranty for our partners – this is our benchmark.



## The Roto NX security concept

Even the standard version of Roto NX features basic security on the sash bottom edge. The sample combinations for safety windows in accordance with DIN V ENV 1627–1630 achieve the greatest burglar-inhibiting effect. This standard includes an overall test of all of a window's sub-elements.



## 1.2.4 A universal locking system



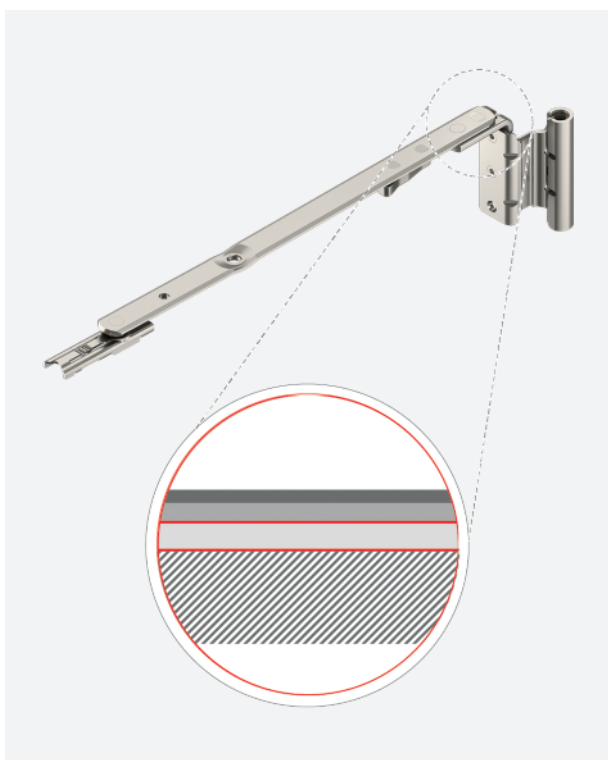
### The Roto NX locking concept

All strikers in the Roto NX hardware system have identical screw axes. This concept enables the sash to be prefitted with security locking cams and subsequently retrofitted in the frame with security strikers (zinc or steel). All locking cam versions can be combined with all strikers.

Roto NX offers three different locking cam versions, which differ in their use and their adjustment possibilities.

- **E locking cam** gasket-compression adjustable cam
- **P locking cam** gasket-compression adjustable security mushroom cam
- **V locking cam** height and gasket-compression adjustable security mushroom cam

## 1.2.5 Maximum surface protection



### Surface structure of a connection element

- Optical seal
- Chromium VI-free passivation
- Zinc layer
- Base material: steel

### Roto Sil

Roto Sil provides optimum surface protection for all components from the Roto NX modular hardware system. This innovative technology has made it possible to create a surface which boasts outstanding corrosion resistance.

- Matt silver look for a sophisticated appearance
- Extremely durable and scratch-resistant
- Whole coating system is free from chromium VI compounds
- Non-toxic to the environment

### Roto Sil Level 6

Roto Sil Level 6 is based on an innovative coating technology with microcrystalline structure. In combination with Roto Sil, Roto Sil Level 6 is an advanced standard for connection components subject to high stress, such as rivets, bolts and sliding elements.

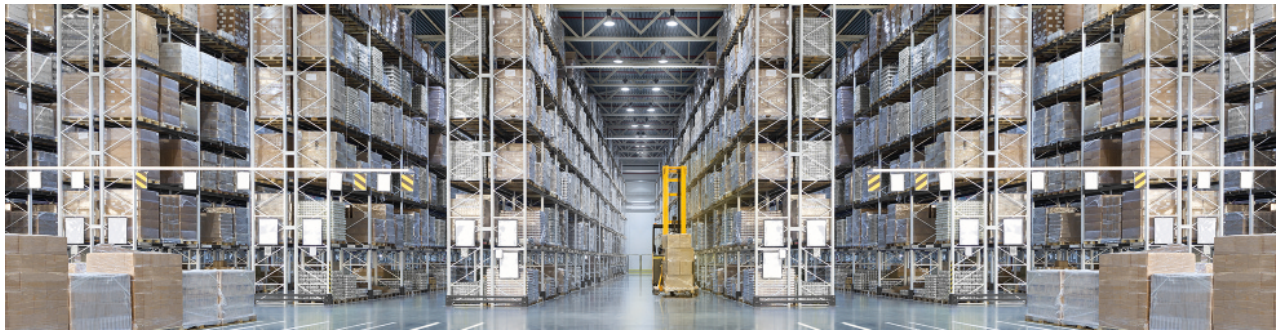
This means that the entire Tilt&Turn hardware system exceeds the requirements of the highest corrosion protection class (class 5).

Roto Sil Level 6 boasts exceptional corrosion resistance. Paired with the surface's excellent mechanical resistance, Roto Sil Level 6 is setting new standards for hardware technology: for the first time, delicate parts such as rivets or sliding elements can be protected against corrosion and abrasion in the long term.





## 1.3 Storage conditions



### **Protecting components against dirt and dust**

Always keep the containers closed, and always cover open hardware containers or goods stored open (i.e. with a layer of cardboard).

### **Protecting components against mechanical damage**

Only transport and handle the containers using suitable means of transport or conveyance (forklifts, lifting devices and roller belts, etc.). Only stack pallets and cardboard boxes (during transport) to the maximum height specified in the printed instructions on the packaging.

### **Protecting components against direct moisture and wet**

The packaging must remain dry and the components must not get wet. This applies to storage and transport, as well as for unloading and loading procedures. Where appropriate, plastic protective sheets or similar are to be used during outdoor transport (i.e. on-site transport) when raining.

Only store components in suitable closed rooms and not outdoors. Condensation must absolutely be avoided during the entire duration of transport and storage.

### **If containers nevertheless get wet...**

Immediately unpack the components from the wet containers, dry the components and check for damage (signs of corrosion). In any case, repack the usable components when dry with new packaging material



## 1.4 Sustainability and the environment



### **The Roto Group mission – We go further**

As a reliable partner, we consider sustainability to be a corporate responsibility – for our actions today and their impact on tomorrow.

Alongside measures to reduce greenhouse gas emissions, we create long-lasting benefits for our customers through durable and future-proof products.

We are only able to do this with the support of everyone at Roto. To this end, we count on a pleasant working environment where every member of staff feels appreciated, laying the foundations for continuous development of the group.

### **Products**

The Roto Group creates a sense of trust and security by developing products with a clear material composition and by ensuring it uses materials that do not have any adverse effects on people or the environment. It goes without saying that Roto fulfils legal requirements, such as those according to REACH and RoHS, and is guided by the stipulations of the German Supply Chain Due Diligence Act (LkSG).

### **Production processes**

We follow LEAN principles and aim to minimise the use of resources in production.

### **Disposal**

The materials used in the hardware can be disposed as mixed scrap so that it can be separated and recycled.

### **Packaging**

The majority of the packaging we use is recyclable, stackable and made from reinforced cardboard, as well as reusable packaging, such as Schäfer boxes, glitterboxes and Euro pallets.

In rare cases, we also use steel or PVC strapping, PE film, timber support frames, single-use timber pallets, cable ties and elastomer cord.

### **Returning packaging material**

Our packaging with the Interzero® logo is accepted free of charge by every Interzero® disposal partner. The directory of your local disposal partners can be requested nationwide from headquarters of Interzero® Circular Solution Germany GmbH in Cologne using the following telephone number: +49 2203 9147-1500 .

The Roto Interzero® number is 243766.

### **Further development**

Roto regularly reviews other options for optimising its processes with regard to legal requirements and internal standards. Follow us on our homepage:





## 1.5 Gütegemeinschaft Schlösser und Beschläge e.V.

Everything you need to know about the correct use and maintenance of hardware for windows and balcony doors can be found in the current directives issued by Gütegemeinschaft Schlösser und Beschläge e.V.

|                                                                                                                                                                                                                 |      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
|                                                                                                                                |      |
| Gütegemeinschaft Schlösser und Beschläge e.V.<br>ORIGINALFASSUNG Ausgabe: 2020-01-02                                                                                                                            |      |
| <b>Reihe:</b><br>Beschläge für Fenster und Fenstertüren<br>Vorlesen: Lesen und Verstehen (Lernfeld 1)                                                                                                           |      |
| <b>Inhalt:</b>                                                                                                                                                                                                  |      |
| 1. Anwendungsbereich dieser Richtlinie                                                                                                                                                                          | 4    |
| 2. Spezifikationen                                                                                                                                                                                              | 5    |
| 3. Die Gruppenbezeichnung                                                                                                                                                                                       | 10   |
| 4. Allgemeine Funktion und Anwendungsbereich der Beschläge                                                                                                                                                      | 15   |
| 5. Funktionsbeschreibung                                                                                                                                                                                        | 18   |
| 6. Zeichnung                                                                                                                                                                                                    | 20   |
| 7. Wartung, Pflege und Inspektion                                                                                                                                                                               | 22   |
| <b>Hinweise:</b><br>Gütegemeinschaft Schlösser und Beschläge e.V.<br>Zentrum für Qualität<br>10555 Berlin<br>Hauptstr. 40, 10555 Berlin<br>Tel.: +49 (0)30 631 11-11<br>Fax: +49 (0)30 631 11-12<br>www.ggsl.de |      |
| <b>Reihe:</b><br>Technische Angaben zur Produktgruppe<br>Beschläge für Fenster und Fenstertüren<br>(Lernfeld 1)                                                                                                 |      |
| Reihe: 101                                                                                                                                                                                                      | 1/20 |

### VHBH

Hardware for windows and balcony doors –  
Guidelines/advice on the product and on liability

|                                                                                                                                                                                                                 |      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
|                                                                                                                                |      |
| Gütegemeinschaft Schlösser und Beschläge e.V.<br>ORIGINALFASSUNG Ausgabe: 2020-01-02                                                                                                                            |      |
| <b>Reihe:</b><br>Beschläge für Fenster und Fenstertüren<br>Vorlesen: Lesen und Verstehen (Lernfeld 1)                                                                                                           |      |
| <b>Inhalt:</b>                                                                                                                                                                                                  |      |
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| 2. Spezifikationen                                                                                                                                                                                              | 5    |
| 3. Die Gruppenbezeichnung                                                                                                                                                                                       | 10   |
| 4. Allgemeine Funktion und Anwendungsbereich der Beschläge                                                                                                                                                      | 15   |
| 5. Funktionsbeschreibung                                                                                                                                                                                        | 18   |
| 6. Zeichnung                                                                                                                                                                                                    | 20   |
| 7. Wartung, Pflege und Inspektion                                                                                                                                                                               | 22   |
| <b>Hinweise:</b><br>Gütegemeinschaft Schlösser und Beschläge e.V.<br>Zentrum für Qualität<br>10555 Berlin<br>Hauptstr. 40, 10555 Berlin<br>Tel.: +49 (0)30 631 11-11<br>Fax: +49 (0)30 631 11-12<br>www.ggsl.de |      |
| <b>Reihe:</b><br>Technische Angaben zur Produktgruppe<br>Beschläge für Fenster und Fenstertüren<br>(Lernfeld 1)                                                                                                 |      |
| Reihe: 101                                                                                                                                                                                                      | 1/20 |

### VHBE

Hardware for windows and balcony doors –  
Guidelines/advice for end-users

|                                                                                                                                                                                                                 |      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
|                                                                                                                              |      |
| Gütegemeinschaft Schlösser und Beschläge e.V.<br>ORIGINALFASSUNG Ausgabe: 2020-01-02                                                                                                                            |      |
| <b>Reihe:</b><br>Beschläge für Fenster und Fenstertüren<br>Vorlesen: Lesen und Verstehen (Lernfeld 1)                                                                                                           |      |
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| 2. Spezifikationen                                                                                                                                                                                              | 5    |
| 3. Die Gruppenbezeichnung                                                                                                                                                                                       | 10   |
| 4. Allgemeine Funktion und Anwendungsbereich der Beschläge                                                                                                                                                      | 15   |
| 5. Funktionsbeschreibung                                                                                                                                                                                        | 18   |
| 6. Zeichnung                                                                                                                                                                                                    | 20   |
| 7. Wartung, Pflege und Inspektion                                                                                                                                                                               | 22   |
| <b>Hinweise:</b><br>Gütegemeinschaft Schlösser und Beschläge e.V.<br>Zentrum für Qualität<br>10555 Berlin<br>Hauptstr. 40, 10555 Berlin<br>Tel.: +49 (0)30 631 11-11<br>Fax: +49 (0)30 631 11-12<br>www.ggsl.de |      |
| <b>Reihe:</b><br>Technische Angaben zur Produktgruppe<br>Beschläge für Fenster und Fenstertüren<br>(Lernfeld 1)                                                                                                 |      |
| Reihe: 101                                                                                                                                                                                                      | 1/20 |

### TBDK

Attachment of supporting fitting components  
for turn-only and tilt&turn fittings with defini-  
tions for turn-only and tilt&turn fittings and their  
possible installation positions

## 1.6 Certifications

### 1.6.1 Institute for Window Technology (ift)

Hardware for windows and balcony doors – QM 328

| Zertifikat / Certificate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ift<br>ROSENHEIM                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Zertifikatsnr. / Certificate No.: 228-9004105-5-8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| <b>Dreh- und Drehkippschläge für Fenster und Fenstertüren</b><br><i>Turn and tilt-turn hardware for windows and casement doors</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| <b>Produkt</b><br><i>product</i><br><b>max. Flügelgewicht</b><br><i>max. casement weight</i><br><b>Einsatzbereich</b><br><i>field of application</i><br><b>Hersteller</b><br><i>manufacturer</i><br><b>Produktionsstandort</b><br><i>production site</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Roto NX</b><br><b>300 kg</b><br><b>Systeme mit entsprechender Beschlagsaufnahme</b><br><i>Systems with suitable hardware groove</i><br><b>Roto Frank Fenster- und Türtechnologie GmbH</b><br>Wilhelm-Frank-Platz 1, DE 70771 Leinfelden-Echterdingen<br><b>Roto Frank Fenster- und Türtechnologie GmbH</b><br>Wilhelm-Frank-Platz 1, D-70771 Leinfelden-Echterdingen<br><b>Roto Frank Austria GmbH</b><br>Lapp-Finze-Str. 21, AT-8401 Kalsdorf bei Graz<br><b>Roto Elzett Ceria Kft.</b><br>Kossuth Lajos u. 25, H-9461 Lévö | <b>Grundlage(n) / Basis:</b><br>ift-Zertifizierungsprogramm für Beschläge<br><i>ift-certification scheme for hardware</i><br>ift Zertifizierung QM328.2016 01<br>EN 1191<br>EN 12400<br>Klasse 3<br><i>class 3</i><br><b>Dauerfunktion</b><br><i>resistance to repeated opening and closing</i><br>EN ISO 9227<br>EN 1670<br>Klasse 5<br><i>class 5</i><br><b>Korrosionsschutz</b><br><i>corrosion protection</i> |  |
| <p>Mit diesem Zertifikat wird bescheinigt, dass das benannte Bauprodukt den Anforderungen des zugrundeliegenden ift-Zertifizierungsprogramms in der aktuellen Fassung entspricht.</p> <p> <input checked="" type="checkbox"/> Erstellung von Produktfamilien des aufgeführten Bauproduktes und Typprüfung durch eine akkreditierte Prüfstelle nach EN 13126-8:2017 unter Berücksichtigung der Anwendungsdiagramme<br/> <input checked="" type="checkbox"/> Einführung und Aufrechterhaltung einer werkseigenen Produktionskontrolle durch den Hersteller<br/> <input checked="" type="checkbox"/> Erstinspektion des Werkes und der werkseigenen Produktionskontrolle durch ift-Zert<br/> <input checked="" type="checkbox"/> kontinuierliche Fremdbewachung des Werkes und der werkseigenen Produktionskontrolle durch ift-Zert           </p> <p>Dieses Zertifikat wurde erstmals am 26.02.2018 ausgestellt. Die aktuelle Version gilt bis zum 05.03.2028, wenn sich zwischenzeitlich die Festlegungen in der oben angeführten technischen Spezifikation oder die Herstellungsbedingungen im Werk oder in der werkseigenen Produktionskontrolle selbst nicht wesentlich verändert haben.</p> <p>Das Zertifikat darf nur unverändert vervielfältigt werden. Alle Änderungen der Voraussetzungen für die Zertifizierung sind ift-Zert mit den erforderlichen Nachweisen unverzüglich schriftlich anzuzeigen.</p> <p>Das Unternehmen ist berechtigt das benannte Bauprodukt gemäß der ift-Zeichensatzung mit dem ift-zertifiziert-Zeichen zu kennzeichnen.</p> <p>Dieses Zertifikat enthält 2 Anlagen.</p>            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| <p>This certificate attests that the building product mentioned fulfils the requirements of the underlying ift-certification scheme in its current version.</p> <p> <input checked="" type="checkbox"/> completion of product families of the building product listed and type-testing by an accredited testing body as per EN 13126-8:2017 based on the application diagrams<br/> <input checked="" type="checkbox"/> implementation and maintenance of a factory production control by the manufacturer<br/> <input checked="" type="checkbox"/> initial inspection of the production site and the factory production control by ift-Zert<br/> <input checked="" type="checkbox"/> continuous third-party control of the production site and the factory production control by ift-Zert           </p> <p>This certificate was first issued on 26.02.2018. The current version is valid until 05.03.2028, as long as neither the conditions laid down in the technical specification listed above nor the manufacturing conditions in the production site nor the factory production control itself are modified significantly.</p> <p>The reproduction of the certificate without any change from the original is permitted. Any changes to the prerequisites applicable to certification shall be immediately communicated in writing to ift-Zert accompanied by the necessary evidence.</p> <p>The company is authorized to affix the "ift-certified"-mark to the building product mentioned according to the ift-rules on the use of the "ift-certified"-mark.</p> <p>This certificate contains 2 annexes.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| <b>ift Rosenheim</b><br>23.01.2024<br><b>Gültig bis / Valid until:</b> 05.03.2028<br><b>Christian Kehr</b><br>Leiter der ift-Zertifizierungs- und Überwachungsstelle<br><i>Head of ift Certification and Surveillance</i><br>PZ Vertragsnr. / Contract No. 228 9004105                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Identitäts-Check</b><br><i>Identity check</i><br><br>www.ift-rosenheim.de/<br>ift-zertifiziert<br>ID: 400-8867D                                                                                                                                                                                                                                                                                                |  |
| <p>ift Rosenheim GmbH<br/>           Theodor-Ebert-Str. 7-9<br/>           D-85336 Rosenheim</p> <p>Kontakt<br/>           Tel: +49 89 31 261-0<br/>           Fax: +49 89 31 261-280<br/>           www.ift-rosenheim.de</p> <p>Prüfung und Zertifizierung – EN ISO/IEC 17025<br/>           Inspektion – EN ISO/IEC 17022<br/>           Zertifizierung Produkte – EN ISO/IEC 17065<br/>           Zertifizierung Managementsysteme – EN ISO/IEC 17021</p> <p>ift Body 072<br/>           ift-Zert: BfR 16</p> <p>DAKKS<br/>           Deutsche Akkreditierungsstelle<br/>           D-53117 Bonn</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                   |  |

The sales employee responsible for your region can provide you with up-to-date certificates.



## 1.6.2 Quality management

The certification in accordance with the international standard DIN EN ISO 9001 certifies that Roto plans, documents and appropriately implements the entire development, production and sales process systematically. Starting with development and design through to quality planning, production and assembly right through to sales and customer service.

The certification is an external indication of the quality awareness practised at Roto:

- Roto's objective is to ensure continuous product and service improvements for the benefit of its customers.
- Roto offers its customers innovative, environmentally friendly and technically sophisticated architectural hardware technology.
- Roto products are supplied punctually worldwide with constant guaranteed quality.
- Roto's comprehensive view regards all business activities – including all the activities within the company – to be the key to achieving long-term corporate success.
- Roto employees are supported in their personal development and fulfil Roto's high quality requirements in their day-to-day work. Their work is performance and goal-oriented.

| Certificate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                             | ift<br>ROSENHEIM |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Certificate-No.: 791-9004105-1-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                             |                  |
| <b>Subject</b><br><b>Quality Management System DIN EN ISO 9001:2015</b>                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Basis:</b><br>ISO 9001                                                                                                                                                                                                                                                                                                                                                                                   |                  |
| <b>Company (Headquarters)</b><br><b>Roto Frank Fenster- und Türtechnologie GmbH</b><br><b>Wilhelm-Frank Platz 1</b><br><b>DE - 70771 Leinfelden-Echterdingen</b>                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                           |                  |
| <b>Scope of the headquarters</b><br><b>Development, design, production and sales of window and door technology</b>                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Validity</b><br>The certificate is valid for three years. During this time the company is surveyed annually. The certificate is only valid in combination with the accompanying certification and surveillance contract. If a Q-Zert shall be informed immediately in writing of all changes to the qualifications for certification and supplied with copies of all resulting new management documents. |                  |
| <b>Further sites</b><br>see appendix to the certificate                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Notes on Publication</b><br>The certificate shall only be reproduced unchanged. Regulations for the use of reports are given in the „Allgemeine Bedingungen für die Zertifizierung von Managementsystemen“.                                                                                                                                                                                              |                  |
| <b>Scopes of the sites</b><br>This Certificate has been issued on the basis of the rules for sites certification. The higher ranking company (headquarters) is responsible for the maintenance and further development of the management system as well as the control of central tasks.                                                                                                                                                                                                                             | The company is entitled to use the "ift-certified" mark in accordance with the ift "Zeichensatzung" (Rules on the use of the ift-mark).                                                                                                                                                                                                                                                                     |                  |
| <b>Rules for sites certification</b><br>During the certification-audit it was demonstrated that the company and all sites listed in this certificate have established and are applying a quality management system in accordance with DIN EN ISO 9001:2015 "Quality Management Systems-Requirements".                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                             |                  |
| <br>Christian Kehrer<br>Head of Certification and Surveillance Body<br>ift Rosenheim<br>18.05.2024                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                             |                  |
| Initial certification: 18.05.2021<br>Contract No.: 791 9004105<br>Valid until: 17.05.2027                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                             |                  |
| <br><b>Identity Check</b><br><br>www.ift-rosenheim.de/<br>ift-zertifiziert<br>ID: 266-BDDA2                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                             |                  |
| <div> <div>ift Rosenheim GmbH<br/>Thudova-Platz-St. 7-9<br/>D-80620 Rosenheim</div> <div> Contact:<br/> Phone: +49 89 351 261-0<br/> Fax: +49 89 351 261-390<br/> info@ift-rosenheim.de<br/> www.ift-rosenheim.de </div> <div> Accredited Certification Body<br/> for Management Systems<br/> DIN ISO/IEC 17021:1 </div> <div>   </div> </div> |                                                                                                                                                                                                                                                                                                                                                                                                             |                  |

### 1.6.3 International Technology Centre (ITC)

Roto has owned a modern International Technology Centre (ITC) at its Leinfelden headquarters since October 1996. This facility is available for both our own material and product testing as well as for inspecting finished products made by Roto market partners.



The ITC is accredited in accordance with DIN EN ISO / IEC 17025 and has the expertise required to perform tests in areas including mechanical technological testing of facade elements such as windows, doors and hardware, as well as metallic materials.

Achieving accreditation in accordance with DIN EN ISO / IEC 17025 represents the highest distinction for a test institute in the private sector. The requirements for this are an extensive quality management system, trained personnel, high-quality test rigs and measuring instruments, as well as continuous external monitoring by the accreditation authorities.







5. **Result:** output of a detailed data sheet with a technical illustration and a complete parts list with editable order numbers, descriptions and individual and total prices.

#### **Intelligent additional functions simplify your processes**



Roto Con Orders makes it easy for you to simplify and accelerate your processes. A large number of useful functions are available to help you do this:

- Store your own company addresses and logos in the header of your offers
- Create and manage customer-specific projects
- Generate individual customer hardware templates
- Integrate a discount structure system
- Material master management
- Due to its responsive design, it can be used on all devices such as PCs, tablets, and smartphones

#### **Get started straight away thanks to web-based solution**

Roto Con Orders is a web-based solution that you can access around the world and around the clock. You only require a computer with a web browser and Internet access for this purpose. To work with the online hardware configurator, please register once with your e-mail address in the portal for dealers and manufacturers at:

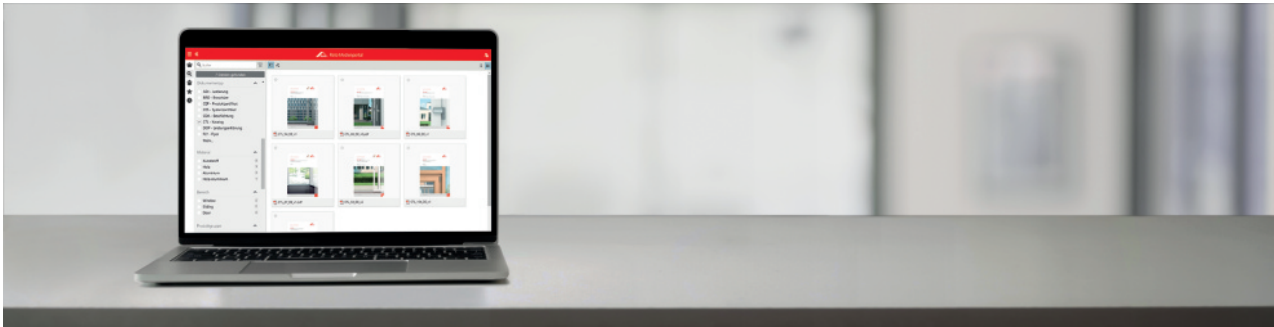


[www.roto-frank.com](http://www.roto-frank.com)





## 1.8 Roto media portal



### Simple and quick

The Roto media portal is where all media is available, such as catalogues, installation instructions, brochures and interactive installation videos. Access to this portal is optimised for PCs, laptops and mobile devices.

The clear user interface and the numerous search options ensure that all available media can be found simply and quickly. Content can be read directly in the Roto media portal or downloaded for later.

The Roto media portal can be accessed via the “Downloads” link in the “Service” main menu item on the Roto website or directly using the links below.



[www.roto-frank.com](http://www.roto-frank.com)

### Media for Roto NX

This catalogue offers an overview of the Roto NX product range. All other media relating to Roto NX can be accessed via the Roto media portal. The links below provide direct access.



[www.roto-frank.com](http://www.roto-frank.com) | Roto NX



## 1.9 Further Roto products

### 1.9.1 Roto Window

**Tilt&Turn** – Tilt&Turn hardware systems for windows and balcony doors

**Timber, PVC and aluminium for a 16 mm hardware groove**



#### **Roto NX | T**

The universal hardware system for modern windows and balcony doors for timber profiles



#### **Roto NX | P**

The universal hardware system for modern windows and balcony doors for PVC profiles



#### **Roto NX | A16**

The universal hardware system for modern windows and balcony doors for aluminium profiles with a 16 mm hardware groove



#### **Roto NX | Power Hinge**

The universal hardware system for modern windows and balcony doors for timber profiles



#### **Roto NX | C**

The universal hardware system for modern windows and balcony doors for timber and PVC profiles



#### **Roto NX | Designo A16**

The universal hardware system for modern windows and balcony doors for aluminium profiles with a 16 mm hardware groove

### **Aluminium**



#### **Roto AL**

Universal hardware for aluminium windows and balcony doors



#### **Roto AL Designo**

Concealed hardware for aesthetic aluminium windows and balcony doors

**Outward Opening** – Hardware systems for outward opening windows



**Roto FS** Kempton

Stainless-steel friction stays for outward opening windows



**Roto PS** Aintree

Parallel stainless-steel friction stays for outward opening windows



**Roto FRH** Uni

Fully reversible hinges for outward opening windows

## 1.9.2 Roto Sliding

**Roto Patio** – High-quality sliding windows and sliding doors



**Roto Patio** Fold

The robust hardware system for large Fold&Slide elements



**Roto Patio** Lift

The versatile hardware system for large Lift&Slide elements



**Roto Patio** Alversa

The universal hardware system for parallel Tilt&Slide elements



**Roto Patio** Inowa

The smart hardware system for tightly sealed parallel retraction sliding elements



**Roto Patio** Inline

The reliable hardware system for Parallel Sliding elements



### 1.9.3 Roto Door

**Roto Safe** – The modular multipoint locking system for doors



#### **Roto Safe H**

Mechanical multipoint lockings for lever-handle-operated doors



#### **Roto Safe C**

Mechanical multipoint lockings for cylinder-operated doors



#### **Roto Safe A**

Mechanical-automatic multipoint lockings for doors



#### **Roto Safe E**

Electromechanical multipoint lockings for doors



#### **Roto Safe P**

Mechanical multipoint lockings for escape and panic doors

**Roto Solid** – Comprehensive range of door hinges



#### **Roto Solid S**

Screw-on hinges for doors



#### **Roto Solid B**

Butt hinges for doors



#### **Roto Solid C**

Concealed hinges for doors

**Roto Eifel** – Thresholds for doors and balcony doors



#### **Roto Eifel**

The varied range of thresholds for doors and balcony doors



## 1.9.4 Roto Equipment

**Drive&Control** – Electronic components for windows and doors



### **Roto E-Tec Drive**

The concealed drive for windows



### **Roto E-Tec Control**

Wired sensors for security technology and room climate



### **Roto Com-Tec Sensor**

Wireless sensors integrated in hardware for home security

**Handles** – Handles for all opening types



### **Roto Swing**

The modern handle line



### **Roto Line**

The classic handle line



### **Roto Samba**

The classic yet modern handle line



### **Roto Freestyle**

Solutions for all opening types

**Fix&Glazing** – Installation and glazing solutions for windows and doors



### **Roto Glas-Tec**

Customised solutions for safe glazing



## **1.10 Contact**

**Roto Frank**  
**Fenster- und Türtechnologie GmbH**

Wilhelm-Frank-Platz 1  
70771 Leinfelden-Echterdingen  
Germany  
Phone +49 711 7598 0  
Fax +49 711 7598 253  
[info@roto-frank.com](mailto:info@roto-frank.com)  
[www.roto-frank.com](http://www.roto-frank.com)



## General information

See page 34

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## Hinge side P

Turn-Only / Tilt&Turn hardware for rectangular windows 35

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Tilt&Turn hardware for pitched windows 39

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Tilt&Turn hardware for arched windows 47

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Tilt-Only hardware for rectangular windows (standard) 49

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Turn-Only overlap hinge for rectangular windows 52

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Tilt-Only overlap hinge for rectangular windows 53

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Comfort windows 55

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## Hinge side C

Turn-Only / Tilt&Turn hardware for rectangular windows 56

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Turn-Only hardware for centre sash in a triple-sashed window (standard) 59

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Tilt-Only hardware for rectangular windows (standard) 60

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## Hinge side Designo (HA 13)

Turn-Only / Tilt&Turn hardware for rectangular windows 61

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Tilt-Only hardware for rectangular windows 64

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## 2 Application diagrams

### 2.1 General information

#### Hardware functional safety

The following points must be noted in order to ensure the functional safety of the hardware at all times:

1. Correct installation of hardware components in accordance with the installation instructions.
2. Correct installation of elements during window installation.
3. The window manufacturer must pass the maintenance and operation instructions and the product liability guidelines (if applicable) on to the user.
4. The hardware as a whole may only consist of original Roto system components. The use of components from other manufacturers excludes any liability.

#### Product liability regulations

Electrogalvanised and passivated steel fenestration screws are to be used to fasten the hardware components.

The window manufacturer must ensure that the hardware components are adequately secured; the screw manufacturer must be involved if required.

When attaching security-relevant, load-bearing hardware components (hinge sides), the manufacturer of windows and balcony doors must prove the specified forces in accordance with the table below (excerpt from Directive TBDK issued by the Gütegemeinschaft Schlösser und Beschläge e. V. quality assurance association) by means of testing and ensure them on their product.

| Sash weight | Tractive force in newtons (N) <sup>[1]</sup> |
|-------------|----------------------------------------------|
| 60 kg       | 1650 N                                       |
| 70 kg       | 1900 N                                       |
| 80 kg       | 2200 N                                       |
| 90 kg       | 2450 N                                       |
| 100 kg      | 2710 N                                       |
| 110 kg      | 3000 N                                       |
| 120 kg      | 3250 N                                       |
| 130 kg      | 3525 N                                       |
| 140 kg      | 3900 N                                       |
| 150 kg      | 4200 N                                       |



#### INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

Do not use any acid cross-linked sealing compounds that could lead to corrosion of the hardware components. The spacer block guidelines for glazing methods must be complied with.

#### Product liability – liability exclusion

The hardware manufacturer is not liable for malfunctions or damage to the hardware, or to windows and balcony doors equipped with the hardware, if this has been caused by insufficient invitation to tender or failure to comply with the installation specifications and application diagrams, or if the hardware has been subjected to increased levels of dirt.

The warranty only covers original Roto components.

#### Profile classification – application ranges

The individual application diagrams must strictly be complied with.

When determining the maximum permitted sash formats and sash weights, the values specified by the profile manufacturers and system owners must not be exceeded either.

[1] Permissible tolerance -10%





## 2.2 Hinge side P

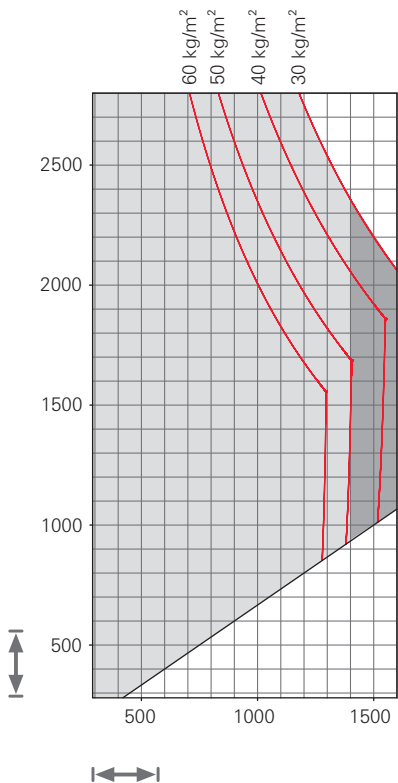
### 2.2.1 Turn-Only / Tilt&Turn hardware for rectangular windows

#### 2.2.1.1 130 kg



#### INFO

For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO\_347 (Roto application diagrams).



□ = Impermissible application range

■ = Additional stay arm required

#### Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.



#### INFO

Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 3525 N
- on the pivot rest 3760 N

The specifications in the application diagram refer to the glass weight in kg/m<sup>2</sup>.

1 mm/m<sup>2</sup> glass thickness  $\approx$  2.5 kg

#### Application range

|  |                    | Basic security | Security<br>RC 1 N | RC 2 / RC 2 N | RC 3          |
|--|--------------------|----------------|--------------------|---------------|---------------|
|  | Sash rebate width  | 290 – 1600 mm  | 320 – 1600 mm      | 320 – 1400 mm | 490 – 1400 mm |
|  | Sash rebate height | 280 – 2800 mm  | 280 – 2800 mm      | 510 – 2800 mm | 600 – 2800 mm |
|  | Sash weight        | Max. 130 kg    | Max. 130 kg        | Max. 130 kg   | Max. 130 kg   |



#### INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).



#### INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

If the standard version does not achieve the specified values during the test, alternative total weights can be tested. The corresponding application diagrams can be found in BRO\_371.



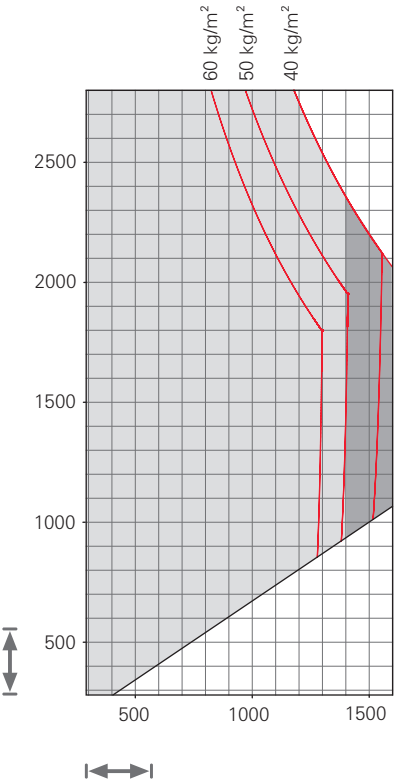


2.2.1.2 150 kg



INFO

For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO\_347 (Roto application diagrams).



-  = Impermissible application range
-  = Additional stay arm required

Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.



INFO

Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

-  on the stay bearing 4200 N
-  on the pivot rest 4340 N

The specifications in the application diagram refer to the glass weight in kg/m².

1 mm/m² glass thickness  $\approx$  2.5 kg

Application range

|                                                                                     |                    | Basic security | Security      |               |               |
|-------------------------------------------------------------------------------------|--------------------|----------------|---------------|---------------|---------------|
|                                                                                     |                    |                | RC 1 N        | RC 2 / RC 2 N | RC 3          |
|  | Sash rebate width  | 290 – 1600 mm  | 320 – 1600 mm | 320 – 1400 mm | 320 – 1400 mm |
|  | Sash rebate height | 280 – 2800 mm  | 280 – 2800 mm | 510 – 2800 mm | 510 – 2800 mm |
|  | Sash weight        | Max. 150 kg    | Max. 150 kg   | Max. 150 kg   | Max. 150 kg   |



INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).



#### INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

If the standard version does not achieve the specified values during the test, alternative total weights can be tested. The corresponding application diagrams can be found in BRO\_371.





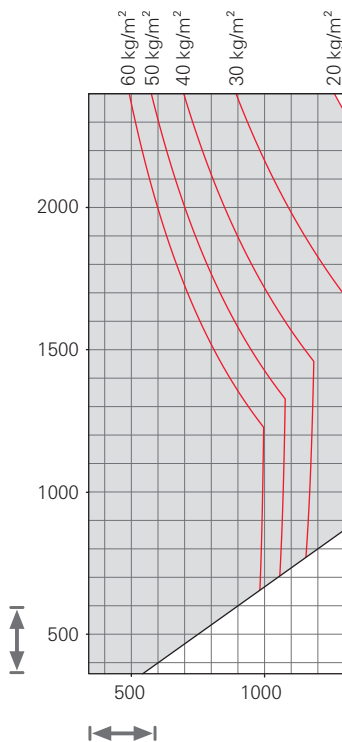
## 2.2.2 Tilt&Turn hardware for pitched windows

### 2.2.2.1 Pitched angle 1° to 15°



#### INFO

For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO\_347 (Roto application diagrams).



 = Impermissible application range

#### Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.

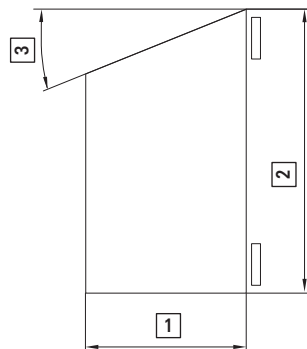


#### INFO

Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 2200 N
- on the pivot rest 2310 N

#### Description on the pitched window



[1] Sash rebate width

[2] Sash rebate height

[3] Pitched angle

Positive pitched angle (1° to 45°)

The specifications in the application diagram refer to the glass weight in kg/m².

1 mm/m² glass thickness ≈ 2.5 kg

**Application range**

| Basic security                                                                    |                    |               |
|-----------------------------------------------------------------------------------|--------------------|---------------|
|  | Sash rebate width  | 340 – 1300 mm |
|  | Sash rebate height | 361 – 2400 mm |
|  | Sash weight        | Max. 80 kg    |

**INFO**

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

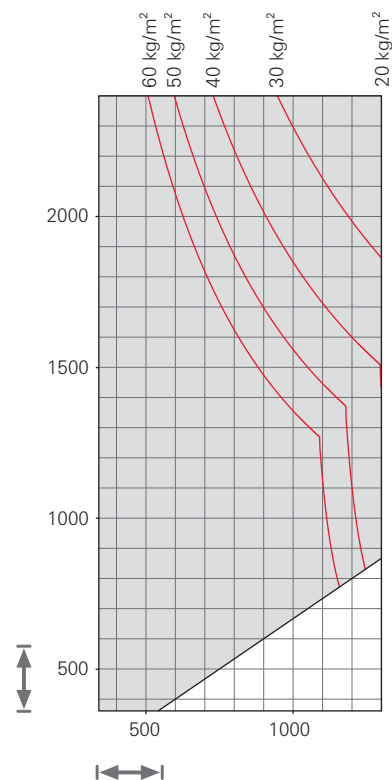


## 2.2.2.2 Pitched angle 16° to 35°



### INFO

For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO\_347 (Roto application diagrams).



 = Impermissible application range

### Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.

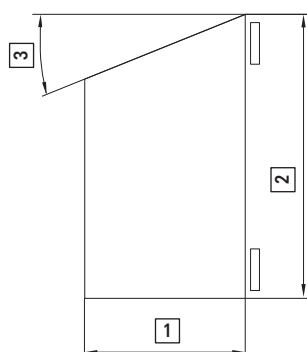


### INFO

Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TDK with the following forces:

- on the stay bearing 2200 N
- on the pivot rest 2310 N

### Description on the pitched window



- [1] Sash rebate width
- [2] Sash rebate height
- [3] Pitched angle

Positive pitched angle (1° to 45°)

The specifications in the application diagram refer to the glass weight in kg/m².

1 mm/m² glass thickness ≈ 2.5 kg

### Application range



| Basic security |                    |               |
|----------------|--------------------|---------------|
|                | Sash rebate width  | 340 – 1300 mm |
|                | Sash rebate height | 361 – 2400 mm |
|                | Sash weight        | Max. 80 kg    |



**INFO**

Observe directive TBDK for tractive force values as a function of the sash weights.  
Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).



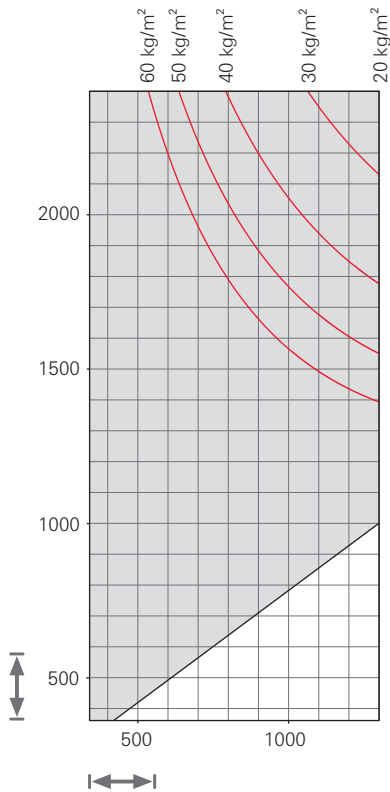


### 2.2.2.3 Pitched angle 36° to 45°



#### INFO

For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO\_347 (Roto application diagrams).



 = Impermissible application range

#### Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.

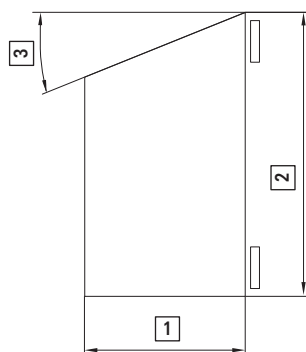


#### INFO

Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TDK with the following forces:

- on the stay bearing 2200 N
- on the pivot rest 2310 N

#### Description on the pitched window



- [1] Sash rebate width
- [2] Sash rebate height
- [3] Pitched angle

Positive pitched angle (1° to 45°)

The specifications in the application diagram refer to the glass weight in kg/m<sup>2</sup>.

1 mm/m<sup>2</sup> glass thickness ≈ 2.5 kg

#### Application range



| Basic security |                    |               |
|----------------|--------------------|---------------|
|                | Sash rebate width  | 340 – 1300 mm |
|                | Sash rebate height | 361 – 2400 mm |
|                | Sash weight        | Max. 80 kg    |



#### INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

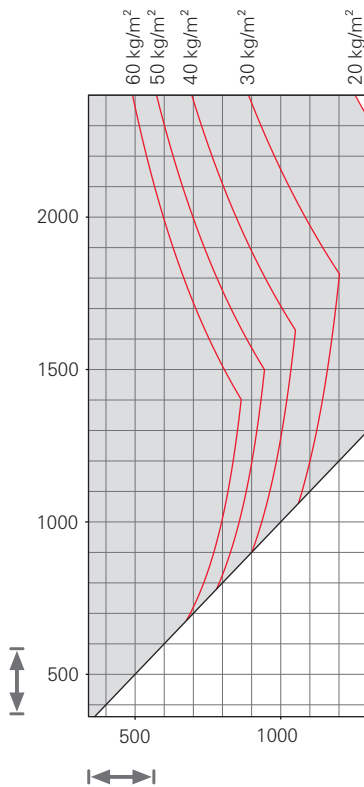


## 2.2.2.4 Pitched angle -15° to 0°



### INFO

For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO\_347 (Roto application diagrams).



= Impermissible application range

### Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.

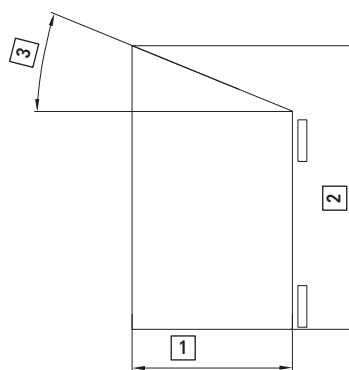


### INFO

Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 2200 N
- on the pivot rest 2310 N

### Description on the pitched window



[1] Sash rebate width

[2] Sash rebate height

[3] Pitched angle

Negative pitched angle (-15° to 0°)

The specifications in the application diagram refer to the glass weight in kg/m².

1 mm/m² glass thickness ≈ 2.5 kg

### Application range



| Basic security |                    |               |
|----------------|--------------------|---------------|
|                | Sash rebate width  | 340 – 1300 mm |
|                | Sash rebate height | 361 – 2400 mm |
|                | Sash weight        | Max. 80 kg    |



#### INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

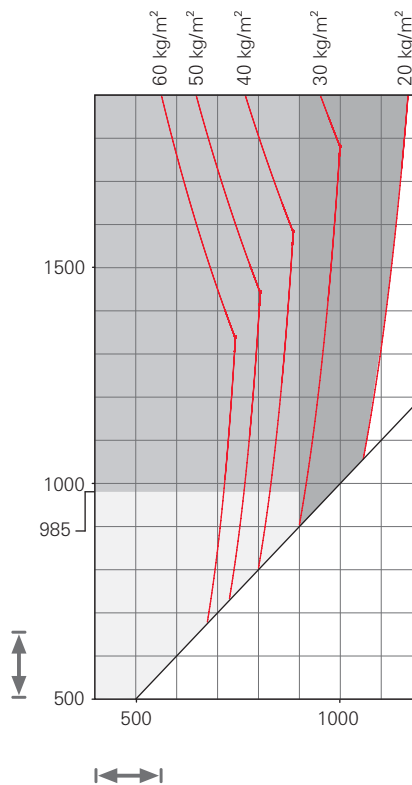


## 2.2.3 Tilt&Turn hardware for arched windows



### INFO

For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO\_347 (Roto application diagrams).



- = Impermissible application range
- = Without additional stay arm
- = Additional stay arm possible
- = Additional stay arm required

### Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Bearing distance (CB) = 45 mm

Lower deductible dimensions of glass, higher profile weights or larger bearing distances require a separate assessment.

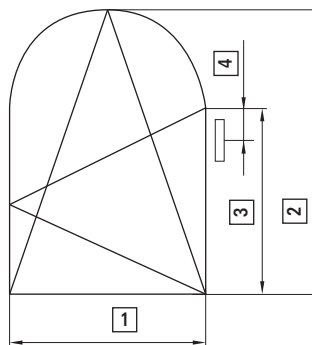


### INFO

Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 2200 N
- on the pivot rest 2310 N

### Description on the arch



- [1] Sash rebate width
- [2] Total sash rebate height
- [3] Sash rebate height at start of arch
- [4] Bearing distance (CB)

The specifications in the application diagram refer to the glass weight in kg/m<sup>2</sup>.

1 mm/m<sup>2</sup> glass thickness  $\approx$  2.5 kg

**Application range**

| Basic security                                                                    |                                     |               |
|-----------------------------------------------------------------------------------|-------------------------------------|---------------|
|  | Sash rebate width                   | 400 – 1185 mm |
|  | Sash rebate height at start of arch | 500 – 1900 mm |
|  | Sash weight                         | Max. 80 kg    |

**INFO**

Observe directive TBDK for tractive force values as a function of the sash weights.

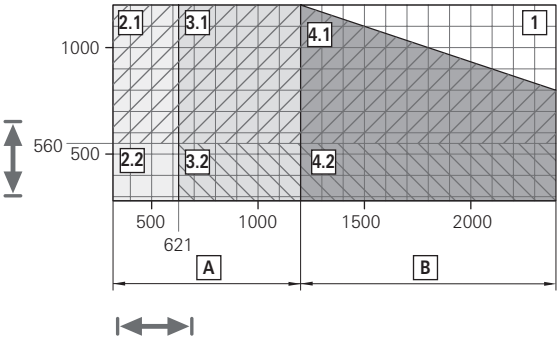
Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

**Notes**

- Permanently bond the glass unit on the hinge side and in the area of the arch.
- In the area of the run-up block of the vertical arched component, also provide spacer blocking for the glass unit or place pressure-proof packers underneath it.



2.2.4 Tilt-Only hardware for rectangular windows (standard)



- [1] = Impermissible application range
- [2.1] = 2 tilt stays at the side, additional restrictor and cleaning stays
- [2.2] = 2 tilt stays at the side
- [3.1] = 1 tilt stay at the top or 2 tilt stays at the side, additional restrictor and cleaning stays
- [3.2] = 1 tilt stay at the top or 2 tilt stays at the side, additional restrictor and cleaning stays for tilt stay(s) at the top
- [4.1] = 2 tilt stays at the top or 2 tilt stays at the side, additional restrictor and cleaning stays
- [4.2] = 2 tilt stays at the top or 2 tilt stays at the side, additional restrictor and cleaning stays for tilt stay(s) at the top
- [A] = at least 2 hinges
- [B] = at least 3 hinges

The specifications in the application diagram refer to the glass weight in kg/m<sup>2</sup>.

1 mm/m<sup>2</sup> glass thickness  $\approx$  2.5 kg

Application range

| Basic security |                    |                              |
|----------------|--------------------|------------------------------|
|                | Sash rebate width  | 310 – 2400 mm <sup>[2]</sup> |
|                | Sash rebate height | 290 – 1200 mm                |
|                | Sash weight        | Max. 80 kg                   |



INFO

Observe directive TBDK for tractive force values as a function of the sash weights.  
Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).



INFO

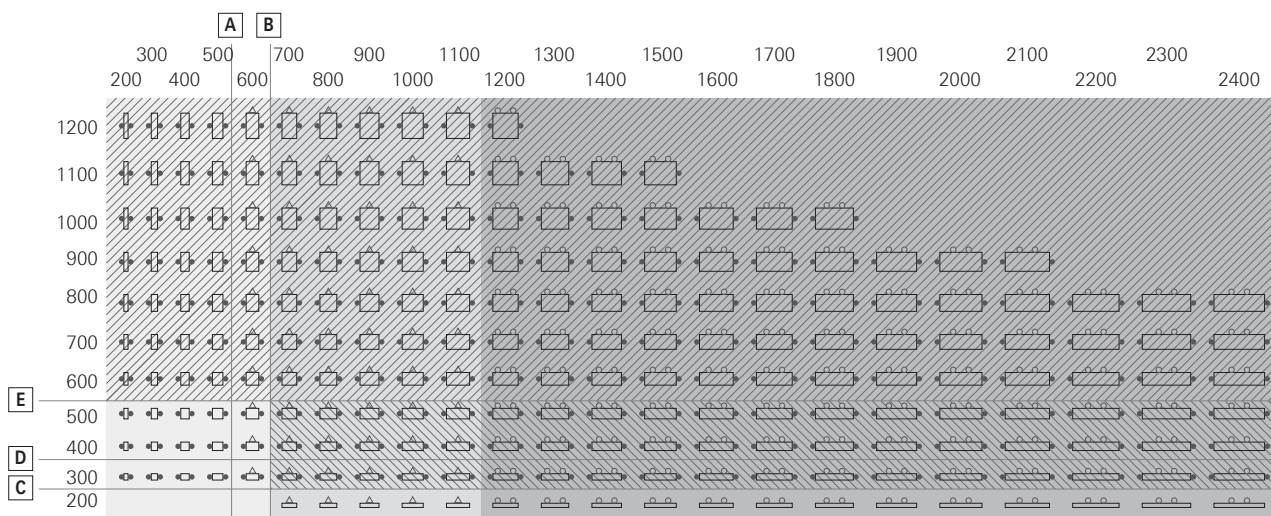
Restrictor and cleaning stays recommended; mandatory for fanlights (in accordance with RAL RG 607/12).  
Restrictor and cleaning stays up to max. 60 kg.

[2] SRW 310 – 449 mm with Turn-Only / Tilt-Only espagnolette only

## Application diagrams

### Hinge side P

Tilt-Only hardware for rectangular windows (standard)



[A] From 501 mm tilt stay at the top is only possible with Turn-Only / Tilt-Only espagnolette

[B] From 621 mm tilt stay at the top is possible with Turn-Only / Tilt-Only espagnolette and T&T espagnolette

[C] From **260 mm** P, T, A

[D] From **360 mm** P, T, A, Designo, Alu

[E] From **520 mm** all hinge sides

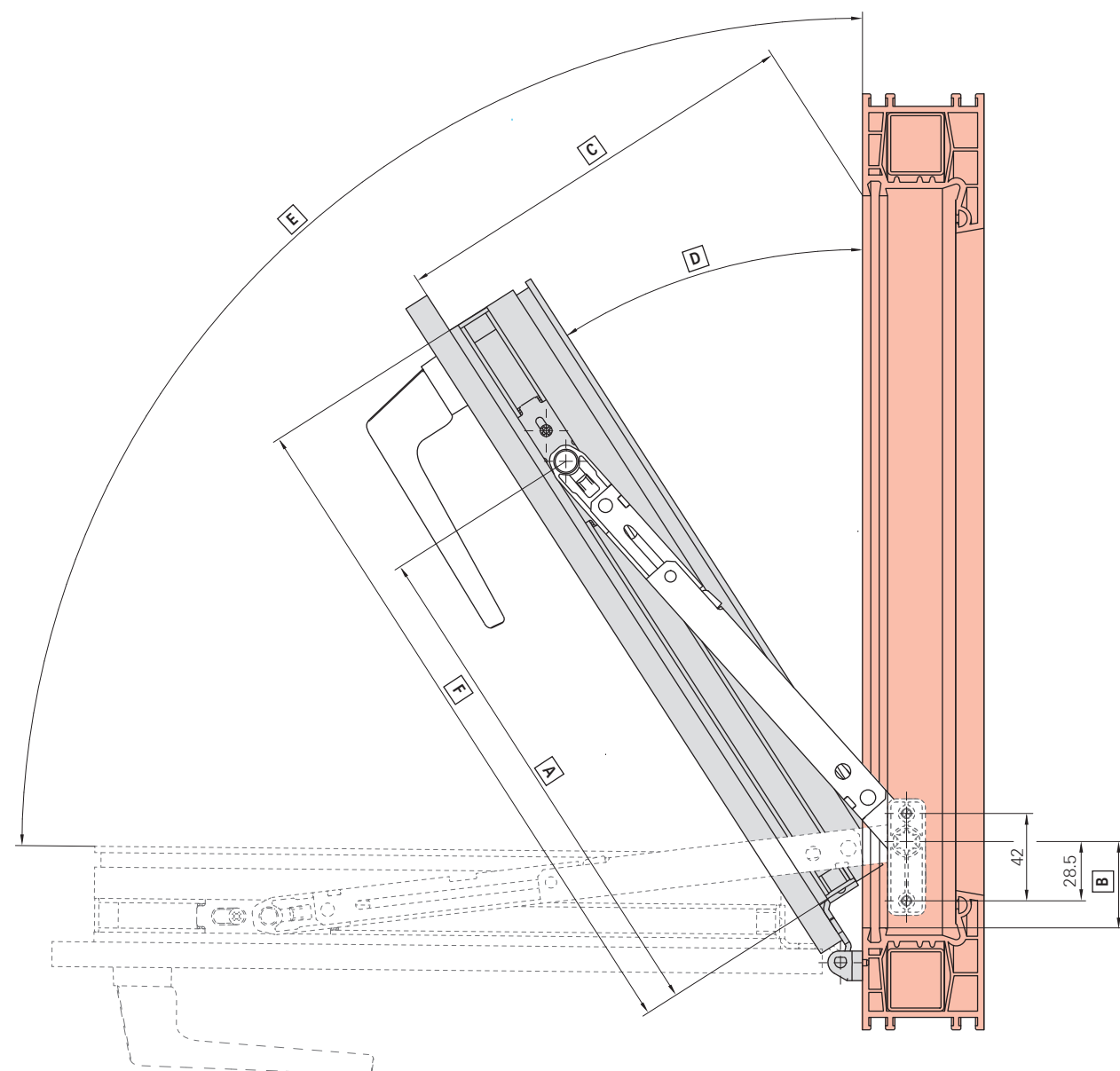
- Possible position of tilt stay up to 80 kg
- Alternative position of tilt stay up to 80 kg
- △ Alternative position of tilt stay up to 60 kg



### INFO

Tilt stays at the side cannot be used in conjunction with the CL 200 centre lock.





- [A] Position of sash bearing
- [B] Position of frame bearing
- [C] Tilt depth restrictor position
- [D] Opening angle restrictor position
- [E] Opening angle cleaning position
- [F] Sash rebate height (SRH)

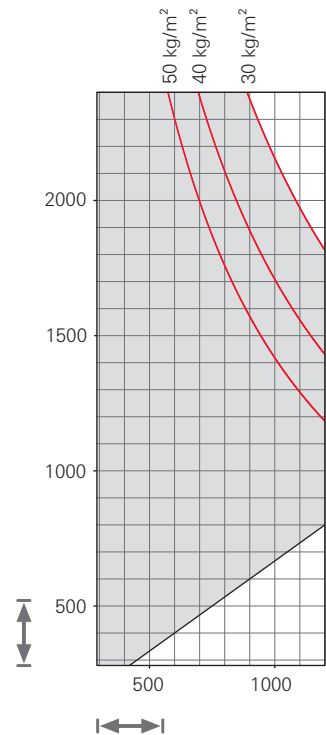
| SRH        | Type | [A] | [B] | [C]       | [D] | [E] |
|------------|------|-----|-----|-----------|-----|-----|
| 290 – 400  | 1    | 250 | 45  | 180 – 245 | 33° | 90° |
| 401 – 560  | 1    | 280 | 75  | 205 – 275 | 27° | 67° |
| 561 – 700  | 2    | 525 | 170 | 225 – 277 | 22° | 88° |
| 701 – 850  | 2    | 575 | 220 | 244 – 292 | 19° | 72° |
| 851 – 1200 | 2    | 625 | 270 | 261 – 363 | 17° | 62° |

## 2.2.5 Turn-Only overlap hinge for rectangular windows



### INFO

For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO\_347 (Roto application diagrams).



= Impermissible application range

### Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.



### INFO

Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 2200 N
- on the pivot rest 2310 N

The specifications in the application diagram refer to the glass weight in kg/m<sup>2</sup>.

1 mm/m<sup>2</sup> glass thickness = 2.5 kg

### Application range

| Basic security |                    |               |
|----------------|--------------------|---------------|
|                | Sash rebate width  | 290 – 1200 mm |
|                | Sash rebate height | 280 – 2400 mm |
|                | Sash weight        | Max. 80 kg    |

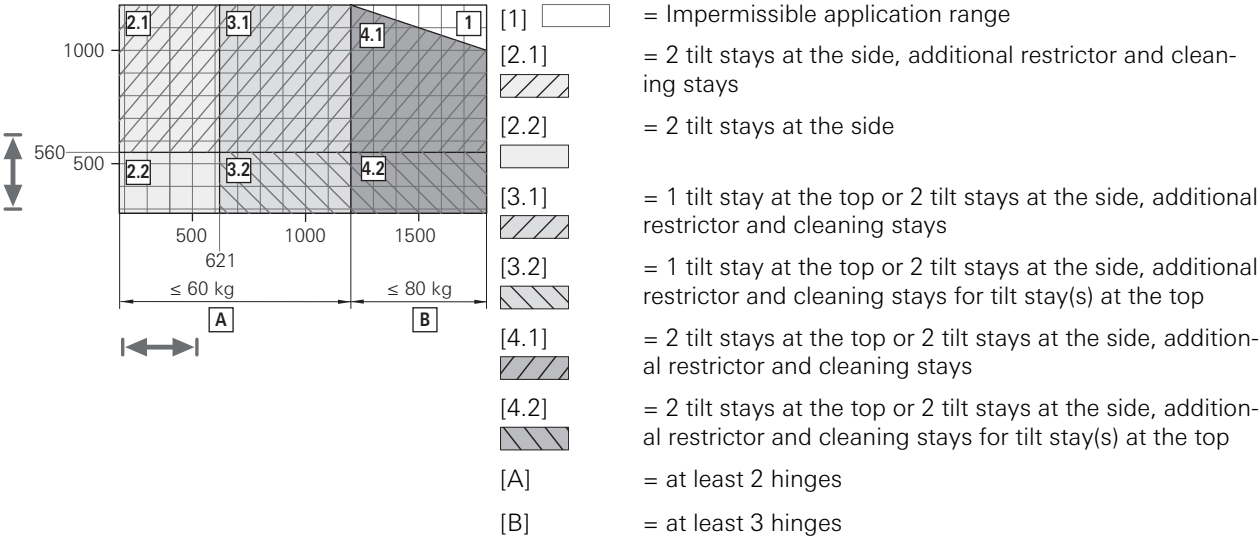


### INFO

Turn-Only / Tilt-Only overlap hinge P in Turn-Only sashes only in conjunction with corner hinge / pivot rest.



2.2.6 Tilt-Only overlap hinge for rectangular windows



The specifications in the application diagram refer to the glass weight in kg/m².

1 mm/m² glass thickness ≈ 2.5 kg

Application range

| Basic security |                    |                   |
|----------------|--------------------|-------------------|
|                | Sash rebate width  | 180 – 1800 mm [3] |
|                | Sash rebate height | 290 – 1200 mm     |
|                | Sash weight        | Max. 60 or 80 kg  |

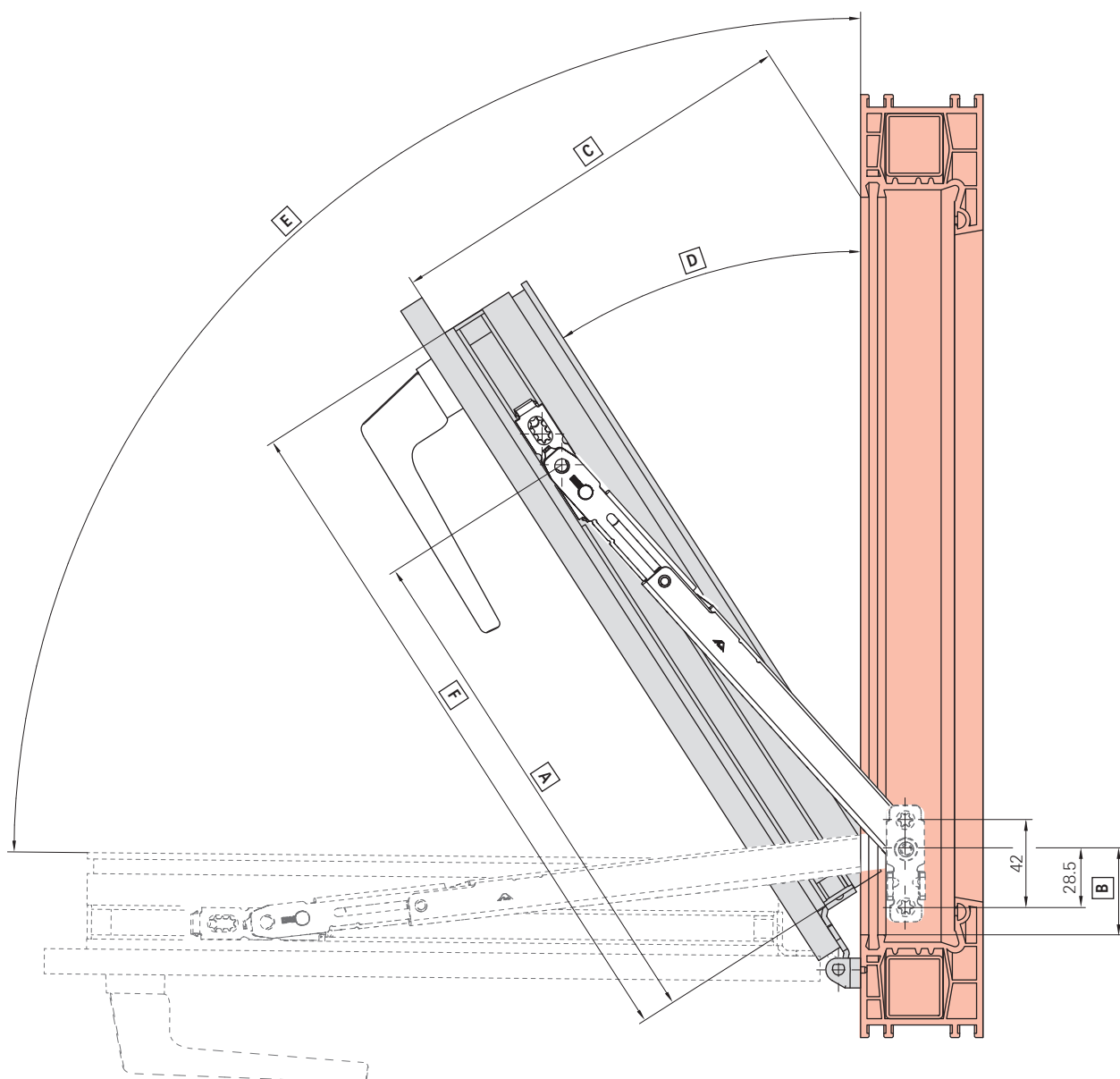


INFO

Restrictor and cleaning stays recommended; mandatory for fanlights (in accordance with RAL RG 607 / 12).

Restrictor and cleaning stays up to max. 60 kg.

[3] SRW 180 – 449 with Turn-Only / Tilt-Only espagnolette only

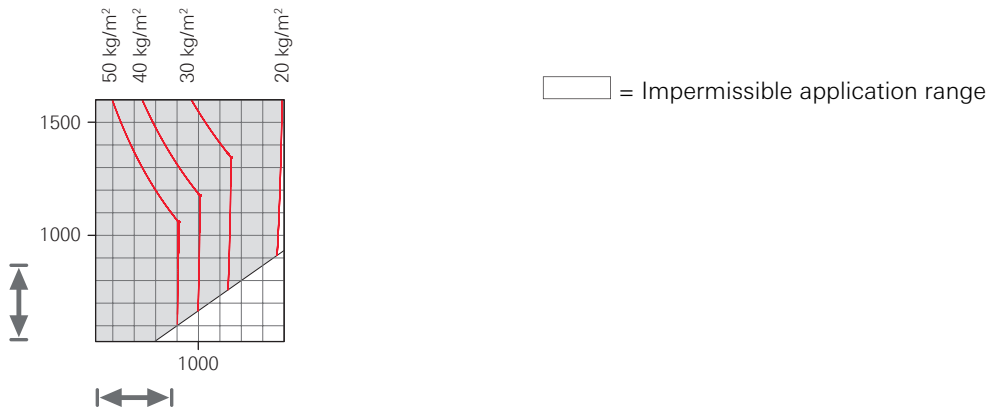


- [A] Position of sash bearing
- [B] Position of frame bearing
- [C] Tilt depth restrictor position
- [D] Opening angle restrictor position
- [E] Opening angle cleaning position
- [F] Sash rebate height (SRH)

| SRH           | Type | [A]    | [B]    | [C]          | [D] | [E] |
|---------------|------|--------|--------|--------------|-----|-----|
| 290 – 400 mm  | 1    | 250 mm | 45 mm  | 180 – 245 mm | 33° | 90° |
| 401 – 560 mm  | 1    | 280 mm | 75 mm  | 205 – 275 mm | 27° | 67° |
| 561 – 700 mm  | 2    | 525 mm | 170 mm | 225 – 277 mm | 22° | 88° |
| 701 – 850 mm  | 2    | 575 mm | 220 mm | 244 – 292 mm | 19° | 72° |
| 851 – 1200 mm | 2    | 625 mm | 270 mm | 261 – 363 mm | 17° | 62° |



### 2.2.7 Comfort windows



The specifications in the application diagram refer to the glass weight in kg/m².

1 mm/m² glass thickness  $\approx$  2.5 kg

#### Application range

| Basic security |                    |               |
|----------------|--------------------|---------------|
|                | Sash rebate width  | 520 – 1400 mm |
|                | Sash rebate height | 530 – 1600 mm |
|                | Sash weight        | Max. 50 kg    |



#### INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

## 2.3 Hinge side C

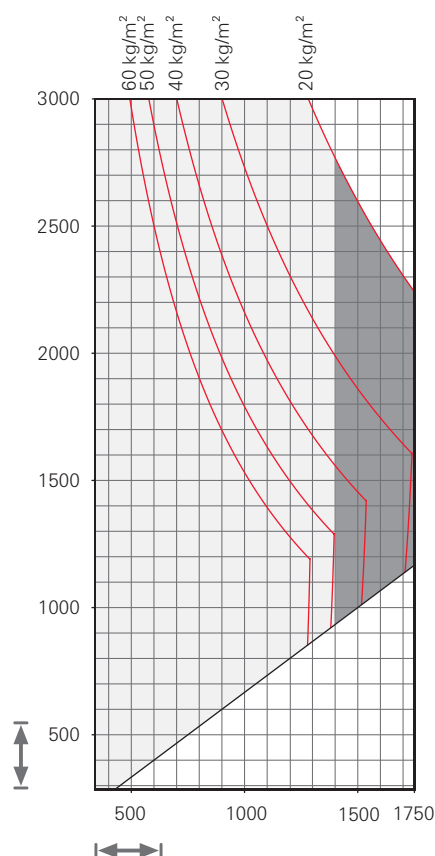
### 2.3.1 Turn-Only / Tilt&Turn hardware for rectangular windows

#### 2.3.1.1 100 kg



#### INFO

For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO\_347 (Roto application diagrams).



□ = Impermissible application range

■ = Additional stay arm required

#### Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.



#### INFO

Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 2710 N
- on the pivot rest 2890 N

The specifications in the application diagram refer to the glass weight in kg/m².

1 mm/m² glass thickness  $\approx$  2.5 kg

Glass weight max. 60 kg/m²

| Application range |             |               |
|-------------------|-------------|---------------|
|                   | Sash width  | 340 – 1750 mm |
|                   | Sash height | 285 – 3000 mm |
|                   | Sash weight | Max. 100 kg   |



#### INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).



2.3.1.2 120 kg



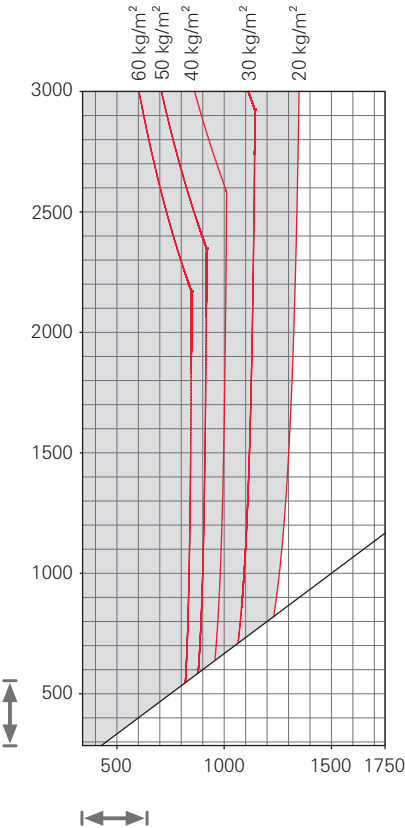
INFO

For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO\_347 (Roto application diagrams).



INFO

For balcony doors with thresholds, load transfer must be fitted at weights of 100 kg and above.



Impermissible application range

Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.



INFO

Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 3250 N
- on the pivot rest 3470 N

The specifications in the application diagram refer to the glass weight in kg/m<sup>2</sup>.

1 mm/m<sup>2</sup> glass thickness ≈ 2.5 kg

Glass weight max. 60 kg/m<sup>2</sup>

| Application range |             |               |
|-------------------|-------------|---------------|
|                   | Sash width  | 340 – 1350 mm |
|                   | Sash height | 285 – 3000 mm |
|                   | Sash weight | max. 120 kg   |



INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

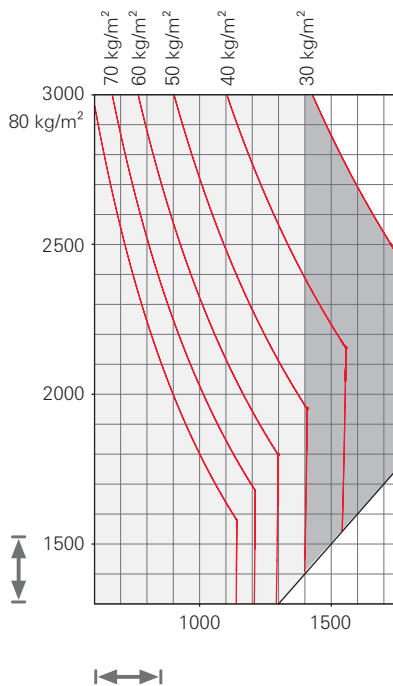
Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

## 2.3.1.3 150 kg with load transfer (standard)



## INFO

For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO\_347 (Roto application diagrams).



= Impermissible application range

= Additional stay arm required

## Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.



## INFO

Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 4200 N
- on the pivot rest 4340 N

The specifications in the application diagram refer to the glass weight in kg/m<sup>2</sup>.

1 mm/m<sup>2</sup> glass thickness ≈ 2.5 kg

## Application range

| Basic security |                    |                | Security       |                |
|----------------|--------------------|----------------|----------------|----------------|
|                |                    |                | RC 1 N         | RC 2 / RC 2 N  |
|                | Sash rebate width  | 600 – 1750 mm  | 650 – 1600 mm  | 650 – 1400 mm  |
|                | Sash rebate height | 1000 – 3000 mm | 1000 – 2800 mm | 1000 – 2800 mm |
|                | Sash weight        | 80 – 150 kg    | 80 – 150 kg    | 80 – 150 kg    |



## INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

If the standard version does not achieve the specified values during the test, alternative total weights can be tested. The corresponding application diagrams can be found in BRO\_371.



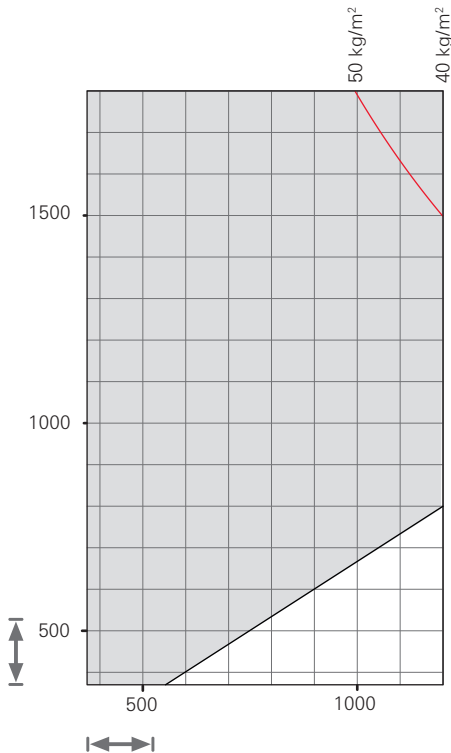


### 2.3.2 Turn-Only hardware for centre sash in a triple-sashed window (standard)



#### INFO

For information on using and reading application diagrams, e.g. for interpolation (calculating missing intermediate values), see BRO\_347 (Roto application diagrams).



 = Impermissible application range

#### Test and calculation principles:

Tilt&Turn test in accordance with QM 328 – hardware certification programme in accordance with DIN EN 13126-8 – class H3

Deductible dimension of glass = 28 mm

(Sash) profile weight = 3.25 kg/m

Lower deductible dimensions of glass or higher profile weights require a separate assessment.



#### INFO

Evidence on the attachment of load-bearing components to the window system by the window manufacturer in accordance with TBDK with the following forces:

- on the stay bearing 2710 N
- on the pivot rest 2890 N

The specifications in the application diagram refer to the glass weight in kg/m<sup>2</sup>.

1 mm/m<sup>2</sup> glass thickness ≈ 2.5 kg

Glass weight max. 50 kg/m<sup>2</sup>

#### Application range

| Application range                                                                   |                    |               |
|-------------------------------------------------------------------------------------|--------------------|---------------|
|  | Sash rebate width  | 370 – 1200 mm |
|  | Sash rebate height | 370 – 1800 mm |
|  | Sash weight        | Max. 100 kg   |

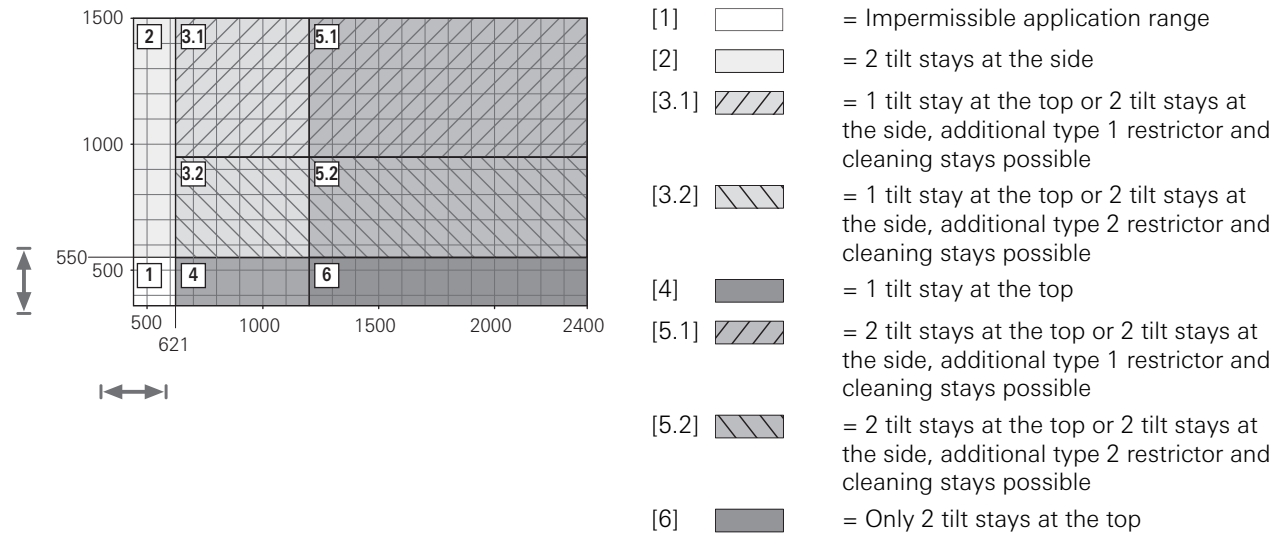


#### INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

### 2.3.3 Tilt-Only hardware for rectangular windows (standard)



The specifications in the application diagram refer to the glass weight in kg/m<sup>2</sup>.

1 mm/m<sup>2</sup> glass thickness  $\approx$  2.5 kg

#### Application range

| Basic security |                    |                                                             |
|----------------|--------------------|-------------------------------------------------------------|
|                | Sash rebate width  | 450 – 2400 mm                                               |
|                | Sash rebate height | 370 – 1500 mm                                               |
|                | Sash weight        | with 1 tilt stay max. 60 kg<br>with 2 tilt stays max. 80 kg |



#### INFO

Observe directive TDBK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).



#### INFO

Restrictor and cleaning stays recommended; mandatory for fanlights (in accordance with RAL GZ 607/12).

Restrictor and cleaning stays up to max. 60 kg.

#### Opening widths of restrictor and cleaning stays

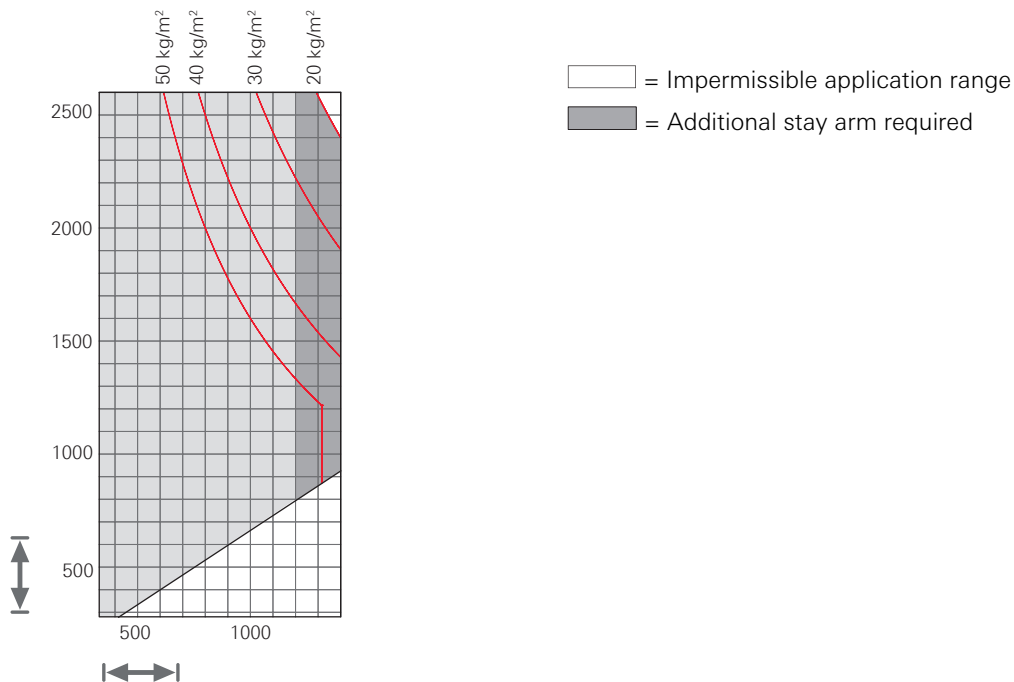
| SRH         | Type | CL     | Position of sash bearing from above | Position of frame bearing from above | Tilt depth with min. SRH |          | Tilt depth with max. SRH |          |
|-------------|------|--------|-------------------------------------|--------------------------------------|--------------------------|----------|--------------------------|----------|
|             |      |        |                                     |                                      | Restrictor               | Cleaning | Restrictor               | Cleaning |
| 550 – 750   | 1    | –      | 105.3                               | 335.5                                | 151                      | 314      | 136                      | 280      |
| 751 – 950   | 1    | 200    | 305.3                               | 535.5                                | 203                      | 420      | 170                      | 350      |
| 951 – 1150  | 2    | –      | 105.3                               | 480.5                                | 215                      | 630      | 202                      | 600      |
| 1151 – 1350 | 2    | 200    | 305.3                               | 680.5                                | 258                      | 758      | 235                      | 700      |
| 1351 – 1500 | 2    | 2x 200 | 505.3                               | 880.5                                | 300                      | 885      | 275                      | 820      |



## 2.4 Hinge side Designo (HA 13)

### 2.4.1 Turn-Only / Tilt&Turn hardware for rectangular windows

#### 2.4.1.1 80 kg



The specifications in the application diagram refer to the glass weight in kg/m<sup>2</sup>.

1 mm/m<sup>2</sup> glass thickness  $\approx$  2.5 kg

#### Application range

|                                                                                     |                    | Basic security | Security<br>RC 1 N | Security<br>RC 2 / RC 2 N |
|-------------------------------------------------------------------------------------|--------------------|----------------|--------------------|---------------------------|
|                                                                                     |                    |                |                    |                           |
|  | Sash rebate width  | 330 – 1400 mm  | 450 – 1400 mm      | 450 – 1400 mm             |
|  | Sash rebate height | 280 – 2600 mm  | 280 – 2600 mm      | 490 – 2400 mm             |
|  | Sash weight        | Max. 80 kg     | Max. 80 kg         | Max. 80 kg                |

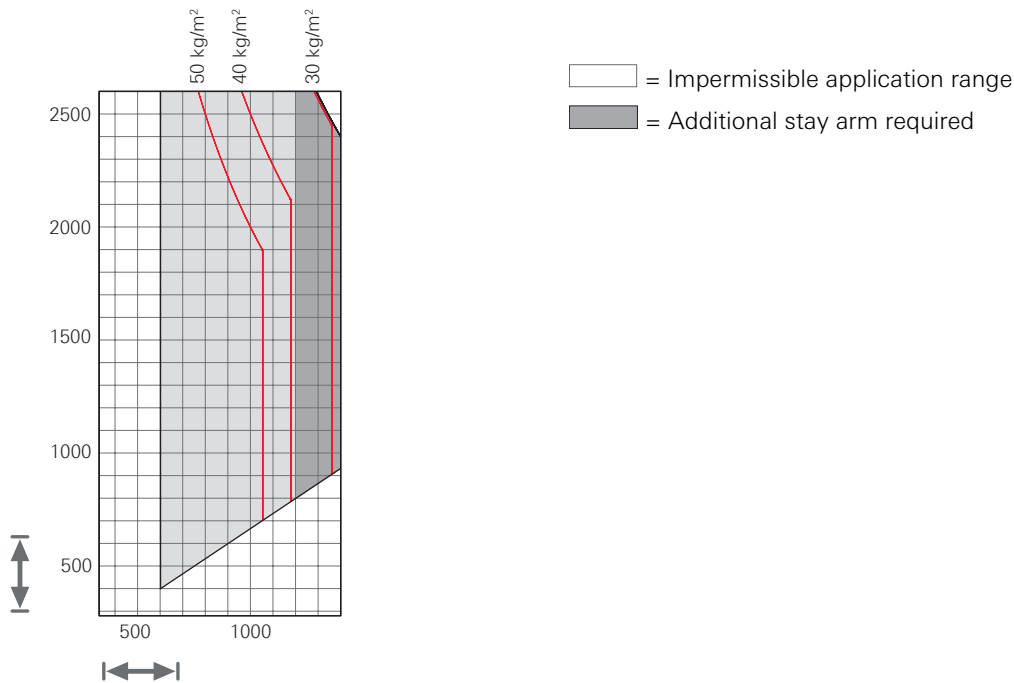


#### INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

2.4.1.2 100 kg



The specifications in the application diagram refer to the glass weight in kg/m².

1 mm/m² glass thickness  $\approx$  2.5 kg

Application range

|                                                                                     |                    | Basic security | Security<br>RC 1 N | Security<br>RC 2 / RC 2 N |
|-------------------------------------------------------------------------------------|--------------------|----------------|--------------------|---------------------------|
|  | Sash rebate width  | 600 – 1400 mm  | 600 – 1400 mm      | 600 – 1400 mm             |
|  | Sash rebate height | 400 – 2600 mm  | 400 – 2600 mm      | 490 – 2400 mm             |
|  | Sash weight        | Max. 100 kg    | Max. 100 kg        | Max. 100 kg               |

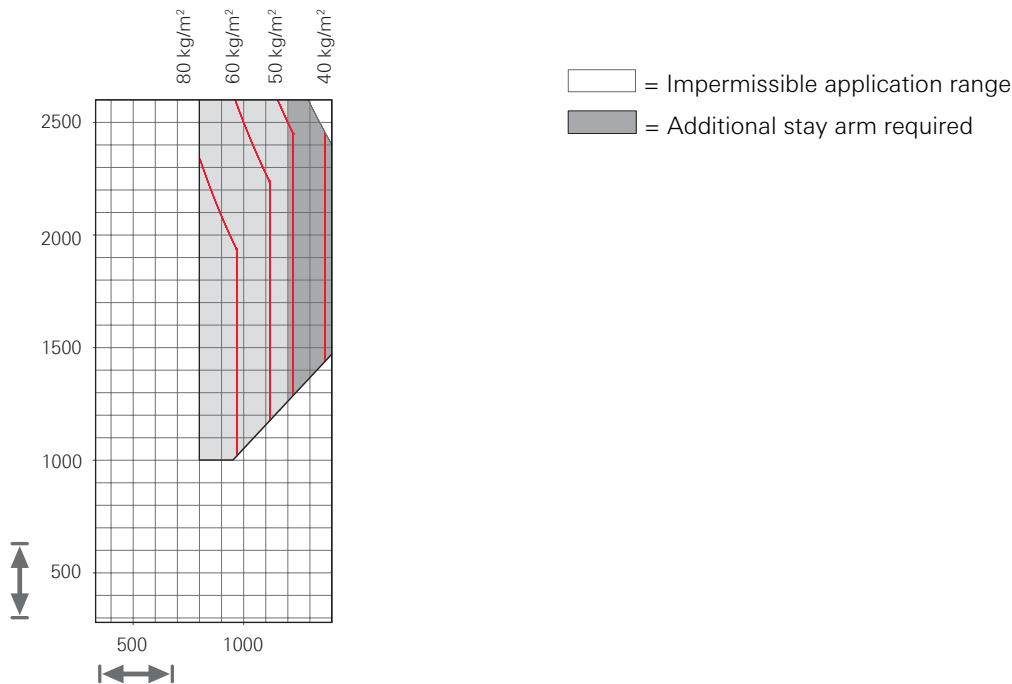


INFO

Observe directive TBDK for tractive force values as a function of the sash weights.  
Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).



2.4.1.3 150 kg with load transfer



The specifications in the application diagram refer to the glass weight in kg/m².

1 mm/m² glass thickness ≈ 2.5 kg

Application range

|  |                    | Basic security | Security<br>RC 1 N | Security<br>RC 2 / RC 2 N |
|--|--------------------|----------------|--------------------|---------------------------|
|  | Sash rebate width  | 800 – 1400 mm  | 800 – 1400 mm      | 800 – 1400 mm             |
|  | Sash rebate height | 1000 – 2600 mm | 1000 – 2600 mm     | 1000 – 2400 mm            |
|  | Sash weight        | 80 – 150 kg    | 80 – 150 kg        | 80 – 150 kg               |



INFO

Sash weight > 130 kg: set the tilt depth restriction of the stay arm to 80 mm.

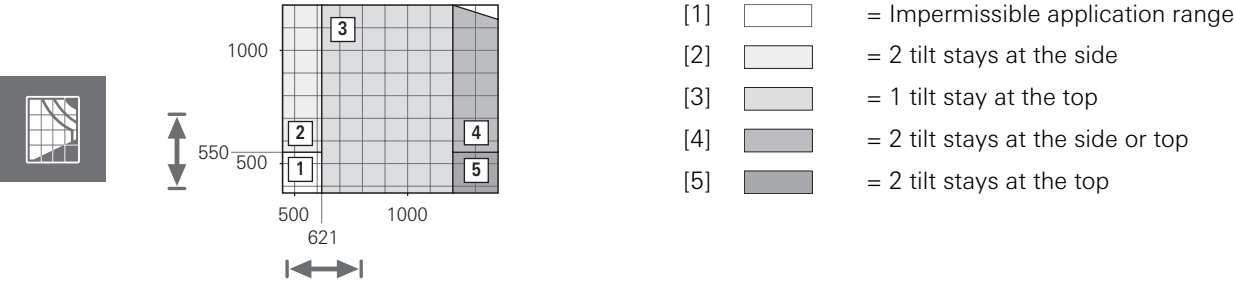


INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

2.4.2 Tilt-Only hardware for rectangular windows



The specifications in the application diagram refer to the glass weight in kg/m<sup>2</sup>.

1 mm/m<sup>2</sup> glass thickness ≈ 2.5 kg

Application range

| Basic security |                    |               |
|----------------|--------------------|---------------|
|                | Sash rebate width  | 450 – 1400 mm |
|                | Sash rebate height | 370 – 1200 mm |
|                | Sash weight        | Max. 80 kg    |



INFO

Restrictor and cleaning stays recommended; mandatory for fanlights (in accordance with RAL RG 607 / 12).

Restrictor and cleaning stays up to max. 60 kg.



INFO

Observe directive TBDK for tractive force values as a function of the sash weights.

Further information can be found at [www.guetegemeinschaft-schloss-beschlag.de](http://www.guetegemeinschaft-schloss-beschlag.de).

**Hinge side P**

|                                                     |     |
|-----------------------------------------------------|-----|
| T&T espagnolette, VT – fixed handle height          | 68  |
| T&T espagnolette – centred / variable handle height | 108 |

**Hinge side C**

|                                                     |     |
|-----------------------------------------------------|-----|
| T&T espagnolette, VT – fixed handle height          | 140 |
| T&T espagnolette – centred / variable handle height | 182 |

**Hinge side Designo (HA 13)**

|                                                     |     |
|-----------------------------------------------------|-----|
| T&T espagnolette, VT – fixed handle height          | 226 |
| T&T espagnolette – centred / variable handle height | 260 |

## 3 Hardware overviews



### INFO

All hardware overviews shown in this chapter are for illustration purposes only. Please refer to the applicable installation instructions for exact specifications and installation advice.



### INFO

#### Security classes

- The RC 1 N, RC 2, RC 2 N and RC 3 security classes refer to the entire system.
- The hardware configurations shown in the hardware overviews are recommendations.
- The hardware complies with the corresponding security classes in the required system tests.
- However, the security classes are only complied with if all of the other components in the system (e.g. profile system, reinforcement, glass, etc.) are also designed for this.
- Steel security locking components must generally be used in systems with a 9 mm hardware axis.



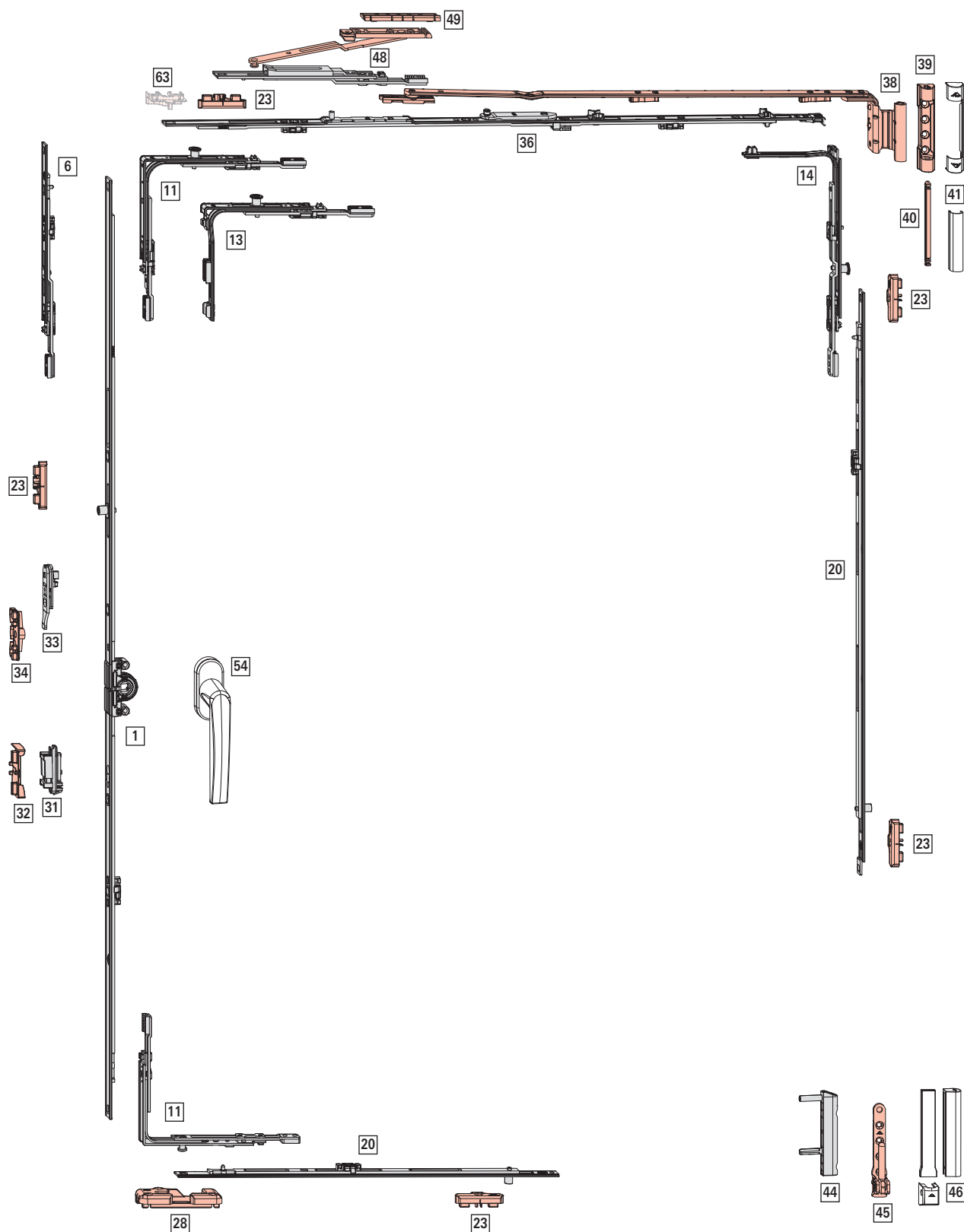


## 3.1 Hinge side P

### 3.1.1 T&T espagnolette, VT – fixed handle height

#### 3.1.1.1 Tilt&Turn hardware

##### 3.1.1.1.1 Basic security





| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                 |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                          |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [13] | Special corner drive, short → <i>from page 353</i>                                |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [20] | Centre lock, multipart – standard, horizontal and vertical → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                                    |
| [28] | Tilt striker → <i>from page 450</i>                                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                  |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                 |
| [36] | Stay guide, basic security → <i>from page 368</i>                                 |
| [38] | Stay arm → <i>from page 372</i>                                                   |
| [39] | Stay bearing → <i>from page 405</i>                                               |
| [40] | Stay-bearing pin → <i>from page 406</i>                                           |
| [41] | Sash stay cover caps → <i>from page 407</i>                                       |
| [44] | Corner hinge → <i>from page 434</i>                                               |
| [45] | Pivot rest → <i>from page 437</i>                                                 |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                       |
| [48] | Additional stay arm → <i>from page 470</i>                                        |
| [49] | Support plate → <i>from page 516</i>                                              |
| [54] | Handle (see catalogue CTL_1)                                                      |
| [63] | Night vent (optional from SRW > 600 mm) → <i>from page 493</i>                    |

## Application range

| Basic security                                                                      |                             |               |
|-------------------------------------------------------------------------------------|-----------------------------|---------------|
|  | Sash rebate width<br>(SRW)  | 290 – 1600 mm |
|  | Sash rebate height<br>(SRH) | 280 – 2800 mm |
|  | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

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### 3.1.1.1.2 RC 1 N





| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>             |
| [11] | Corner drive, standard → <i>from page 352</i>                        |
| [13] | Special corner drive, short → <i>from page 353</i>                   |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                       |
| [24] | Striker, security → <i>from page 457</i>                             |
| [28] | Tilt striker → <i>from page 450</i>                                  |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, basic security → <i>from page 368</i>                    |
| [38] | Stay arm → <i>from page 372</i>                                      |
| [39] | Stay bearing → <i>from page 405</i>                                  |
| [40] | Stay-bearing pin → <i>from page 406</i>                              |
| [41] | Sash stay cover caps → <i>from page 407</i>                          |
| [44] | Corner hinge → <i>from page 434</i>                                  |
| [45] | Pivot rest → <i>from page 437</i>                                    |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>          |
| [48] | Additional stay arm → <i>from page 470</i>                           |
| [49] | Support plate → <i>from page 516</i>                                 |
| [53] | Drilling protection → <i>from page 509</i>                           |
| [54] | Handle, lockable (see catalogue CTL_1)                               |
| [63] | Night vent (optional from SRW > 600 mm) → <i>from page 493</i>       |
| [82] | Anti-jemmy device → <i>from page 510</i>                             |

## Application range

| RC 1 N |                             |               |
|--------|-----------------------------|---------------|
|        | Sash rebate width<br>(SRW)  | 320 – 1600 mm |
|        | Sash rebate height<br>(SRH) | 280 – 2800 mm |
|        | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

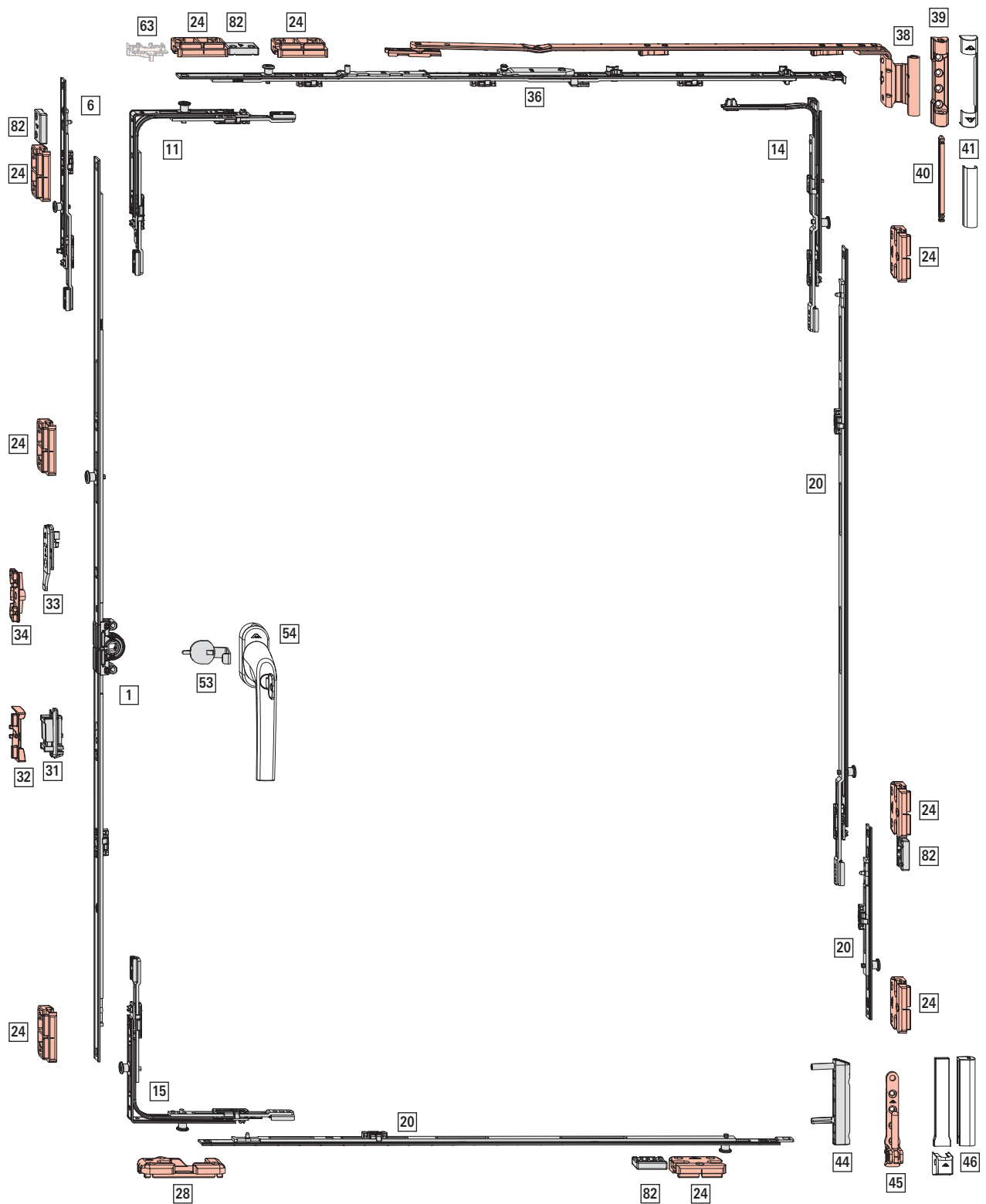
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### 3.1.1.1.3 RC 2 / RC 2 N





| Item | Description                                                                      |
|------|----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                         |
| [11] | Corner drive, standard → <i>from page 352</i>                                    |
| [14] | Sash stay corner drive → <i>from page 356</i>                                    |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                         |
| [20] | Multipart centre lock – security, horizontal and vertical → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                                         |
| [28] | Tilt striker → <i>from page 450</i>                                              |
| [31] | Bullet-catch sash component → <i>from page 486</i>                               |
| [32] | Bullet-catch frame component → <i>from page 486</i>                              |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                 |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                |
| [36] | Stay guide, security → <i>from page 368</i>                                      |
| [38] | Stay arm → <i>from page 372</i>                                                  |
| [39] | Stay bearing → <i>from page 405</i>                                              |
| [40] | Stay-bearing pin → <i>from page 406</i>                                          |
| [41] | Sash stay cover caps → <i>from page 407</i>                                      |
| [44] | Corner hinge → <i>from page 434</i>                                              |
| [45] | Pivot rest → <i>from page 437</i>                                                |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                      |
| [53] | Drilling protection → <i>from page 509</i>                                       |
| [54] | Handle, lockable (see catalogue CTL_1)                                           |
| [63] | Night vent (optional from SRW > 600 mm) → <i>from page 493</i>                   |
| [82] | Anti-jemmy device → <i>from page 510</i>                                         |

## Application range

| RC 2 / RC 2 N                                                                       |                             |               |
|-------------------------------------------------------------------------------------|-----------------------------|---------------|
|  | Sash rebate width<br>(SRW)  | 320 – 1400 mm |
|  | Sash rebate height<br>(SRH) | 600 – 2800 mm |
|  | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

### Roto Con Orders

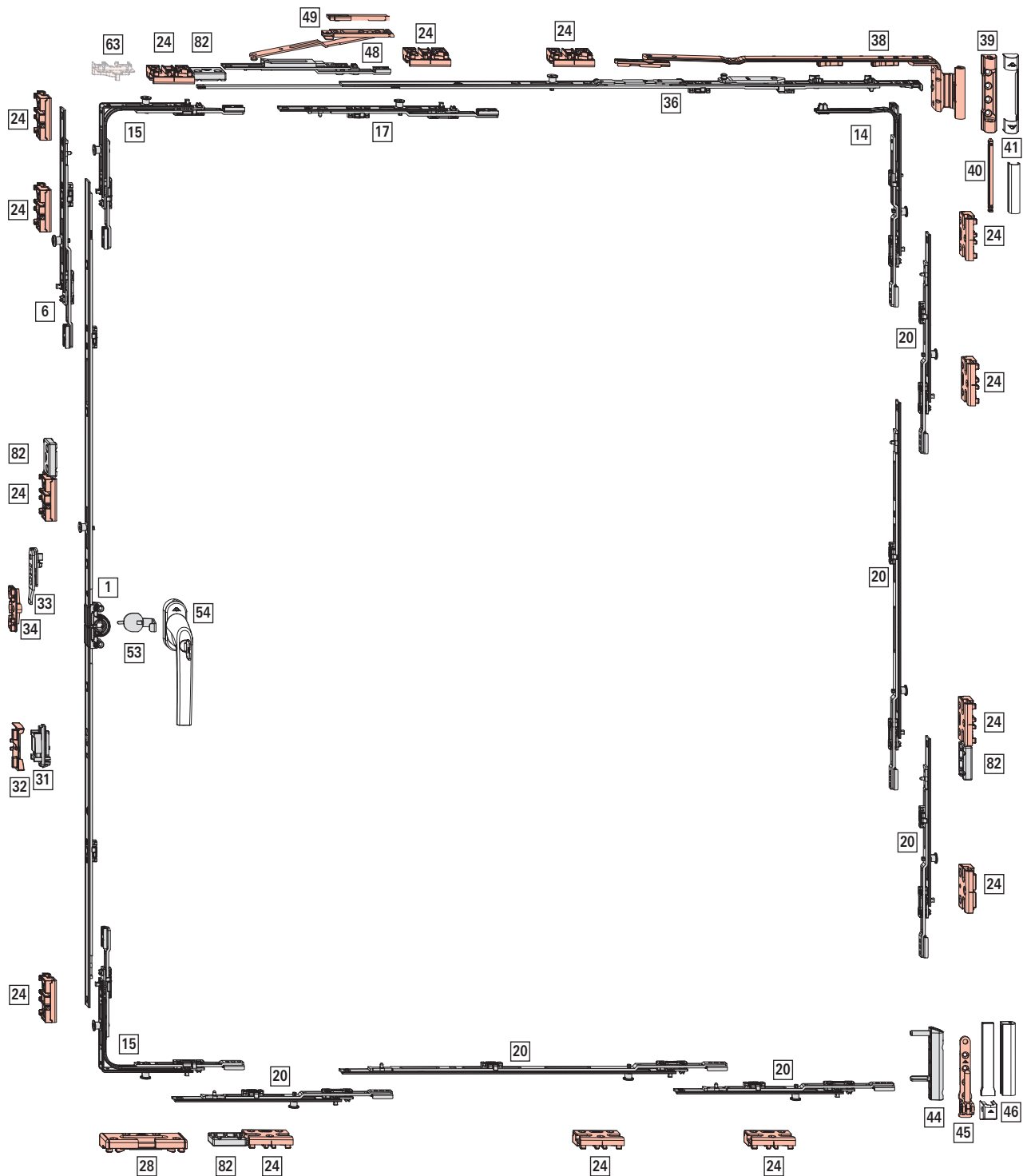
Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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T&T espagnolette, VT – fixed handle height

#### 3.1.1.1.4 RC 3







| Item | Description                                                                      |
|------|----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                                    |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                         |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                         |
| [20] | Multipart centre lock – security, horizontal and vertical → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                                         |
| [28] | Tilt striker → <i>from page 450</i>                                              |
| [31] | Bullet-catch sash component → <i>from page 486</i>                               |
| [32] | Bullet-catch frame component → <i>from page 486</i>                              |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                 |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                |
| [36] | Stay guide, security → <i>from page 368</i>                                      |
| [38] | Stay arm → <i>from page 372</i>                                                  |
| [39] | Stay bearing → <i>from page 405</i>                                              |
| [40] | Stay-bearing pin → <i>from page 406</i>                                          |
| [41] | Sash stay cover caps → <i>from page 407</i>                                      |
| [44] | Corner hinge → <i>from page 434</i>                                              |
| [45] | Pivot rest → <i>from page 437</i>                                                |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                      |
| [48] | Additional stay arm → <i>from page 470</i>                                       |
| [49] | Support plate → <i>from page 516</i>                                             |
| [53] | Drilling protection → <i>from page 509</i>                                       |
| [54] | Handle, lockable (see catalogue CTL_1)                                           |
| [63] | Night vent (optional from SRW > 600 mm) → <i>from page 493</i>                   |
| [82] | Anti-jimmy device → <i>from page 510</i>                                         |

## Application range

| RC 3 |                             |               |
|------|-----------------------------|---------------|
|      | Sash rebate width<br>(SRW)  | 490 – 1400 mm |
|      | Sash rebate height<br>(SRH) | 600 – 2800 mm |
|      | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

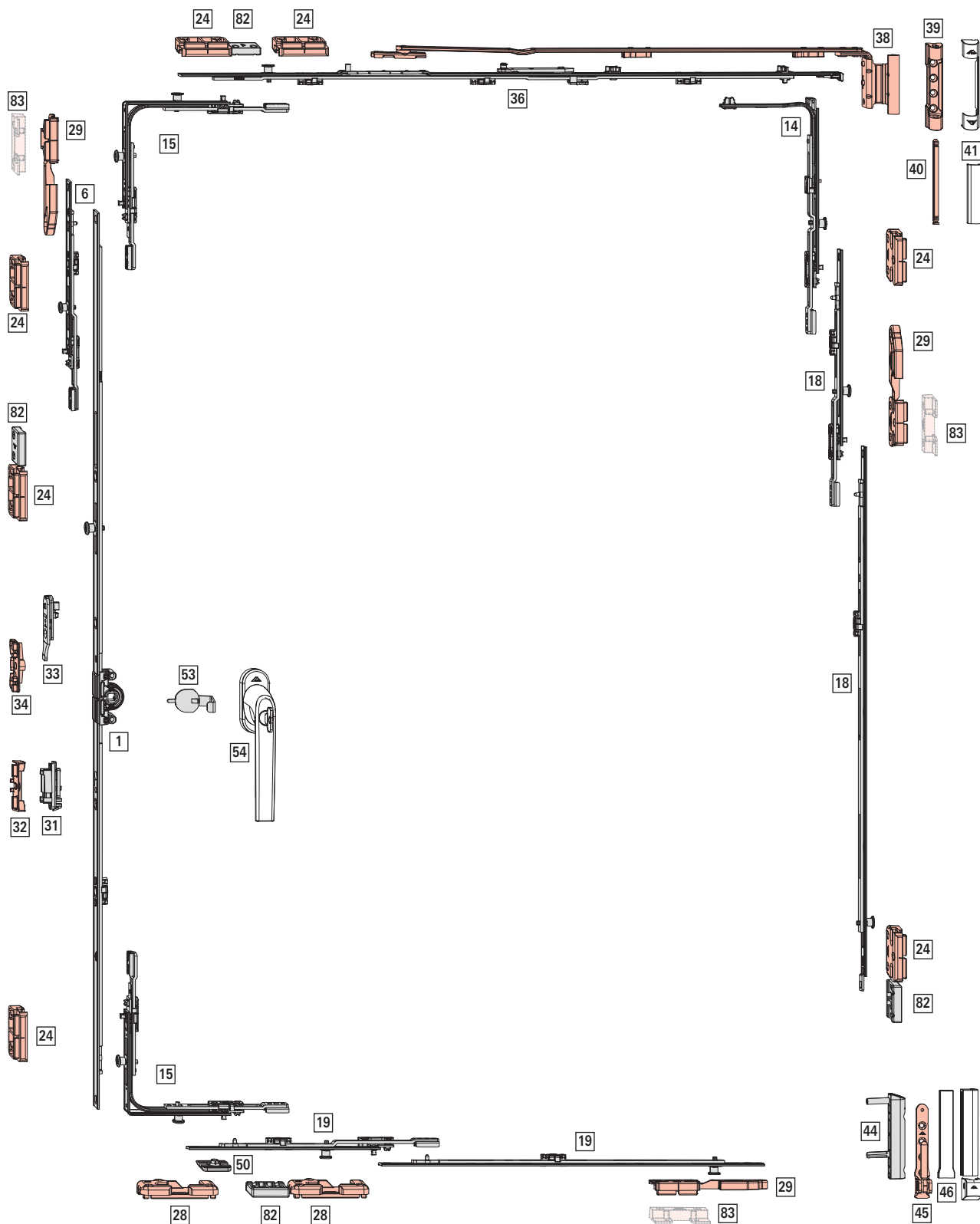
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### 3.1.1.1.5 TiltSafe RC 2 / RC 2 N





| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>             |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [15] | Corner drive, standard (security) → <i>from page 352</i>             |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                             |
| [28] | Tilt striker → <i>from page 450</i>                                  |
| [29] | Security striker for tilt ventilation → <i>from page 461</i>         |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, security → <i>from page 368</i>                          |
| [38] | Stay arm → <i>from page 372</i>                                      |
| [39] | Stay bearing → <i>from page 405</i>                                  |
| [40] | Stay-bearing pin → <i>from page 406</i>                              |
| [41] | Sash stay cover caps → <i>from page 407</i>                          |
| [44] | Corner hinge → <i>from page 434</i>                                  |
| [45] | Pivot rest → <i>from page 437</i>                                    |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>          |
| [53] | Drilling protection → <i>from page 509</i>                           |
| [54] | Handle, lockable (see catalogue CTL_1)                               |
| [81] | Run-up block → <i>from page 514</i>                                  |
| [82] | Anti-jemmy device → <i>from page 510</i>                             |
| [83] | TiltSafe protective support (optional) → <i>from page 461</i>        |

## Application range

| RC 2 / RC 2 N |                             |               |
|---------------|-----------------------------|---------------|
|               | Sash rebate width<br>(SRW)  | 410 – 1400 mm |
|               | Sash rebate height<br>(SRH) | 600 – 2800 mm |
|               | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

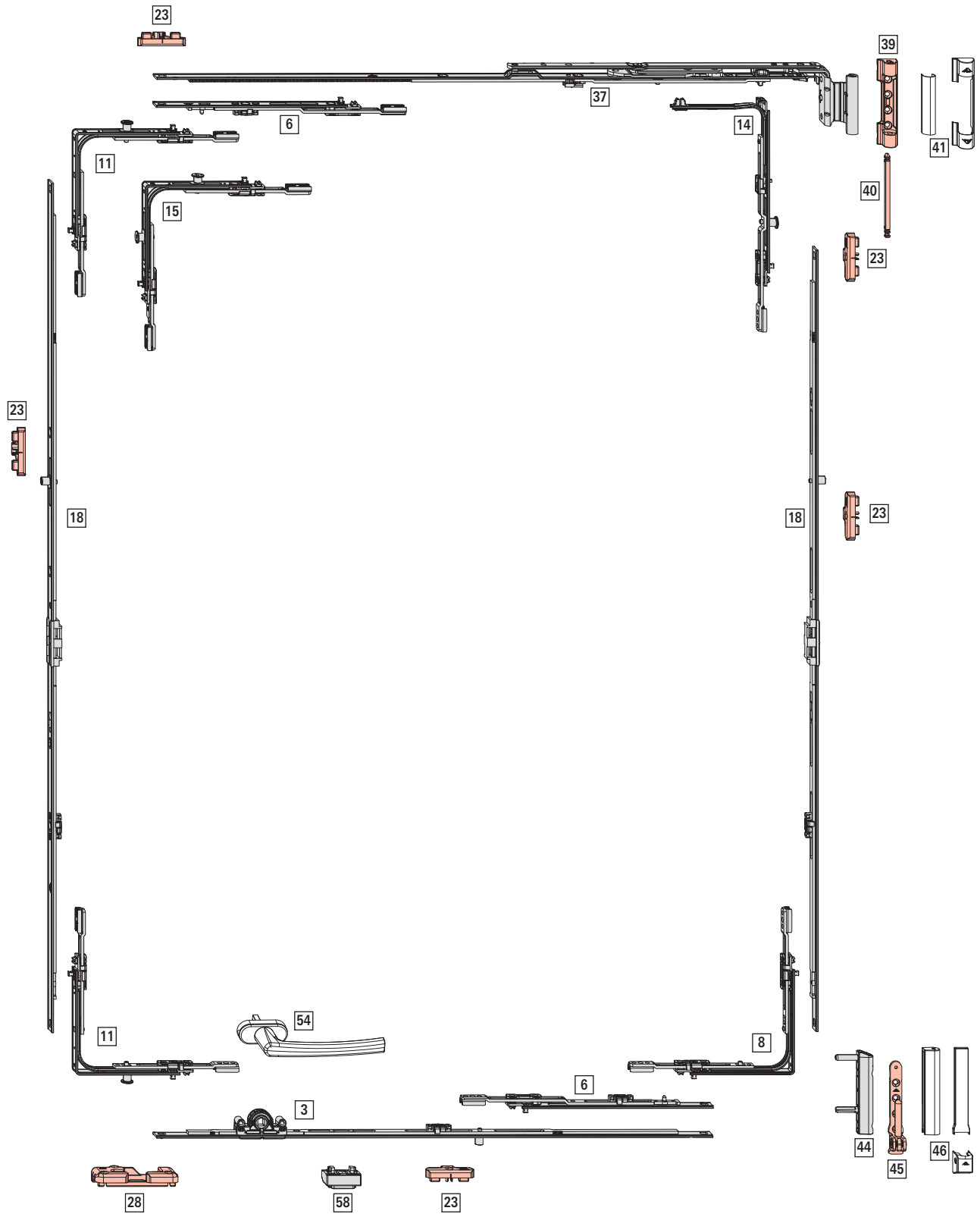
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### 3.1.1.1.6 Comfort – basic security





| Item | Description                                                             |
|------|-------------------------------------------------------------------------|
| [3]  | T&T espagnolette – comfort – fixed handle height → <i>from page 322</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                |
| [8]  | Corner drive, standard, without cam → <i>from page 352</i>              |
| [11] | Corner drive, standard → <i>from page 352</i>                           |
| [14] | Sash stay corner drive → <i>from page 356</i>                           |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                |
| [18] | Centre lock, comfort → <i>from page 425</i>                             |
| [23] | Striker → <i>from page 456</i>                                          |
| [28] | Tilt striker → <i>from page 450</i>                                     |
| [37] | Scissor stay, forcibly controlled → <i>from page 393</i>                |
| [39] | Stay bearing → <i>from page 405</i>                                     |
| [40] | Stay-bearing pin → <i>from page 406</i>                                 |
| [41] | Sash stay cover caps → <i>from page 407</i>                             |
| [44] | Corner hinge → <i>from page 434</i>                                     |
| [45] | Pivot rest → <i>from page 437</i>                                       |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>             |
| [54] | Handle (see catalogue CTL_1)                                            |
| [58] | Run-up block with mishandling device → <i>from page 514</i>             |

### Application range

| Basic security |                             |               |
|----------------|-----------------------------|---------------|
|                | Sash rebate width<br>(SRW)  | 520 – 1400 mm |
|                | Sash rebate height<br>(SRH) | 530 – 1600 mm |
|                | Sash weight<br>(S.kg)       | Max. 50 kg    |



### INFO

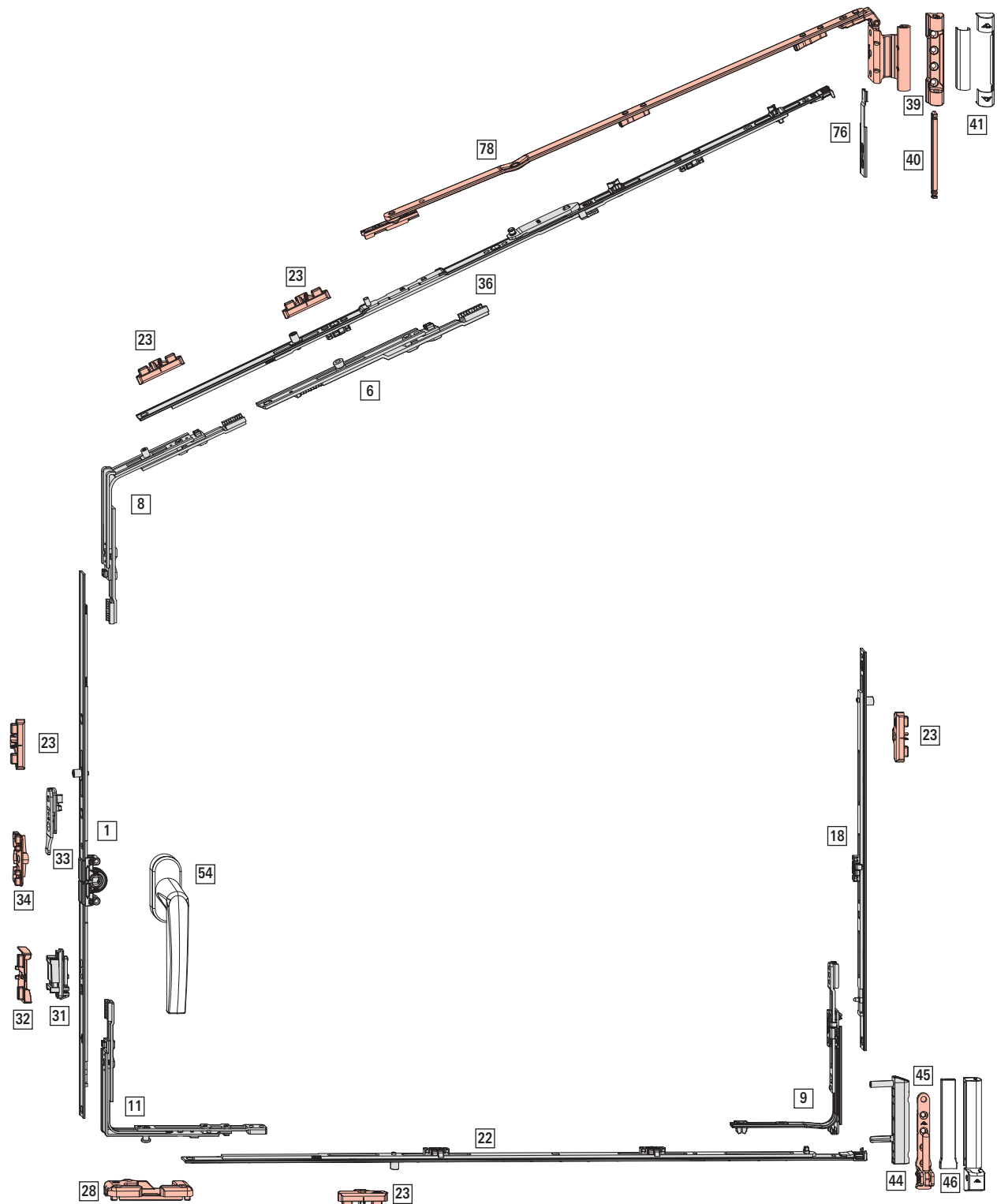
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### 3.1.1.1.7 Pitched window – basic security





| Item | Description                                                        |
|------|--------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>  |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>           |
| [8]  | Corner drive for pitched windows → <i>from page 357</i>            |
| [9]  | Corner drive for arched windows → <i>from page 357</i>             |
| [11] | Corner drive, standard → <i>from page 352</i>                      |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i> |
| [22] | Arched component → <i>from page 424</i>                            |
| [23] | Striker → <i>from page 456</i>                                     |
| [28] | Tilt striker → <i>from page 450</i>                                |
| [31] | Bullet-catch sash component → <i>from page 486</i>                 |
| [32] | Bullet-catch frame component → <i>from page 486</i>                |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>   |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>  |
| [36] | Stay guide, basic security → <i>from page 368</i>                  |
| [39] | Stay bearing → <i>from page 405</i>                                |
| [40] | Stay-bearing pin → <i>from page 406</i>                            |
| [41] | Sash stay cover caps → <i>from page 407</i>                        |
| [44] | Corner hinge → <i>from page 434</i>                                |
| [45] | Pivot rest → <i>from page 437</i>                                  |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>        |
| [54] | Handle (see catalogue CTL_1)                                       |
| [76] | End piece for pitched stay arm → <i>from page 523</i>              |
| [78] | Stay arm for pitched windows → <i>from page 376</i>                |

## Application range

| Basic security |                             |               |
|----------------|-----------------------------|---------------|
|                | Sash rebate width<br>(SRW)  | 340 – 1300 mm |
|                | Sash rebate height<br>(SRH) | 361 – 2400 mm |
|                | Sash weight<br>(S.kg)       | Max. 80 kg    |



## INFO

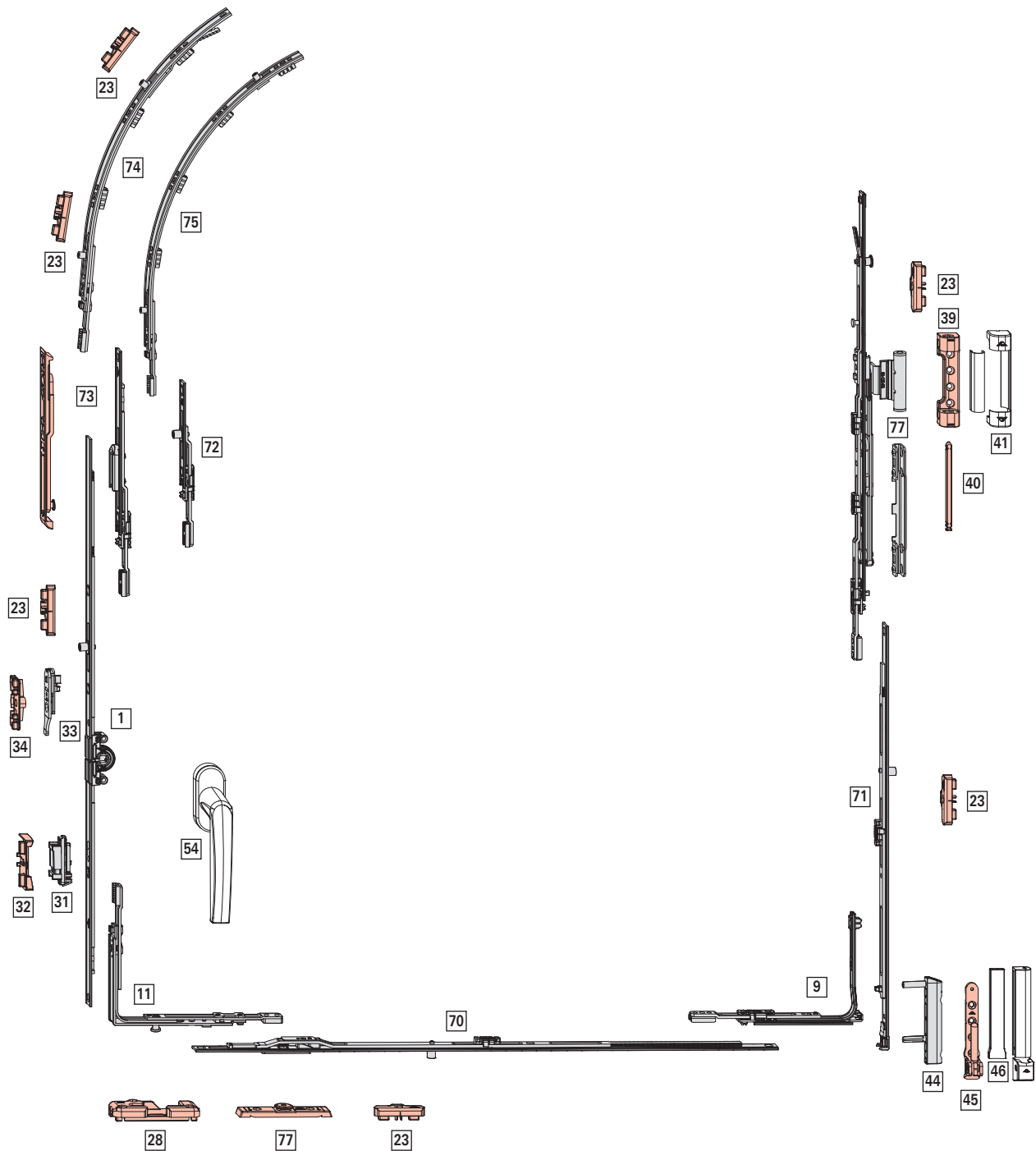
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### 3.1.1.1.8 Arched window – basic security







| Item | Description                                                       |
|------|-------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i> |
| [9]  | Corner drive for arched windows → <i>from page 357</i>            |
| [11] | Corner drive, standard → <i>from page 352</i>                     |
| [23] | Striker → <i>from page 456</i>                                    |
| [28] | Tilt striker → <i>from page 450</i>                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                |
| [32] | Bullet-catch frame component → <i>from page 486</i>               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>  |
| [34] | Lifting mishandling device frame component → <i>from page 496</i> |
| [39] | Stay bearing → <i>from page 405</i>                               |
| [40] | Stay-bearing pin → <i>from page 406</i>                           |
| [41] | Sash stay cover caps → <i>from page 407</i>                       |
| [44] | Corner hinge → <i>from page 434</i>                               |
| [45] | Pivot rest → <i>from page 437</i>                                 |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>       |
| [54] | Handle (see catalogue CTL_1)                                      |
| [70] | Arched component, horizontal → <i>from page 423</i>               |
| [71] | Arched component, vertical → <i>from page 424</i>                 |
| [72] | Arched espagnolette connector → <i>from page 331</i>              |
| [73] | Arched additional scissor stay → <i>from page 471</i>             |
| [74] | Arched centre lock, standard → <i>from page 423</i>               |
| [75] | Arched centre lock, couplable → <i>from page 423</i>              |
| [77] | Arched sash stay → <i>from page 378</i>                           |

## Application range

| Basic security                                                                      |                                                 |               |
|-------------------------------------------------------------------------------------|-------------------------------------------------|---------------|
|  | Sash rebate width<br>(SRW)                      | 400 – 1300 mm |
|  | Sash rebate height at start of arch<br>(SRH SA) | 510 – 1900 mm |
|  | Sash weight<br>(S.kg)                           | Max. 80 kg    |



## INFO

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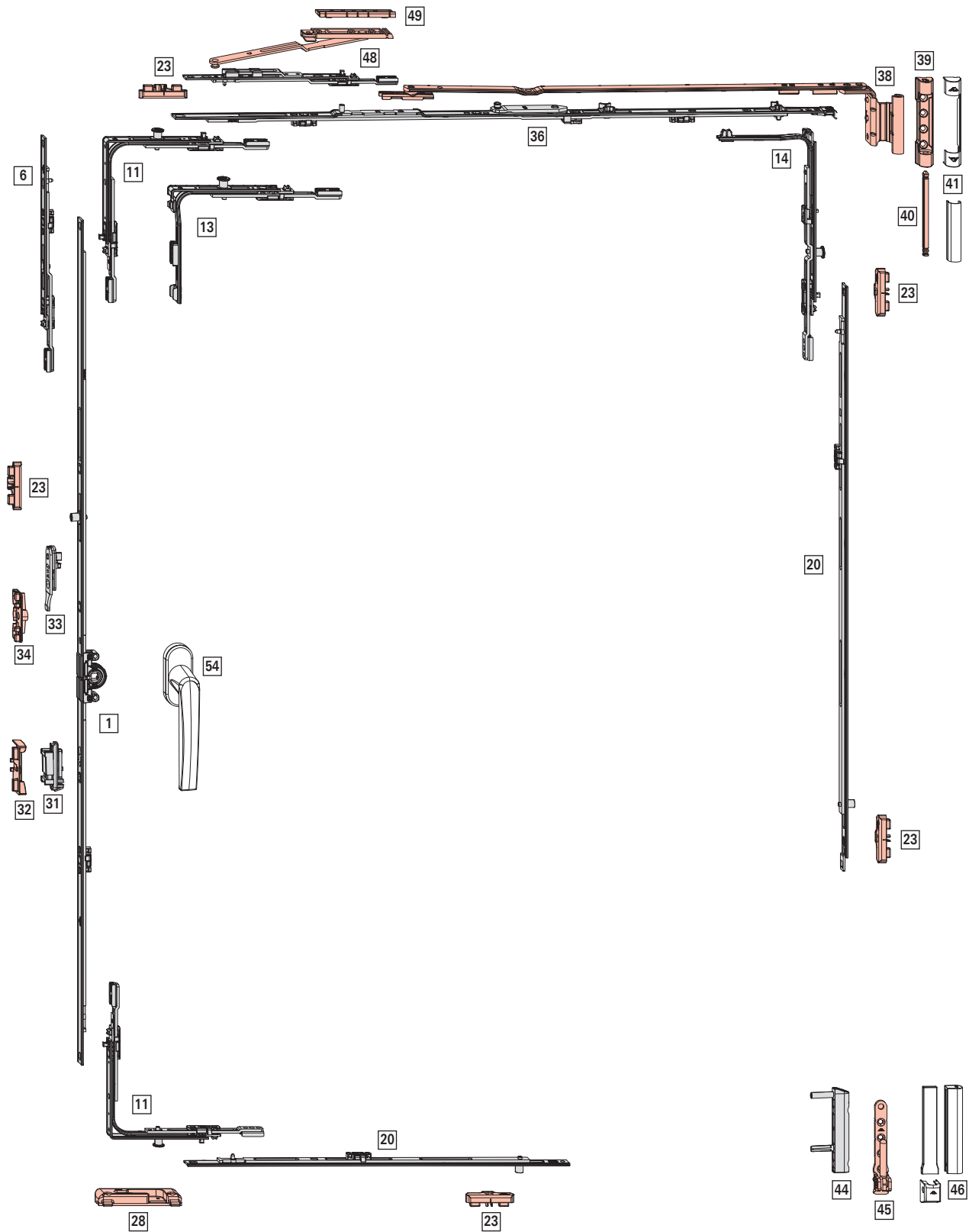
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### 3.1.1.2 TiltFirst hardware

#### 3.1.1.2.1 Basic security





| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                 |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                          |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [13] | Special corner drive, short → <i>from page 353</i>                                |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [20] | Centre lock, multipart – standard, horizontal and vertical → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                                    |
| [28] | Tilt striker, TiltFirst → <i>from page 453</i>                                    |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                  |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                 |
| [36] | Stay guide, basic security → <i>from page 368</i>                                 |
| [38] | Stay arm, TiltFirst → <i>from page 374</i>                                        |
| [39] | Stay bearing → <i>from page 405</i>                                               |
| [40] | Stay-bearing pin → <i>from page 406</i>                                           |
| [41] | Sash stay cover caps → <i>from page 407</i>                                       |
| [44] | Corner hinge → <i>from page 434</i>                                               |
| [45] | Pivot rest → <i>from page 437</i>                                                 |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                       |
| [48] | Additional stay arm, TiltFirst → <i>from page 470</i>                             |
| [49] | Support plate → <i>from page 516</i>                                              |
| [54] | Handle (see catalogue CTL_1)                                                      |

## Application range

| Basic security |                             |               |
|----------------|-----------------------------|---------------|
|                | Sash rebate width<br>(SRW)  | 290 – 1600 mm |
|                | Sash rebate height<br>(SRH) | 280 – 2800 mm |
|                | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

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### 3.1.1.3 Turn-Only hardware

#### 3.1.1.3.1 Basic security





| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>             |
| [11] | Corner drive, standard → <i>from page 352</i>                        |
| [13] | Special corner drive, short → <i>from page 353</i>                   |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                       |
| [24] | Striker, security → <i>from page 457</i>                             |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>     |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>      |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [39] | Stay bearing → <i>from page 405</i>                                  |
| [40] | Stay-bearing pin → <i>from page 406</i>                              |
| [41] | Sash stay cover caps → <i>from page 407</i>                          |
| [42] | Rebate stay guide → <i>from page 394</i>                             |
| [43] | Rebate stay arm → <i>from page 396</i>                               |
| [44] | Corner hinge → <i>from page 434</i>                                  |
| [45] | Pivot rest → <i>from page 437</i>                                    |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>          |
| [52] | Travel restrictor → <i>from page 523</i>                             |
| [54] | Handle (see catalogue CTL_1)                                         |

## Application range

| Basic security                                                                      |                             |               |
|-------------------------------------------------------------------------------------|-----------------------------|---------------|
|  | Sash rebate width<br>(SRW)  | 290 – 1600 mm |
|  | Sash rebate height<br>(SRH) | 280 – 2800 mm |
|  | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

### Roto Con Orders

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### 3.1.1.3.2 RC 1 N





| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>             |
| [11] | Corner drive, standard → <i>from page 352</i>                        |
| [13] | Special corner drive, short → <i>from page 353</i>                   |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>             |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                       |
| [24] | Striker, security → <i>from page 457</i>                             |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, basic security → <i>from page 368</i>                    |
| [38] | Stay arm → <i>from page 372</i>                                      |
| [39] | Stay bearing → <i>from page 405</i>                                  |
| [40] | Stay-bearing pin → <i>from page 406</i>                              |
| [41] | Sash stay cover caps → <i>from page 407</i>                          |
| [44] | Corner hinge → <i>from page 434</i>                                  |
| [45] | Pivot rest → <i>from page 437</i>                                    |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>          |
| [52] | Travel restrictor → <i>from page 523</i>                             |
| [53] | Drilling protection → <i>from page 509</i>                           |
| [54] | Handle, lockable (see catalogue CTL_1)                               |
| [82] | Anti-jemmy device → <i>from page 510</i>                             |

## Application range

| RC 1 N |                             |               |
|--------|-----------------------------|---------------|
|        | Sash rebate width<br>(SRW)  | 320 – 1600 mm |
|        | Sash rebate height<br>(SRH) | 280 – 2800 mm |
|        | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

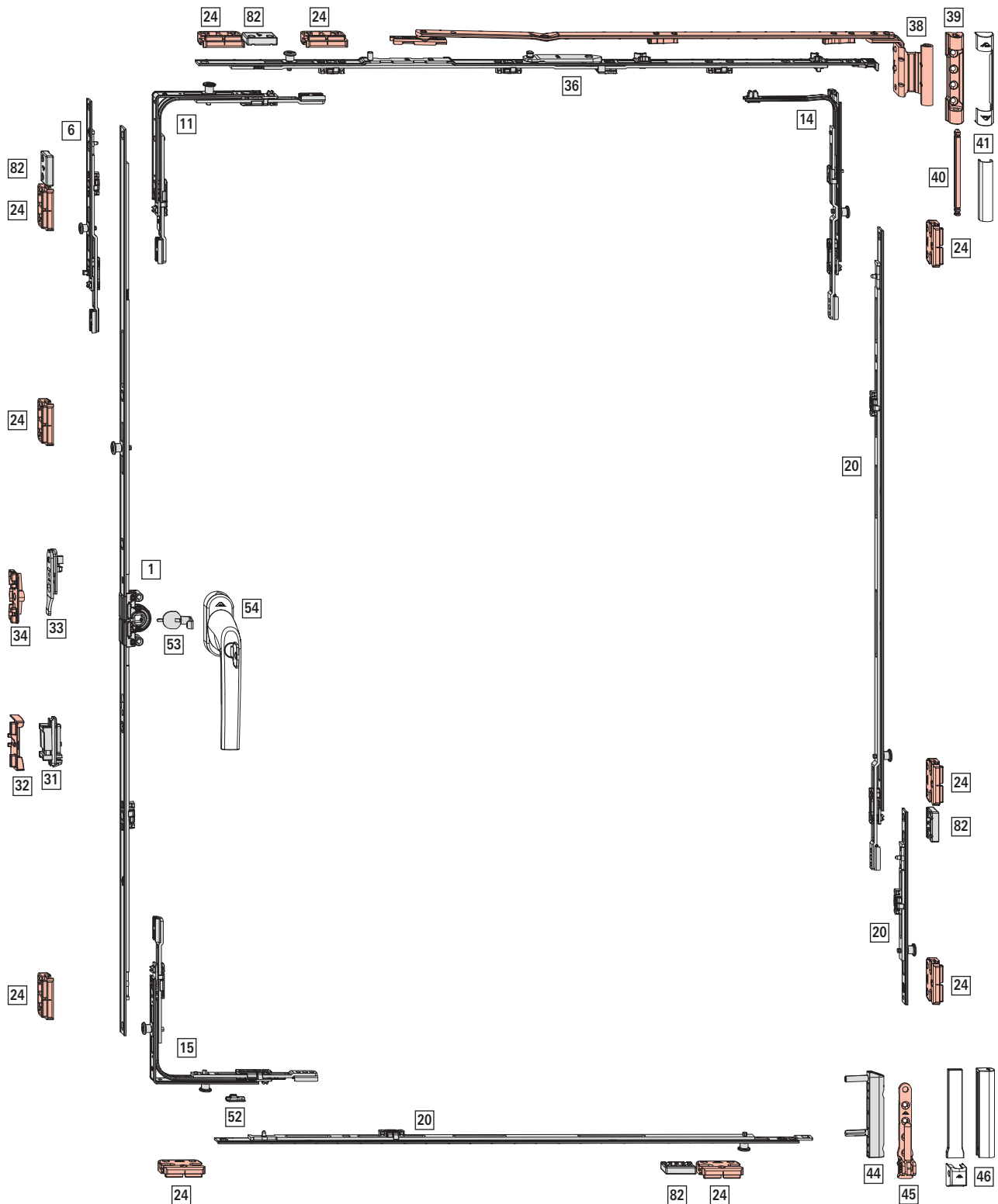
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### 3.1.1.3.3 RC 2 / RC 2 N







| Item | Description                                                                      |
|------|----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                         |
| [11] | Corner drive, standard → <i>from page 352</i>                                    |
| [14] | Sash stay corner drive → <i>from page 356</i>                                    |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                         |
| [20] | Multipart centre lock – security, horizontal and vertical → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                                         |
| [31] | Bullet-catch sash component → <i>from page 486</i>                               |
| [32] | Bullet-catch frame component → <i>from page 486</i>                              |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                 |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                |
| [36] | Stay guide, security → <i>from page 368</i>                                      |
| [38] | Stay arm → <i>from page 372</i>                                                  |
| [39] | Stay bearing → <i>from page 405</i>                                              |
| [40] | Stay-bearing pin → <i>from page 406</i>                                          |
| [41] | Sash stay cover caps → <i>from page 407</i>                                      |
| [44] | Corner hinge → <i>from page 434</i>                                              |
| [45] | Pivot rest → <i>from page 437</i>                                                |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                      |
| [52] | Travel restrictor → <i>from page 523</i>                                         |
| [53] | Drilling protection → <i>from page 509</i>                                       |
| [54] | Handle, lockable (see catalogue CTL_1)                                           |
| [82] | Anti-jemmy device → <i>from page 510</i>                                         |

## Application range

| RC 2 / RC 2 N |                             |               |
|---------------|-----------------------------|---------------|
|               | Sash rebate width<br>(SRW)  | 320 – 1400 mm |
|               | Sash rebate height<br>(SRH) | 600 – 2800 mm |
|               | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

### Roto Con Orders

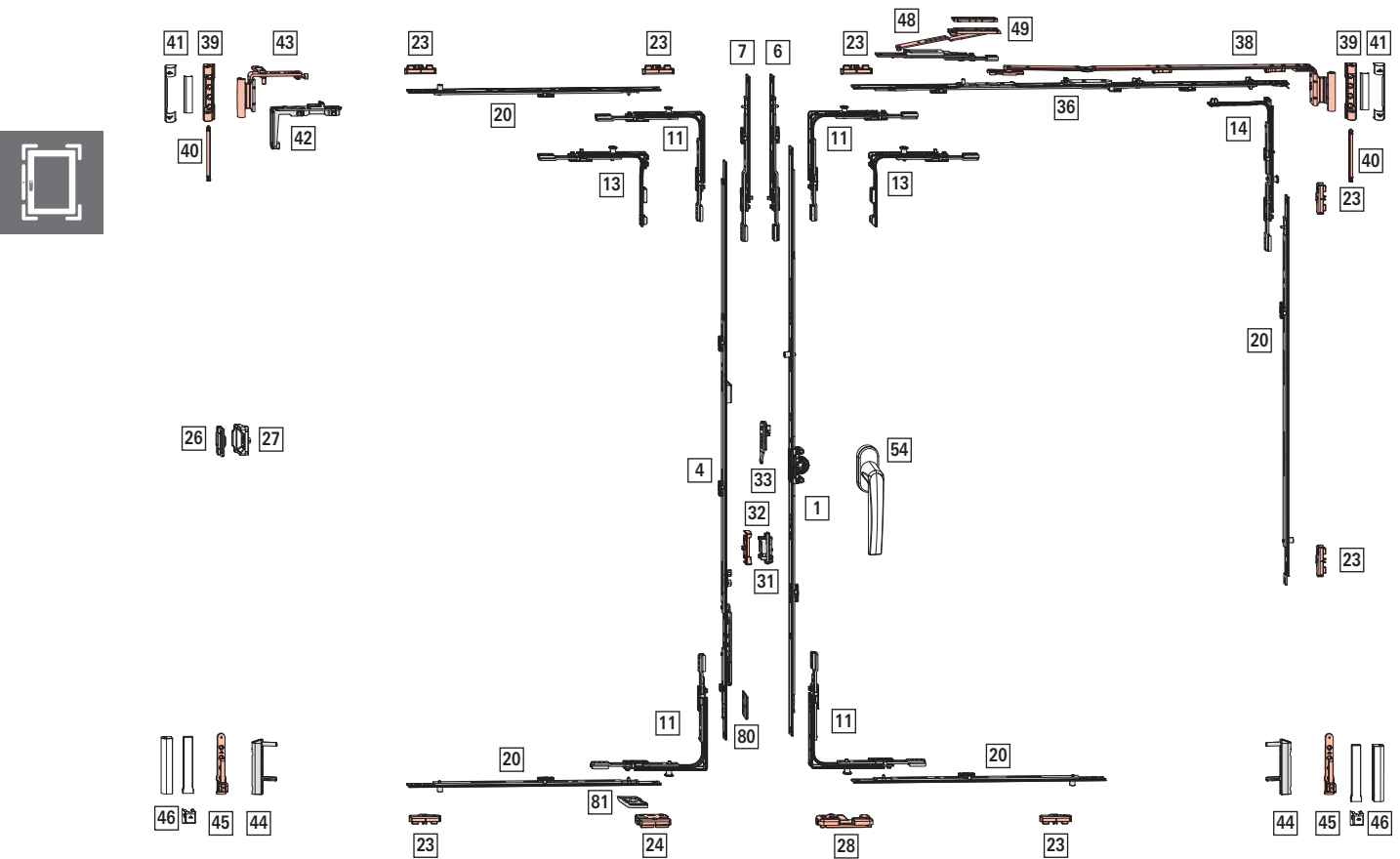
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### 3.1.1.4 Floating-mullion hardware – standard

#### 3.1.1.4.1 Basic security





| Item | Description                                                                           |
|------|---------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                     |
| [4]  | Lever-operated espagnolette Standard, VT – fixed handle height → <i>from page 335</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                              |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                   |
| [11] | Corner drive, standard → <i>from page 352</i>                                         |
| [13] | Special corner drive, short → <i>from page 353</i>                                    |
| [14] | Sash stay corner drive → <i>from page 356</i>                                         |
| [20] | Centre lock, multipart – standard, horizontal and vertical → <i>from page 416</i>     |
| [23] | Striker → <i>from page 456</i>                                                        |
| [24] | Striker, security → <i>from page 457</i>                                              |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>                      |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>                       |
| [28] | Tilt striker → <i>from page 450</i>                                                   |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                    |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                   |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                      |
| [36] | Stay guide, basic security → <i>from page 368</i>                                     |
| [38] | Stay arm → <i>from page 372</i>                                                       |
| [39] | Stay bearing → <i>from page 405</i>                                                   |
| [40] | Stay-bearing pin → <i>from page 406</i>                                               |
| [41] | Sash stay cover caps → <i>from page 407</i>                                           |
| [42] | Rebate stay guide → <i>from page 394</i>                                              |
| [43] | Rebate stay arm → <i>from page 396</i>                                                |
| [44] | Corner hinge → <i>from page 434</i>                                                   |
| [45] | Pivot rest → <i>from page 437</i>                                                     |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                           |
| [48] | Additional stay arm → <i>from page 470</i>                                            |
| [49] | Support plate → <i>from page 516</i>                                                  |
| [54] | Handle (see catalogue CTL_1)                                                          |
| [80] | Fastening plate → <i>from page 511</i>                                                |
| [81] | Run-up block → <i>from page 514</i>                                                   |

## Application range

| Basic security |                             |               |
|----------------|-----------------------------|---------------|
|                | Sash rebate width<br>(SRW)  | 290 – 1600 mm |
|                | Sash rebate height<br>(SRH) | 280 – 2800 mm |
|                | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

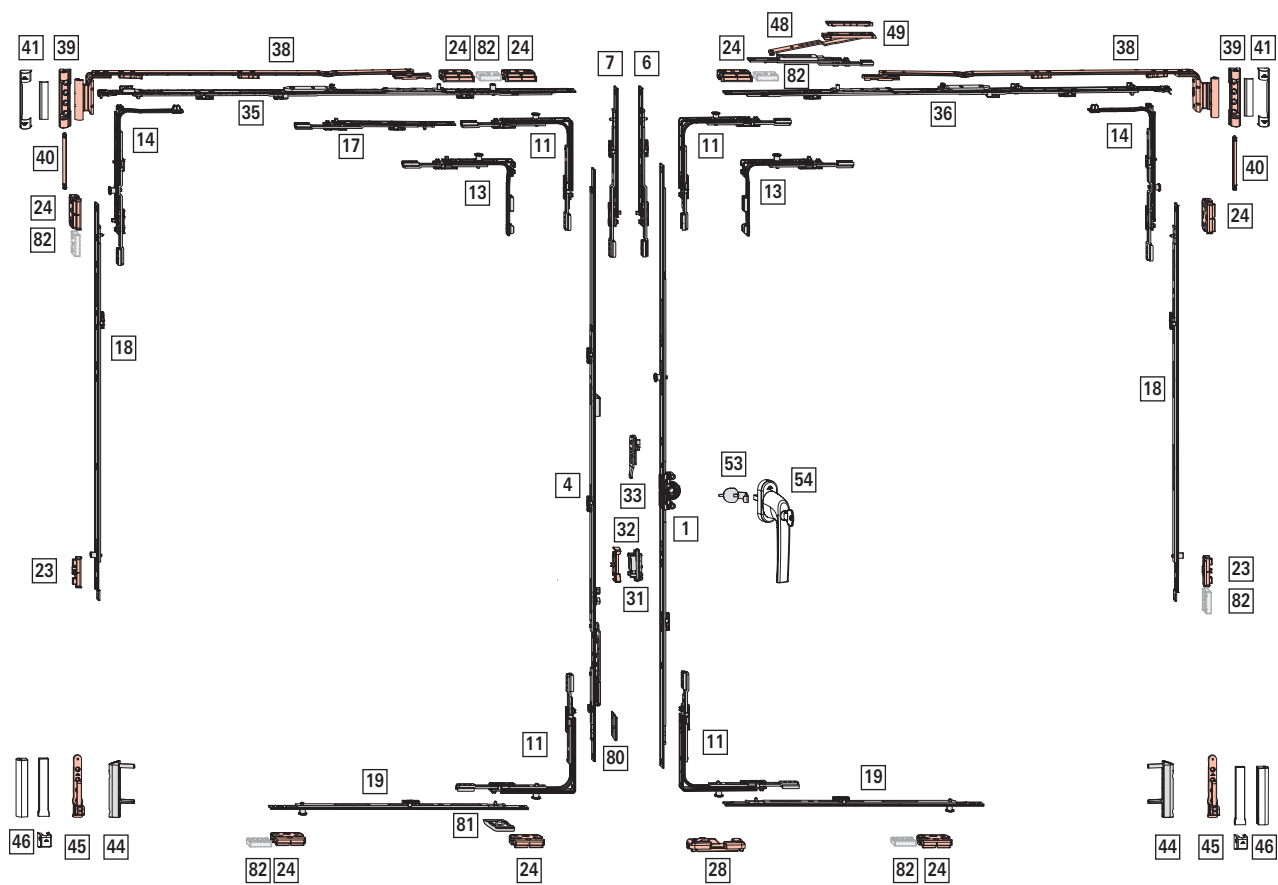
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### 3.1.1.4.2 RC 1 N





| Item | Description                                                                           |
|------|---------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                     |
| [4]  | Lever-operated espagnolette Standard, VT – fixed handle height → <i>from page 335</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                              |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                   |
| [11] | Corner drive, standard → <i>from page 352</i>                                         |
| [13] | Special corner drive, short → <i>from page 353</i>                                    |
| [14] | Sash stay corner drive → <i>from page 356</i>                                         |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                              |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>                    |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>                  |
| [23] | Striker → <i>from page 456</i>                                                        |
| [24] | Striker, security → <i>from page 457</i>                                              |
| [28] | Tilt striker → <i>from page 450</i>                                                   |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                    |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                   |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                      |
| [35] | Turn-Only sash stay guide → <i>from page 369</i>                                      |
| [36] | Stay guide, basic security → <i>from page 368</i>                                     |
| [38] | Stay arm → <i>from page 372</i>                                                       |
| [39] | Stay bearing → <i>from page 405</i>                                                   |
| [40] | Stay-bearing pin → <i>from page 406</i>                                               |
| [41] | Sash stay cover caps → <i>from page 407</i>                                           |
| [44] | Corner hinge → <i>from page 434</i>                                                   |
| [45] | Pivot rest → <i>from page 437</i>                                                     |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                           |
| [48] | Additional stay arm → <i>from page 470</i>                                            |
| [49] | Support plate → <i>from page 516</i>                                                  |
| [53] | Drilling protection → <i>from page 509</i>                                            |
| [54] | Handle, lockable (see catalogue CTL_1)                                                |
| [80] | Fastening plate → <i>from page 511</i>                                                |
| [81] | Run-up block → <i>from page 514</i>                                                   |
| [82] | Anti-jemmy device → <i>from page 510</i>                                              |

## Application range

| RC 1 N |                             |               |
|--------|-----------------------------|---------------|
|        | Sash rebate width<br>(SRW)  | 320 – 1600 mm |
|        | Sash rebate height<br>(SRH) | 280 – 2800 mm |
|        | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

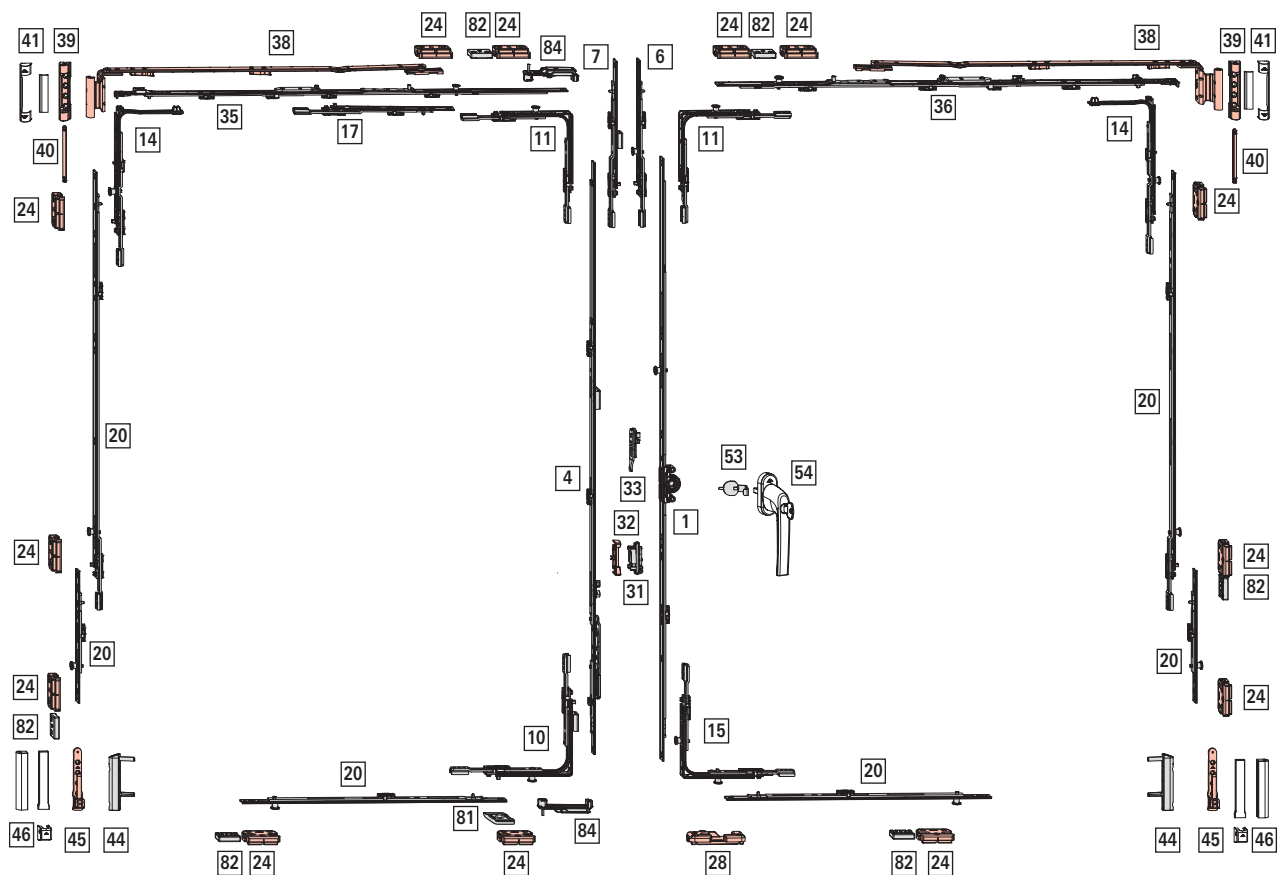
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### 3.1.1.4.3 RC 2 / RC 2 N





| Item | Description                                                                           |
|------|---------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                     |
| [4]  | Lever-operated espagnolette Standard, VT – fixed handle height → <i>from page 335</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                              |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                   |
| [10] | Floating-mullion corner drive → <i>from page 354</i>                                  |
| [11] | Corner drive, standard → <i>from page 352</i>                                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                                         |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                              |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                              |
| [20] | Multipart centre lock – security, horizontal and vertical → <i>from page 416</i>      |
| [24] | Striker, security → <i>from page 457</i>                                              |
| [28] | Tilt striker → <i>from page 450</i>                                                   |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                    |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                   |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                      |
| [35] | Turn-Only sash stay guide → <i>from page 369</i>                                      |
| [36] | Stay guide, security → <i>from page 368</i>                                           |
| [38] | Stay arm → <i>from page 372</i>                                                       |
| [39] | Stay bearing → <i>from page 405</i>                                                   |
| [40] | Stay-bearing pin → <i>from page 406</i>                                               |
| [41] | Sash stay cover caps → <i>from page 407</i>                                           |
| [44] | Corner hinge → <i>from page 434</i>                                                   |
| [45] | Pivot rest → <i>from page 437</i>                                                     |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                           |
| [53] | Drilling protection → <i>from page 509</i>                                            |
| [54] | Handle, lockable (see catalogue CTL_1)                                                |
| [81] | Run-up block → <i>from page 514</i>                                                   |
| [82] | Anti-jemmy device → <i>from page 510</i>                                              |
| [84] | Safety device for floating-mullion sash → <i>from page 509</i>                        |

## Application range

| RC 2 / RC 2 N |                             |               |
|---------------|-----------------------------|---------------|
|               | Sash rebate width<br>(SRW)  | 400 – 1400 mm |
|               | Sash rebate height<br>(SRH) | 600 – 2800 mm |
|               | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

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#### 3.1.1.4.4 Comfort – basic security







| Item | Description                                                                           |
|------|---------------------------------------------------------------------------------------|
| [3]  | T&T espagnolette – comfort – fixed handle height → <i>from page 322</i>               |
| [4]  | Lever-operated espagnolette Standard, VT – fixed handle height → <i>from page 335</i> |
| [8]  | Corner drive, standard, without cam → <i>from page 352</i>                            |
| [11] | Corner drive, standard → <i>from page 352</i>                                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                                         |
| [18] | Centre lock, comfort → <i>from page 425</i>                                           |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                  |
| [23] | Striker → <i>from page 456</i>                                                        |
| [24] | Striker, security → <i>from page 457</i>                                              |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>                      |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>                       |
| [28] | Tilt striker → <i>from page 450</i>                                                   |
| [37] | Scissor stay, forcibly controlled → <i>from page 393</i>                              |
| [39] | Stay bearing → <i>from page 405</i>                                                   |
| [40] | Stay-bearing pin → <i>from page 406</i>                                               |
| [41] | Sash stay cover caps → <i>from page 407</i>                                           |
| [42] | Rebate stay guide → <i>from page 394</i>                                              |
| [43] | Rebate stay arm → <i>from page 396</i>                                                |
| [44] | Corner hinge → <i>from page 434</i>                                                   |
| [45] | Pivot rest → <i>from page 437</i>                                                     |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                           |
| [54] | Handle (see catalogue CTL_1)                                                          |
| [58] | Run-up block with mishandling device → <i>from page 514</i>                           |
| [81] | Run-up block → <i>from page 514</i>                                                   |

## Application range

| Basic security |                             |               |
|----------------|-----------------------------|---------------|
|                | Sash rebate width<br>(SRW)  | 520 – 1400 mm |
|                | Sash rebate height<br>(SRH) | 800 – 1600 mm |
|                | Sash weight<br>(S.kg)       | Max. 50 kg    |



## INFO

### Roto Con Orders

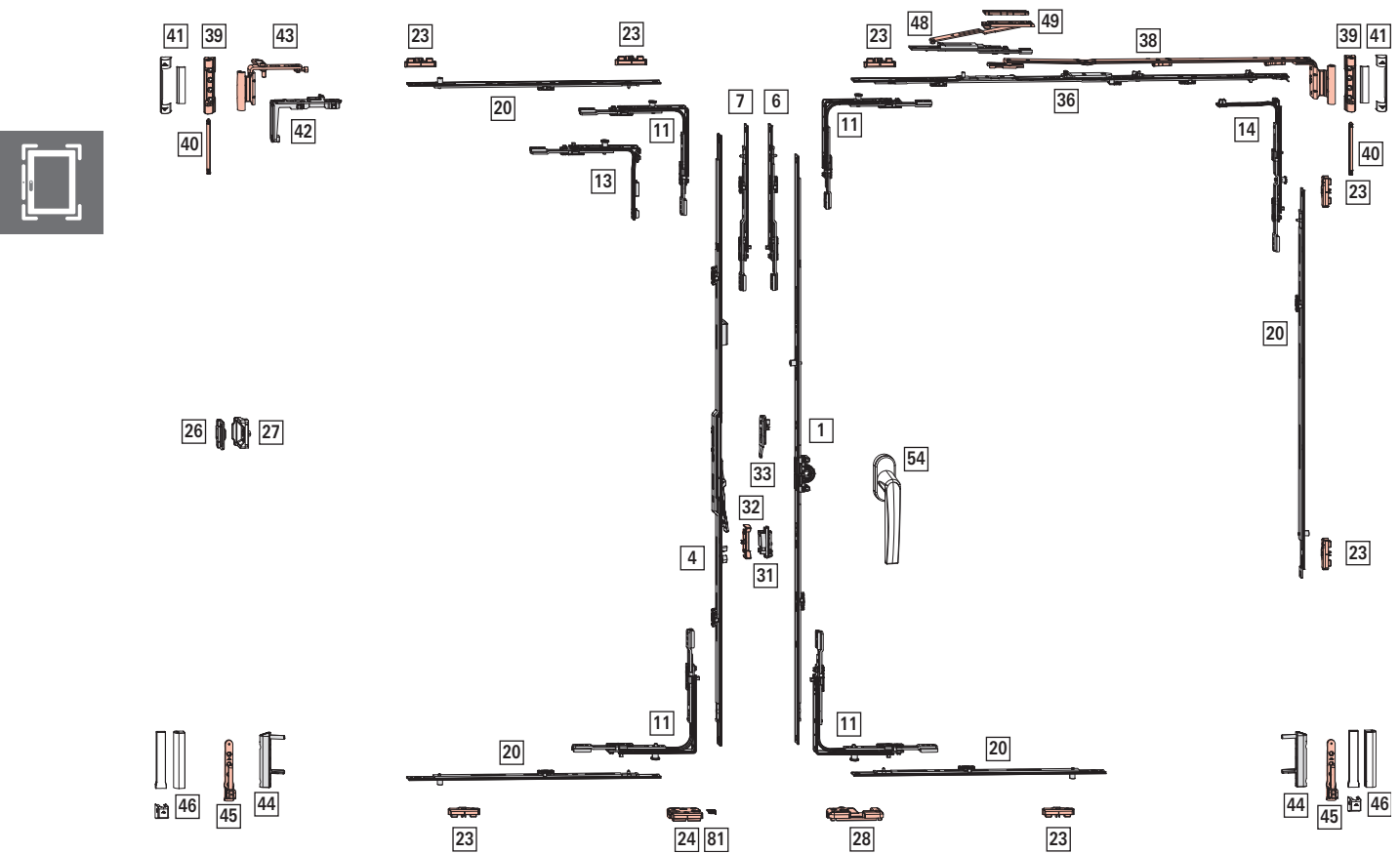
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### 3.1.1.5 Floating-mullion hardware – Plus

#### 3.1.1.5.1 Basic security





| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                 |
| [4]  | Lever-operated espagnolette Plus, VT – fixed handle height → <i>from page 339</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                          |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                               |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [13] | Special corner drive, short → <i>from page 353</i>                                |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [20] | Centre lock, multipart – standard, horizontal and vertical → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                                    |
| [24] | Striker, security → <i>from page 457</i>                                          |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>                  |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>                   |
| [28] | Tilt striker → <i>from page 450</i>                                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                  |
| [36] | Stay guide, basic security → <i>from page 368</i>                                 |
| [38] | Stay arm → <i>from page 372</i>                                                   |
| [39] | Stay bearing → <i>from page 405</i>                                               |
| [40] | Stay-bearing pin → <i>from page 406</i>                                           |
| [41] | Sash stay cover caps → <i>from page 407</i>                                       |
| [42] | Rebate stay guide → <i>from page 394</i>                                          |
| [43] | Rebate stay arm → <i>from page 396</i>                                            |
| [44] | Corner hinge → <i>from page 434</i>                                               |
| [45] | Pivot rest → <i>from page 437</i>                                                 |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                       |
| [48] | Additional stay arm → <i>from page 470</i>                                        |
| [49] | Support plate → <i>from page 516</i>                                              |
| [54] | Handle (see catalogue CTL_1)                                                      |
| [80] | Fastening plate → <i>from page 511</i>                                            |
| [81] | Run-up block → <i>from page 514</i>                                               |

## Application range

| Basic security |                             |               |
|----------------|-----------------------------|---------------|
|                | Sash rebate width<br>(SRW)  | 290 – 1600 mm |
|                | Sash rebate height<br>(SRH) | 430 – 2800 mm |
|                | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

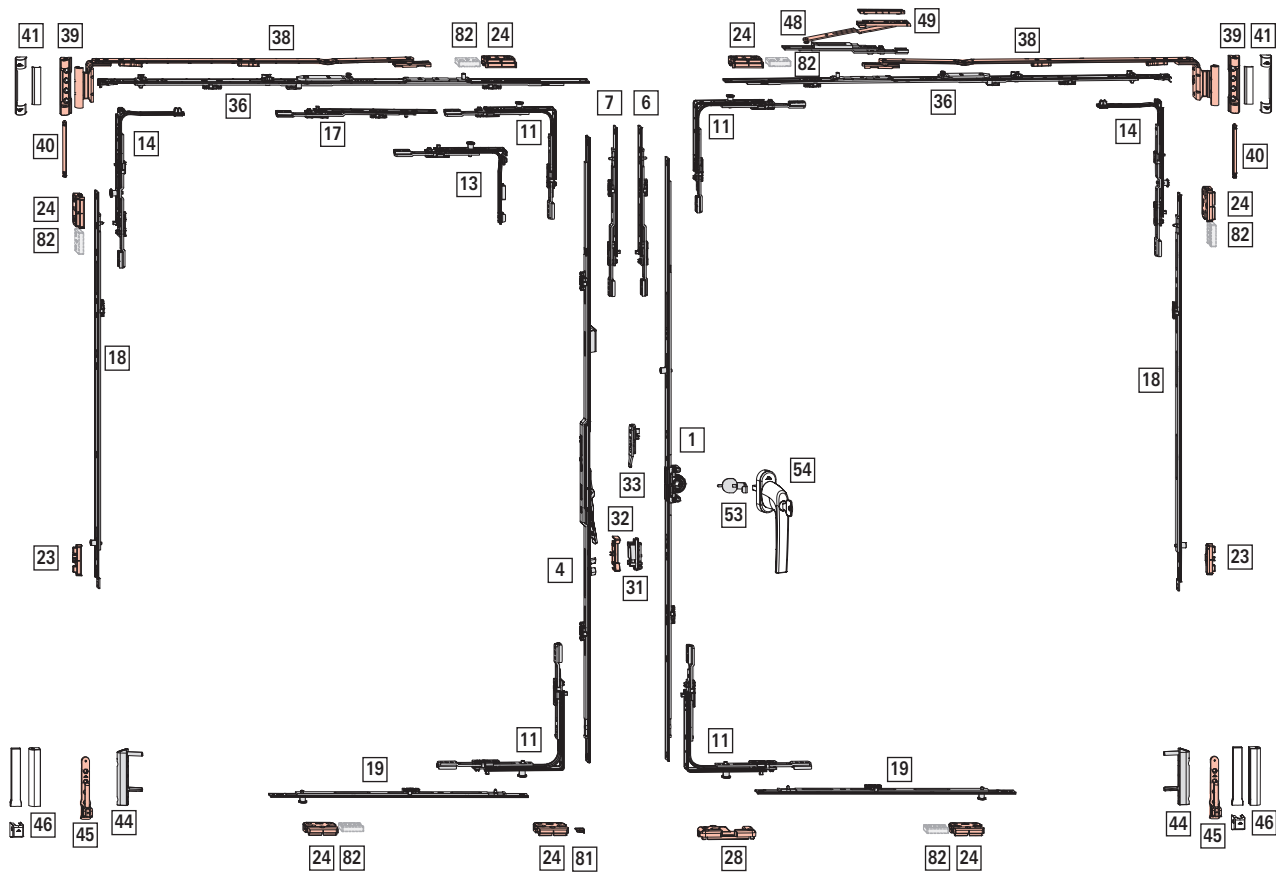
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### 3.1.1.5.2 RC 1 N





| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                 |
| [4]  | Lever-operated espagnolette Plus, VT – fixed handle height → <i>from page 339</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                          |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                               |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [13] | Special corner drive, short → <i>from page 353</i>                                |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                          |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>                |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>              |
| [23] | Striker → <i>from page 456</i>                                                    |
| [24] | Striker, security → <i>from page 457</i>                                          |
| [28] | Tilt striker → <i>from page 450</i>                                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                  |
| [35] | Turn-Only sash stay guide → <i>from page 369</i>                                  |
| [36] | Stay guide, basic security → <i>from page 368</i>                                 |
| [38] | Stay arm → <i>from page 372</i>                                                   |
| [39] | Stay bearing → <i>from page 405</i>                                               |
| [40] | Stay-bearing pin → <i>from page 406</i>                                           |
| [41] | Sash stay cover caps → <i>from page 407</i>                                       |
| [44] | Corner hinge → <i>from page 434</i>                                               |
| [45] | Pivot rest → <i>from page 437</i>                                                 |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                       |
| [48] | Additional stay arm → <i>from page 470</i>                                        |
| [49] | Support plate → <i>from page 516</i>                                              |
| [53] | Drilling protection → <i>from page 509</i>                                        |
| [54] | Handle, lockable (see catalogue CTL_1)                                            |
| [80] | Fastening plate → <i>from page 511</i>                                            |
| [81] | Run-up block → <i>from page 514</i>                                               |
| [82] | Anti-jemmy device → <i>from page 510</i>                                          |

## Application range

| RC 1 N |                             |               |
|--------|-----------------------------|---------------|
|        | Sash rebate width<br>(SRW)  | 320 – 1600 mm |
|        | Sash rebate height<br>(SRH) | 430 – 2800 mm |
|        | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

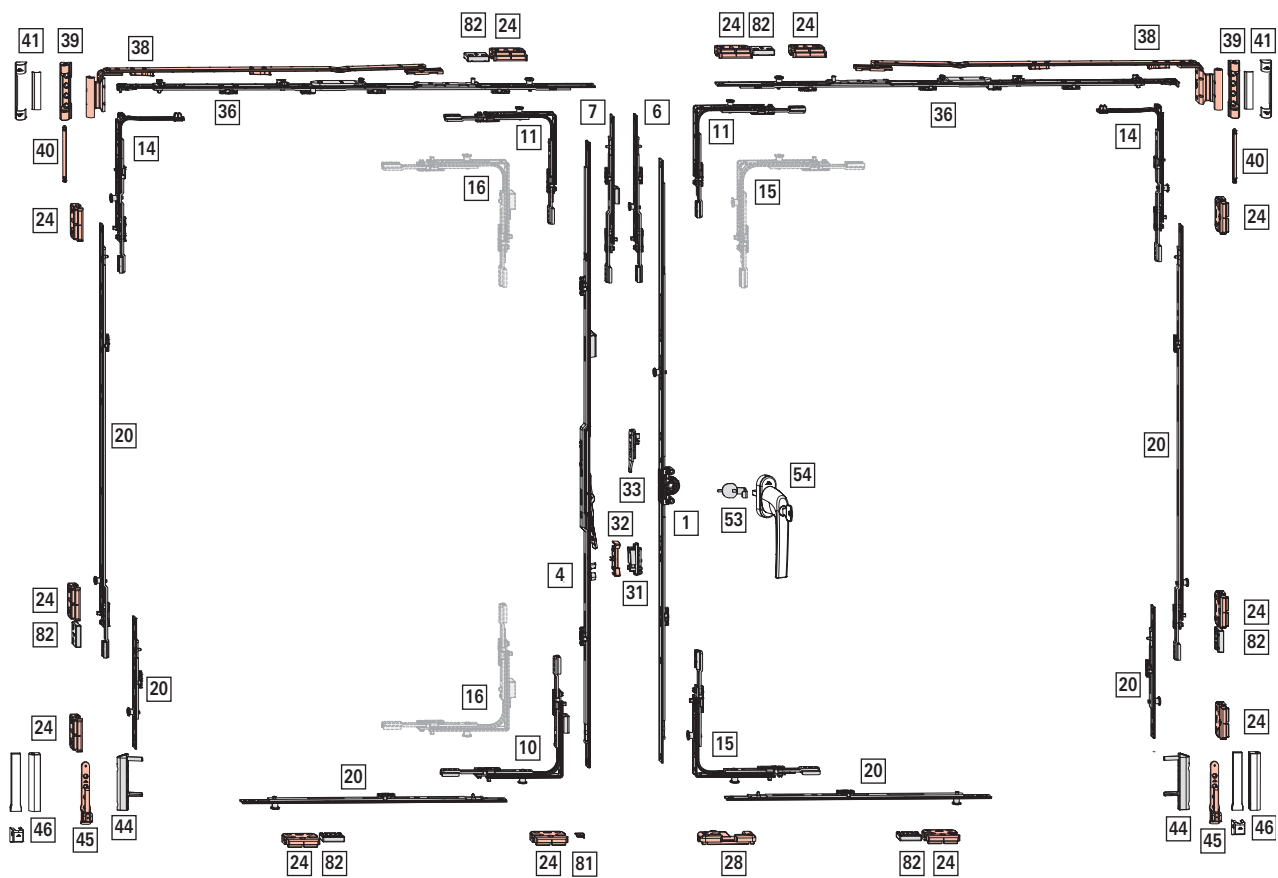
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### 3.1.1.5.3 RC 2 / RC 2 N





| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                 |
| [4]  | Lever-operated espagnolette Plus, VT – fixed handle height → <i>from page 339</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                          |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                               |
| [10] | Floating-mullion corner drive → <i>from page 354</i>                              |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                          |
| [16] | Floating-mullion corner drive – slide guard (optional) → <i>from page 354</i>     |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                          |
| [20] | Multipart centre lock – security, horizontal and vertical → <i>from page 416</i>  |
| [24] | Striker, security → <i>from page 457</i>                                          |
| [28] | Tilt striker → <i>from page 450</i>                                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                  |
| [35] | Turn-Only sash stay guide → <i>from page 369</i>                                  |
| [36] | Stay guide, security → <i>from page 368</i>                                       |
| [38] | Stay arm → <i>from page 372</i>                                                   |
| [39] | Stay bearing → <i>from page 405</i>                                               |
| [40] | Stay-bearing pin → <i>from page 406</i>                                           |
| [41] | Sash stay cover caps → <i>from page 407</i>                                       |
| [44] | Corner hinge → <i>from page 434</i>                                               |
| [45] | Pivot rest → <i>from page 437</i>                                                 |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                       |
| [53] | Drilling protection → <i>from page 509</i>                                        |
| [54] | Handle, lockable (see catalogue CTL_1)                                            |
| [81] | Run-up block → <i>from page 514</i>                                               |
| [82] | Anti-jemmy device → <i>from page 510</i>                                          |

## Application range

| RC 2 / RC 2 N |                             |               |
|---------------|-----------------------------|---------------|
|               | Sash rebate width<br>(SRW)  | 400 – 1400 mm |
|               | Sash rebate height<br>(SRH) | 600 – 2800 mm |
|               | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

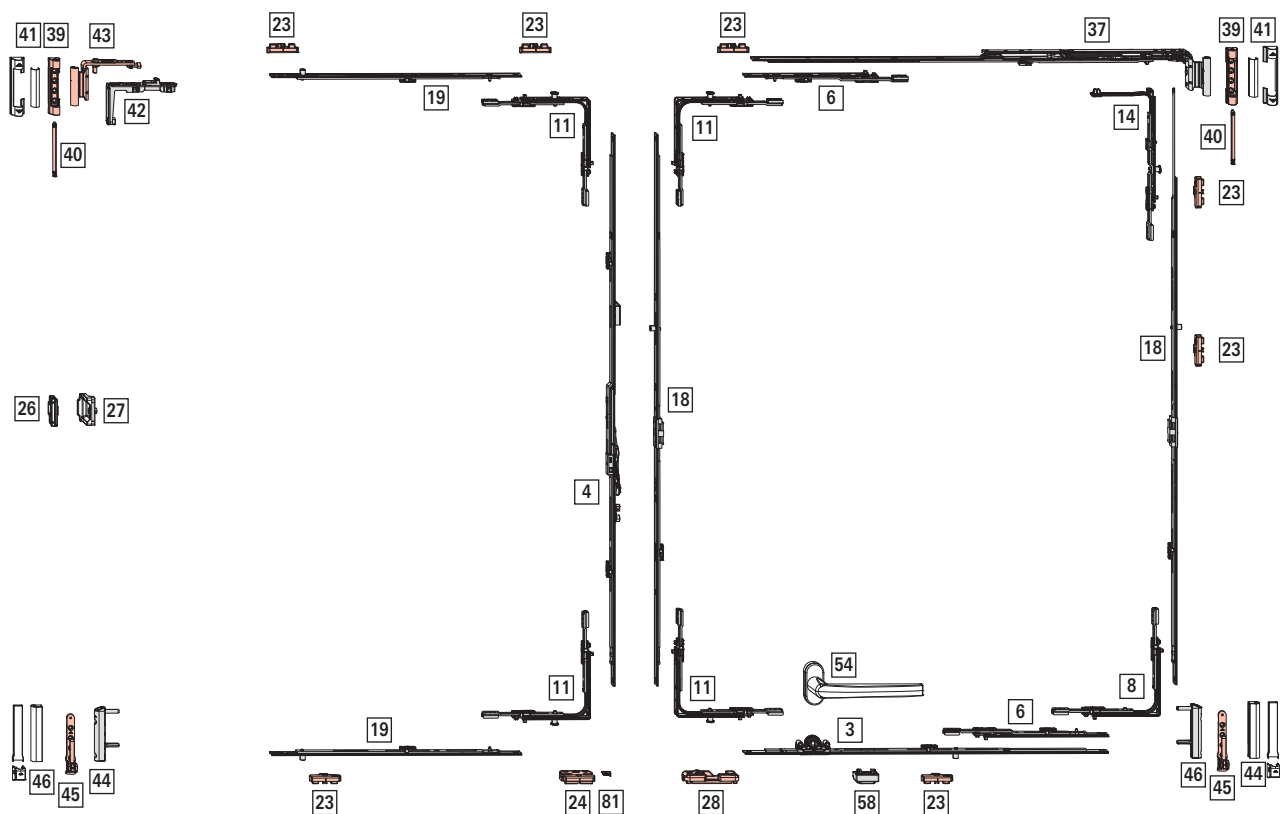
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### 3.1.1.5.4 Comfort – basic security







| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [3]  | T&T espagnolette – comfort – fixed handle height → <i>from page 322</i>           |
| [4]  | Lever-operated espagnolette Plus, VT – fixed handle height → <i>from page 339</i> |
| [8]  | Corner drive, standard, without cam → <i>from page 352</i>                        |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [18] | Centre lock, comfort → <i>from page 425</i>                                       |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>              |
| [23] | Striker → <i>from page 456</i>                                                    |
| [24] | Striker, security → <i>from page 457</i>                                          |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>                  |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>                   |
| [28] | Tilt striker → <i>from page 450</i>                                               |
| [37] | Scissor stay, forcibly controlled → <i>from page 393</i>                          |
| [39] | Stay bearing → <i>from page 405</i>                                               |
| [40] | Stay-bearing pin → <i>from page 406</i>                                           |
| [41] | Sash stay cover caps → <i>from page 407</i>                                       |
| [42] | Rebate stay guide → <i>from page 394</i>                                          |
| [43] | Rebate stay arm → <i>from page 396</i>                                            |
| [44] | Corner hinge → <i>from page 434</i>                                               |
| [45] | Pivot rest → <i>from page 437</i>                                                 |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                       |
| [54] | Handle (see catalogue CTL_1)                                                      |
| [58] | Run-up block with mishandling device → <i>from page 514</i>                       |
| [81] | Run-up block → <i>from page 514</i>                                               |

## Application range

| Basic security |                             |               |
|----------------|-----------------------------|---------------|
|                | Sash rebate width<br>(SRW)  | 520 – 1400 mm |
|                | Sash rebate height<br>(SRH) | 800 – 1600 mm |
|                | Sash weight<br>(S.kg)       | Max. 50 kg    |



## INFO

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## 3.1.2 T&T espagnolette – centred / variable handle height

### 3.1.2.1 Tilt&Turn hardware

#### 3.1.2.1.1 Basic security





| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>        |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                          |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [13] | Special corner drive, short → <i>from page 353</i>                                |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [20] | Centre lock, multipart – standard, horizontal and vertical → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                                    |
| [28] | Tilt striker → <i>from page 450</i>                                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                  |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                 |
| [36] | Stay guide, basic security → <i>from page 368</i>                                 |
| [38] | Stay arm → <i>from page 372</i>                                                   |
| [39] | Stay bearing → <i>from page 405</i>                                               |
| [40] | Stay-bearing pin → <i>from page 406</i>                                           |
| [41] | Sash stay cover caps → <i>from page 407</i>                                       |
| [44] | Corner hinge → <i>from page 434</i>                                               |
| [45] | Pivot rest → <i>from page 437</i>                                                 |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                       |
| [48] | Additional stay arm → <i>from page 470</i>                                        |
| [49] | Support plate → <i>from page 516</i>                                              |
| [54] | Handle (see catalogue CTL_1)                                                      |
| [63] | Night vent (optional from SRW > 600 mm) → <i>from page 493</i>                    |

## Application range

| Basic security                                                                      |                             |               |
|-------------------------------------------------------------------------------------|-----------------------------|---------------|
|  | Sash rebate width<br>(SRW)  | 290 – 1600 mm |
|  | Sash rebate height<br>(SRH) | 310 – 2800 mm |
|  | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

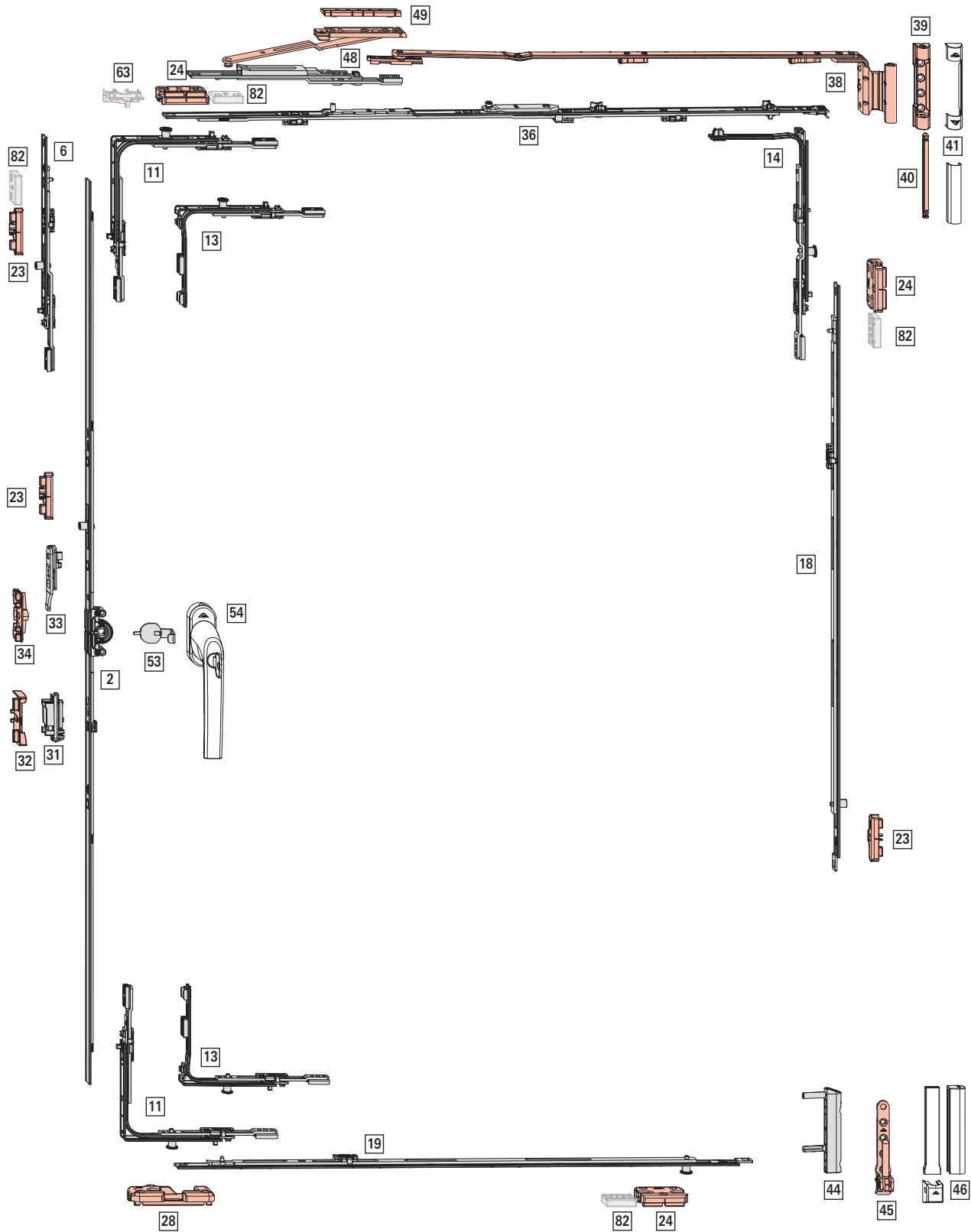
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### 3.1.2.1.2 RC 1 N





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                   |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [13] | Special corner drive, short → <i>from page 353</i>                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>       |
| [23] | Striker → <i>from page 456</i>                                             |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [28] | Tilt striker → <i>from page 450</i>                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, basic security → <i>from page 368</i>                          |
| [38] | Stay arm → <i>from page 372</i>                                            |
| [39] | Stay bearing → <i>from page 405</i>                                        |
| [40] | Stay-bearing pin → <i>from page 406</i>                                    |
| [41] | Sash stay cover caps → <i>from page 407</i>                                |
| [44] | Corner hinge → <i>from page 434</i>                                        |
| [45] | Pivot rest → <i>from page 437</i>                                          |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                |
| [48] | Additional stay arm → <i>from page 470</i>                                 |
| [49] | Support plate → <i>from page 516</i>                                       |
| [53] | Drilling protection → <i>from page 509</i>                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                     |
| [63] | Night vent (optional from SRW > 600 mm) → <i>from page 493</i>             |
| [82] | Anti-jemmy device → <i>from page 510</i>                                   |

## Application range

| RC 1 N |                             |               |
|--------|-----------------------------|---------------|
|        | Sash rebate width<br>(SRW)  | 320 – 1600 mm |
|        | Sash rebate height<br>(SRH) | 310 – 2800 mm |
|        | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

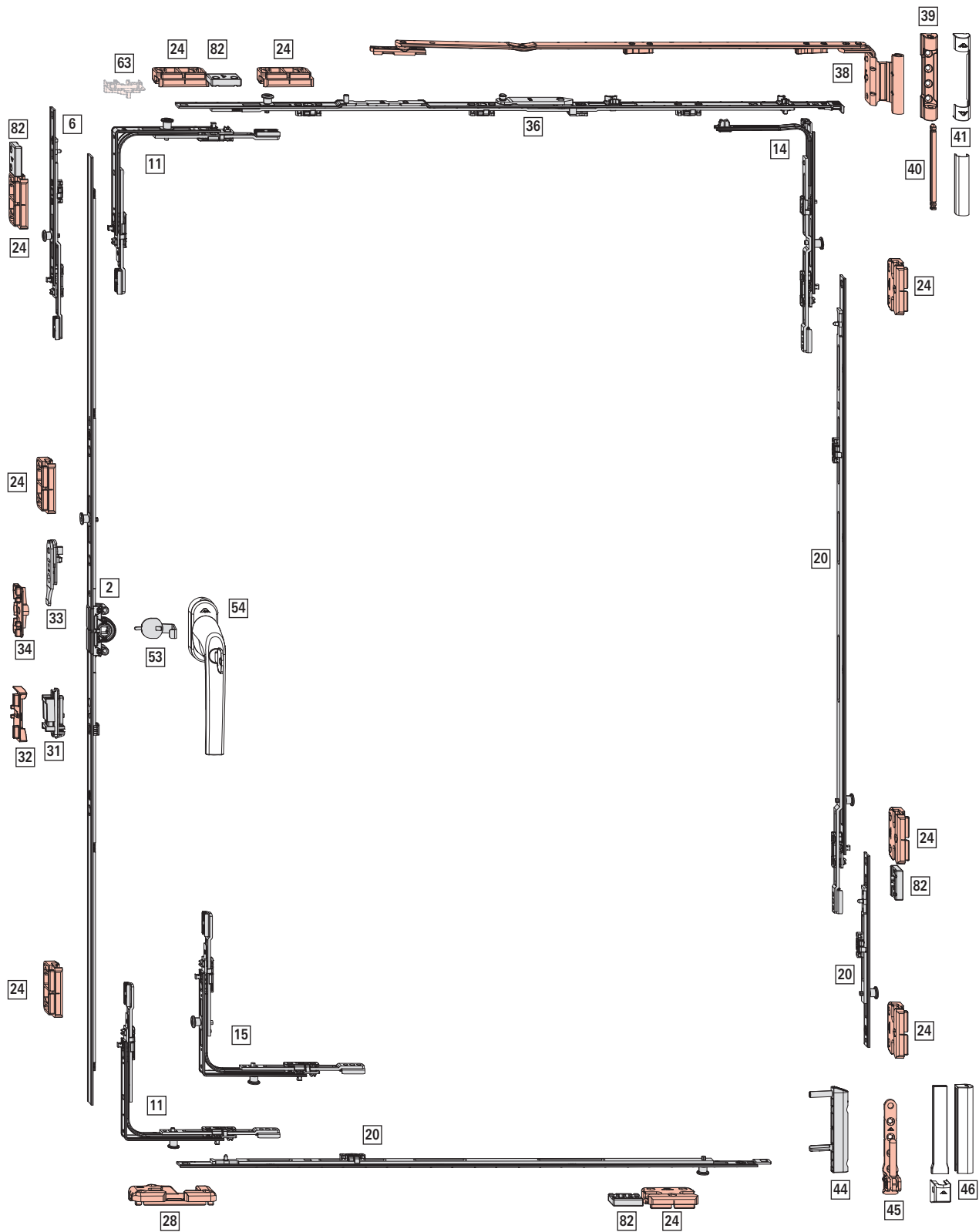
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### 3.1.2.1.3 RC 2 / RC 2 N





| Item | Description                                                                      |
|------|----------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>       |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                         |
| [11] | Corner drive, standard → <i>from page 352</i>                                    |
| [14] | Sash stay corner drive → <i>from page 356</i>                                    |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                         |
| [20] | Multipart centre lock – security, horizontal and vertical → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                                         |
| [28] | Tilt striker → <i>from page 450</i>                                              |
| [31] | Bullet-catch sash component → <i>from page 486</i>                               |
| [32] | Bullet-catch frame component → <i>from page 486</i>                              |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                 |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                |
| [36] | Stay guide, security → <i>from page 368</i>                                      |
| [38] | Stay arm → <i>from page 372</i>                                                  |
| [39] | Stay bearing → <i>from page 405</i>                                              |
| [40] | Stay-bearing pin → <i>from page 406</i>                                          |
| [41] | Sash stay cover caps → <i>from page 407</i>                                      |
| [44] | Corner hinge → <i>from page 434</i>                                              |
| [45] | Pivot rest → <i>from page 437</i>                                                |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                      |
| [53] | Drilling protection → <i>from page 509</i>                                       |
| [54] | Handle, lockable (see catalogue CTL_1)                                           |
| [63] | Night vent (optional from SRW > 600 mm) → <i>from page 493</i>                   |
| [82] | Anti-jemmy device → <i>from page 510</i>                                         |

## Application range

| RC 2 / RC 2 N |                             |               |
|---------------|-----------------------------|---------------|
|               | Sash rebate width<br>(SRW)  | 320 – 1400 mm |
|               | Sash rebate height<br>(SRH) | 490 – 2800 mm |
|               | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

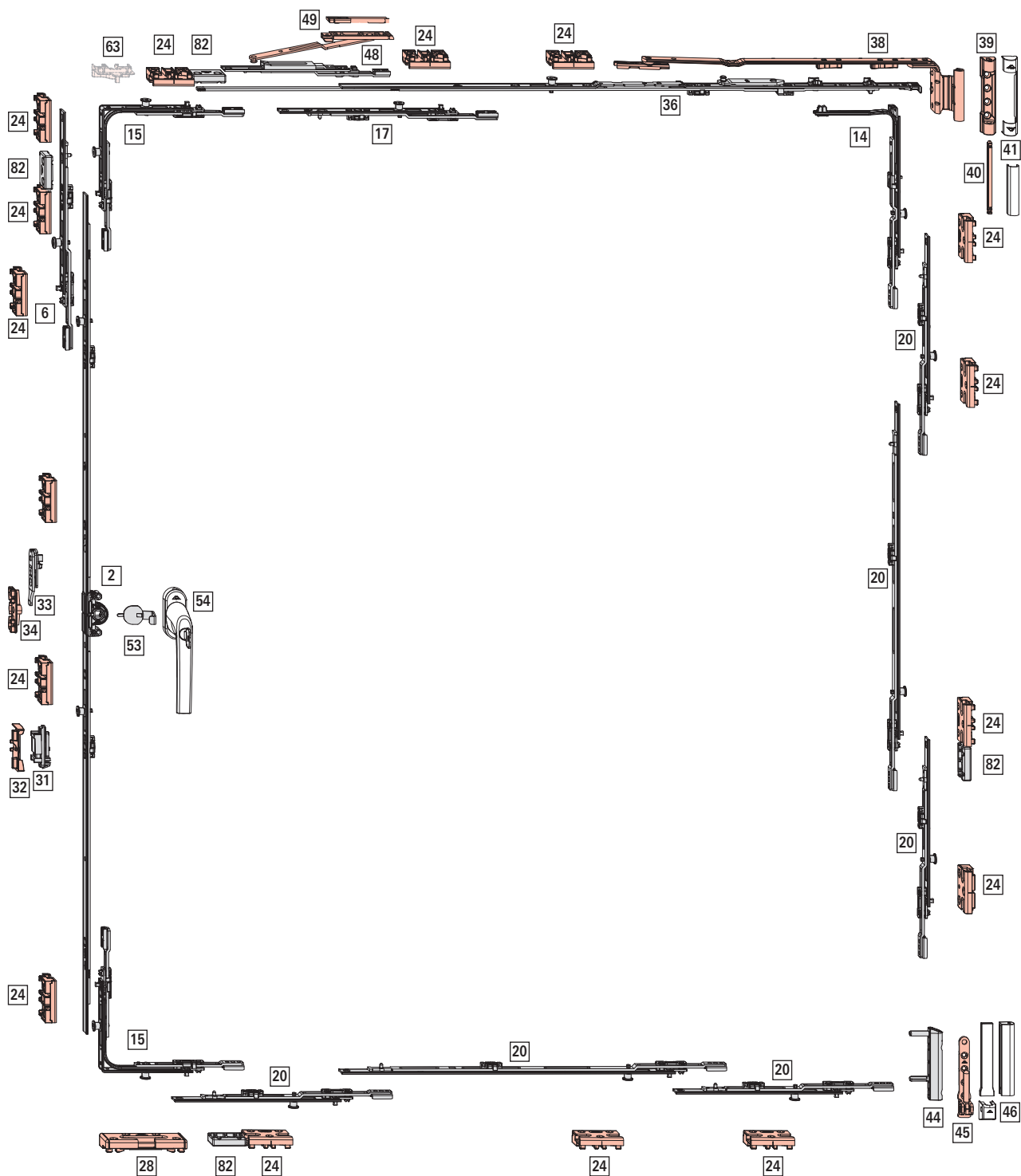
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### 3.1.2.1.4 RC 3







| Item | Description                                                                      |
|------|----------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>       |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                                    |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                         |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                         |
| [20] | Multipart centre lock – security, horizontal and vertical → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                                         |
| [28] | Tilt striker → <i>from page 450</i>                                              |
| [31] | Bullet-catch sash component → <i>from page 486</i>                               |
| [32] | Bullet-catch frame component → <i>from page 486</i>                              |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                 |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                |
| [36] | Stay guide, security → <i>from page 368</i>                                      |
| [38] | Stay arm → <i>from page 372</i>                                                  |
| [39] | Stay bearing → <i>from page 405</i>                                              |
| [40] | Stay-bearing pin → <i>from page 406</i>                                          |
| [41] | Sash stay cover caps → <i>from page 407</i>                                      |
| [44] | Corner hinge → <i>from page 434</i>                                              |
| [45] | Pivot rest → <i>from page 437</i>                                                |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                      |
| [48] | Additional stay arm → <i>from page 470</i>                                       |
| [49] | Support plate → <i>from page 516</i>                                             |
| [53] | Drilling protection → <i>from page 509</i>                                       |
| [54] | Handle, lockable (see catalogue CTL_1)                                           |
| [63] | Night vent (optional from SRW > 600 mm) → <i>from page 493</i>                   |
| [82] | Anti-jemmy device → <i>from page 510</i>                                         |

## Application range

| RC 3 |                             |               |
|------|-----------------------------|---------------|
|      | Sash rebate width<br>(SRW)  | 490 – 1400 mm |
|      | Sash rebate height<br>(SRH) | 490 – 2800 mm |
|      | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

### Roto Con Orders

Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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### 3.1.2.1.5 TiltSafe RC 2 / RC 2 N





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                   |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                   |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>       |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [28] | Tilt striker → <i>from page 450</i>                                        |
| [29] | Security striker for tilt ventilation → <i>from page 461</i>               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, security → <i>from page 368</i>                                |
| [38] | Stay arm → <i>from page 372</i>                                            |
| [39] | Stay bearing → <i>from page 405</i>                                        |
| [40] | Stay-bearing pin → <i>from page 406</i>                                    |
| [41] | Sash stay cover caps → <i>from page 407</i>                                |
| [44] | Corner hinge → <i>from page 434</i>                                        |
| [45] | Pivot rest → <i>from page 437</i>                                          |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                |
| [53] | Drilling protection → <i>from page 509</i>                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                     |
| [81] | Run-up block → <i>from page 514</i>                                        |
| [82] | Anti-jemmy device → <i>from page 510</i>                                   |
| [83] | TiltSafe protective support (optional) → <i>from page 461</i>              |

## Application range

| RC 2 / RC 2 N |                             |               |
|---------------|-----------------------------|---------------|
|               | Sash rebate width<br>(SRW)  | 410 – 1400 mm |
|               | Sash rebate height<br>(SRH) | 490 – 2800 mm |
|               | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

### Roto Con Orders

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### 3.1.2.2 TiltFirst hardware

#### 3.1.2.2.1 Basic security





| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>        |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                          |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [13] | Special corner drive, short → <i>from page 353</i>                                |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [20] | Centre lock, multipart – standard, horizontal and vertical → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                                    |
| [28] | Tilt striker, TiltFirst → <i>from page 453</i>                                    |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                  |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                 |
| [36] | Stay guide, basic security → <i>from page 368</i>                                 |
| [38] | Stay arm, TiltFirst → <i>from page 374</i>                                        |
| [39] | Stay bearing → <i>from page 405</i>                                               |
| [40] | Stay-bearing pin → <i>from page 406</i>                                           |
| [41] | Sash stay cover caps → <i>from page 407</i>                                       |
| [44] | Corner hinge → <i>from page 434</i>                                               |
| [45] | Pivot rest → <i>from page 437</i>                                                 |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                       |
| [48] | Additional stay arm, TiltFirst → <i>from page 470</i>                             |
| [49] | Support plate → <i>from page 516</i>                                              |
| [54] | Handle (see catalogue CTL_1)                                                      |

## Application range

| Basic security |                             |               |
|----------------|-----------------------------|---------------|
|                | Sash rebate width<br>(SRW)  | 290 – 1600 mm |
|                | Sash rebate height<br>(SRH) | 310 – 2800 mm |
|                | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

### Roto Con Orders

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### 3.1.2.3 Turn-Only hardware

#### 3.1.2.3.1 Basic security





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                   |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [13] | Special corner drive, short → <i>from page 353</i>                         |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>       |
| [23] | Striker → <i>from page 456</i>                                             |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>           |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>            |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [39] | Stay bearing → <i>from page 405</i>                                        |
| [40] | Stay-bearing pin → <i>from page 406</i>                                    |
| [41] | Sash stay cover caps → <i>from page 407</i>                                |
| [42] | Rebate stay guide → <i>from page 394</i>                                   |
| [43] | Rebate stay arm → <i>from page 396</i>                                     |
| [44] | Corner hinge → <i>from page 434</i>                                        |
| [45] | Pivot rest → <i>from page 437</i>                                          |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                |
| [52] | Travel restrictor → <i>from page 523</i>                                   |
| [54] | Handle (see catalogue CTL_1)                                               |

## Application range

| Basic security                                                                      |                             |               |
|-------------------------------------------------------------------------------------|-----------------------------|---------------|
|  | Sash rebate width<br>(SRW)  | 290 – 1600 mm |
|  | Sash rebate height<br>(SRH) | 310 – 2800 mm |
|  | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

### Roto Con Orders

Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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### 3.1.2.3.2 RC 1 N







| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                   |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [13] | Special corner drive, short → <i>from page 353</i>                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                   |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>       |
| [23] | Striker → <i>from page 456</i>                                             |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, basic security → <i>from page 368</i>                          |
| [38] | Stay arm → <i>from page 372</i>                                            |
| [39] | Stay bearing → <i>from page 405</i>                                        |
| [40] | Stay-bearing pin → <i>from page 406</i>                                    |
| [41] | Sash stay cover caps → <i>from page 407</i>                                |
| [44] | Corner hinge → <i>from page 434</i>                                        |
| [45] | Pivot rest → <i>from page 437</i>                                          |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                |
| [52] | Travel restrictor → <i>from page 523</i>                                   |
| [53] | Drilling protection → <i>from page 509</i>                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                     |
| [82] | Anti-jemmy device → <i>from page 510</i>                                   |

## Application range

| RC 1 N |                             |               |
|--------|-----------------------------|---------------|
|        | Sash rebate width<br>(SRW)  | 320 – 1600 mm |
|        | Sash rebate height<br>(SRH) | 310 – 2800 mm |
|        | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

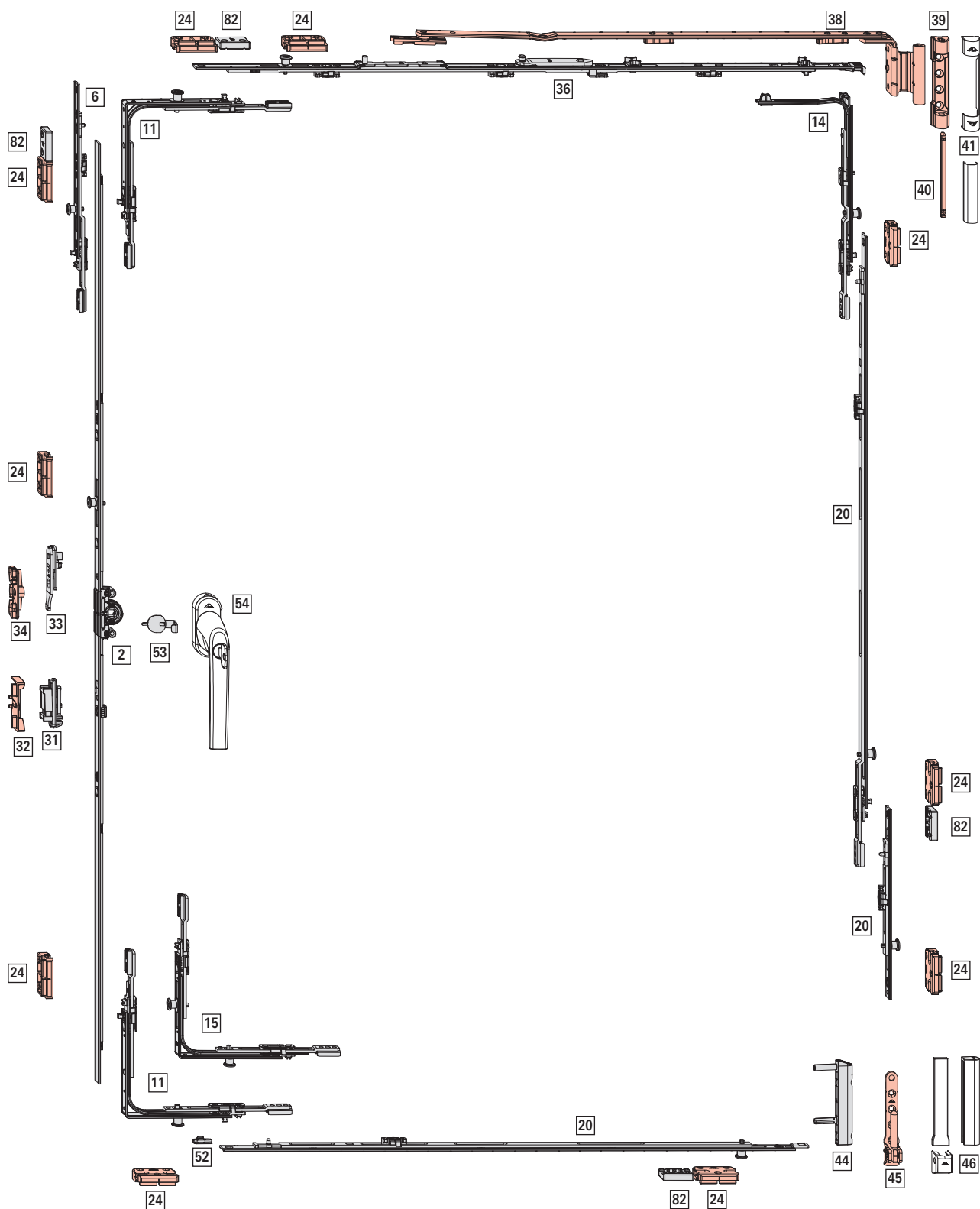
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### 3.1.2.3.3 RC 2 / RC 2 N





| Item | Description                                                                      |
|------|----------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>       |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                         |
| [11] | Corner drive, standard → <i>from page 352</i>                                    |
| [14] | Sash stay corner drive → <i>from page 356</i>                                    |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                         |
| [20] | Multipart centre lock – security, horizontal and vertical → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                                         |
| [31] | Bullet-catch sash component → <i>from page 486</i>                               |
| [32] | Bullet-catch frame component → <i>from page 486</i>                              |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                 |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                |
| [36] | Stay guide, security → <i>from page 368</i>                                      |
| [38] | Stay arm → <i>from page 372</i>                                                  |
| [39] | Stay bearing → <i>from page 405</i>                                              |
| [40] | Stay-bearing pin → <i>from page 406</i>                                          |
| [41] | Sash stay cover caps → <i>from page 407</i>                                      |
| [44] | Corner hinge → <i>from page 434</i>                                              |
| [45] | Pivot rest → <i>from page 437</i>                                                |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                      |
| [52] | Travel restrictor → <i>from page 523</i>                                         |
| [53] | Drilling protection → <i>from page 509</i>                                       |
| [54] | Handle, lockable (see catalogue CTL_1)                                           |
| [82] | Anti-jemmy device → <i>from page 510</i>                                         |

## Application range

| RC 2 / RC 2 N |                             |               |
|---------------|-----------------------------|---------------|
|               | Sash rebate width<br>(SRW)  | 320 – 1400 mm |
|               | Sash rebate height<br>(SRH) | 490 – 2800 mm |
|               | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

### Roto Con Orders

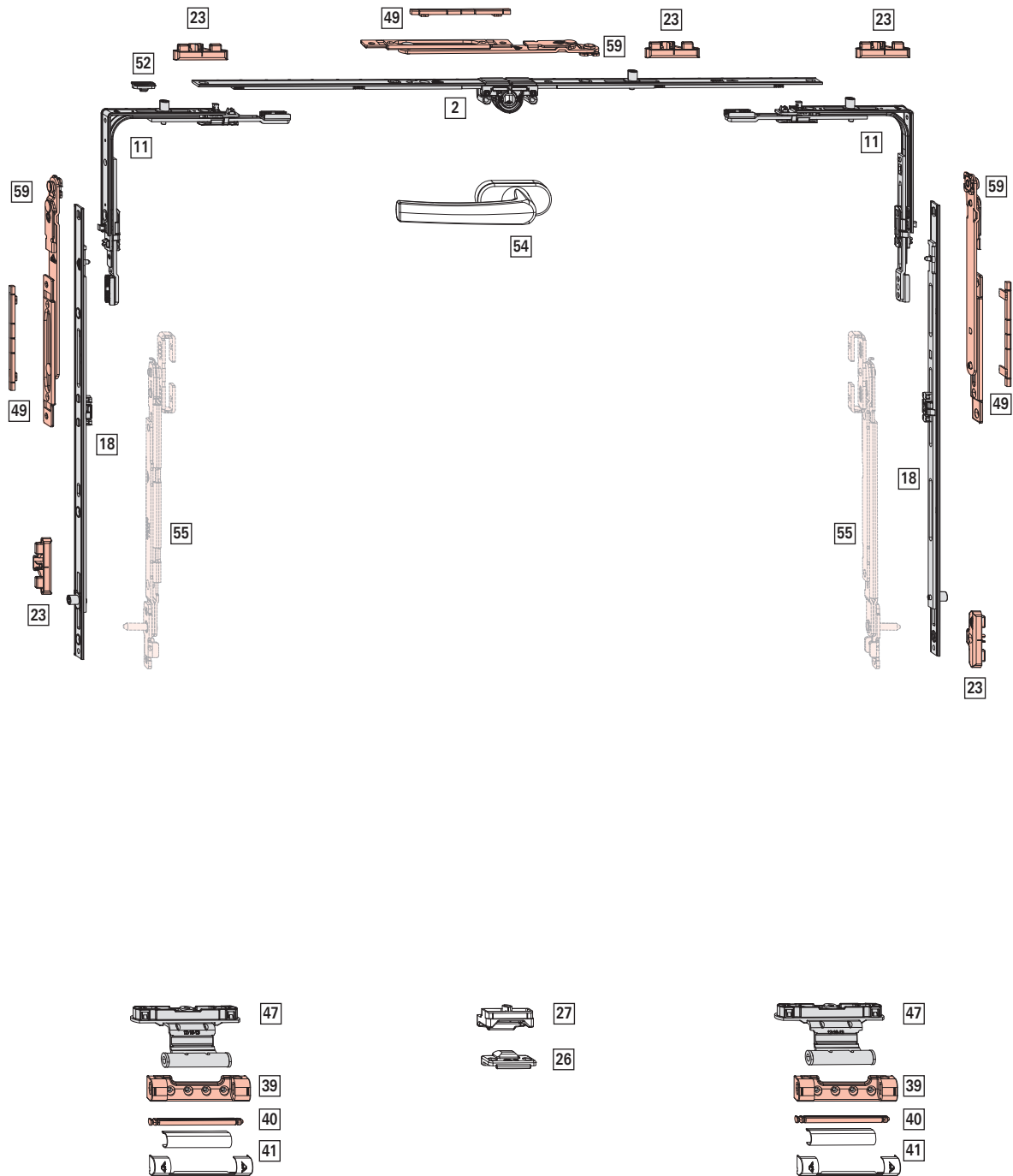
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### 3.1.2.4 Tilt-Only hardware

#### 3.1.2.4.1 Basic security





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i> |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>         |
| [23] | Striker → <i>from page 456</i>                                             |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>           |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>            |
| [39] | Stay bearing → <i>from page 404</i>                                        |
| [40] | Stay-bearing pin → <i>from page 406</i>                                    |
| [41] | Sash stay cover caps → <i>from page 407</i>                                |
| [47] | Turn-Only / Tilt-Only rebate hinge → <i>from page 402</i>                  |
| [49] | Support plate (profile-related) → <i>from page 516</i>                     |
| [52] | Travel restrictor → <i>from page 523</i>                                   |
| [54] | Handle (see catalogue CTL_1)                                               |
| [55] | Restrictor and cleaning stay → <i>from page 478</i>                        |
| [59] | Tilt stay set for floating-mullion installation → <i>from page 472</i>     |

## Application range

| Basic security |                             |               |
|----------------|-----------------------------|---------------|
|                | Sash rebate width<br>(SRW)  | 450 – 2400 mm |
|                | Sash rebate height<br>(SRH) | 290 – 1200 mm |
|                | Sash weight<br>(S.kg)       | Max. 80 kg    |



### INFO

Restrictor and cleaning stays mandatory for fanlights (in accordance with RAL RG 607 / 12).

Restrictor and cleaning stays up to max. 60 kg.



### INFO

#### Roto Con Orders

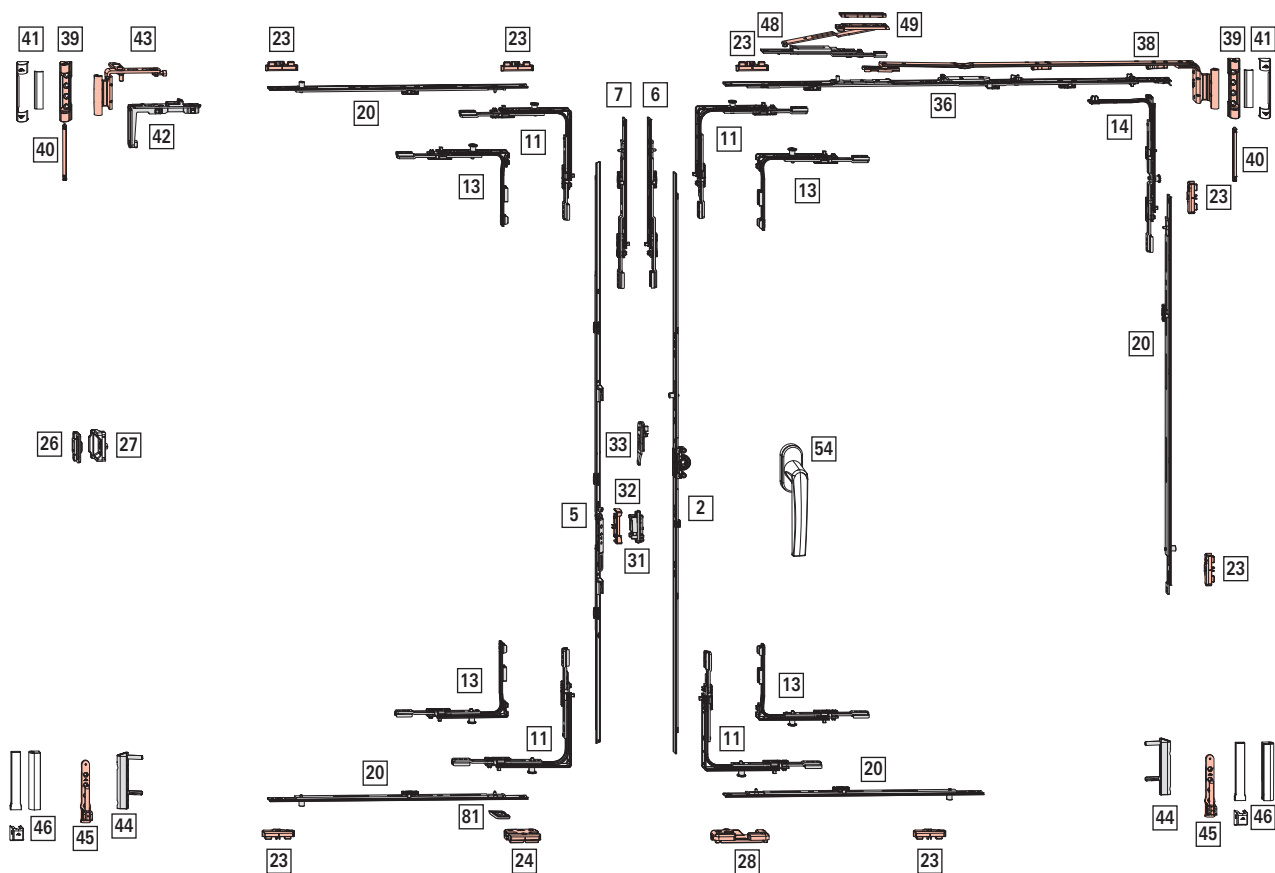
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### 3.1.2.5 Floating-mullion hardware – standard

#### 3.1.2.5.1 Basic security





| Item | Description                                                                                    |
|------|------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                     |
| [5]  | Lever-operated espagnolette Standard – centred / variable handle height → <i>from page 338</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                       |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                            |
| [11] | Corner drive, standard → <i>from page 352</i>                                                  |
| [13] | Special corner drive, short → <i>from page 353</i>                                             |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                  |
| [20] | Centre lock, multipart – standard, horizontal and vertical → <i>from page 416</i>              |
| [23] | Striker → <i>from page 456</i>                                                                 |
| [24] | Striker, security → <i>from page 457</i>                                                       |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>                               |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>                                |
| [28] | Tilt striker → <i>from page 450</i>                                                            |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                             |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                            |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                               |
| [36] | Stay guide, basic security → <i>from page 368</i>                                              |
| [38] | Stay arm → <i>from page 372</i>                                                                |
| [39] | Stay bearing → <i>from page 405</i>                                                            |
| [40] | Stay-bearing pin → <i>from page 406</i>                                                        |
| [41] | Sash stay cover caps → <i>from page 407</i>                                                    |
| [42] | Rebate stay guide → <i>from page 394</i>                                                       |
| [43] | Rebate stay arm → <i>from page 396</i>                                                         |
| [44] | Corner hinge → <i>from page 434</i>                                                            |
| [45] | Pivot rest → <i>from page 437</i>                                                              |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                                    |
| [48] | Additional stay arm → <i>from page 470</i>                                                     |
| [49] | Support plate → <i>from page 516</i>                                                           |
| [54] | Handle (see catalogue CTL_1)                                                                   |
| [81] | Run-up block → <i>from page 514</i>                                                            |

## Application range

| Basic security |                             |               |
|----------------|-----------------------------|---------------|
|                | Sash rebate width<br>(SRW)  | 290 – 1600 mm |
|                | Sash rebate height<br>(SRH) | 370 – 2800 mm |
|                | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

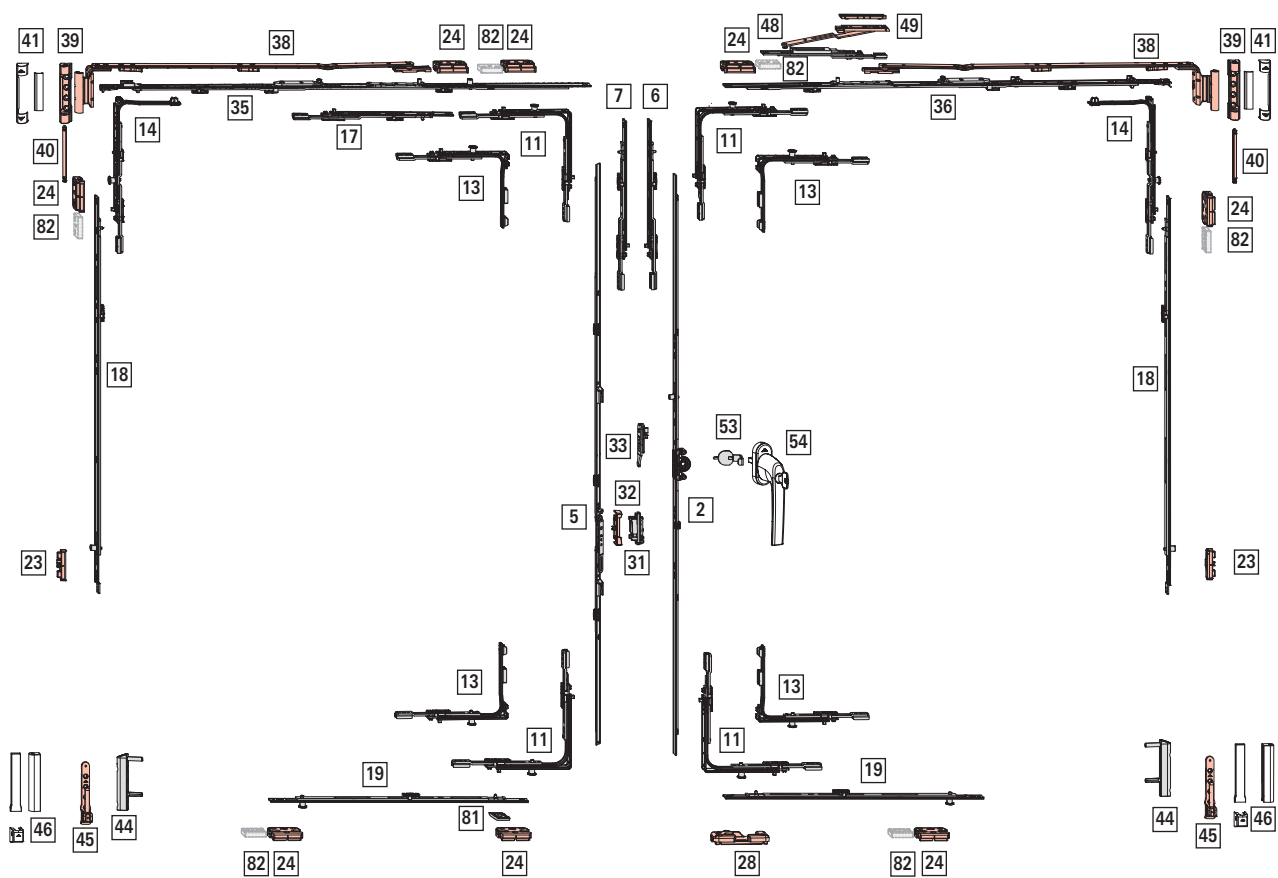
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### 3.1.2.5.2 RC 1 N







| Item | Description                                                                                    |
|------|------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                     |
| [5]  | Lever-operated espagnolette Standard – centred / variable handle height → <i>from page 338</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                       |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                            |
| [11] | Corner drive, standard → <i>from page 352</i>                                                  |
| [13] | Special corner drive, short → <i>from page 353</i>                                             |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                  |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                                       |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>                             |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>                           |
| [23] | Striker → <i>from page 456</i>                                                                 |
| [24] | Striker, security → <i>from page 457</i>                                                       |
| [28] | Tilt striker → <i>from page 450</i>                                                            |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                             |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                            |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                               |
| [35] | Turn-Only sash stay guide → <i>from page 369</i>                                               |
| [36] | Stay guide, basic security → <i>from page 368</i>                                              |
| [38] | Stay arm → <i>from page 372</i>                                                                |
| [39] | Stay bearing → <i>from page 405</i>                                                            |
| [40] | Stay-bearing pin → <i>from page 406</i>                                                        |
| [41] | Sash stay cover caps → <i>from page 407</i>                                                    |
| [44] | Corner hinge → <i>from page 434</i>                                                            |
| [45] | Pivot rest → <i>from page 437</i>                                                              |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                                    |
| [48] | Additional stay arm → <i>from page 470</i>                                                     |
| [49] | Support plate → <i>from page 516</i>                                                           |
| [53] | Drilling protection → <i>from page 509</i>                                                     |
| [54] | Handle, lockable (see catalogue CTL_1)                                                         |
| [81] | Run-up block → <i>from page 514</i>                                                            |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                       |

## Application range

| RC 1 N |                             |               |
|--------|-----------------------------|---------------|
|        | Sash rebate width<br>(SRW)  | 320 – 1600 mm |
|        | Sash rebate height<br>(SRH) | 370 – 2800 mm |
|        | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

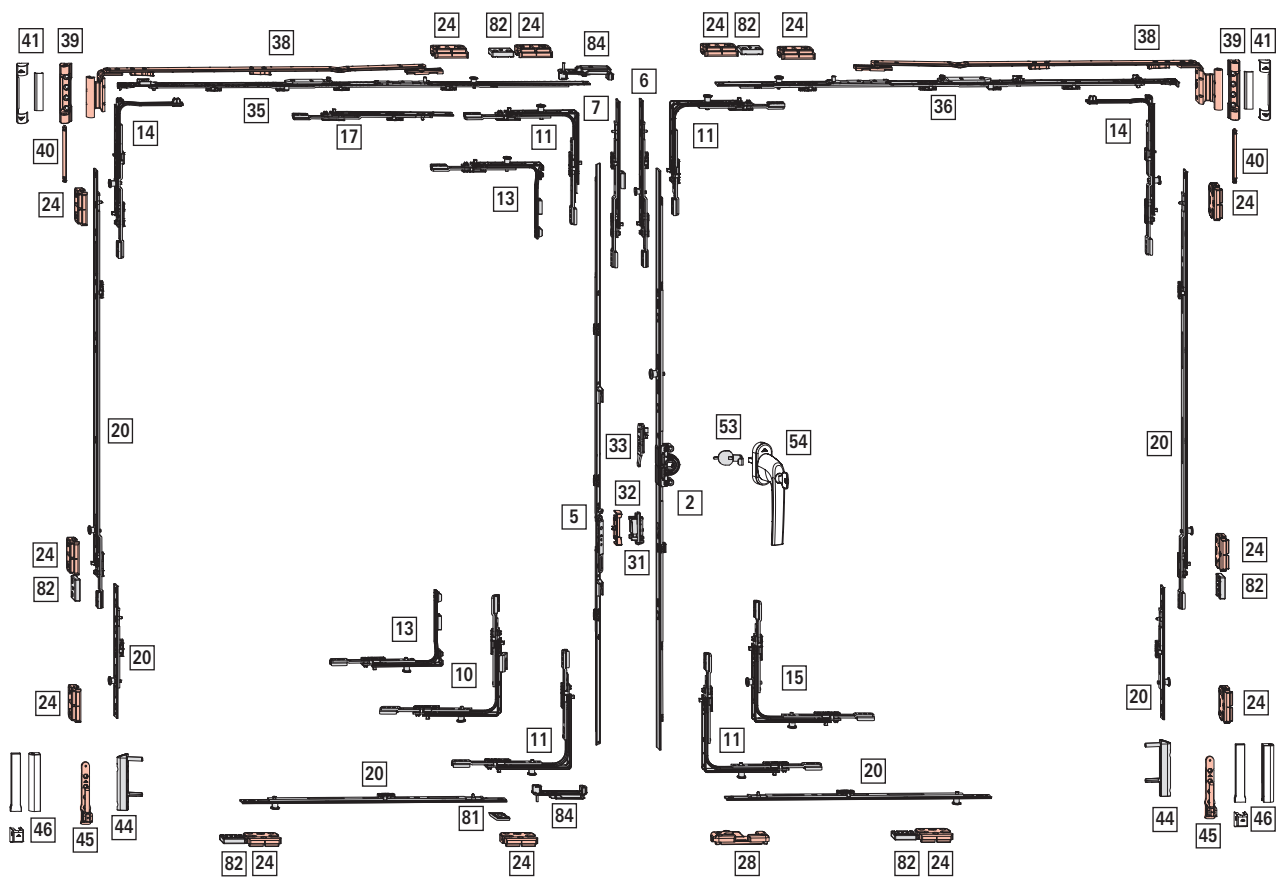
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Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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### 3.1.2.5.3 RC 2 / RC 2 N





| Item | Description                                                                                    |
|------|------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                     |
| [5]  | Lever-operated espagnolette Standard – centred / variable handle height → <i>from page 338</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                                       |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                            |
| [10] | Floating-mullion corner drive → <i>from page 354</i>                                           |
| [11] | Corner drive, standard → <i>from page 352</i>                                                  |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                  |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                                       |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                                       |
| [20] | Multipart centre lock – security, horizontal and vertical → <i>from page 416</i>               |
| [24] | Striker, security → <i>from page 457</i>                                                       |
| [28] | Tilt striker → <i>from page 450</i>                                                            |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                             |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                            |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                               |
| [35] | Turn-Only sash stay guide → <i>from page 369</i>                                               |
| [36] | Stay guide, security → <i>from page 368</i>                                                    |
| [38] | Stay arm → <i>from page 372</i>                                                                |
| [39] | Stay bearing → <i>from page 405</i>                                                            |
| [40] | Stay-bearing pin → <i>from page 406</i>                                                        |
| [41] | Sash stay cover caps → <i>from page 407</i>                                                    |
| [44] | Corner hinge → <i>from page 434</i>                                                            |
| [45] | Pivot rest → <i>from page 437</i>                                                              |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                                    |
| [53] | Drilling protection → <i>from page 509</i>                                                     |
| [54] | Handle, lockable (see catalogue CTL_1)                                                         |
| [81] | Run-up block → <i>from page 514</i>                                                            |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                       |
| [84] | Safety device for floating-mullion sash → <i>from page 509</i>                                 |

## Application range

| RC 2 / RC 2 N |                             |               |
|---------------|-----------------------------|---------------|
|               | Sash rebate width<br>(SRW)  | 320 – 1400 mm |
|               | Sash rebate height<br>(SRH) | 520 – 2800 mm |
|               | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

### Roto Con Orders

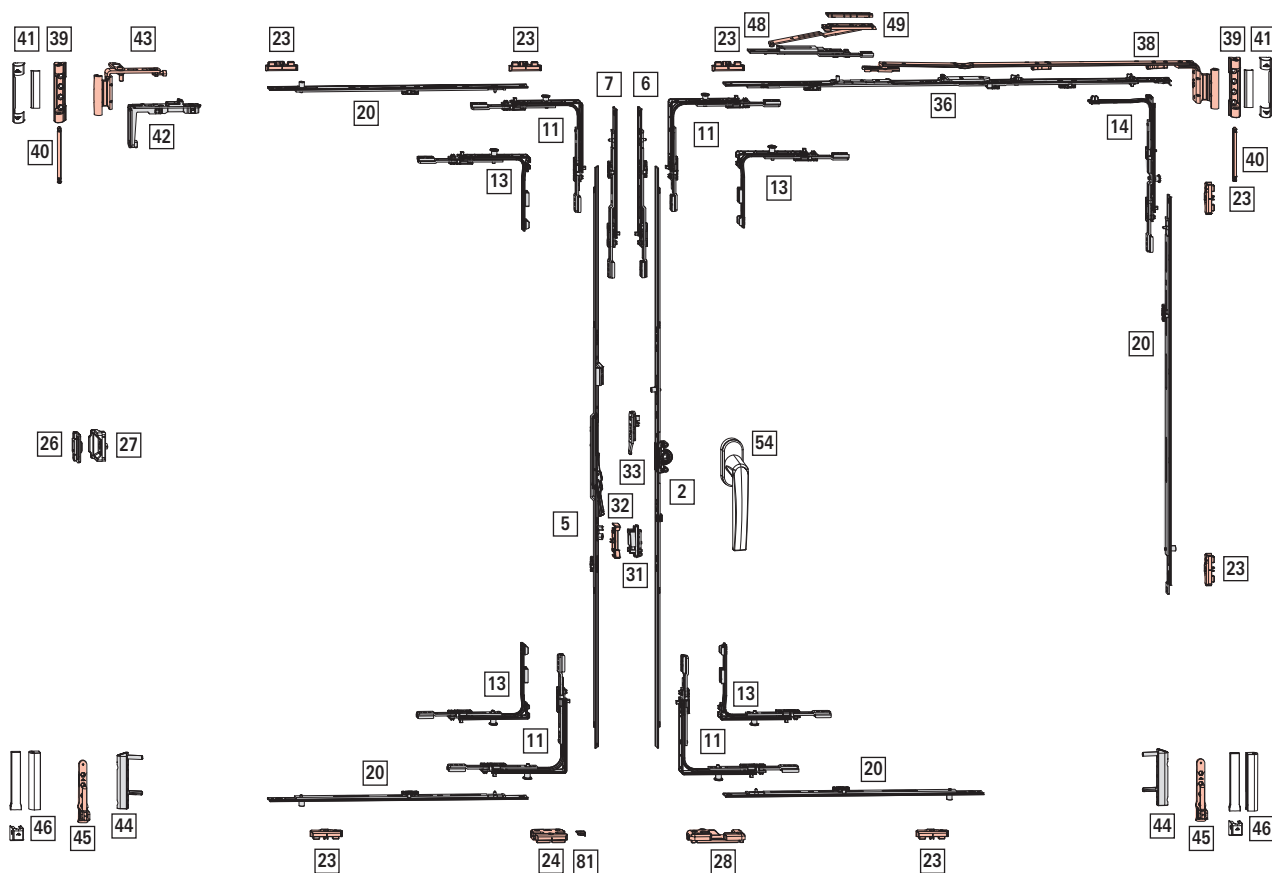
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### 3.1.2.6 Floating-mullion hardware – Plus

#### 3.1.2.6.1 Basic security





| Item | Description                                                                                |
|------|--------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                 |
| [5]  | Lever-operated espagnolette Plus – centred / variable handle height → <i>from page 344</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                   |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                        |
| [11] | Corner drive, standard → <i>from page 352</i>                                              |
| [13] | Special corner drive, short → <i>from page 353</i>                                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                                              |
| [20] | Centre lock, multipart – standard, horizontal and vertical → <i>from page 416</i>          |
| [23] | Striker → <i>from page 456</i>                                                             |
| [24] | Striker, security → <i>from page 457</i>                                                   |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>                           |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>                            |
| [28] | Tilt striker → <i>from page 450</i>                                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                           |
| [36] | Stay guide, basic security → <i>from page 368</i>                                          |
| [38] | Stay arm → <i>from page 372</i>                                                            |
| [39] | Stay bearing → <i>from page 405</i>                                                        |
| [40] | Stay-bearing pin → <i>from page 406</i>                                                    |
| [41] | Sash stay cover caps → <i>from page 407</i>                                                |
| [42] | Rebate stay guide → <i>from page 394</i>                                                   |
| [43] | Rebate stay arm → <i>from page 396</i>                                                     |
| [44] | Corner hinge → <i>from page 434</i>                                                        |
| [45] | Pivot rest → <i>from page 437</i>                                                          |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                                |
| [48] | Additional stay arm → <i>from page 470</i>                                                 |
| [49] | Support plate → <i>from page 516</i>                                                       |
| [54] | Handle (see catalogue CTL_1)                                                               |
| [80] | Fastening plate → <i>from page 511</i>                                                     |
| [81] | Run-up block → <i>from page 514</i>                                                        |

## Application range

| Basic security |                             |               |
|----------------|-----------------------------|---------------|
|                | Sash rebate width<br>(SRW)  | 290 – 1600 mm |
|                | Sash rebate height<br>(SRH) | 420 – 2800 mm |
|                | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

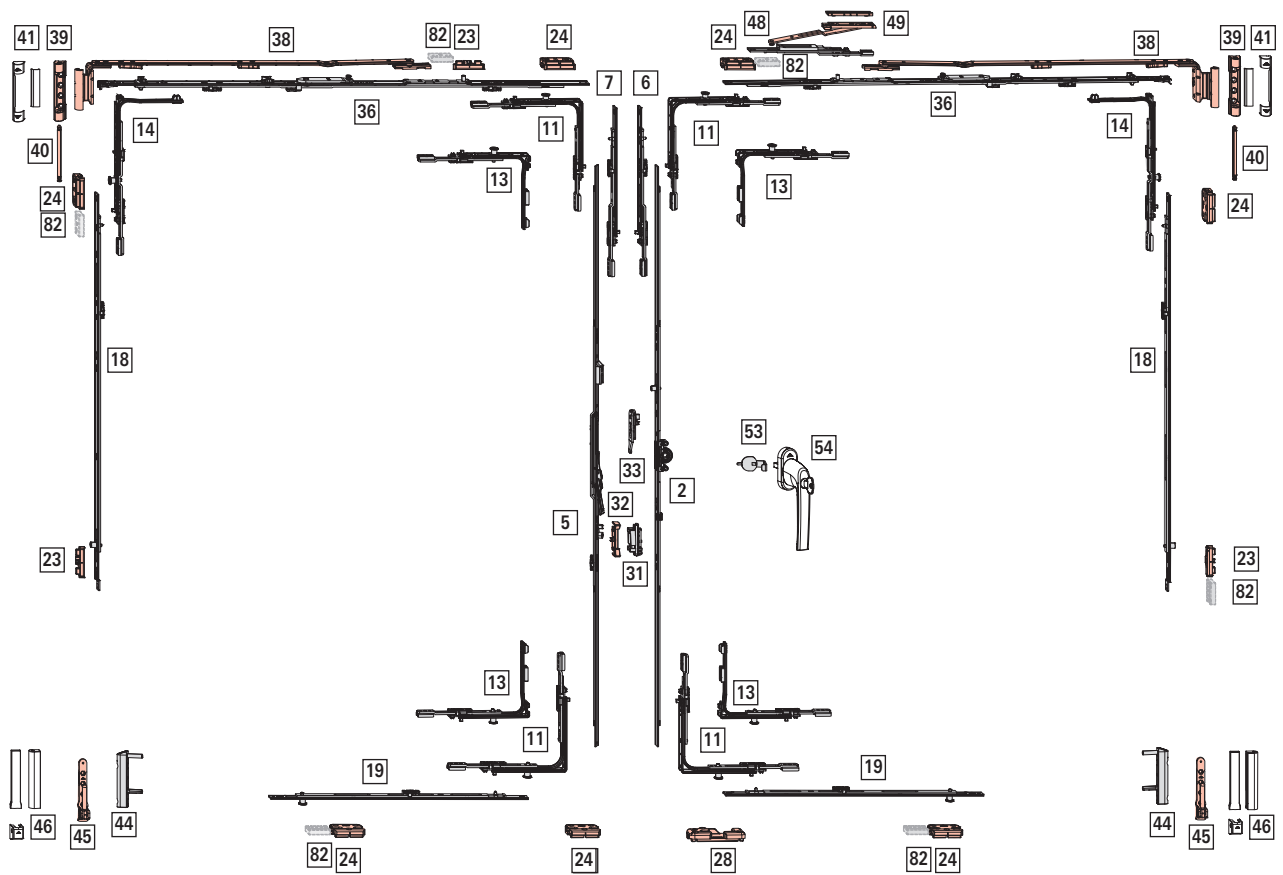
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### 3.1.2.6.2 RC 1 N





| Item | Description                                                                                |
|------|--------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                 |
| [5]  | Lever-operated espagnolette Plus – centred / variable handle height → <i>from page 344</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                   |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                        |
| [11] | Corner drive, standard → <i>from page 352</i>                                              |
| [13] | Special corner drive, short → <i>from page 353</i>                                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                                              |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                                   |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>                         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>                       |
| [23] | Striker → <i>from page 456</i>                                                             |
| [24] | Striker, security → <i>from page 457</i>                                                   |
| [28] | Tilt striker → <i>from page 450</i>                                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                           |
| [35] | Turn-Only sash stay guide → <i>from page 369</i>                                           |
| [36] | Stay guide, basic security → <i>from page 368</i>                                          |
| [38] | Stay arm → <i>from page 372</i>                                                            |
| [39] | Stay bearing → <i>from page 405</i>                                                        |
| [40] | Stay-bearing pin → <i>from page 406</i>                                                    |
| [41] | Sash stay cover caps → <i>from page 407</i>                                                |
| [44] | Corner hinge → <i>from page 434</i>                                                        |
| [45] | Pivot rest → <i>from page 437</i>                                                          |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                                |
| [48] | Additional stay arm → <i>from page 470</i>                                                 |
| [49] | Support plate → <i>from page 516</i>                                                       |
| [53] | Drilling protection → <i>from page 509</i>                                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                                     |
| [81] | Run-up block → <i>from page 514</i>                                                        |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                   |

## Application range

| RC 1 N |                             |               |
|--------|-----------------------------|---------------|
|        | Sash rebate width<br>(SRW)  | 320 – 1600 mm |
|        | Sash rebate height<br>(SRH) | 420 – 2800 mm |
|        | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

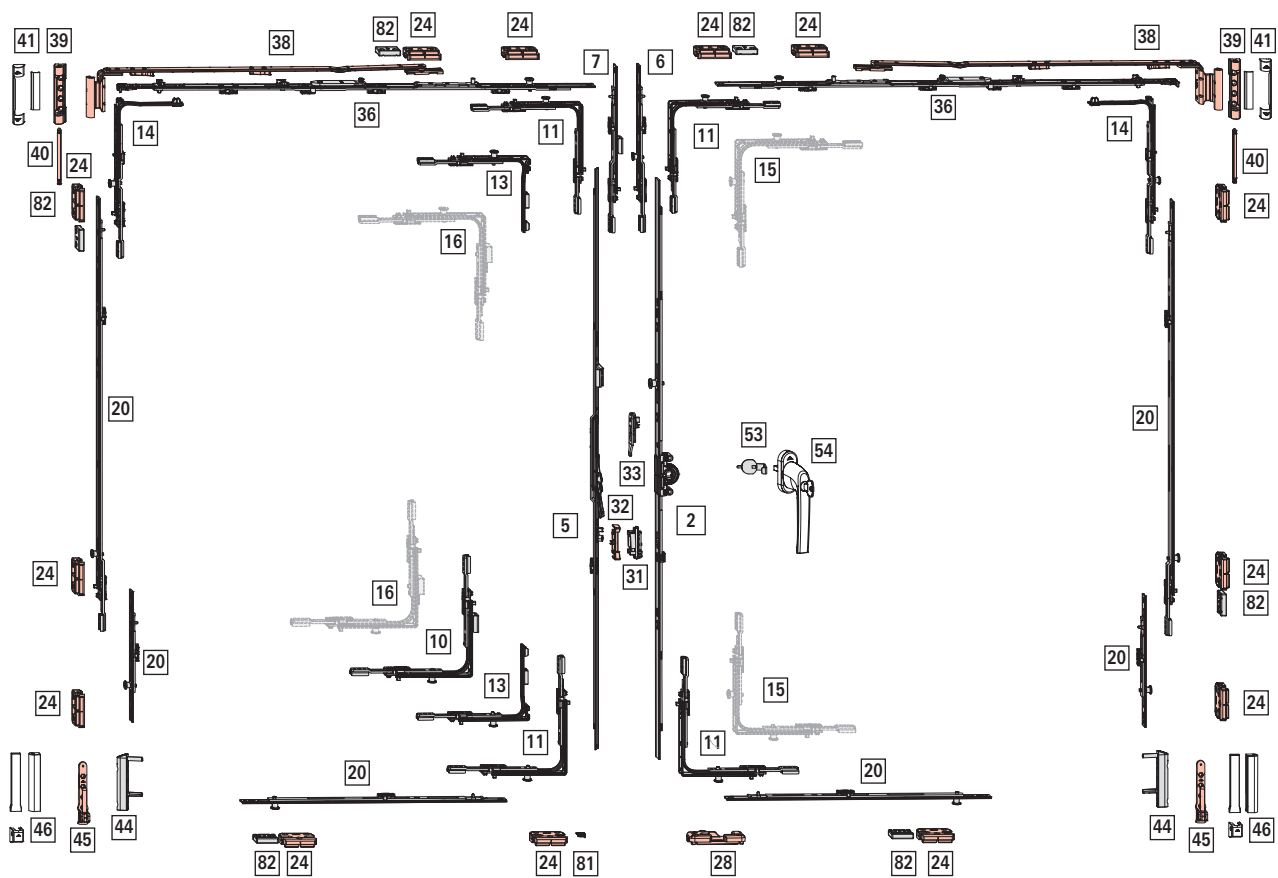
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### 3.1.2.6.3 RC 2 / RC 2 N







| Item | Description                                                                                |
|------|--------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                 |
| [5]  | Lever-operated espagnolette Plus – centred / variable handle height → <i>from page 344</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                                   |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                        |
| [10] | Floating-mullion corner drive → <i>from page 354</i>                                       |
| [11] | Corner drive, standard → <i>from page 352</i>                                              |
| [14] | Sash stay corner drive → <i>from page 356</i>                                              |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                                   |
| [16] | Floating-mullion corner drive – slide guard (optional) → <i>from page 354</i>              |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                                   |
| [20] | Multipart centre lock – security, horizontal and vertical → <i>from page 416</i>           |
| [24] | Striker, security → <i>from page 457</i>                                                   |
| [28] | Tilt striker → <i>from page 450</i>                                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                           |
| [35] | Turn-Only sash stay guide → <i>from page 369</i>                                           |
| [36] | Stay guide, security → <i>from page 368</i>                                                |
| [38] | Stay arm → <i>from page 372</i>                                                            |
| [39] | Stay bearing → <i>from page 405</i>                                                        |
| [40] | Stay-bearing pin → <i>from page 406</i>                                                    |
| [41] | Sash stay cover caps → <i>from page 407</i>                                                |
| [44] | Corner hinge → <i>from page 434</i>                                                        |
| [45] | Pivot rest → <i>from page 437</i>                                                          |
| [46] | Corner hinge / pivot rest cover caps → <i>from page 444</i>                                |
| [53] | Drilling protection → <i>from page 509</i>                                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                                     |
| [81] | Run-up block → <i>from page 514</i>                                                        |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                   |

## Application range

| RC 2 / RC 2 N |                             |               |
|---------------|-----------------------------|---------------|
|               | Sash rebate width<br>(SRW)  | 320 – 1400 mm |
|               | Sash rebate height<br>(SRH) | 520 – 2800 mm |
|               | Sash weight<br>(S.kg)       | Max. 150 kg   |



## INFO

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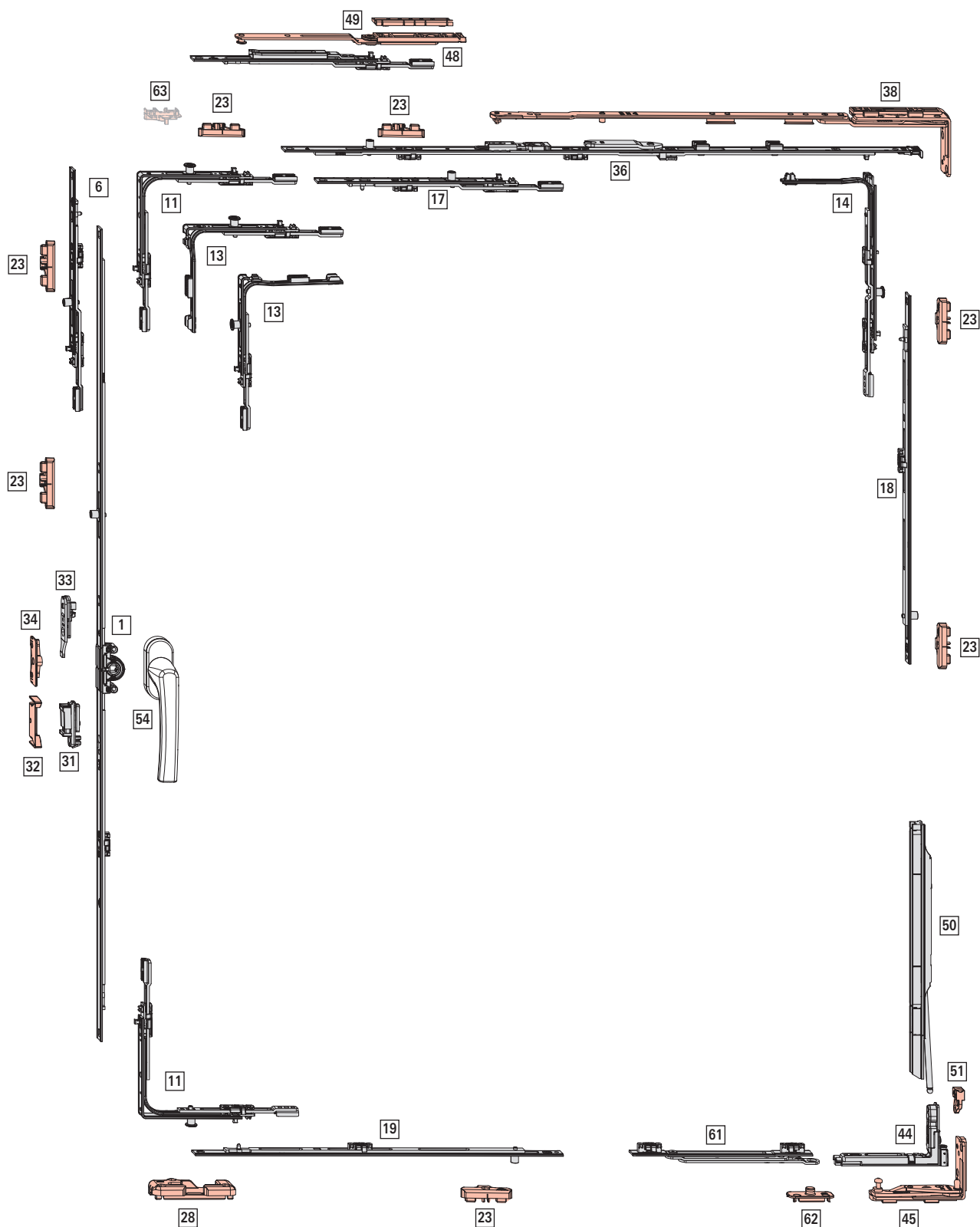
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## 3.2 Hinge side C

### 3.2.1 T&T espagnolette, VT – fixed handle height

#### 3.2.1.1 Tilt&Turn hardware

##### 3.2.1.1.1 Basic security





| Item | Description                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                                                             |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [11] | Corner drive, standard → <i>from page 352</i>                                                                                 |
| [13] | Special corner drive, short → <i>from page 353</i>                                                                            |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                                                 |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                                                            |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                                                          |
| [23] | Striker → <i>from page 456</i>                                                                                                |
| [28] | Tilt striker → <i>from page 450</i>                                                                                           |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                                                            |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                                                           |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                                                              |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                                                             |
| [36] | Stay guide, basic security → <i>from page 369</i>                                                                             |
| [38] | Stay arm → <i>from page 379</i>                                                                                               |
| [44] | Corner hinge → <i>from page 435</i>                                                                                           |
| [45] | Pivot rest → <i>from page 438</i>                                                                                             |
| [48] | Additional stay arm → <i>from page 470</i>                                                                                    |
| [49] | Support plate → <i>from page 516</i>                                                                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                                                                           |
| [51] | Load transfer frame component → <i>from page 443</i>                                                                          |
| [54] | Handle (see catalogue CTL_1)                                                                                                  |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i>  |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i> |
| [63] | Night vent → <i>from page 493</i>                                                                                             |

## Application range

|  |                          | Basic security        |                    |
|--|--------------------------|-----------------------|--------------------|
|  |                          | Without load transfer | With load transfer |
|  | Sash rebate width (SRW)  | 340 – 1750 mm         | 600 – 1750 mm      |
|  | Sash rebate height (SRH) | 285 – 3000 mm         | 1000 – 3000 mm     |
|  | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

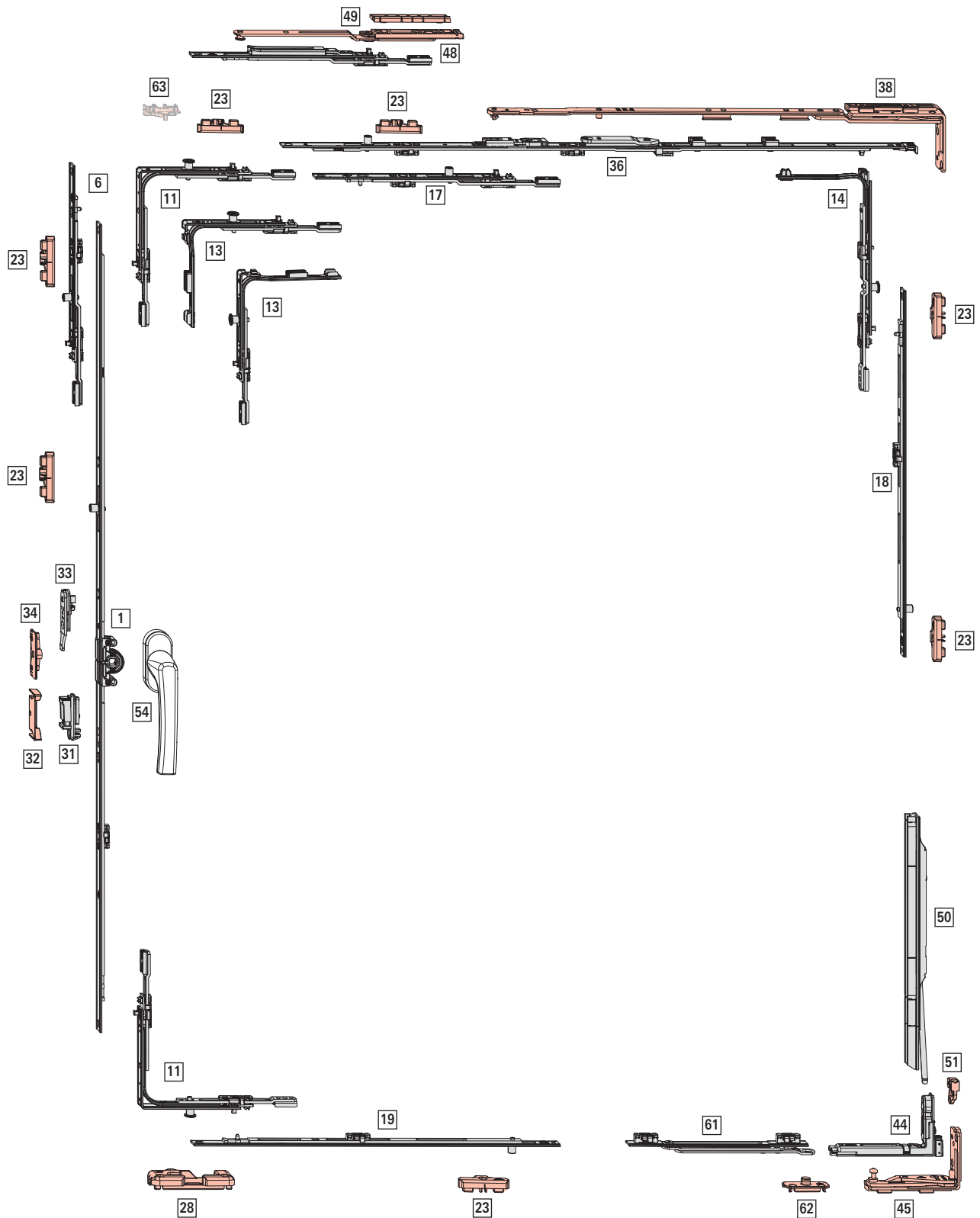
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### 3.2.1.1.2 RC 1 N





| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>             |
| [11] | Corner drive, standard → <i>from page 352</i>                        |
| [13] | Special corner drive, short → <i>from page 353</i>                   |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                       |
| [24] | Striker, security → <i>from page 457</i>                             |
| [28] | Tilt striker → <i>from page 450</i>                                  |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, basic security → <i>from page 369</i>                    |
| [38] | Stay arm → <i>from page 379</i>                                      |
| [44] | Corner hinge → <i>from page 435</i>                                  |
| [45] | Pivot rest → <i>from page 438</i>                                    |
| [48] | Additional stay arm → <i>from page 470</i>                           |
| [49] | Support plate → <i>from page 516</i>                                 |
| [50] | Load transfer sash component → <i>from page 443</i>                  |
| [51] | Load transfer frame component → <i>from page 443</i>                 |
| [53] | Drilling protection → <i>from page 509</i>                           |
| [54] | Handle, lockable (see catalogue CTL_1)                               |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>           |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>          |
| [63] | Night vent → <i>from page 493</i>                                    |
| [82] | Anti-jemmy device → <i>from page 510</i>                             |

## Application range

| RC 1 N |                          |                       |                    |
|--------|--------------------------|-----------------------|--------------------|
|        |                          | Without load transfer | With load transfer |
|        | Sash rebate width (SRW)  | 450 – 1600 mm         | 650 – 1600 mm      |
|        | Sash rebate height (SRH) | 285 – 2800 mm         | 1000 – 2800 mm     |
|        | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

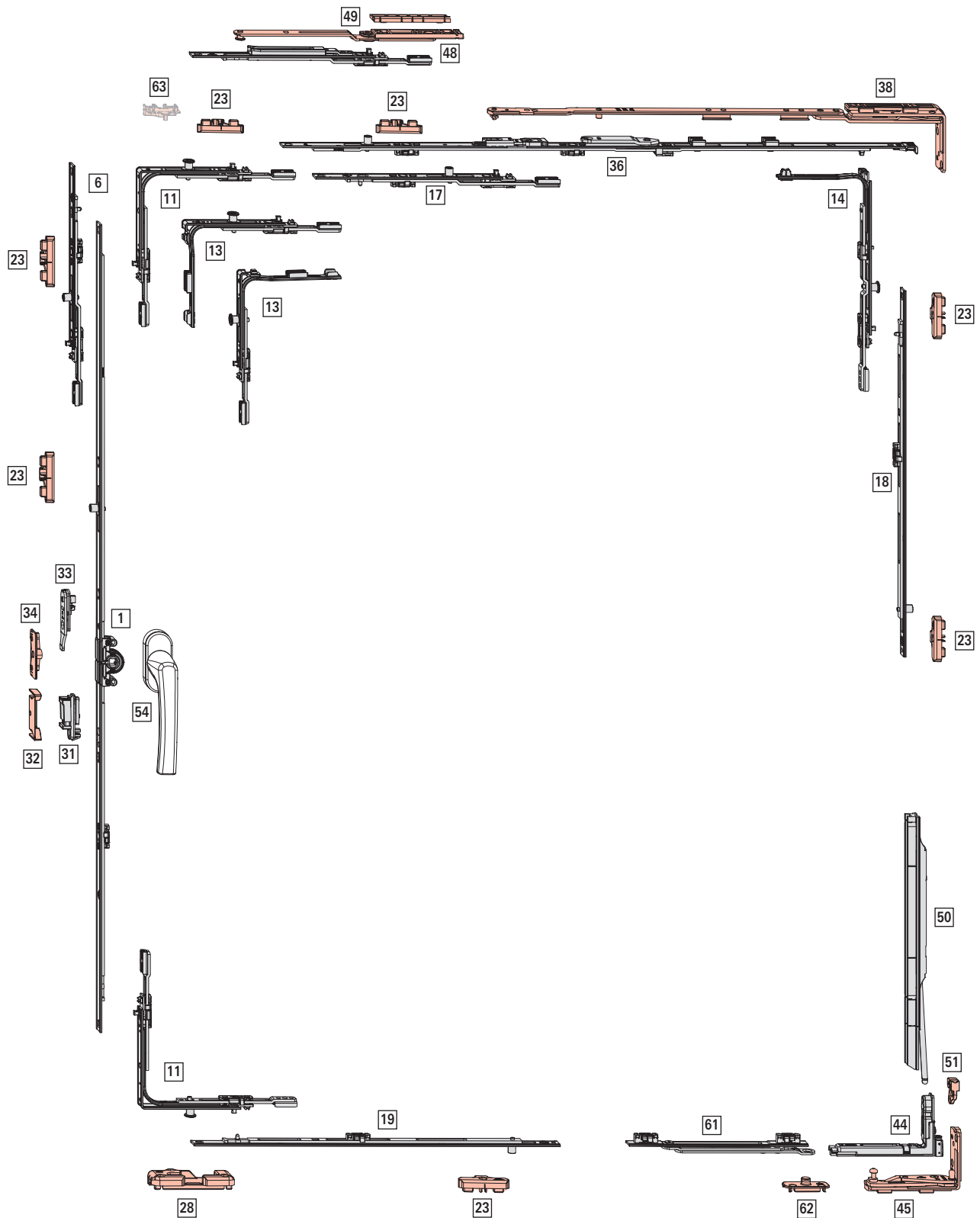
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### 3.2.1.1.3 RC 2 / RC 2 N





| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>             |
| [11] | Corner drive, standard → <i>from page 352</i>                        |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [15] | Corner drive, standard (security) → <i>from page 352</i>             |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                             |
| [28] | Tilt striker → <i>from page 450</i>                                  |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, security → <i>from page 370</i>                          |
| [38] | Stay arm → <i>from page 379</i>                                      |
| [44] | Corner hinge → <i>from page 435</i>                                  |
| [45] | Pivot rest → <i>from page 438</i>                                    |
| [50] | Load transfer sash component → <i>from page 443</i>                  |
| [51] | Load transfer frame component → <i>from page 443</i>                 |
| [53] | Drilling protection → <i>from page 509</i>                           |
| [54] | Handle, lockable (see catalogue CTL_1)                               |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>           |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>          |
| [63] | Night vent → <i>from page 493</i>                                    |
| [82] | Anti-jemmy device → <i>from page 510</i>                             |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 650 – 1400 mm      |
|               | Sash rebate height (SRH) | 601 – 2800 mm         | 1000 – 2800 mm     |
|               | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

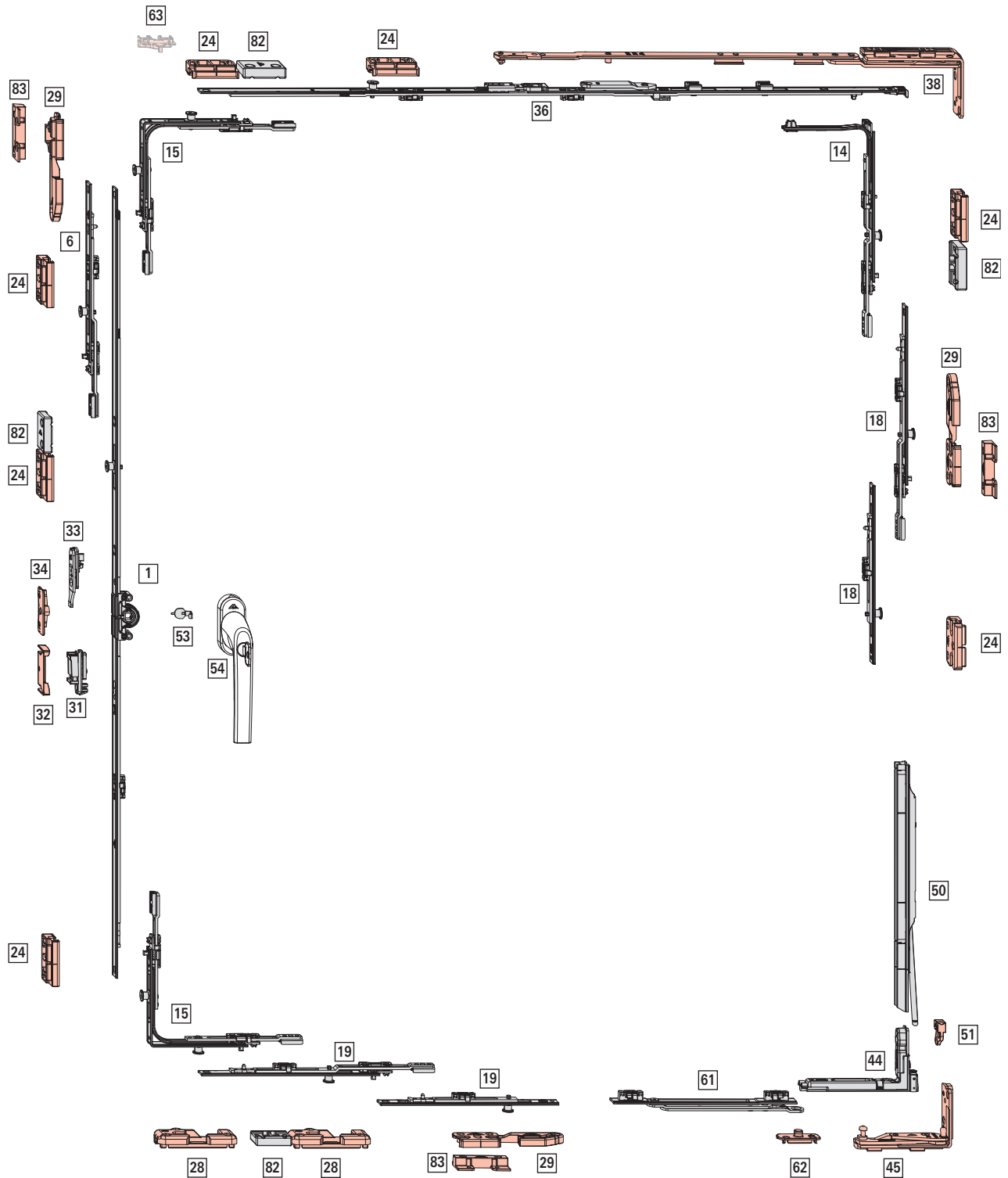
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### 3.2.1.1.4 TiltSafe RC 2 / RC 2 N







| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>             |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [15] | Corner drive, standard (security) → <i>from page 352</i>             |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                             |
| [28] | Tilt striker → <i>from page 450</i>                                  |
| [29] | Security striker for tilt ventilation → <i>from page 461</i>         |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, security → <i>from page 370</i>                          |
| [38] | Stay arm → <i>from page 379</i>                                      |
| [44] | Corner hinge → <i>from page 435</i>                                  |
| [45] | Pivot rest → <i>from page 438</i>                                    |
| [50] | Load transfer sash component → <i>from page 443</i>                  |
| [51] | Load transfer frame component → <i>from page 443</i>                 |
| [53] | Drilling protection → <i>from page 509</i>                           |
| [54] | Handle, lockable (see catalogue CTL_1)                               |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>           |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>          |
| [63] | Night vent → <i>from page 493</i>                                    |
| [82] | Anti-jemmy device → <i>from page 510</i>                             |
| [83] | TiltSafe protective support (optional) → <i>from page 461</i>        |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 650 – 1400 mm      |
|               | Sash rebate height (SRH) | 601 – 2800 mm         | 1000 – 2800 mm     |
|               | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

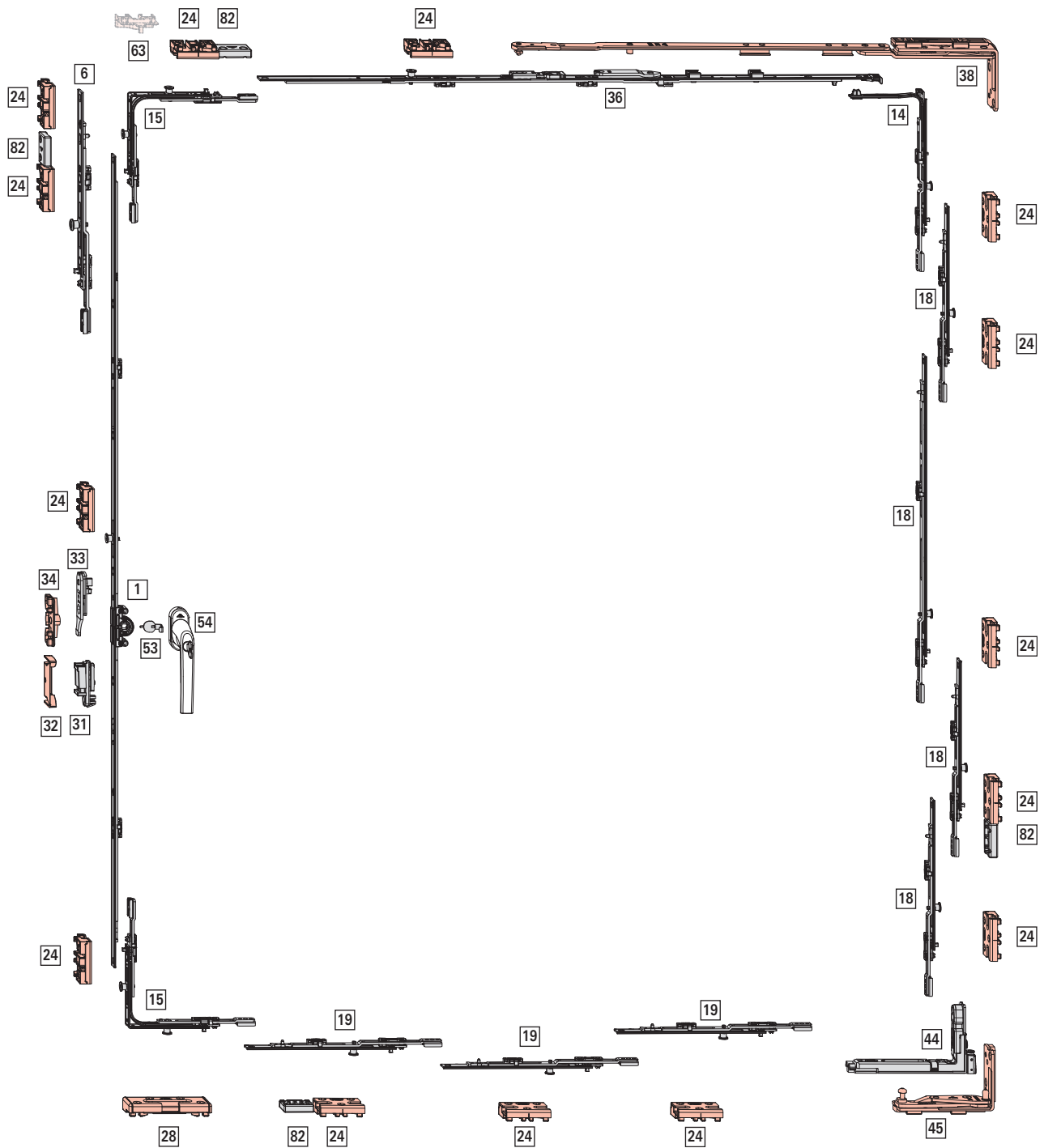
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### 3.2.1.1.5 RC 3





| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>             |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [15] | Corner drive, standard (security) → <i>from page 352</i>             |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                             |
| [28] | Tilt striker → <i>from page 450</i>                                  |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, security → <i>from page 370</i>                          |
| [38] | Stay arm → <i>from page 379</i>                                      |
| [44] | Corner hinge → <i>from page 435</i>                                  |
| [45] | Pivot rest → <i>from page 438</i>                                    |
| [53] | Drilling protection → <i>from page 509</i>                           |
| [54] | Handle, lockable (see catalogue CTL_1)                               |
| [63] | Night vent → <i>from page 493</i>                                    |
| [82] | Anti-jemmy device → <i>from page 510</i>                             |

### Application range

| RC 3 |                             |               |
|------|-----------------------------|---------------|
|      | Sash rebate width<br>(SRW)  | 490 – 1000 mm |
|      | Sash rebate height<br>(SRH) | 601 – 2800 mm |
|      | Sash weight<br>(S.kg)       | Max. 120 kg   |



### INFO

#### Roto Con Orders

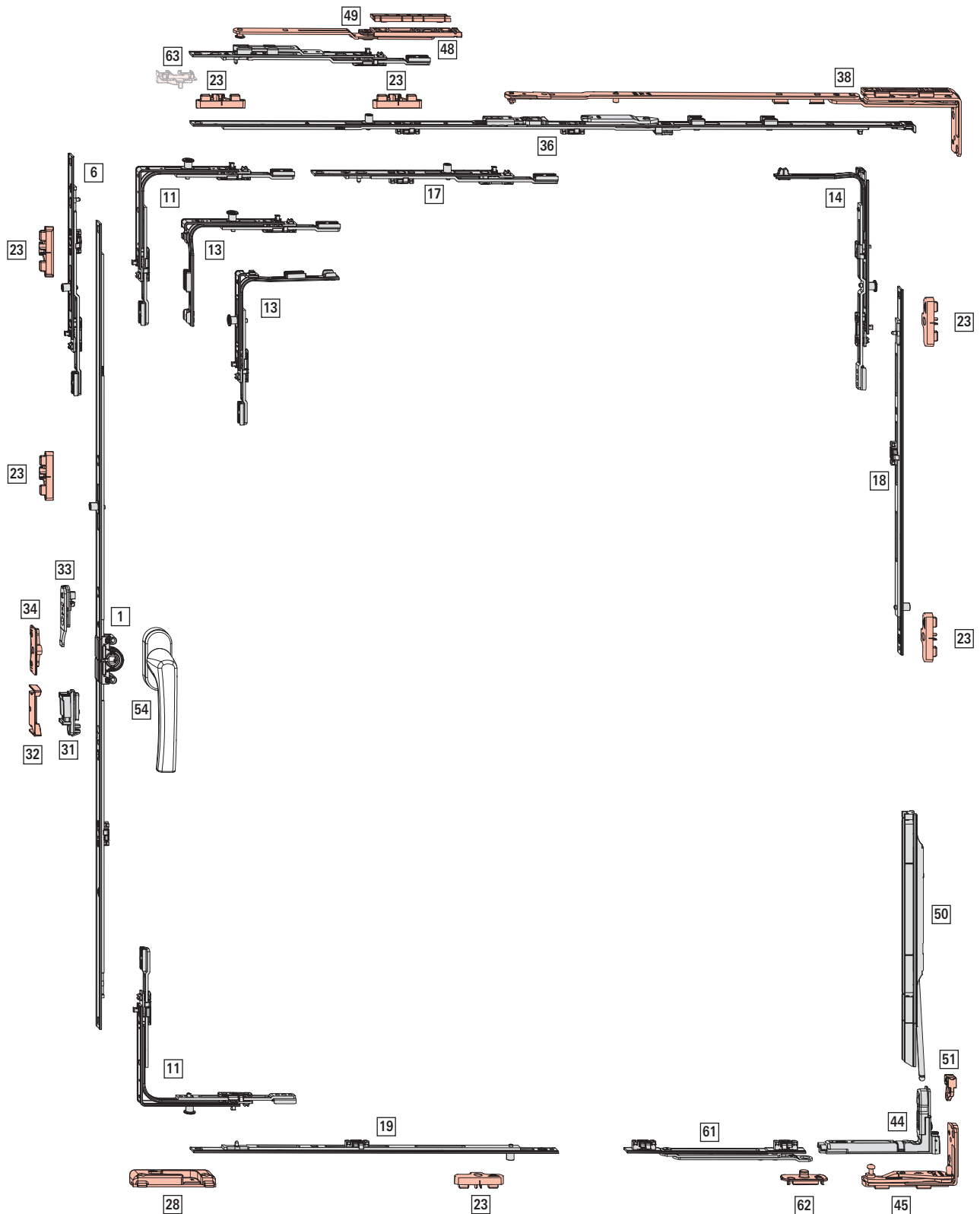
Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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### 3.2.1.2 TiltFirst hardware

#### 3.2.1.2.1 Basic security





| Item | Description                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                                                             |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [11] | Corner drive, standard → <i>from page 352</i>                                                                                 |
| [13] | Special corner drive, short → <i>from page 353</i>                                                                            |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                                                 |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                                                            |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                                                          |
| [23] | Striker → <i>from page 456</i>                                                                                                |
| [28] | Tilt striker, TiltFirst → <i>from page 453</i>                                                                                |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                                                            |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                                                           |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                                                              |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                                                             |
| [36] | Stay guide, basic security → <i>from page 369</i>                                                                             |
| [38] | Stay arm, TiltFirst → <i>from page 382</i>                                                                                    |
| [44] | Corner hinge → <i>from page 435</i>                                                                                           |
| [45] | Pivot rest → <i>from page 438</i>                                                                                             |
| [48] | Additional stay arm, TiltFirst → <i>from page 470</i>                                                                         |
| [49] | Support plate → <i>from page 516</i>                                                                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                                                                           |
| [51] | Load transfer frame component → <i>from page 443</i>                                                                          |
| [54] | Handle (see catalogue CTL_1)                                                                                                  |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i>  |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i> |
| [63] | Night vent → <i>from page 493</i>                                                                                             |

## Application range

|  |                          | Basic security        |                    |
|--|--------------------------|-----------------------|--------------------|
|  |                          | Without load transfer | With load transfer |
|  | Sash rebate width (SRW)  | 340 – 1750 mm         | 600 – 1750 mm      |
|  | Sash rebate height (SRH) | 285 – 3000 mm         | 1000 – 3000 mm     |
|  | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

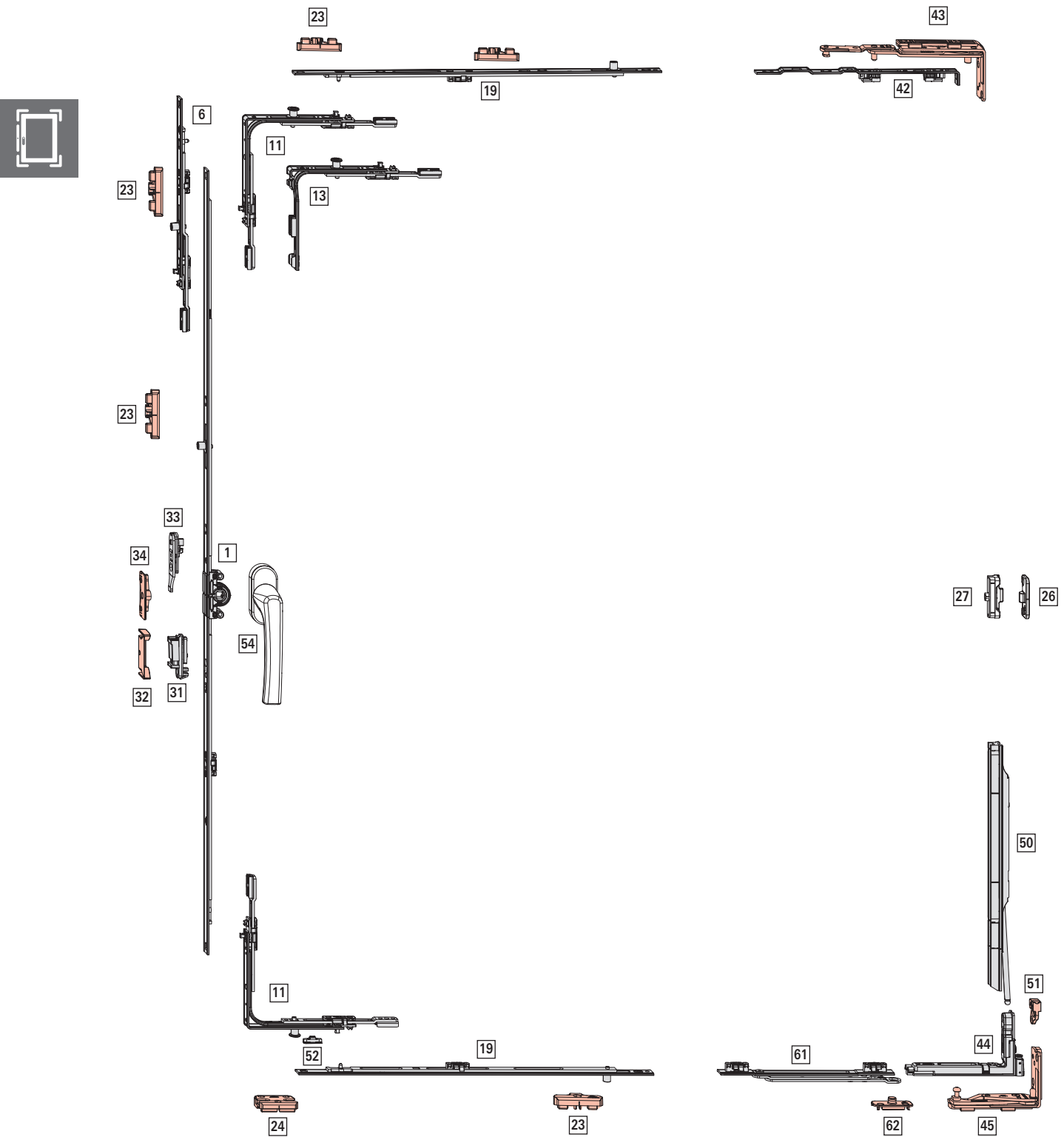
Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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### 3.2.1.3 Turn-Only hardware

#### 3.2.1.3.1 Basic security





| Item | Description                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                                                             |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [11] | Corner drive, standard → <i>from page 352</i>                                                                                 |
| [13] | Special corner drive, short → <i>from page 353</i>                                                                            |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                                                          |
| [23] | Striker → <i>from page 456</i>                                                                                                |
| [24] | Striker, security → <i>from page 457</i>                                                                                      |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>                                                              |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>                                                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                                                            |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                                                           |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                                                              |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                                                             |
| [42] | Rebate stay guide → <i>from page 394</i>                                                                                      |
| [43] | Rebate stay arm → <i>from page 397</i>                                                                                        |
| [44] | Corner hinge → <i>from page 435</i>                                                                                           |
| [45] | Pivot rest → <i>from page 438</i>                                                                                             |
| [50] | Load transfer sash component → <i>from page 443</i>                                                                           |
| [51] | Load transfer frame component → <i>from page 443</i>                                                                          |
| [52] | Travel restrictor → <i>from page 523</i>                                                                                      |
| [54] | Handle (see catalogue CTL_1)                                                                                                  |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i>  |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i> |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 370 – 1750 mm         | 600 – 1750 mm      |
|                | Sash rebate height (SRH) | 285 – 3000 mm         | 1000 – 3000 mm     |
|                | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

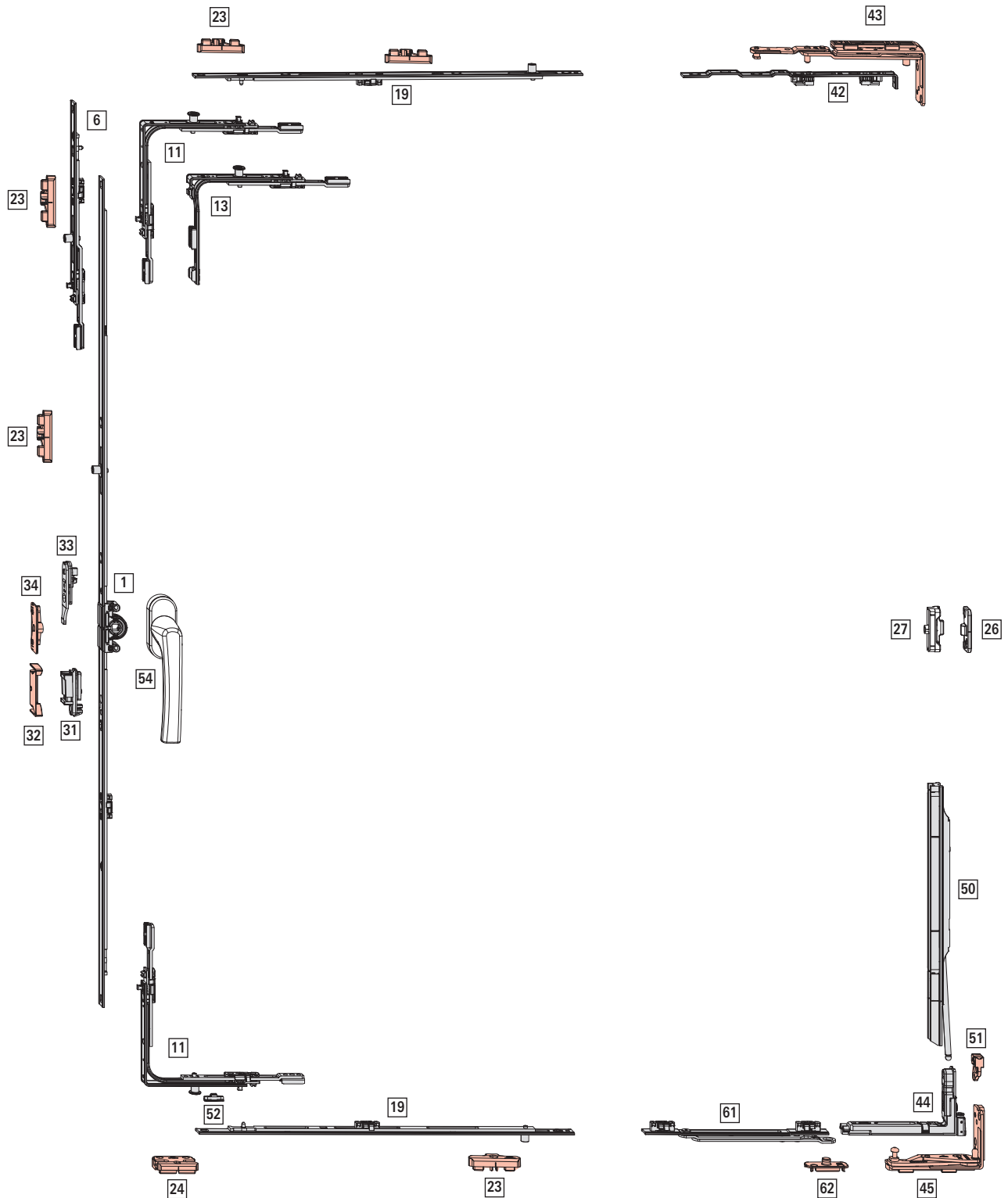
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### 3.2.1.3.2 RC 1 N







| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>             |
| [11] | Corner drive, standard → <i>from page 352</i>                        |
| [13] | Special corner drive, short → <i>from page 353</i>                   |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>             |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                       |
| [24] | Striker, security → <i>from page 457</i>                             |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, basic security → <i>from page 369</i>                    |
| [38] | Stay arm → <i>from page 379</i>                                      |
| [44] | Corner hinge → <i>from page 435</i>                                  |
| [45] | Pivot rest → <i>from page 438</i>                                    |
| [50] | Load transfer sash component → <i>from page 443</i>                  |
| [51] | Load transfer frame component → <i>from page 443</i>                 |
| [52] | Travel restrictor → <i>from page 523</i>                             |
| [53] | Drilling protection → <i>from page 509</i>                           |
| [54] | Handle, lockable (see catalogue CTL_1)                               |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>           |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>          |
| [82] | Anti-jemmy device → <i>from page 510</i>                             |

## Application range

| RC 1 N |                          |                       |                    |
|--------|--------------------------|-----------------------|--------------------|
|        |                          | Without load transfer | With load transfer |
|        | Sash rebate width (SRW)  | 450 – 1600 mm         | 650 – 1600 mm      |
|        | Sash rebate height (SRH) | 285 – 2800 mm         | 1000 – 2800 mm     |
|        | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

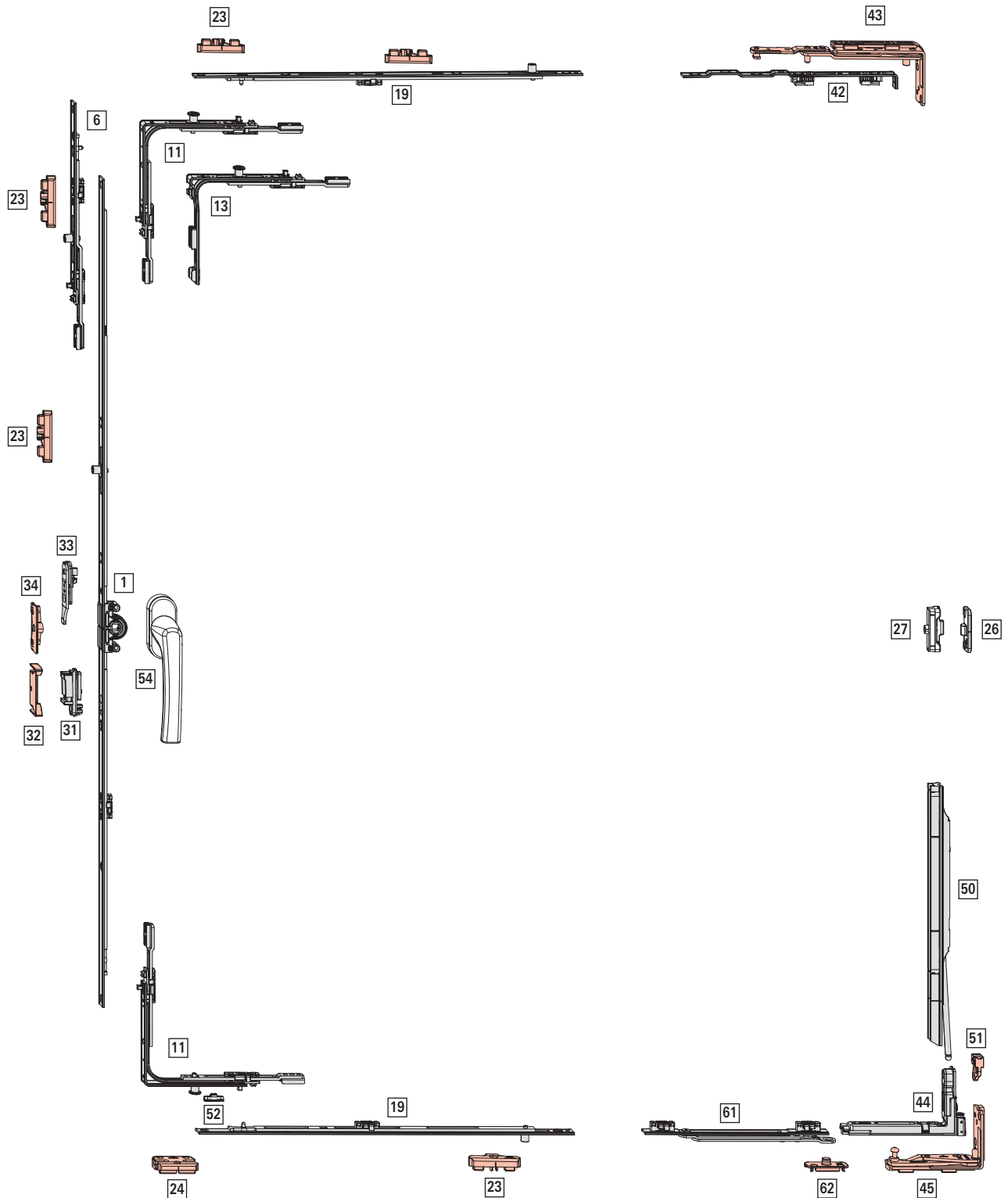
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### 3.2.1.3.3 RC 2 / RC 2 N





| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>             |
| [11] | Corner drive, standard → <i>from page 352</i>                        |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [15] | Corner drive, standard (security) → <i>from page 352</i>             |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                             |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, security → <i>from page 370</i>                          |
| [38] | Stay arm → <i>from page 379</i>                                      |
| [44] | Corner hinge → <i>from page 435</i>                                  |
| [45] | Pivot rest → <i>from page 438</i>                                    |
| [50] | Load transfer sash component → <i>from page 443</i>                  |
| [51] | Load transfer frame component → <i>from page 443</i>                 |
| [52] | Travel restrictor → <i>from page 523</i>                             |
| [53] | Drilling protection → <i>from page 509</i>                           |
| [54] | Handle, lockable (see catalogue CTL_1)                               |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>           |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>          |
| [82] | Anti-jemmy device → <i>from page 510</i>                             |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 650 – 1400 mm      |
|               | Sash rebate height (SRH) | 601 – 2800 mm         | 1000 – 2800 mm     |
|               | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

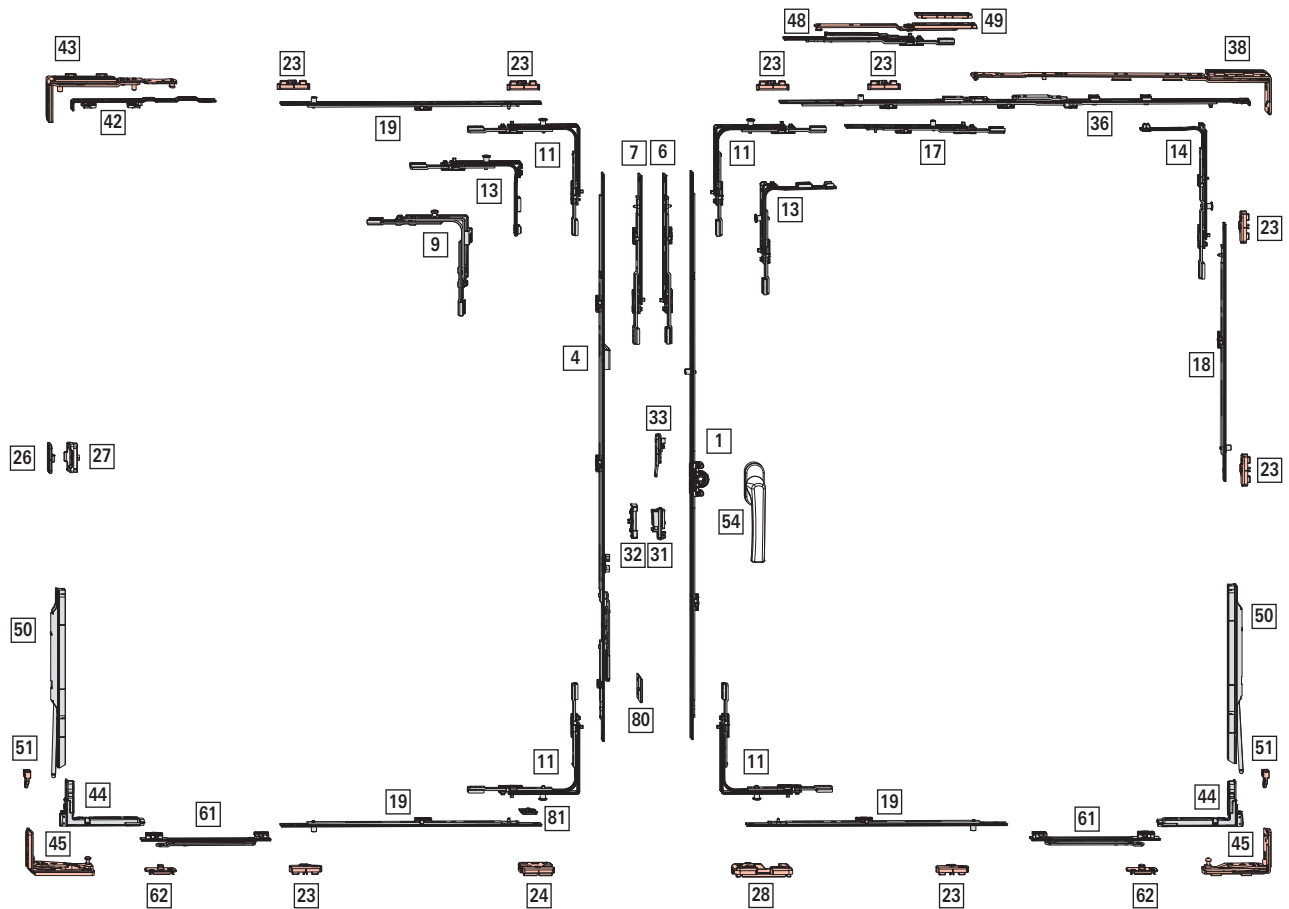
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### 3.2.1.4 Floating-mullion hardware – standard

#### 3.2.1.4.1 Basic security





| Item | Description                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                                                             |
| [4]  | Lever-operated espagnolette Standard, VT – fixed handle height → <i>from page 335</i>                                         |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                                                           |
| [9]  | Floating-mullion corner drive → <i>from page 354</i>                                                                          |
| [11] | Corner drive, standard → <i>from page 352</i>                                                                                 |
| [13] | Special corner drive, short → <i>from page 353</i>                                                                            |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                                                 |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                                                            |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                                                          |
| [23] | Striker → <i>from page 456</i>                                                                                                |
| [24] | Striker, security → <i>from page 457</i>                                                                                      |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>                                                              |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>                                                               |
| [28] | Tilt striker → <i>from page 450</i>                                                                                           |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                                                            |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                                                           |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                                                              |
| [36] | Stay guide, basic security → <i>from page 369</i>                                                                             |
| [38] | Stay arm → <i>from page 379</i>                                                                                               |
| [42] | Rebate stay guide → <i>from page 394</i>                                                                                      |
| [43] | Rebate stay arm → <i>from page 397</i>                                                                                        |
| [44] | Corner hinge → <i>from page 435</i>                                                                                           |
| [45] | Pivot rest → <i>from page 438</i>                                                                                             |
| [48] | Additional stay arm → <i>from page 470</i>                                                                                    |
| [49] | Support plate → <i>from page 516</i>                                                                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                                                                           |
| [51] | Load transfer frame component → <i>from page 443</i>                                                                          |
| [54] | Handle (see catalogue CTL_1)                                                                                                  |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i>  |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i> |
| [80] | Fastening plate → <i>from page 511</i>                                                                                        |
| [81] | Run-up block → <i>from page 514</i>                                                                                           |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 370 – 1750 mm         | 600 – 1750 mm      |
|                | Sash rebate height (SRH) | 430 – 3000 mm         | 1000 – 3000 mm     |
|                | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## **INFO**

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### 3.2.1.4.2 RC 1 N







| Item | Description                                                                           |
|------|---------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                     |
| [4]  | Lever-operated espagnolette Standard, VT – fixed handle height → <i>from page 335</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                              |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                   |
| [11] | Corner drive, standard → <i>from page 352</i>                                         |
| [13] | Special corner drive, short → <i>from page 353</i>                                    |
| [14] | Sash stay corner drive → <i>from page 356</i>                                         |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                              |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                    |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>                  |
| [23] | Striker → <i>from page 456</i>                                                        |
| [24] | Striker, security → <i>from page 457</i>                                              |
| [28] | Tilt striker → <i>from page 450</i>                                                   |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                    |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                   |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                      |
| [35] | Turn-Only sash stay guide → <i>from page 370</i>                                      |
| [36] | Stay guide, basic security → <i>from page 369</i>                                     |
| [38] | Stay arm → <i>from page 379</i>                                                       |
| [44] | Corner hinge → <i>from page 435</i>                                                   |
| [45] | Pivot rest → <i>from page 438</i>                                                     |
| [48] | Additional stay arm → <i>from page 470</i>                                            |
| [49] | Support plate → <i>from page 516</i>                                                  |
| [50] | Load transfer sash component → <i>from page 443</i>                                   |
| [51] | Load transfer frame component → <i>from page 443</i>                                  |
| [53] | Drilling protection → <i>from page 509</i>                                            |
| [54] | Handle, lockable (see catalogue CTL_1)                                                |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                            |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                           |
| [80] | Fastening plate → <i>from page 511</i>                                                |
| [81] | Run-up block → <i>from page 514</i>                                                   |
| [82] | Anti-jemmy device → <i>from page 510</i>                                              |

## Application range

| RC 1 N |                          |                       |                    |
|--------|--------------------------|-----------------------|--------------------|
|        |                          | Without load transfer | With load transfer |
|        | Sash rebate width (SRW)  | 450 – 1600 mm         | 650 – 1600 mm      |
|        | Sash rebate height (SRH) | 430 – 2800 mm         | 1000 – 2800 mm     |
|        | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## **INFO**

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### 3.2.1.4.3 RC 2 / RC 2 N





| Item | Description                                                                           |
|------|---------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                     |
| [4]  | Lever-operated espagnolette Standard, VT – fixed handle height → <i>from page 335</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                              |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                   |
| [10] | Floating-mullion corner drive → <i>from page 354</i>                                  |
| [11] | Corner drive, standard → <i>from page 352</i>                                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                                         |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                              |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                              |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>                    |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>                  |
| [24] | Striker, security → <i>from page 457</i>                                              |
| [28] | Tilt striker → <i>from page 450</i>                                                   |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                    |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                   |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                      |
| [35] | Turn-Only sash stay guide → <i>from page 370</i>                                      |
| [36] | Stay guide, security → <i>from page 369</i>                                           |
| [38] | Stay arm → <i>from page 379</i>                                                       |
| [44] | Corner hinge → <i>from page 435</i>                                                   |
| [45] | Pivot rest → <i>from page 438</i>                                                     |
| [50] | Load transfer sash component → <i>from page 443</i>                                   |
| [51] | Load transfer frame component → <i>from page 443</i>                                  |
| [53] | Drilling protection → <i>from page 509</i>                                            |
| [54] | Handle, lockable (see catalogue CTL_1)                                                |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                            |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                           |
| [81] | Run-up block → <i>from page 514</i>                                                   |
| [82] | Anti-jemmy device → <i>from page 510</i>                                              |
| [84] | Safety device for floating-mullion sash → <i>from page 509</i>                        |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 650 – 1400 mm      |
|               | Sash rebate height (SRH) | 601 – 2800 mm         | 1000 – 2800 mm     |
|               | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

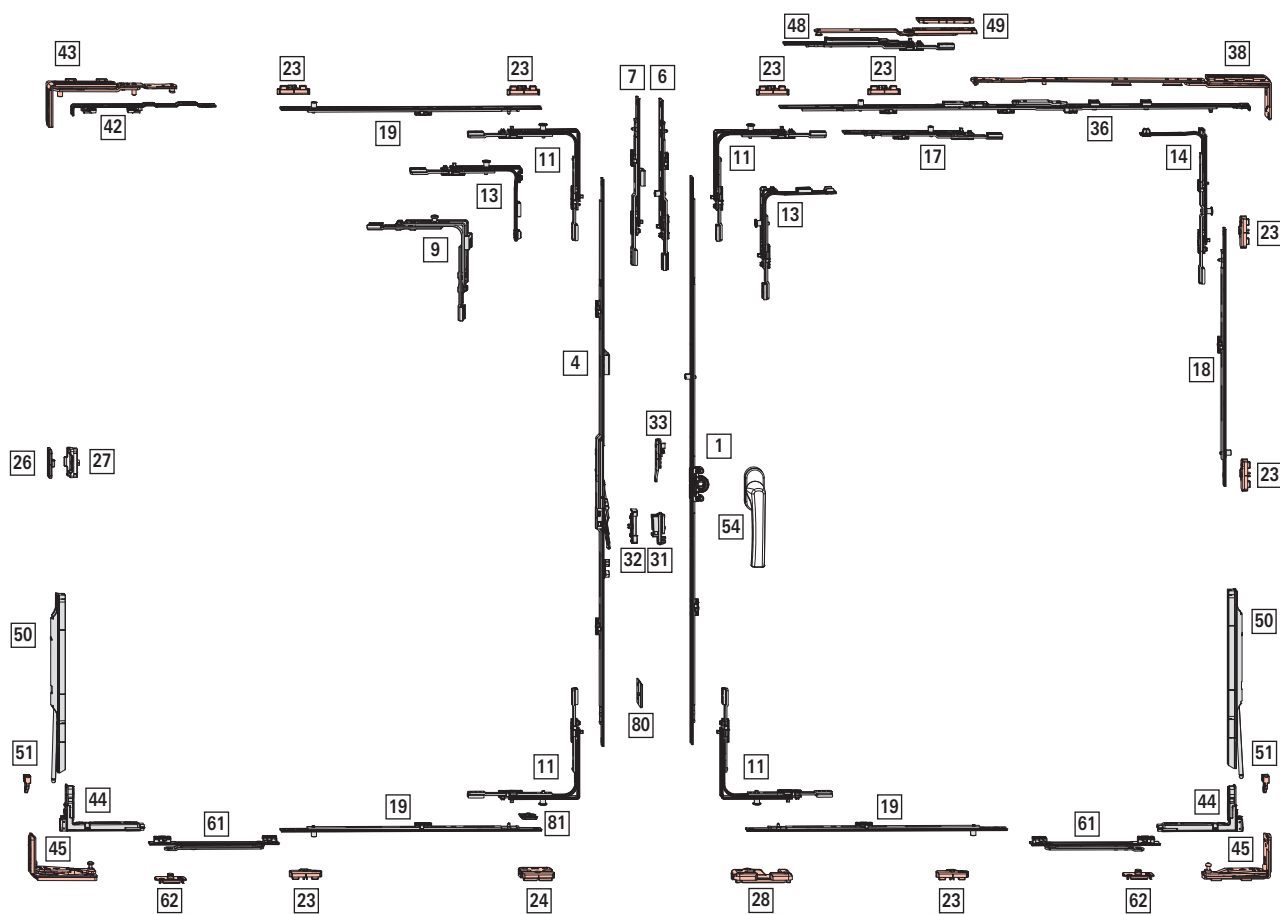
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### 3.2.1.5 Floating-mullion hardware – Plus

#### 3.2.1.5.1 Basic security





| Item | Description                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                                                             |
| [4]  | Lever-operated espagnolette Plus, VT – fixed handle height → <i>from page 339</i>                                             |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                                                           |
| [9]  | Floating-mullion corner drive → <i>from page 354</i>                                                                          |
| [11] | Corner drive, standard → <i>from page 352</i>                                                                                 |
| [13] | Special corner drive, short → <i>from page 353</i>                                                                            |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                                                 |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                                                            |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                                                          |
| [23] | Striker → <i>from page 456</i>                                                                                                |
| [24] | Striker, security → <i>from page 457</i>                                                                                      |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>                                                              |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>                                                               |
| [28] | Tilt striker → <i>from page 450</i>                                                                                           |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                                                            |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                                                           |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                                                              |
| [36] | Stay guide, basic security → <i>from page 369</i>                                                                             |
| [38] | Stay arm → <i>from page 379</i>                                                                                               |
| [42] | Rebate stay guide → <i>from page 394</i>                                                                                      |
| [43] | Rebate stay arm → <i>from page 397</i>                                                                                        |
| [44] | Corner hinge → <i>from page 435</i>                                                                                           |
| [45] | Pivot rest → <i>from page 438</i>                                                                                             |
| [48] | Additional stay arm → <i>from page 470</i>                                                                                    |
| [49] | Support plate → <i>from page 516</i>                                                                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                                                                           |
| [51] | Load transfer frame component → <i>from page 443</i>                                                                          |
| [54] | Handle (see catalogue CTL_1)                                                                                                  |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i>  |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i> |
| [80] | Fastening plate → <i>from page 511</i>                                                                                        |
| [81] | Run-up block → <i>from page 514</i>                                                                                           |

## Application range

| Basic security                                                                      |                          |                       |                    |
|-------------------------------------------------------------------------------------|--------------------------|-----------------------|--------------------|
|                                                                                     |                          | Without load transfer | With load transfer |
|  | Sash rebate width (SRW)  | 370 – 1750 mm         | 600 – 1750 mm      |
|  | Sash rebate height (SRH) | 430 – 3000 mm         | 1000 – 3000 mm     |
|  | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



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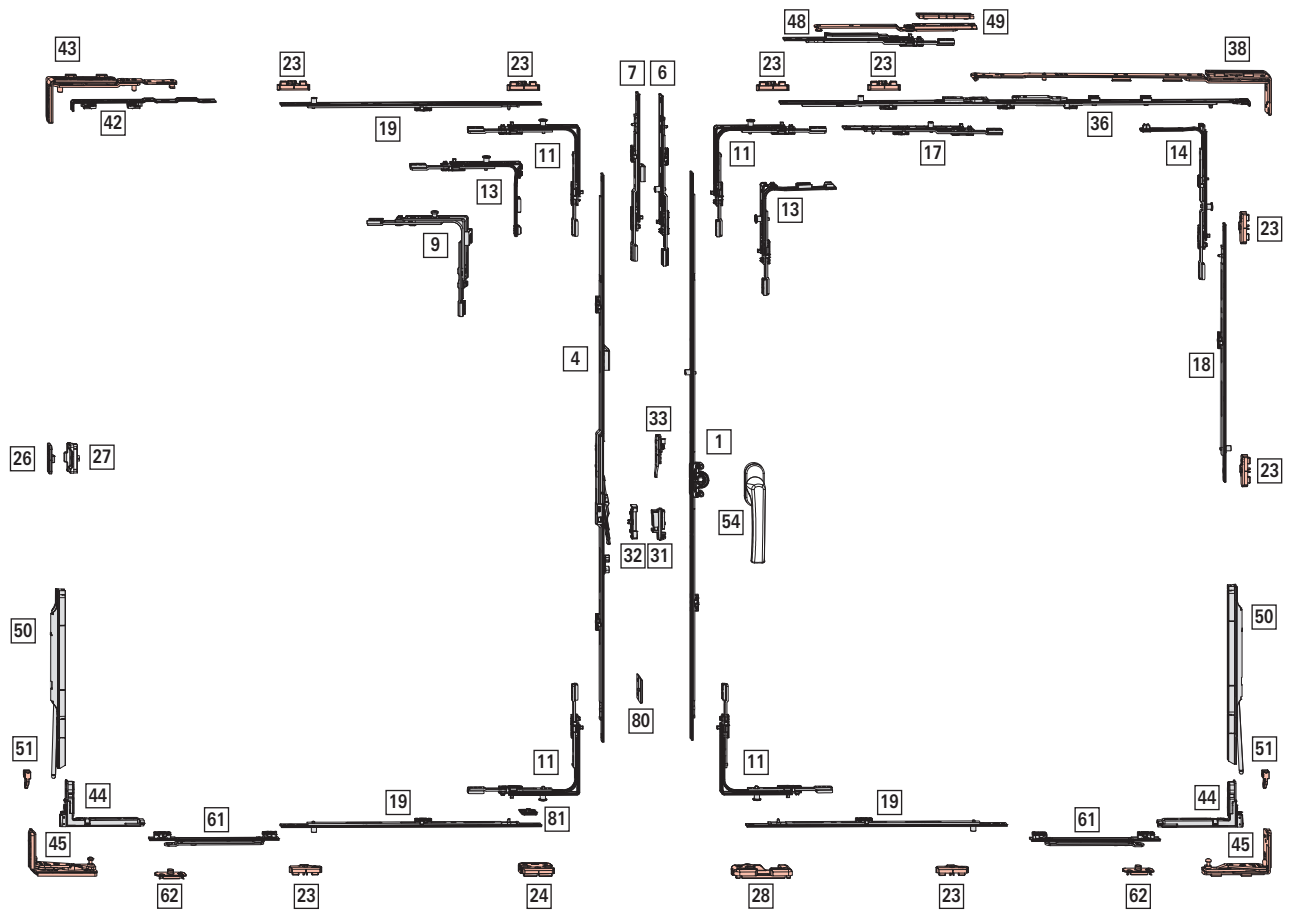


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### 3.2.1.5.2 RC 1 N





| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                 |
| [4]  | Lever-operated espagnolette Plus, VT – fixed handle height → <i>from page 339</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                          |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                               |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [13] | Special corner drive, short → <i>from page 353</i>                                |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                          |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>              |
| [23] | Striker → <i>from page 456</i>                                                    |
| [24] | Striker, security → <i>from page 457</i>                                          |
| [28] | Tilt striker → <i>from page 450</i>                                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                  |
| [35] | Turn-Only sash stay guide → <i>from page 370</i>                                  |
| [36] | Stay guide, basic security → <i>from page 369</i>                                 |
| [38] | Stay arm → <i>from page 379</i>                                                   |
| [44] | Corner hinge → <i>from page 435</i>                                               |
| [45] | Pivot rest → <i>from page 438</i>                                                 |
| [48] | Additional stay arm → <i>from page 470</i>                                        |
| [49] | Support plate → <i>from page 516</i>                                              |
| [50] | Load transfer sash component → <i>from page 443</i>                               |
| [51] | Load transfer frame component → <i>from page 443</i>                              |
| [53] | Drilling protection → <i>from page 509</i>                                        |
| [54] | Handle, lockable (see catalogue CTL_1)                                            |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                        |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                       |
| [80] | Fastening plate → <i>from page 511</i>                                            |
| [81] | Run-up block → <i>from page 514</i>                                               |
| [82] | Anti-jemmy device → <i>from page 510</i>                                          |

## Application range

| RC 1 N |                          |                       |                    |
|--------|--------------------------|-----------------------|--------------------|
|        |                          | Without load transfer | With load transfer |
|        | Sash rebate width (SRW)  | 450 – 1600 mm         | 650 – 1600 mm      |
|        | Sash rebate height (SRH) | 430 – 2800 mm         | 1000 – 2800 mm     |
|        | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## **INFO**

### **Roto Con Orders**

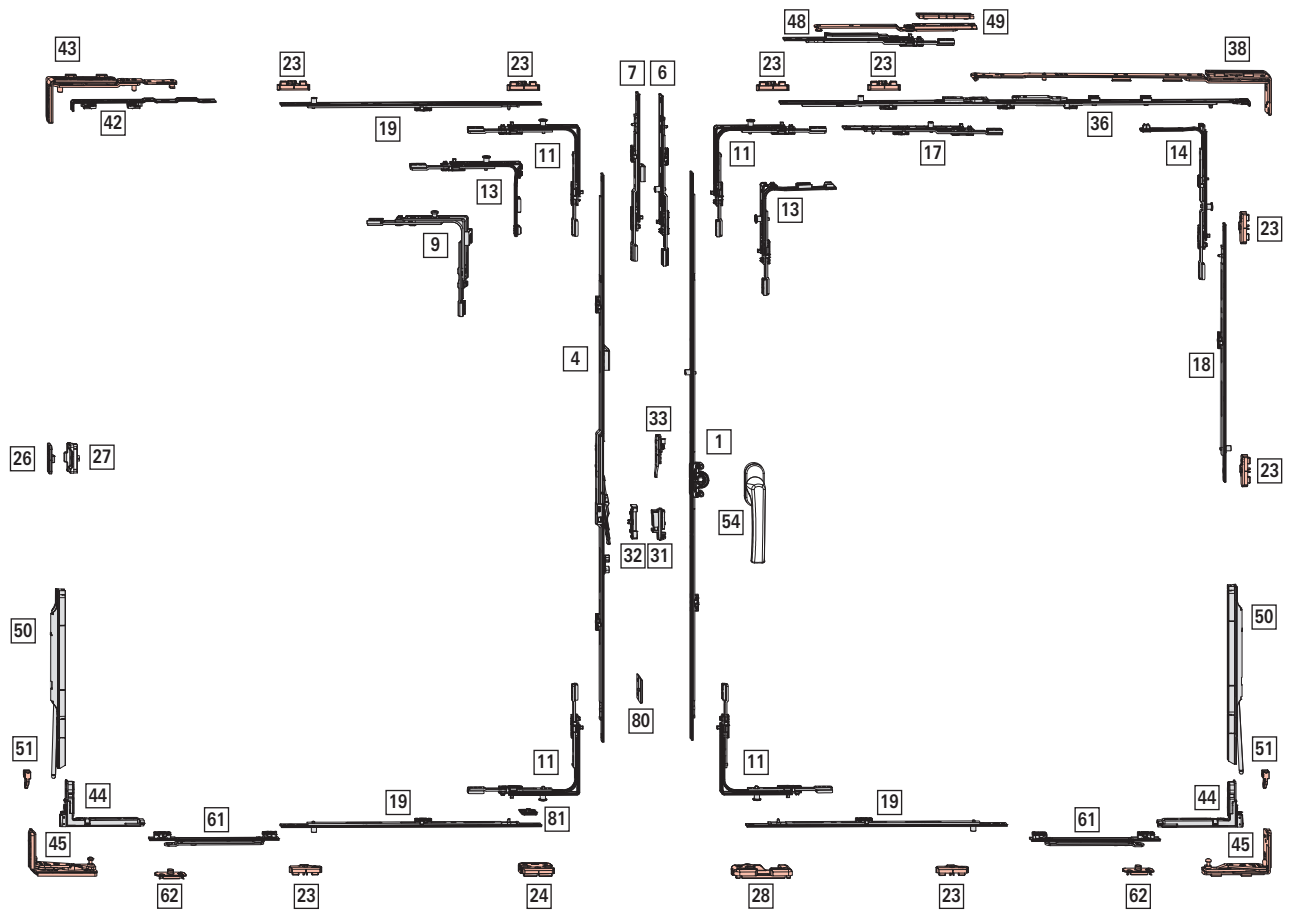
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### 3.2.1.5.3 RC 2 / RC 2 N





| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                 |
| [4]  | Lever-operated espagnolette Plus, VT – fixed handle height → <i>from page 339</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                          |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                               |
| [10] | Floating-mullion corner drive → <i>from page 354</i>                              |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                          |
| [16] | Floating-mullion corner drive – slide guard (optional) → <i>from page 354</i>     |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                          |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>                |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>              |
| [24] | Striker, security → <i>from page 457</i>                                          |
| [28] | Tilt striker → <i>from page 450</i>                                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                  |
| [35] | Turn-Only sash stay guide → <i>from page 370</i>                                  |
| [36] | Stay guide, security → <i>from page 369</i>                                       |
| [38] | Stay arm → <i>from page 379</i>                                                   |
| [44] | Corner hinge → <i>from page 435</i>                                               |
| [45] | Pivot rest → <i>from page 438</i>                                                 |
| [50] | Load transfer sash component → <i>from page 443</i>                               |
| [51] | Load transfer frame component → <i>from page 443</i>                              |
| [53] | Drilling protection → <i>from page 509</i>                                        |
| [54] | Handle, lockable (see catalogue CTL_1)                                            |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                        |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                       |
| [81] | Run-up block → <i>from page 514</i>                                               |
| [82] | Anti-jemmy device → <i>from page 510</i>                                          |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1600 mm         | 650 – 1600 mm      |
|               | Sash rebate height (SRH) | 285 – 2800 mm         | 1000 – 2800 mm     |
|               | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

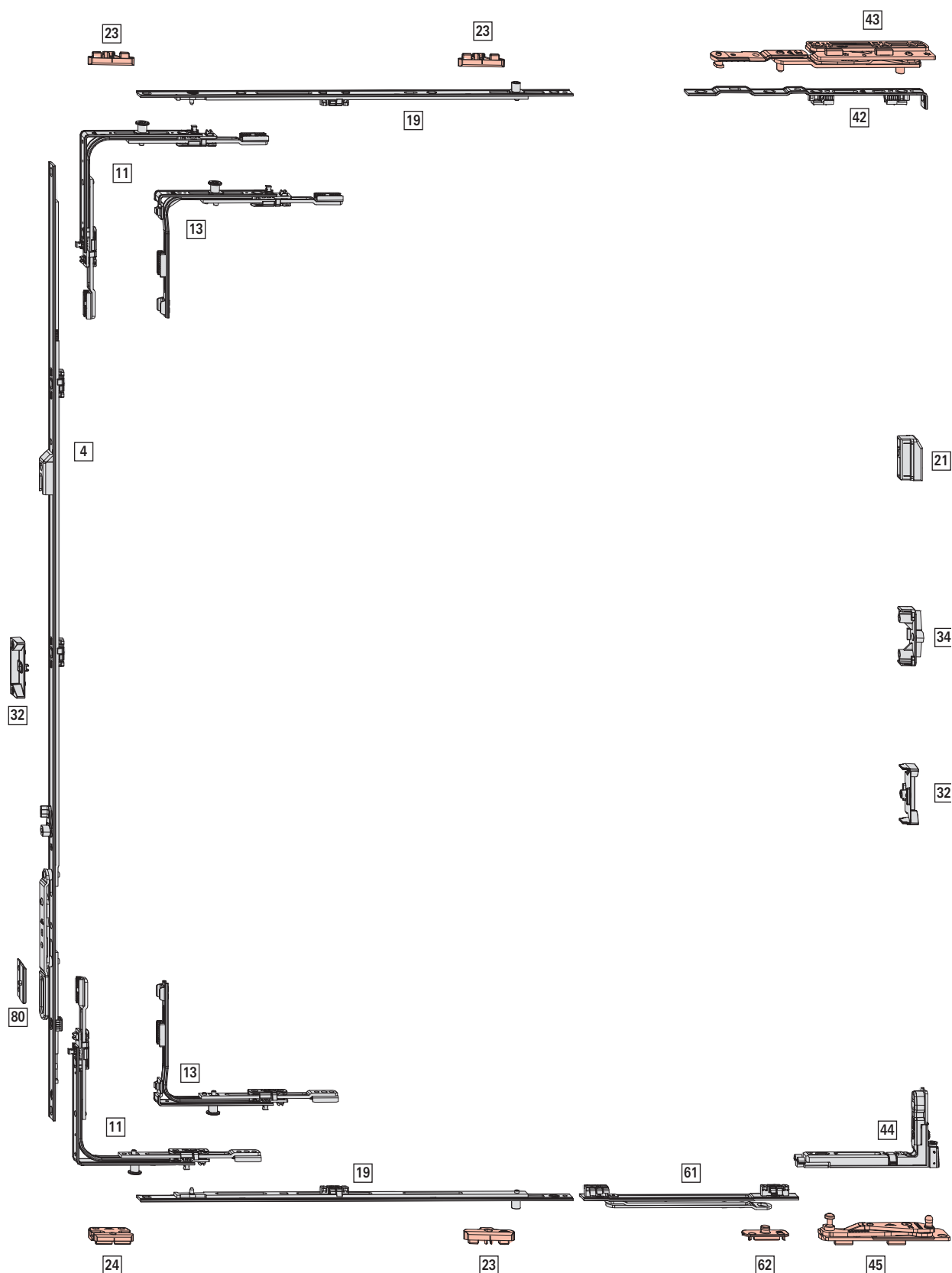
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### 3.2.1.6 Floating-mullion hardware – centre sash (triple-sashed windows)

#### 3.2.1.6.1 Standard – basic security







| Item | Description                                                                           |
|------|---------------------------------------------------------------------------------------|
| [4]  | Lever-operated espagnolette Standard, VT – fixed handle height → <i>from page 335</i> |
| [11] | Corner drive, standard → <i>from page 352</i>                                         |
| [13] | Special corner drive, short → <i>from page 353</i>                                    |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                  |
| [21] | Striker for opposite hardware groove → <i>from page 463</i>                           |
| [23] | Striker → <i>from page 456</i>                                                        |
| [24] | Striker, security → <i>from page 457</i>                                              |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                   |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                     |
| [42] | Rebate stay guide → <i>from page 394</i>                                              |
| [43] | Rebate stay arm → <i>from page 397</i>                                                |
| [44] | Corner hinge → <i>from page 435</i>                                                   |
| [45] | Pivot rest → <i>from page 438</i>                                                     |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                            |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                           |
| [80] | Fastening plate → <i>from page 511</i>                                                |

### Application range

| Basic security                                                                      |                             |               |
|-------------------------------------------------------------------------------------|-----------------------------|---------------|
| Without load transfer                                                               |                             |               |
|    | Sash rebate width<br>(SRW)  | 370 – 1200 mm |
|  | Sash rebate height<br>(SRH) | 430 – 1800 mm |
|  | Sash weight<br>(S.kg)       | Max. 100 kg   |



### INFO

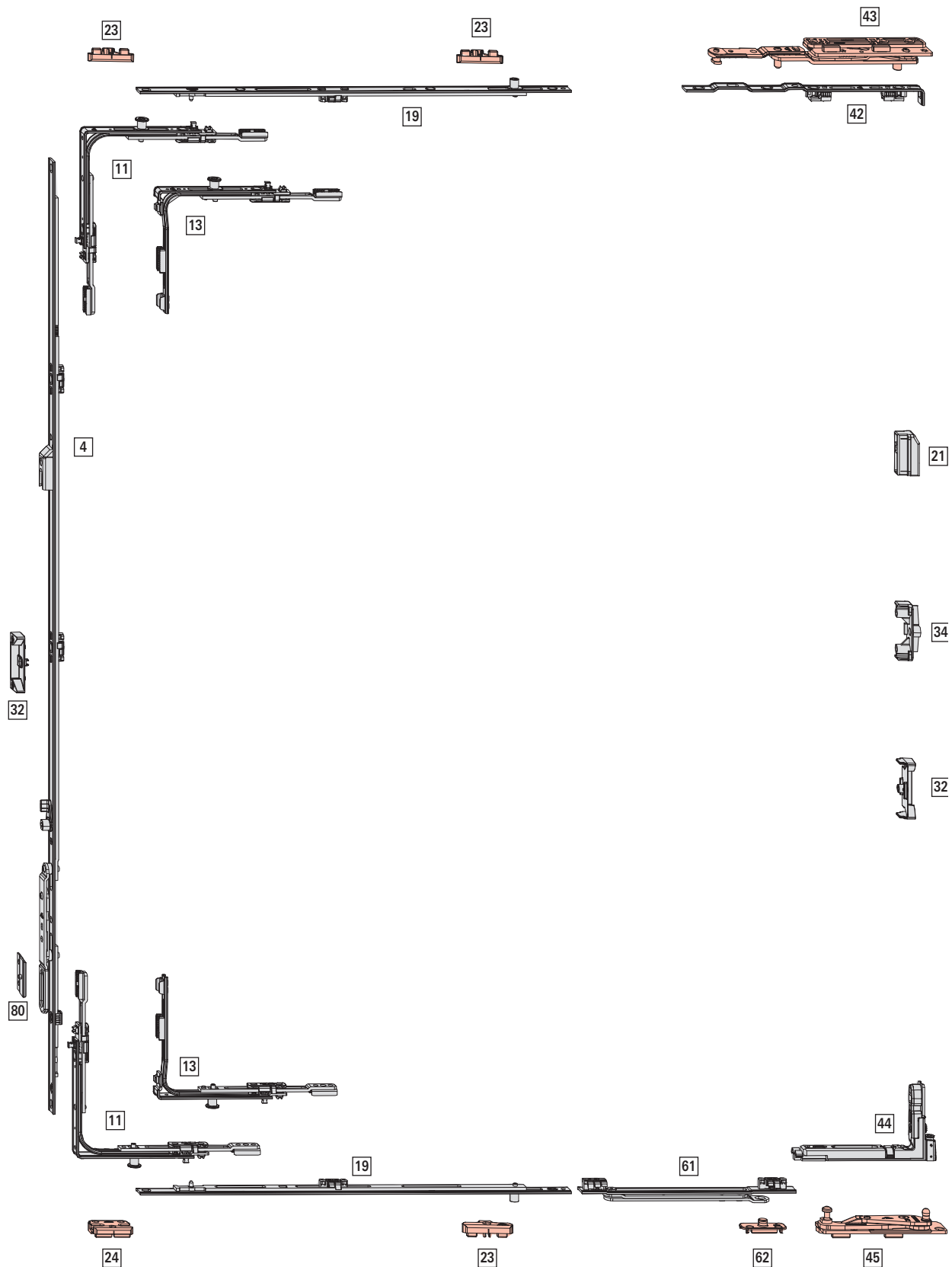
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### 3.2.1.6.2 Plus – basic security





| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [4]  | Lever-operated espagnolette Plus, VT – fixed handle height → <i>from page 339</i> |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [13] | Special corner drive, short → <i>from page 353</i>                                |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>              |
| [21] | Striker for opposite hardware groove → <i>from page 463</i>                       |
| [23] | Striker → <i>from page 456</i>                                                    |
| [24] | Striker, security → <i>from page 457</i>                                          |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                 |
| [42] | Rebate stay guide → <i>from page 394</i>                                          |
| [43] | Rebate stay arm → <i>from page 397</i>                                            |
| [44] | Corner hinge → <i>from page 435</i>                                               |
| [45] | Pivot rest → <i>from page 438</i>                                                 |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                        |
| [62] | Turn restrictor 195, frame component                                              |

## Application range

| Basic security                                                                      |                             |               |
|-------------------------------------------------------------------------------------|-----------------------------|---------------|
| Without load transfer                                                               |                             |               |
|    | Sash rebate width<br>(SRW)  | 370 – 1200 mm |
|   | Sash rebate height<br>(SRH) | 430 – 1800 mm |
|  | Sash weight<br>(S.kg)       | Max. 100 kg   |



## INFO

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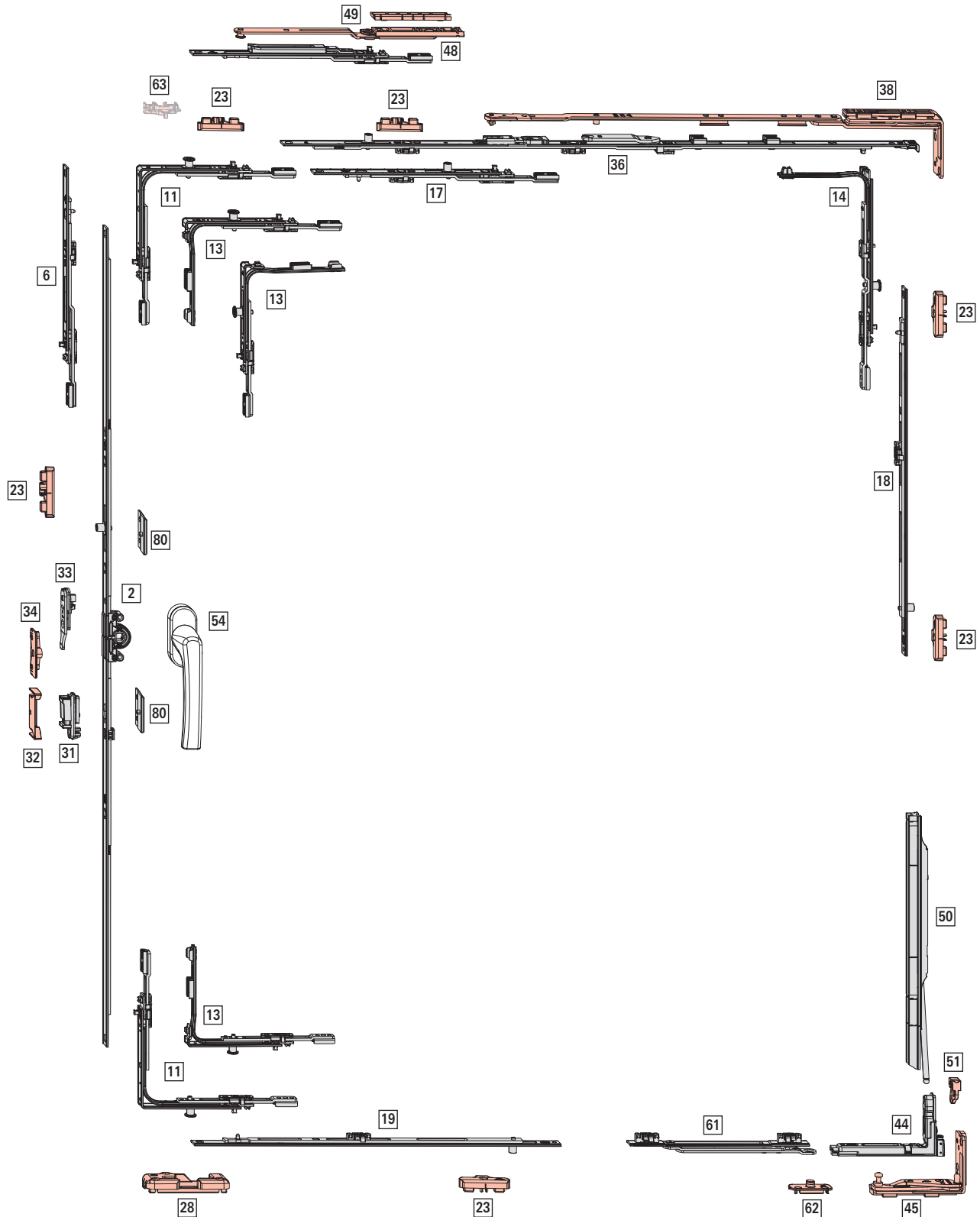


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## 3.2.2 T&T espagnolette – centred / variable handle height

### 3.2.2.1 Tilt&Turn hardware

#### 3.2.2.1.1 Basic security





| Item | Description                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                                                    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [11] | Corner drive, standard → <i>from page 352</i>                                                                                 |
| [13] | Special corner drive, short → <i>from page 353</i>                                                                            |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                                                 |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                                                            |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                                                          |
| [23] | Striker → <i>from page 456</i>                                                                                                |
| [28] | Tilt striker → <i>from page 450</i>                                                                                           |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                                                            |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                                                           |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                                                              |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                                                             |
| [36] | Stay guide, basic security → <i>from page 369</i>                                                                             |
| [38] | Stay arm → <i>from page 379</i>                                                                                               |
| [44] | Corner hinge → <i>from page 435</i>                                                                                           |
| [45] | Pivot rest → <i>from page 438</i>                                                                                             |
| [48] | Additional stay arm → <i>from page 470</i>                                                                                    |
| [49] | Support plate → <i>from page 516</i>                                                                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                                                                           |
| [51] | Load transfer frame component → <i>from page 443</i>                                                                          |
| [54] | Handle (see catalogue CTL_1)                                                                                                  |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i>  |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i> |
| [63] | Night vent → <i>from page 493</i>                                                                                             |
| [80] | Fastening plate → <i>from page 511</i>                                                                                        |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 340 – 1750 mm         | 600 – 1750 mm      |
|                | Sash rebate height (SRH) | 310 – 3000 mm         | 1000 – 3000 mm     |
|                | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

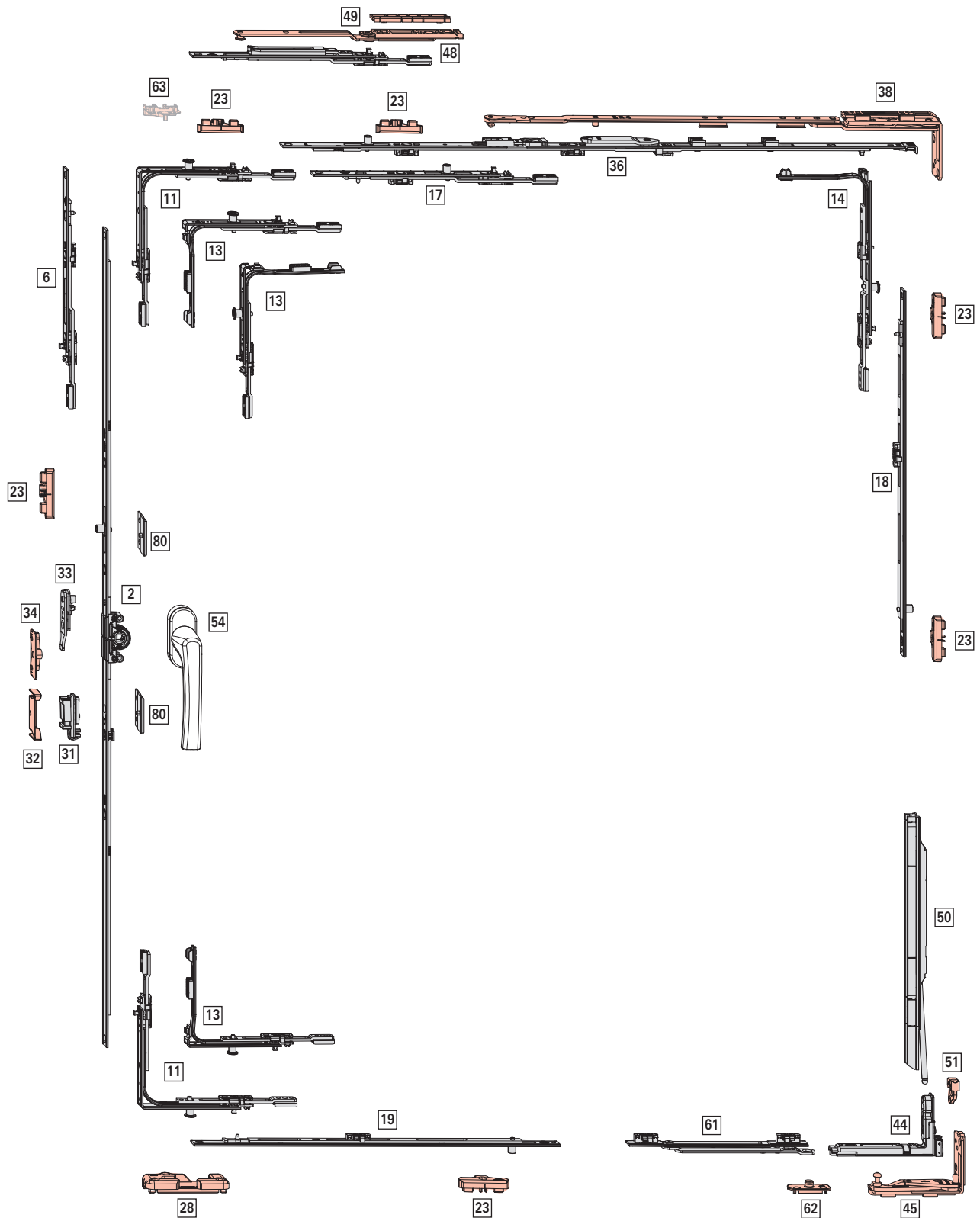
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### 3.2.2.1.2 RC 1 N





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                   |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [13] | Special corner drive, short → <i>from page 353</i>                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>       |
| [23] | Striker → <i>from page 456</i>                                             |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [28] | Tilt striker → <i>from page 450</i>                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, basic security → <i>from page 369</i>                          |
| [38] | Stay arm → <i>from page 379</i>                                            |
| [44] | Corner hinge → <i>from page 435</i>                                        |
| [45] | Pivot rest → <i>from page 438</i>                                          |
| [48] | Additional stay arm → <i>from page 470</i>                                 |
| [49] | Support plate → <i>from page 516</i>                                       |
| [50] | Load transfer sash component → <i>from page 443</i>                        |
| [51] | Load transfer frame component → <i>from page 443</i>                       |
| [53] | Drilling protection → <i>from page 509</i>                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                     |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                 |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                |
| [63] | Night vent → <i>from page 493</i>                                          |
| [80] | Fastening plate → <i>from page 511</i>                                     |
| [82] | Anti-jemmy device → <i>from page 510</i>                                   |

### Application range

| RC 1 N |                             |                       |                    |
|--------|-----------------------------|-----------------------|--------------------|
|        |                             | Without load transfer | With load transfer |
|        | Sash rebate width<br>(SRW)  | 450 – 1600 mm         | 650 – 1600 mm      |
|        | Sash rebate height<br>(SRH) | 310 – 2800 mm         | 1000 – 2800 mm     |
|        | Sash weight<br>(S.kg)       | Max. 120 kg           | 80 – 150 kg        |



### INFO

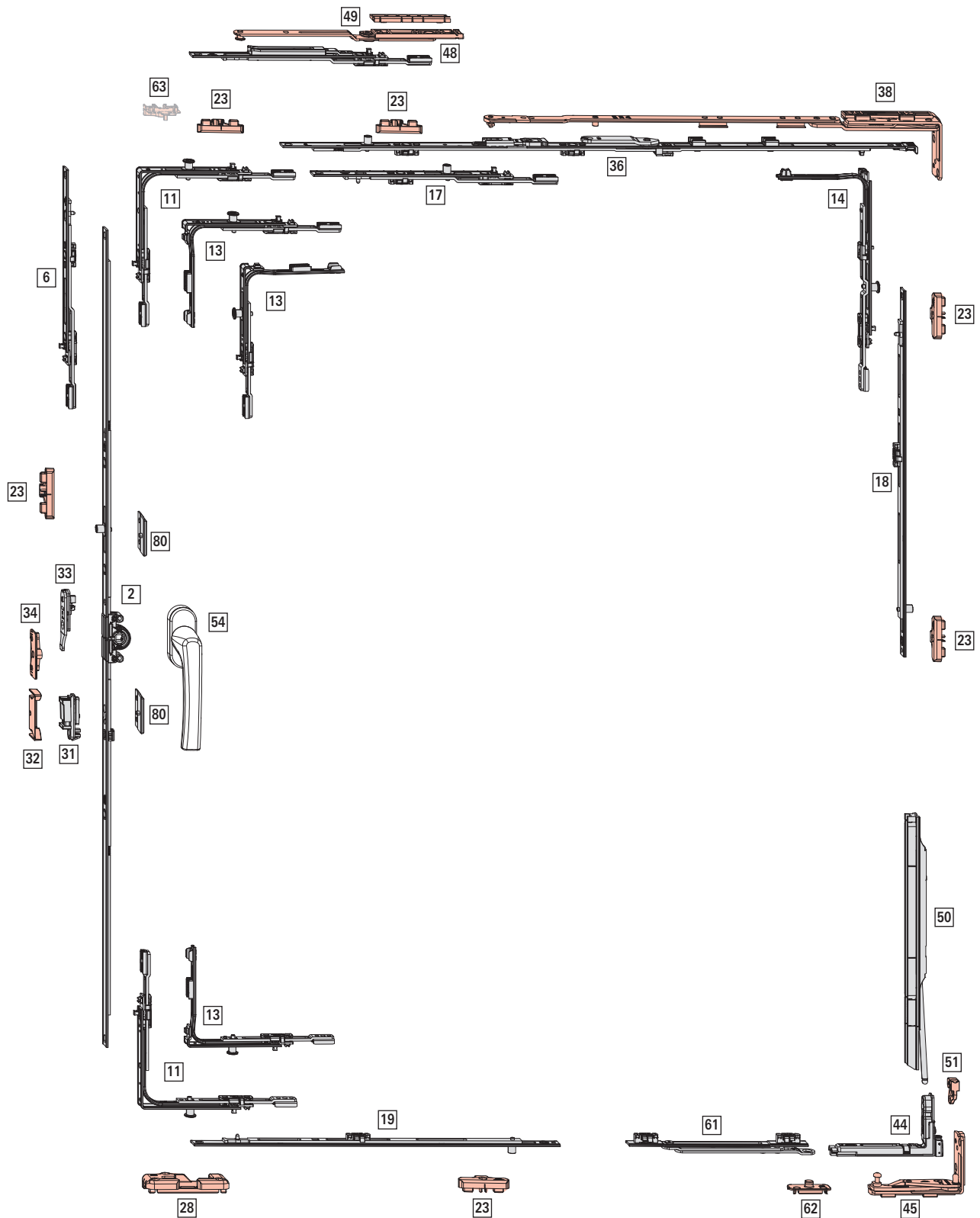
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### 3.2.2.1.3 RC 2 / RC 2 N







| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                   |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                   |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>       |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [28] | Tilt striker → <i>from page 450</i>                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, security → <i>from page 370</i>                                |
| [38] | Stay arm → <i>from page 379</i>                                            |
| [44] | Corner hinge → <i>from page 435</i>                                        |
| [45] | Pivot rest → <i>from page 438</i>                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                        |
| [51] | Load transfer frame component → <i>from page 443</i>                       |
| [53] | Drilling protection → <i>from page 509</i>                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                     |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                 |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                |
| [63] | Night vent → <i>from page 493</i>                                          |
| [80] | Fastening plate → <i>from page 511</i>                                     |
| [82] | Anti-jemmy device → <i>from page 510</i>                                   |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 650 – 1400 mm      |
|               | Sash rebate height (SRH) | 490 – 2800 mm         | 1000 – 2800 mm     |
|               | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

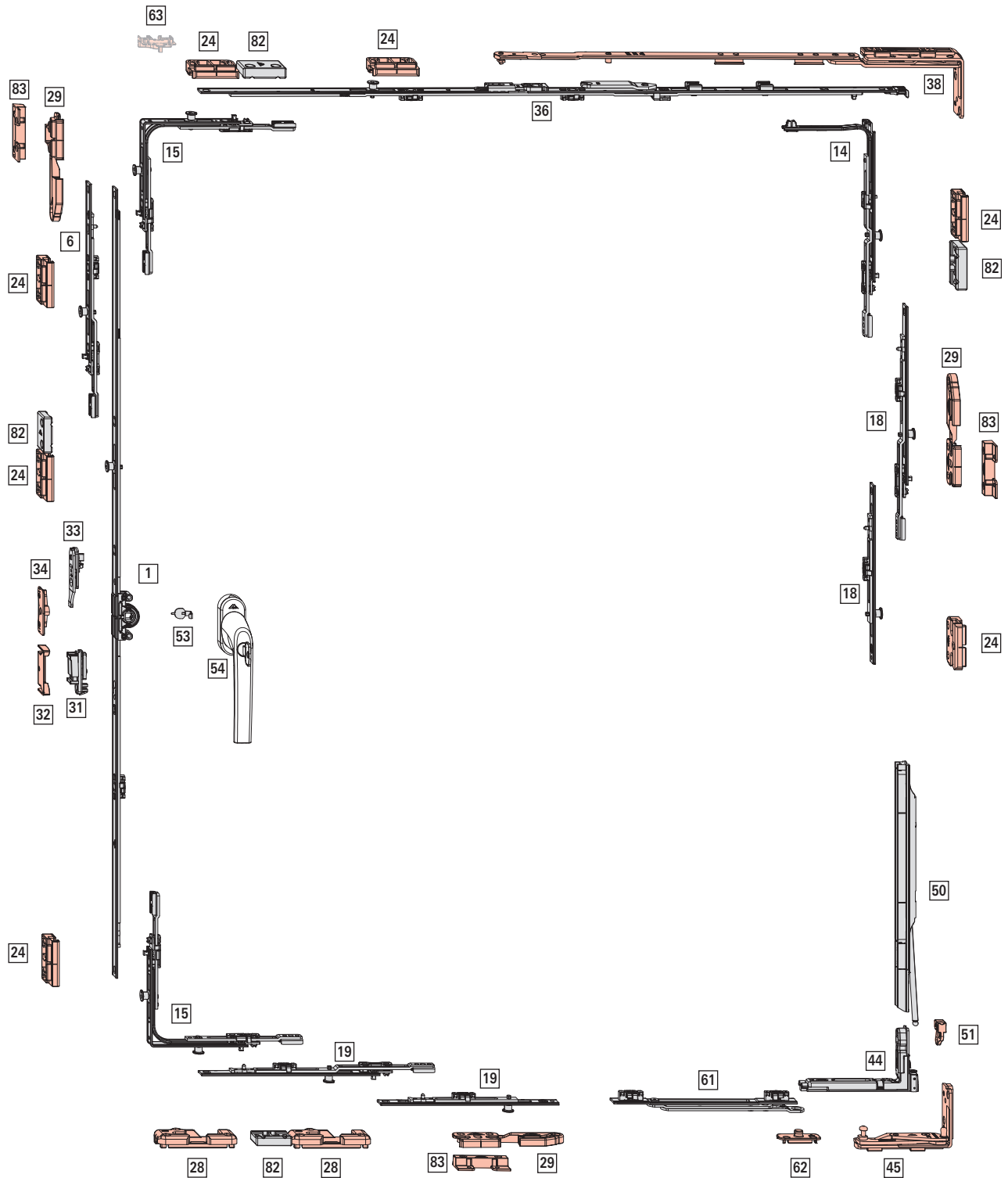
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Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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### 3.2.2.1.4 TiltSafe RC 2 / RC 2 N





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                   |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                   |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>       |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [28] | Tilt striker → <i>from page 450</i>                                        |
| [29] | Security striker for tilt ventilation → <i>from page 461</i>               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, security → <i>from page 370</i>                                |
| [38] | Stay arm → <i>from page 379</i>                                            |
| [44] | Corner hinge → <i>from page 435</i>                                        |
| [45] | Pivot rest → <i>from page 438</i>                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                        |
| [51] | Load transfer frame component → <i>from page 443</i>                       |
| [53] | Drilling protection → <i>from page 509</i>                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                     |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                 |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                |
| [63] | Night vent → <i>from page 493</i>                                          |
| [80] | Fastening plate → <i>from page 511</i>                                     |
| [82] | Anti-jemmy device → <i>from page 510</i>                                   |
| [83] | TiltSafe protective support (optional) → <i>from page 461</i>              |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 650 – 1400 mm      |
|               | Sash rebate height (SRH) | 490 – 2800 mm         | 1000 – 2800 mm     |
|               | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

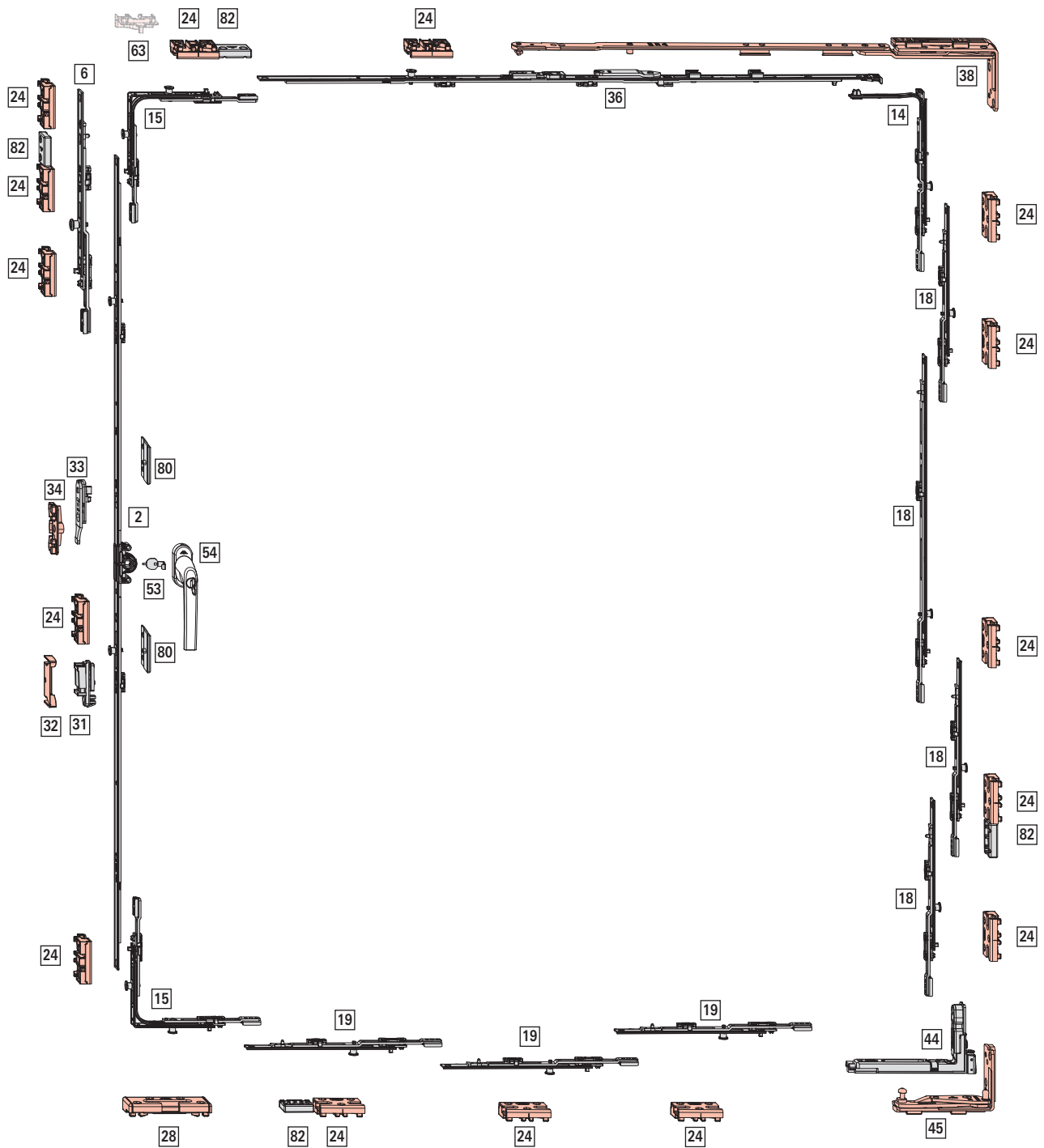
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### 3.2.2.1.5 RC 3





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                   |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                   |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>       |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [28] | Tilt striker → <i>from page 450</i>                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, security → <i>from page 370</i>                                |
| [38] | Stay arm → <i>from page 379</i>                                            |
| [44] | Corner hinge → <i>from page 435</i>                                        |
| [45] | Pivot rest → <i>from page 438</i>                                          |
| [53] | Drilling protection → <i>from page 509</i>                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                     |
| [63] | Night vent → <i>from page 493</i>                                          |
| [80] | Fastening plate → <i>from page 511</i>                                     |
| [82] | Anti-jemmy device → <i>from page 510</i>                                   |

### Application range

| RC 3                                                                                |                             |               |
|-------------------------------------------------------------------------------------|-----------------------------|---------------|
|  | Sash rebate width<br>(SRW)  | 490 – 1000 mm |
|  | Sash rebate height<br>(SRH) | 540 – 2800 mm |
|  | Sash weight<br>(S.kg)       | Max. 120 kg   |



### INFO

#### Roto Con Orders

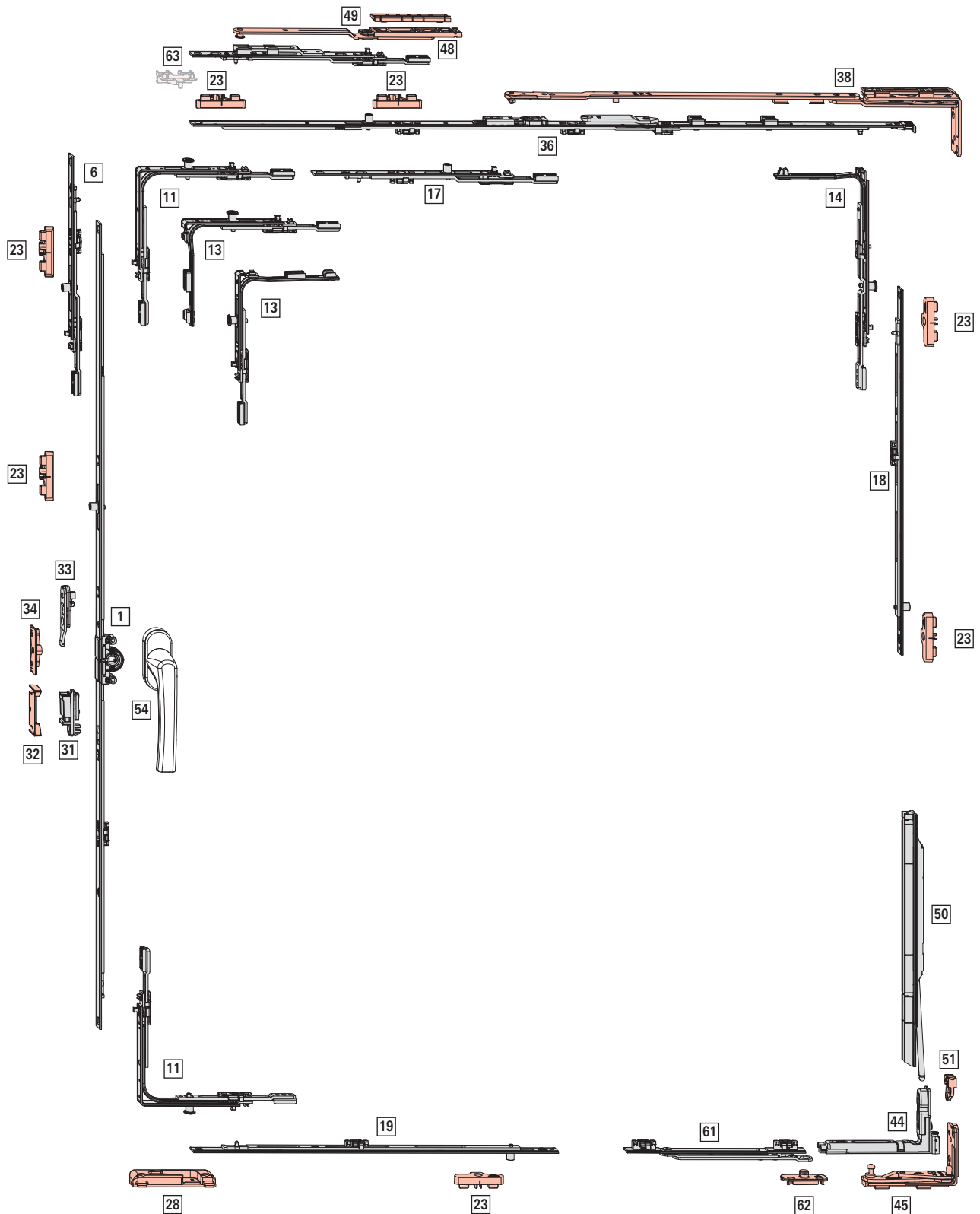
Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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### 3.2.2.2 TiltFirst hardware

#### 3.2.2.2.1 Basic security





| Item | Description                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                                                    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [11] | Corner drive, standard → <i>from page 352</i>                                                                                 |
| [13] | Special corner drive, short → <i>from page 353</i>                                                                            |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                                                 |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                                                            |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                                                          |
| [23] | Striker → <i>from page 456</i>                                                                                                |
| [28] | Tilt striker, TiltFirst → <i>from page 453</i>                                                                                |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                                                            |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                                                           |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                                                              |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                                                             |
| [36] | Stay guide, basic security → <i>from page 369</i>                                                                             |
| [38] | Stay arm, TiltFirst → <i>from page 382</i>                                                                                    |
| [44] | Corner hinge → <i>from page 435</i>                                                                                           |
| [45] | Pivot rest → <i>from page 438</i>                                                                                             |
| [48] | Additional stay arm, TiltFirst → <i>from page 470</i>                                                                         |
| [49] | Support plate → <i>from page 516</i>                                                                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                                                                           |
| [51] | Load transfer frame component → <i>from page 443</i>                                                                          |
| [54] | Handle (see catalogue CTL_1)                                                                                                  |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i>  |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i> |
| [63] | Night vent → <i>from page 493</i>                                                                                             |
| [80] | Fastening plate → <i>from page 511</i>                                                                                        |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 340 – 1750 mm         | 600 – 1750 mm      |
|                | Sash rebate height (SRH) | 310 – 3000 mm         | 1000 – 3000 mm     |
|                | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

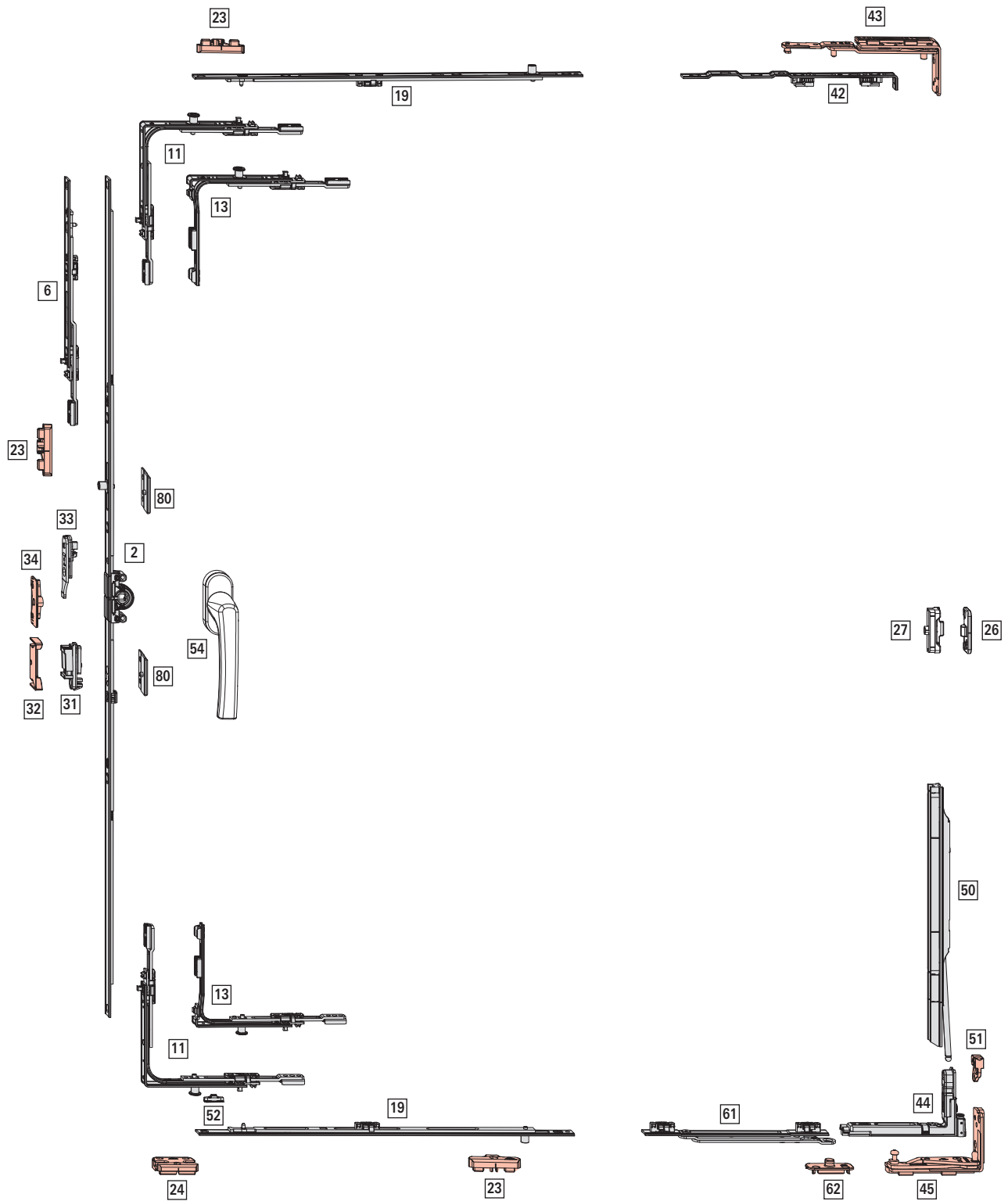
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### 3.2.2.3 Turn-Only hardware

#### 3.2.2.3.1 Basic security







| Item | Description                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                                                    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [11] | Corner drive, standard → <i>from page 352</i>                                                                                 |
| [13] | Special corner drive, short → <i>from page 353</i>                                                                            |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                                                          |
| [23] | Striker → <i>from page 456</i>                                                                                                |
| [24] | Striker, security → <i>from page 457</i>                                                                                      |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>                                                              |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>                                                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                                                            |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                                                           |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                                                              |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                                                             |
| [42] | Rebate stay guide → <i>from page 394</i>                                                                                      |
| [43] | Rebate stay arm → <i>from page 397</i>                                                                                        |
| [44] | Corner hinge → <i>from page 435</i>                                                                                           |
| [45] | Pivot rest → <i>from page 438</i>                                                                                             |
| [50] | Load transfer sash component → <i>from page 443</i>                                                                           |
| [51] | Load transfer frame component → <i>from page 443</i>                                                                          |
| [52] | Travel restrictor → <i>from page 523</i>                                                                                      |
| [54] | Handle (see catalogue CTL_1)                                                                                                  |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i>  |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i> |
| [80] | Fastening plate → <i>from page 511</i>                                                                                        |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 370 – 1750 mm         | 600 – 1750 mm      |
|                | Sash rebate height (SRH) | 310 – 3000 mm         | 1000 – 3000 mm     |
|                | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

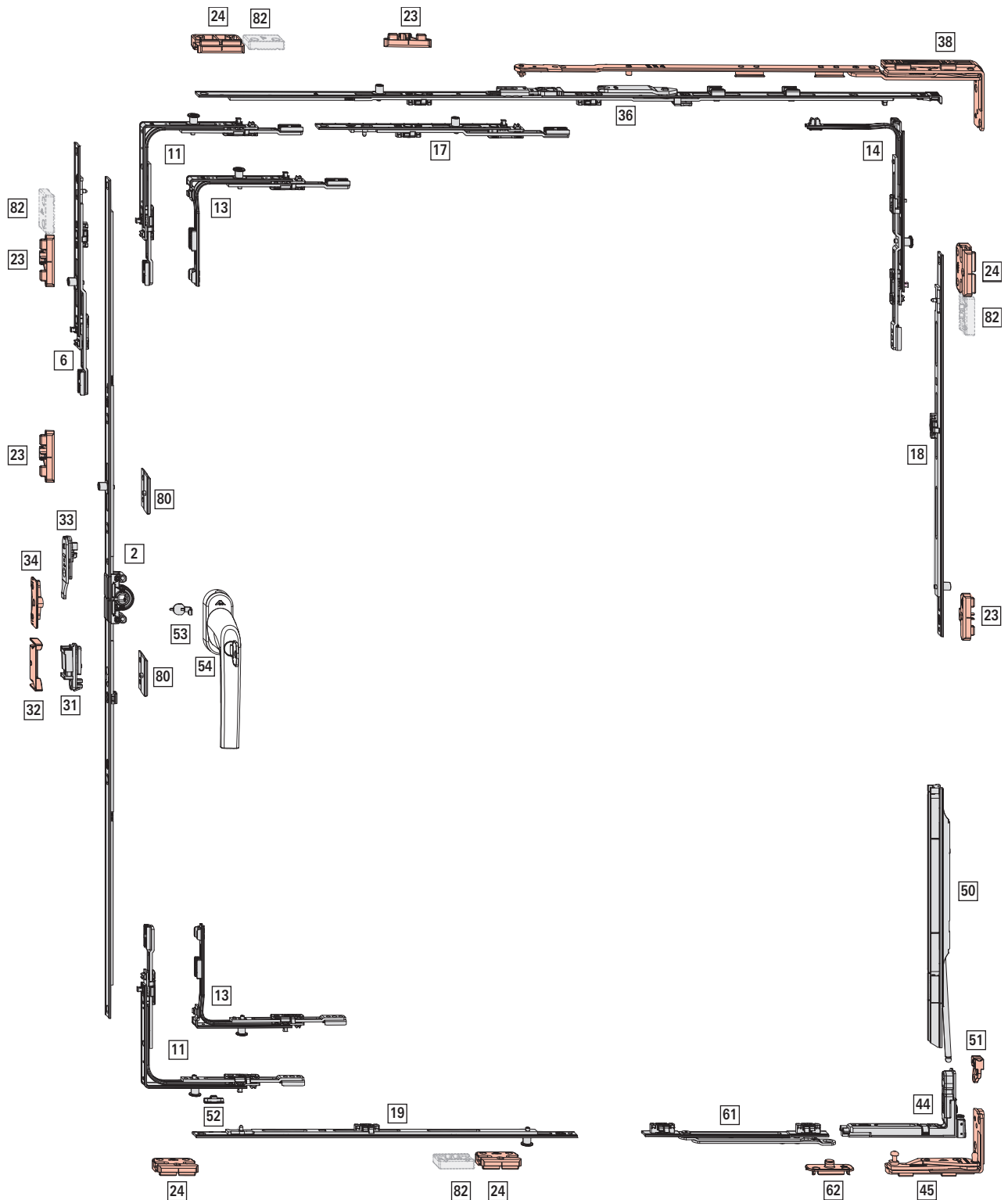
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### 3.2.2.3.2 RC 1 N





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                   |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [13] | Special corner drive, short → <i>from page 353</i>                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                   |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>       |
| [23] | Striker → <i>from page 456</i>                                             |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, basic security → <i>from page 369</i>                          |
| [38] | Stay arm → <i>from page 379</i>                                            |
| [44] | Corner hinge → <i>from page 435</i>                                        |
| [45] | Pivot rest → <i>from page 438</i>                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                        |
| [51] | Load transfer frame component → <i>from page 443</i>                       |
| [52] | Travel restrictor → <i>from page 523</i>                                   |
| [53] | Drilling protection → <i>from page 509</i>                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                     |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                 |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                |
| [80] | Fastening plate → <i>from page 511</i>                                     |
| [82] | Anti-jemmy device → <i>from page 510</i>                                   |

## Application range

| RC 1 N |                          |                       |                    |
|--------|--------------------------|-----------------------|--------------------|
|        |                          | Without load transfer | With load transfer |
|        | Sash rebate width (SRW)  | 450 – 1600 mm         | 650 – 1600 mm      |
|        | Sash rebate height (SRH) | 310 – 2800 mm         | 1000 – 2800 mm     |
|        | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

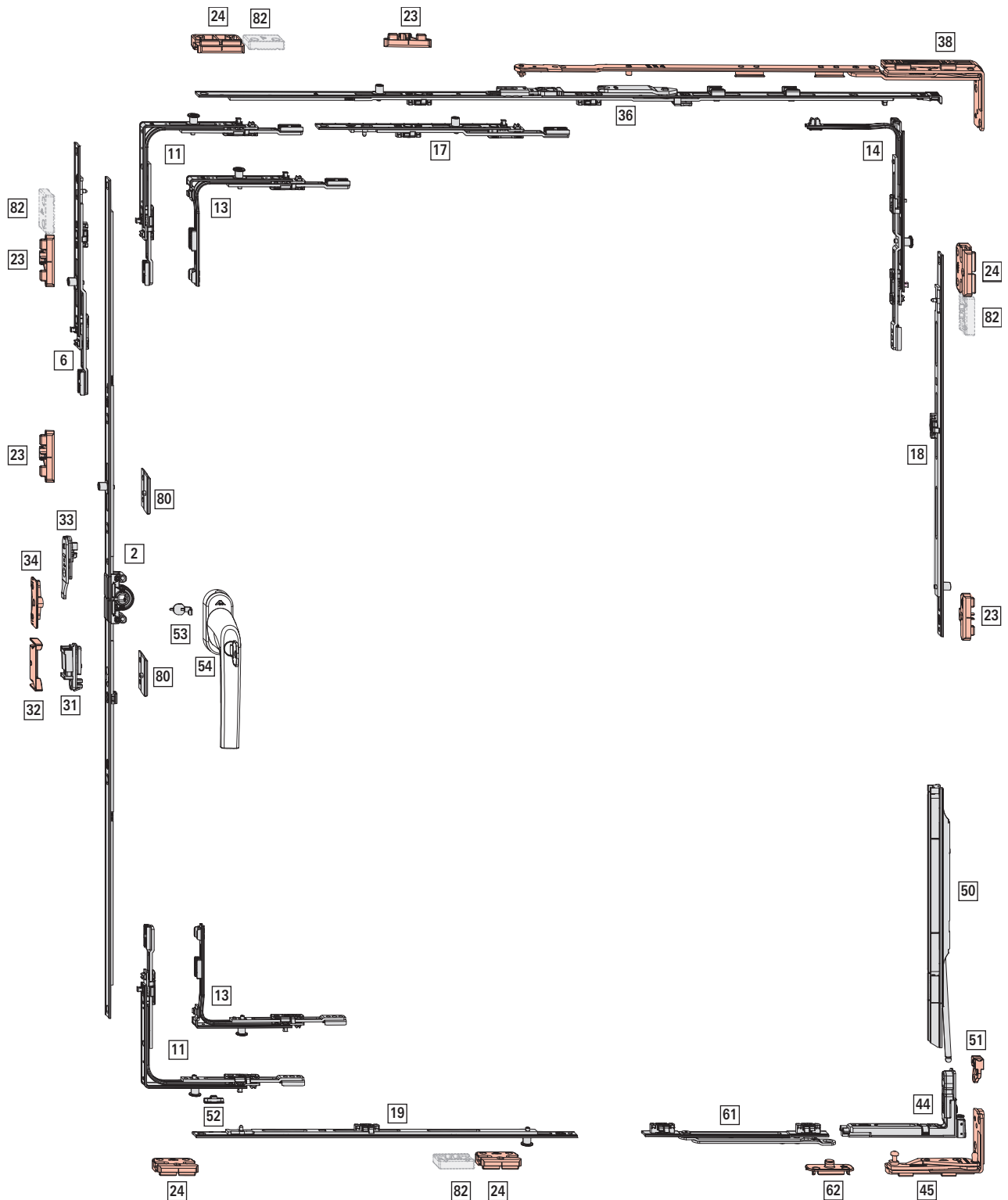
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### 3.2.2.3.3 RC 2 / RC 2 N





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                   |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                   |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>       |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, security → <i>from page 370</i>                                |
| [38] | Stay arm → <i>from page 379</i>                                            |
| [44] | Corner hinge → <i>from page 435</i>                                        |
| [45] | Pivot rest → <i>from page 438</i>                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                        |
| [51] | Load transfer frame component → <i>from page 443</i>                       |
| [52] | Travel restrictor → <i>from page 523</i>                                   |
| [53] | Drilling protection → <i>from page 509</i>                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                     |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                 |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                |
| [80] | Fastening plate → <i>from page 511</i>                                     |
| [82] | Anti-jemmy device → <i>from page 510</i>                                   |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 650 – 1400 mm      |
|               | Sash rebate height (SRH) | 490 – 2800 mm         | 1000 – 2800 mm     |
|               | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

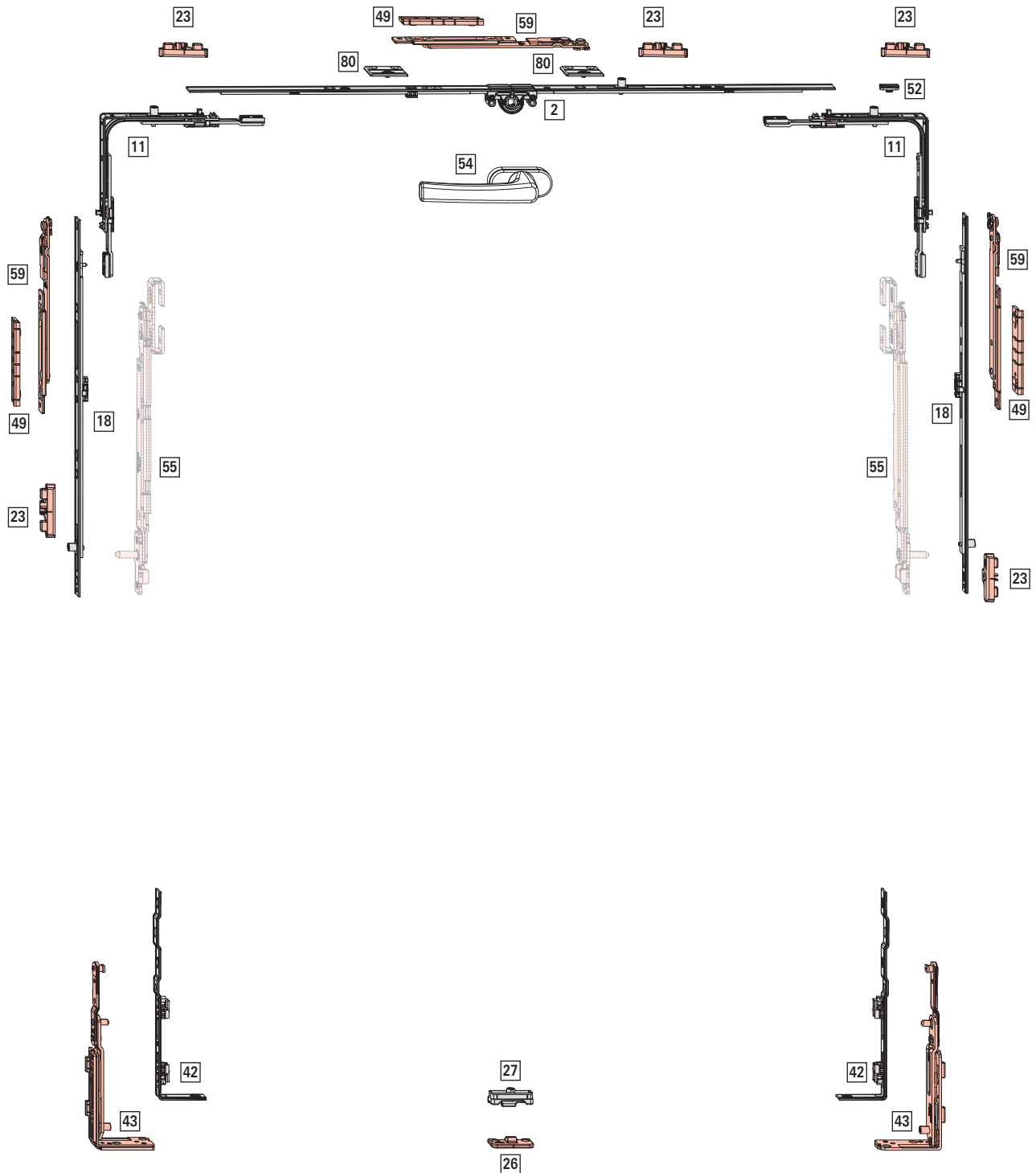
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### 3.2.2.4 Tilt-Only hardware

#### 3.2.2.4.1 Basic security





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i> |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>         |
| [23] | Striker → <i>from page 456</i>                                             |
| [26] | Centre closer, concealed, frame component                                  |
| [27] | Centre closer, concealed, sash component                                   |
| [42] | Rebate stay guide → <i>from page 394</i>                                   |
| [43] | Rebate stay arm → <i>from page 397</i>                                     |
| [49] | Support plate (profile-related) → <i>from page 516</i>                     |
| [52] | Travel restrictor → <i>from page 523</i>                                   |
| [54] | Handle (see catalogue CTL_1)                                               |
| [55] | Restrictor and cleaning stay → <i>from page 478</i>                        |
| [59] | Tilt stay set for floating-mullion installation → <i>from page 472</i>     |
| [80] | Fastening plate → <i>from page 511</i>                                     |

### Application range

| Basic security                                                                      |                             |               |
|-------------------------------------------------------------------------------------|-----------------------------|---------------|
|    | Sash rebate width<br>(SRW)  | 450 – 2400 mm |
|    | Sash rebate height<br>(SRH) | 370 – 1500 mm |
|  | Sash weight<br>(S.kg)       | Max. 80 kg    |



#### INFO

Restrictor and cleaning stays mandatory for fanlights (in accordance with RAL RG 607 / 12).

Restrictor and cleaning stays up to max. 60 kg.



#### INFO

##### Roto Con Orders

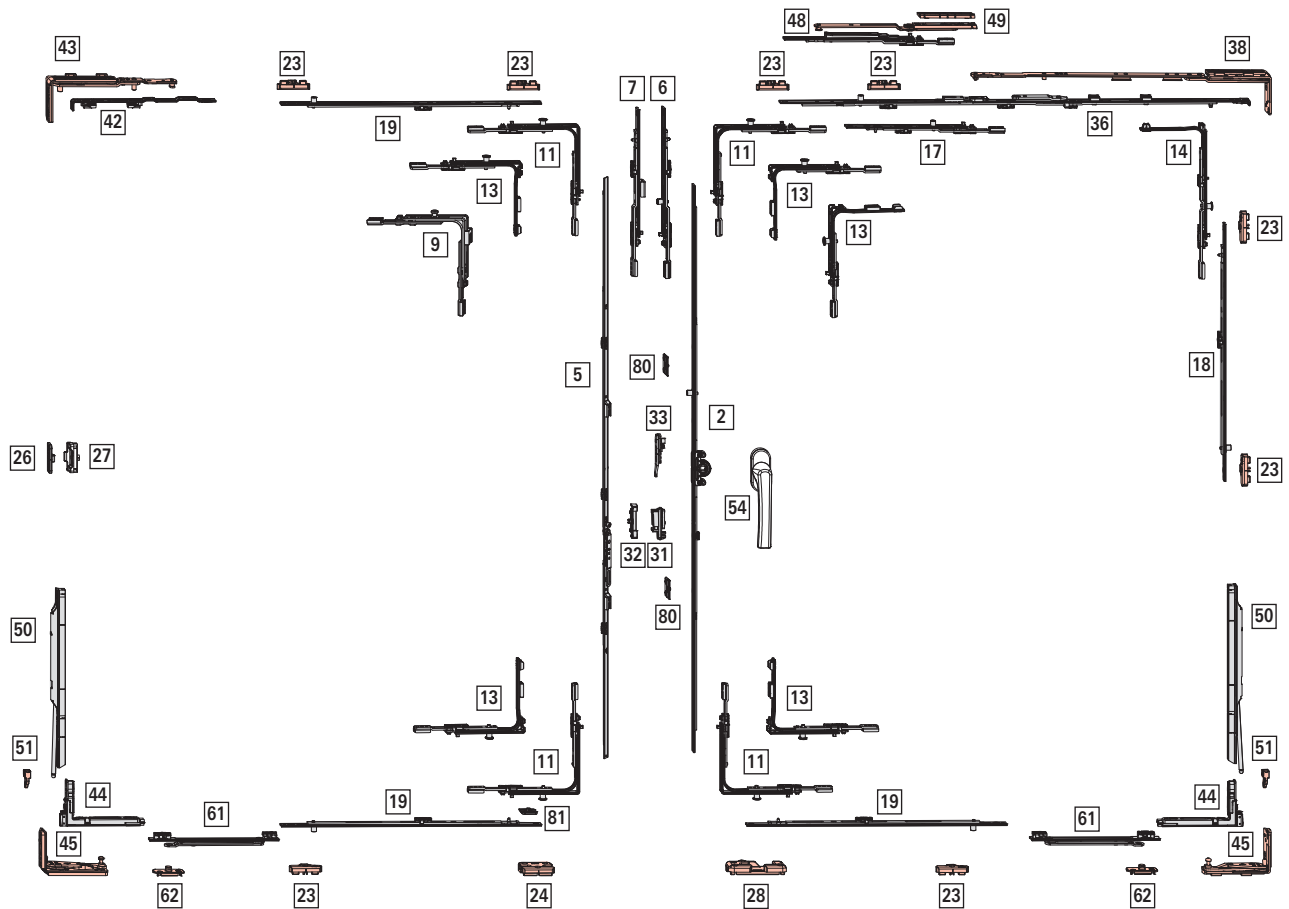
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### 3.2.2.5 Floating-mullion hardware – standard

#### 3.2.2.5.1 Basic security







| Item | Description                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                                                    |
| [5]  | Lever-operated espagnolette Standard – centred / variable handle height → <i>from page 338</i>                                |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                                                           |
| [9]  | Floating-mullion corner drive → <i>from page 354</i>                                                                          |
| [11] | Corner drive, standard → <i>from page 352</i>                                                                                 |
| [13] | Special corner drive, short → <i>from page 353</i>                                                                            |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                                                 |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                                                            |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                                                          |
| [23] | Striker → <i>from page 456</i>                                                                                                |
| [24] | Striker, security → <i>from page 457</i>                                                                                      |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>                                                              |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>                                                               |
| [28] | Tilt striker → <i>from page 450</i>                                                                                           |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                                                            |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                                                           |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                                                              |
| [36] | Stay guide, basic security → <i>from page 369</i>                                                                             |
| [38] | Stay arm → <i>from page 379</i>                                                                                               |
| [42] | Rebate stay guide → <i>from page 394</i>                                                                                      |
| [43] | Rebate stay arm → <i>from page 397</i>                                                                                        |
| [44] | Corner hinge → <i>from page 435</i>                                                                                           |
| [45] | Pivot rest → <i>from page 438</i>                                                                                             |
| [48] | Additional stay arm → <i>from page 470</i>                                                                                    |
| [49] | Support plate → <i>from page 516</i>                                                                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                                                                           |
| [51] | Load transfer frame component → <i>from page 443</i>                                                                          |
| [54] | Handle (see catalogue CTL_1)                                                                                                  |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i>  |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i> |
| [80] | Fastening plate → <i>from page 511</i>                                                                                        |
| [81] | Run-up block → <i>from page 514</i>                                                                                           |

## Application range

| Basic security                                                                      |                          |                       |                    |
|-------------------------------------------------------------------------------------|--------------------------|-----------------------|--------------------|
|                                                                                     |                          | Without load transfer | With load transfer |
|  | Sash rebate width (SRW)  | 370 – 1750 mm         | 600 – 1750 mm      |
|  | Sash rebate height (SRH) | 370 – 3000 mm         | 1000 – 3000 mm     |
|  | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## **INFO**

### **Roto Con Orders**

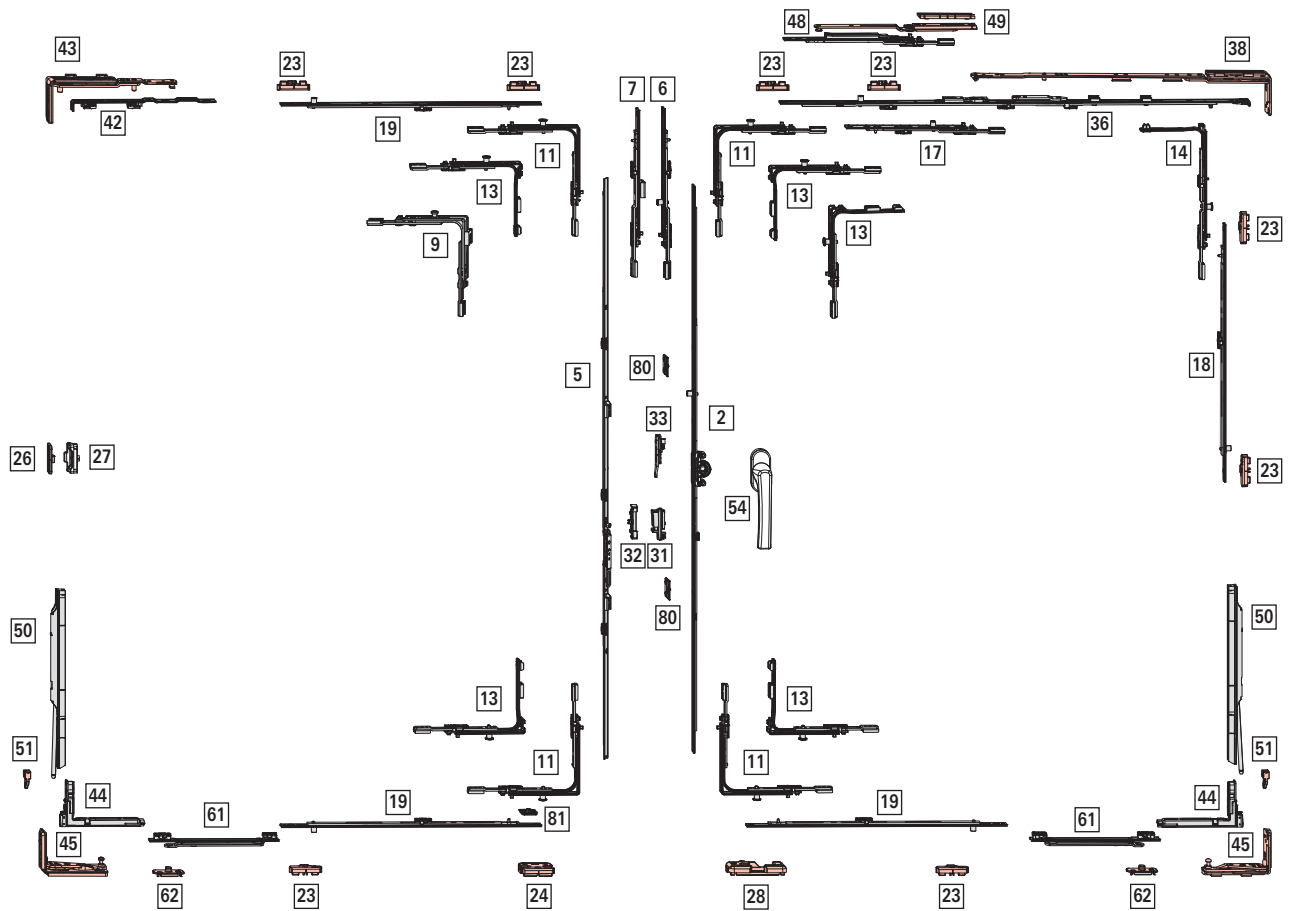
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### 3.2.2.5.2 RC 1 N





| Item | Description                                                                                    |
|------|------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                     |
| [5]  | Lever-operated espagnolette Standard – centred / variable handle height → <i>from page 338</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                       |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                            |
| [11] | Corner drive, standard → <i>from page 352</i>                                                  |
| [13] | Special corner drive, short → <i>from page 353</i>                                             |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                  |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                                       |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                             |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>                           |
| [23] | Striker → <i>from page 456</i>                                                                 |
| [24] | Striker, security → <i>from page 457</i>                                                       |
| [28] | Tilt striker → <i>from page 450</i>                                                            |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                             |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                            |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                               |
| [35] | Turn-Only sash stay guide → <i>from page 370</i>                                               |
| [36] | Stay guide, basic security → <i>from page 369</i>                                              |
| [38] | Stay arm → <i>from page 379</i>                                                                |
| [44] | Corner hinge → <i>from page 435</i>                                                            |
| [45] | Pivot rest → <i>from page 438</i>                                                              |
| [48] | Additional stay arm → <i>from page 470</i>                                                     |
| [49] | Support plate → <i>from page 516</i>                                                           |
| [50] | Load transfer sash component → <i>from page 443</i>                                            |
| [51] | Load transfer frame component → <i>from page 443</i>                                           |
| [53] | Drilling protection → <i>from page 509</i>                                                     |
| [54] | Handle, lockable (see catalogue CTL_1)                                                         |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                                     |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                                    |
| [80] | Fastening plate → <i>from page 511</i>                                                         |
| [81] | Run-up block → <i>from page 514</i>                                                            |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                       |

### Application range

| RC 1 N |                          |                       |                    |
|--------|--------------------------|-----------------------|--------------------|
|        |                          | Without load transfer | With load transfer |
|        | Sash rebate width (SRW)  | 450 – 1600 mm         | 650 – 1600 mm      |
|        | Sash rebate height (SRH) | 370 – 2800 mm         | 1000 – 2800 mm     |
|        | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## **INFO**

### **Roto Con Orders**

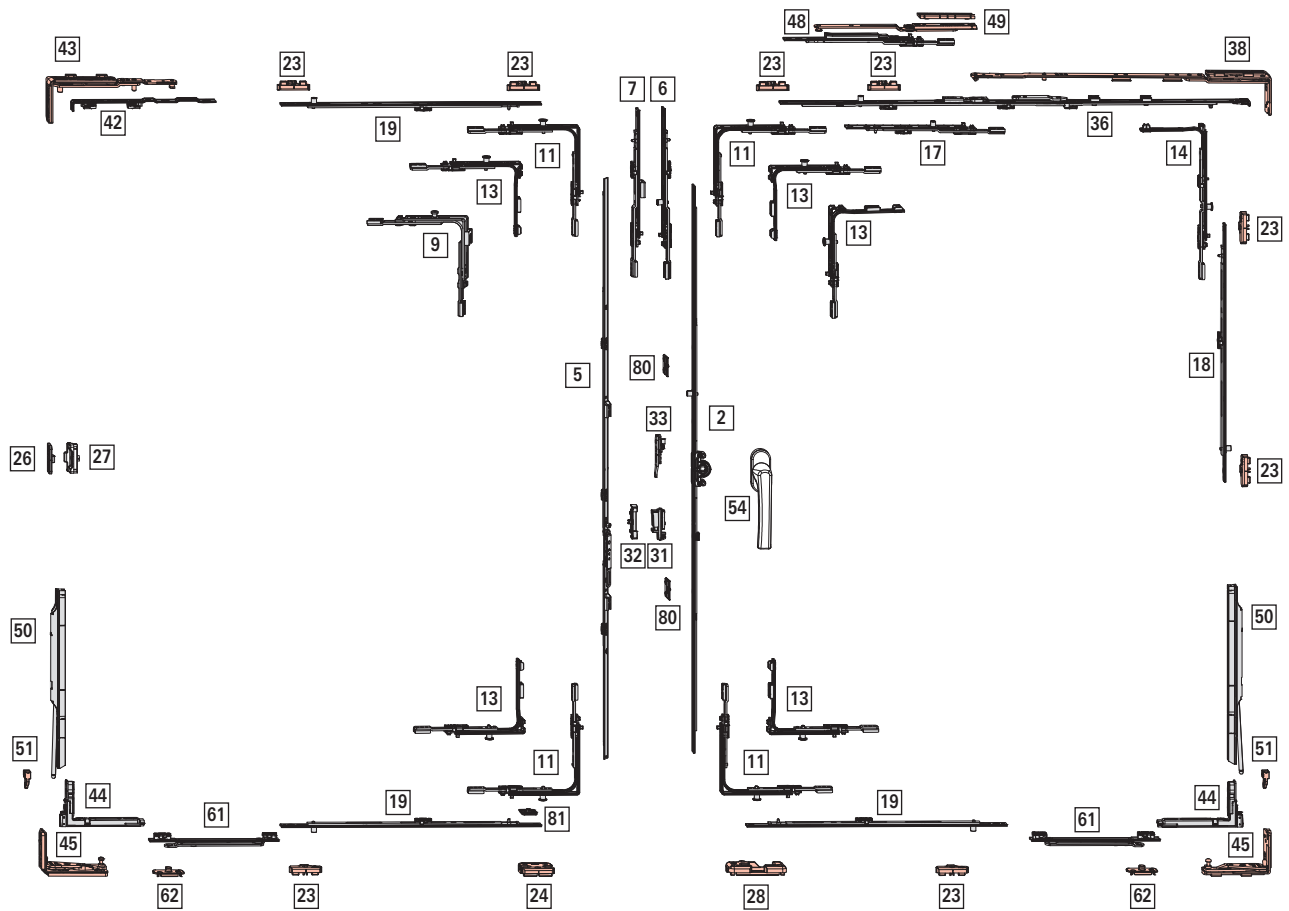
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### 3.2.2.5.3 RC 2 / RC 2 N







| Item | Description                                                                                    |
|------|------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                     |
| [5]  | Lever-operated espagnolette Standard – centred / variable handle height → <i>from page 338</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                                       |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                            |
| [10] | Floating-mullion corner drive → <i>from page 354</i>                                           |
| [11] | Corner drive, standard → <i>from page 352</i>                                                  |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                  |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                                       |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                                       |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>                             |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>                           |
| [24] | Striker, security → <i>from page 457</i>                                                       |
| [28] | Tilt striker → <i>from page 450</i>                                                            |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                             |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                            |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                               |
| [35] | Turn-Only sash stay guide → <i>from page 370</i>                                               |
| [36] | Stay guide, security → <i>from page 369</i>                                                    |
| [38] | Stay arm → <i>from page 379</i>                                                                |
| [44] | Corner hinge → <i>from page 435</i>                                                            |
| [45] | Pivot rest → <i>from page 438</i>                                                              |
| [50] | Load transfer sash component → <i>from page 443</i>                                            |
| [51] | Load transfer frame component → <i>from page 443</i>                                           |
| [53] | Drilling protection → <i>from page 509</i>                                                     |
| [54] | Handle, lockable (see catalogue CTL_1)                                                         |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                                     |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                                    |
| [80] | Fastening plate → <i>from page 511</i>                                                         |
| [81] | Run-up block → <i>from page 514</i>                                                            |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                       |
| [84] | Safety device for floating-mullion sash → <i>from page 509</i>                                 |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 650 – 1400 mm      |
|               | Sash rebate height (SRH) | 520 – 2800 mm         | 1000 – 2800 mm     |
|               | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

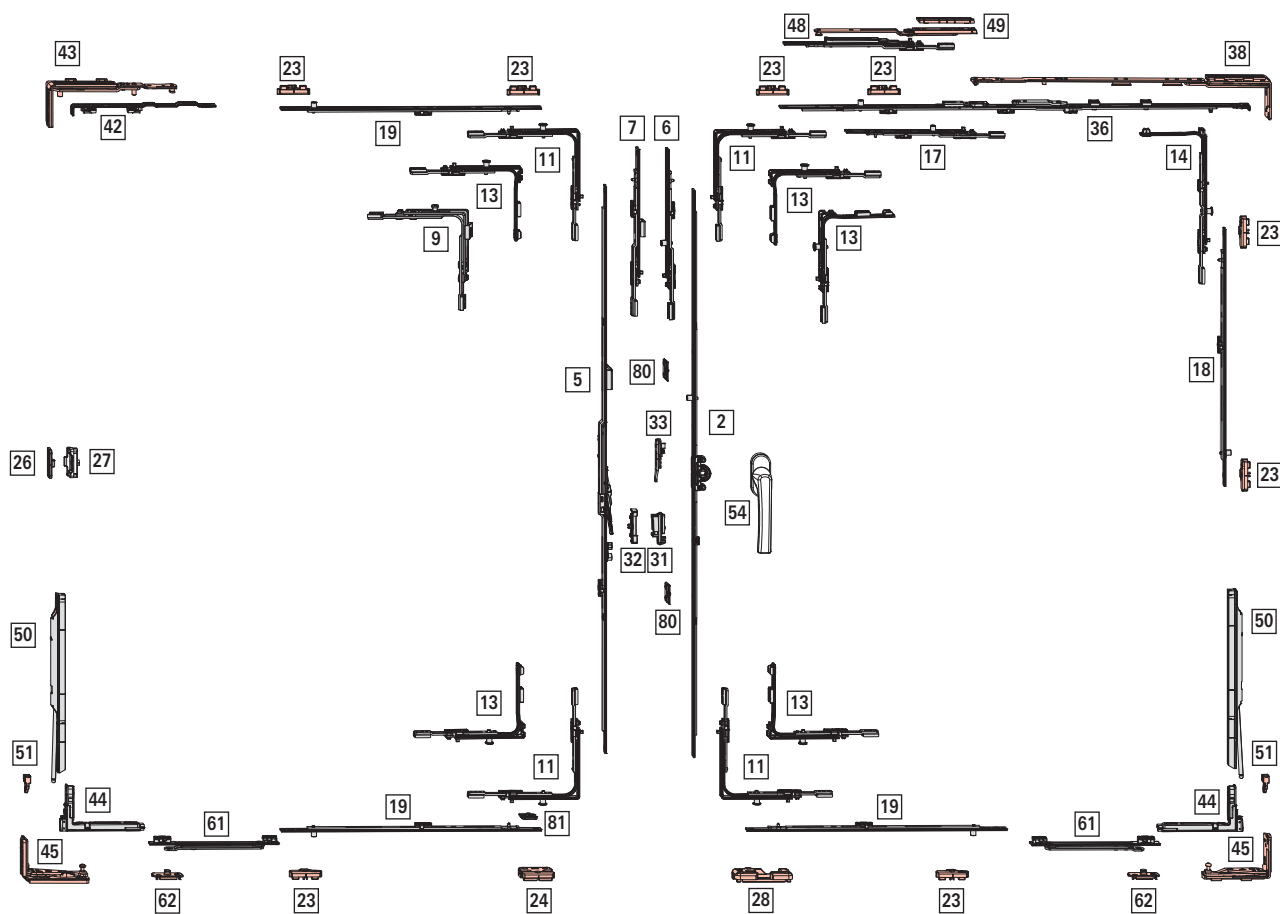
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### 3.2.2.6 Floating-mullion hardware – Plus

#### 3.2.2.6.1 Basic security





| Item | Description                                                                                                                   |
|------|-------------------------------------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                                                    |
| [5]  | Lever-operated espagnolette Plus – centred / variable handle height → <i>from page 344</i>                                    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                                                           |
| [9]  | Floating-mullion corner drive → <i>from page 354</i>                                                                          |
| [11] | Corner drive, standard → <i>from page 352</i>                                                                                 |
| [13] | Special corner drive, short → <i>from page 353</i>                                                                            |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                                                 |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                                                                      |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                                                            |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                                                          |
| [23] | Striker → <i>from page 456</i>                                                                                                |
| [24] | Striker, security → <i>from page 457</i>                                                                                      |
| [26] | Centre closer, concealed, frame component → <i>from page 517</i>                                                              |
| [27] | Centre closer, concealed, sash component → <i>from page 517</i>                                                               |
| [28] | Tilt striker → <i>from page 450</i>                                                                                           |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                                                            |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                                                           |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                                                              |
| [36] | Stay guide, basic security → <i>from page 369</i>                                                                             |
| [38] | Stay arm → <i>from page 379</i>                                                                                               |
| [42] | Rebate stay guide → <i>from page 394</i>                                                                                      |
| [43] | Rebate stay arm → <i>from page 397</i>                                                                                        |
| [44] | Corner hinge → <i>from page 435</i>                                                                                           |
| [45] | Pivot rest → <i>from page 438</i>                                                                                             |
| [48] | Additional stay arm → <i>from page 470</i>                                                                                    |
| [49] | Support plate → <i>from page 516</i>                                                                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                                                                           |
| [51] | Load transfer frame component → <i>from page 443</i>                                                                          |
| [54] | Handle (see catalogue CTL_1)                                                                                                  |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i>  |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i><br><br>Alternatively: turn restrictor 355C → <i>from page 502</i> |
| [80] | Fastening plate → <i>from page 511</i>                                                                                        |
| [81] | Run-up block → <i>from page 514</i>                                                                                           |

## Application range

| Basic security                                                                      |                          |                       |                    |
|-------------------------------------------------------------------------------------|--------------------------|-----------------------|--------------------|
|                                                                                     |                          | Without load transfer | With load transfer |
|  | Sash rebate width (SRW)  | 370 – 1750 mm         | 600 – 1750 mm      |
|  | Sash rebate height (SRH) | 420 – 3000 mm         | 1000 – 3000 mm     |
|  | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## **INFO**

### **Roto Con Orders**

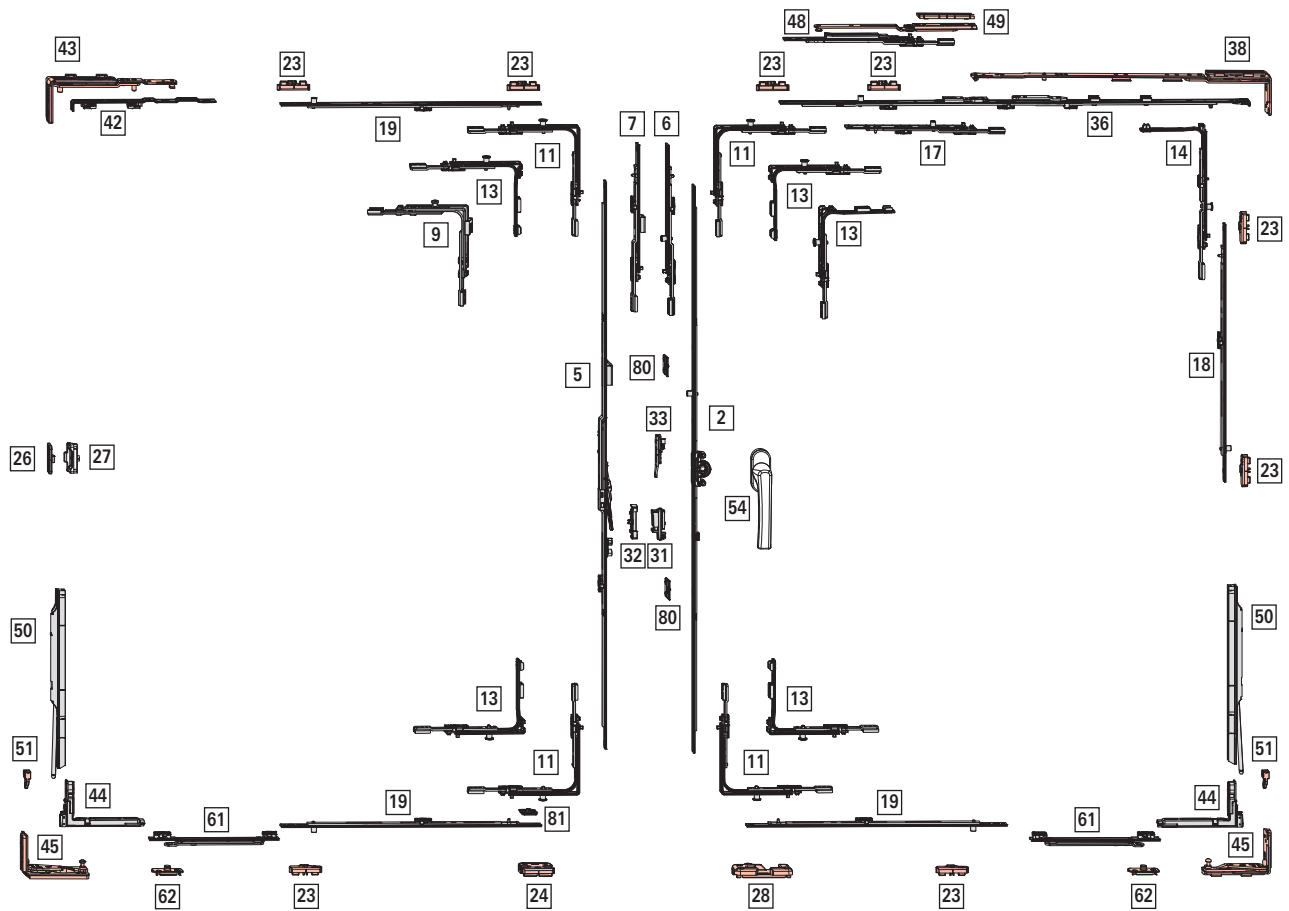
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### 3.2.2.6.2 RC 1 N





| Item | Description                                                                                |
|------|--------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                 |
| [5]  | Lever-operated espagnolette Plus – centred / variable handle height → <i>from page 344</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                   |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                        |
| [11] | Corner drive, standard → <i>from page 352</i>                                              |
| [13] | Special corner drive, short → <i>from page 353</i>                                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                                              |
| [17] | Centre lock, multipart – standard → <i>from page 416</i>                                   |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>                       |
| [23] | Striker → <i>from page 456</i>                                                             |
| [24] | Striker, security → <i>from page 457</i>                                                   |
| [28] | Tilt striker → <i>from page 450</i>                                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                           |
| [35] | Turn-Only sash stay guide → <i>from page 370</i>                                           |
| [36] | Stay guide, basic security → <i>from page 369</i>                                          |
| [38] | Stay arm → <i>from page 379</i>                                                            |
| [44] | Corner hinge → <i>from page 435</i>                                                        |
| [45] | Pivot rest → <i>from page 438</i>                                                          |
| [48] | Additional stay arm → <i>from page 470</i>                                                 |
| [49] | Support plate → <i>from page 516</i>                                                       |
| [50] | Load transfer sash component → <i>from page 443</i>                                        |
| [51] | Load transfer frame component → <i>from page 443</i>                                       |
| [53] | Drilling protection → <i>from page 509</i>                                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                                     |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                                 |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                                |
| [80] | Fastening plate → <i>from page 511</i>                                                     |
| [81] | Run-up block → <i>from page 514</i>                                                        |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                   |

### Application range

| RC 1 N |                          |                       |                    |
|--------|--------------------------|-----------------------|--------------------|
|        |                          | Without load transfer | With load transfer |
|        | Sash rebate width (SRW)  | 450 – 1600 mm         | 650 – 1600 mm      |
|        | Sash rebate height (SRH) | 430 – 2800 mm         | 1000 – 2800 mm     |
|        | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

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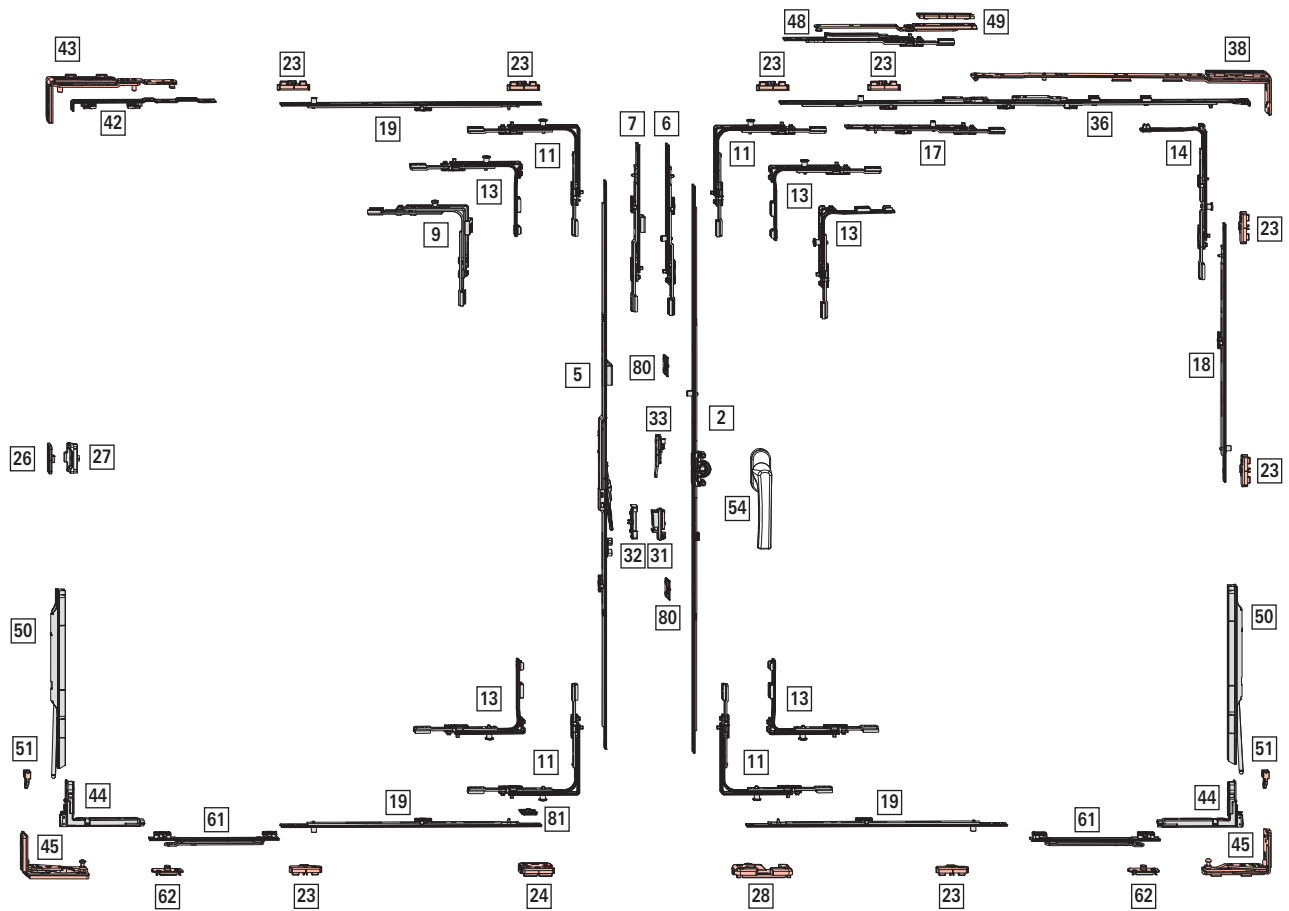


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### 3.2.2.6.3 RC 2 / RC 2 N





| Item | Description                                                                                |
|------|--------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 312</i>                 |
| [5]  | Lever-operated espagnolette Plus – centred / variable handle height → <i>from page 344</i> |
| [6]  | Centre lock, multipart – security → <i>from page 416</i>                                   |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                        |
| [10] | Floating-mullion corner drive → <i>from page 354</i>                                       |
| [11] | Corner drive, standard → <i>from page 352</i>                                              |
| [14] | Sash stay corner drive → <i>from page 356</i>                                              |
| [15] | Corner drive, standard (security) → <i>from page 352</i>                                   |
| [16] | Floating-mullion corner drive – slide guard (optional) → <i>from page 354</i>              |
| [17] | Centre lock, multipart – security → <i>from page 416</i>                                   |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>                         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>                       |
| [24] | Striker, security → <i>from page 457</i>                                                   |
| [28] | Tilt striker → <i>from page 450</i>                                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                           |
| [35] | Turn-Only sash stay guide → <i>from page 370</i>                                           |
| [36] | Stay guide, security → <i>from page 370</i>                                                |
| [38] | Stay arm → <i>from page 379</i>                                                            |
| [44] | Corner hinge → <i>from page 435</i>                                                        |
| [45] | Pivot rest → <i>from page 438</i>                                                          |
| [50] | Load transfer sash component → <i>from page 443</i>                                        |
| [51] | Load transfer frame component → <i>from page 443</i>                                       |
| [53] | Drilling protection → <i>from page 509</i>                                                 |
| [54] | Handle, lockable (see catalogue CTL_1)                                                     |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                                 |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                                |
| [80] | Fastening plate → <i>from page 511</i>                                                     |
| [81] | Run-up block → <i>from page 514</i>                                                        |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                   |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 650 – 1400 mm      |
|               | Sash rebate height (SRH) | 520 – 2800 mm         | 1000 – 2800 mm     |
|               | Sash weight (S.kg)       | Max. 120 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

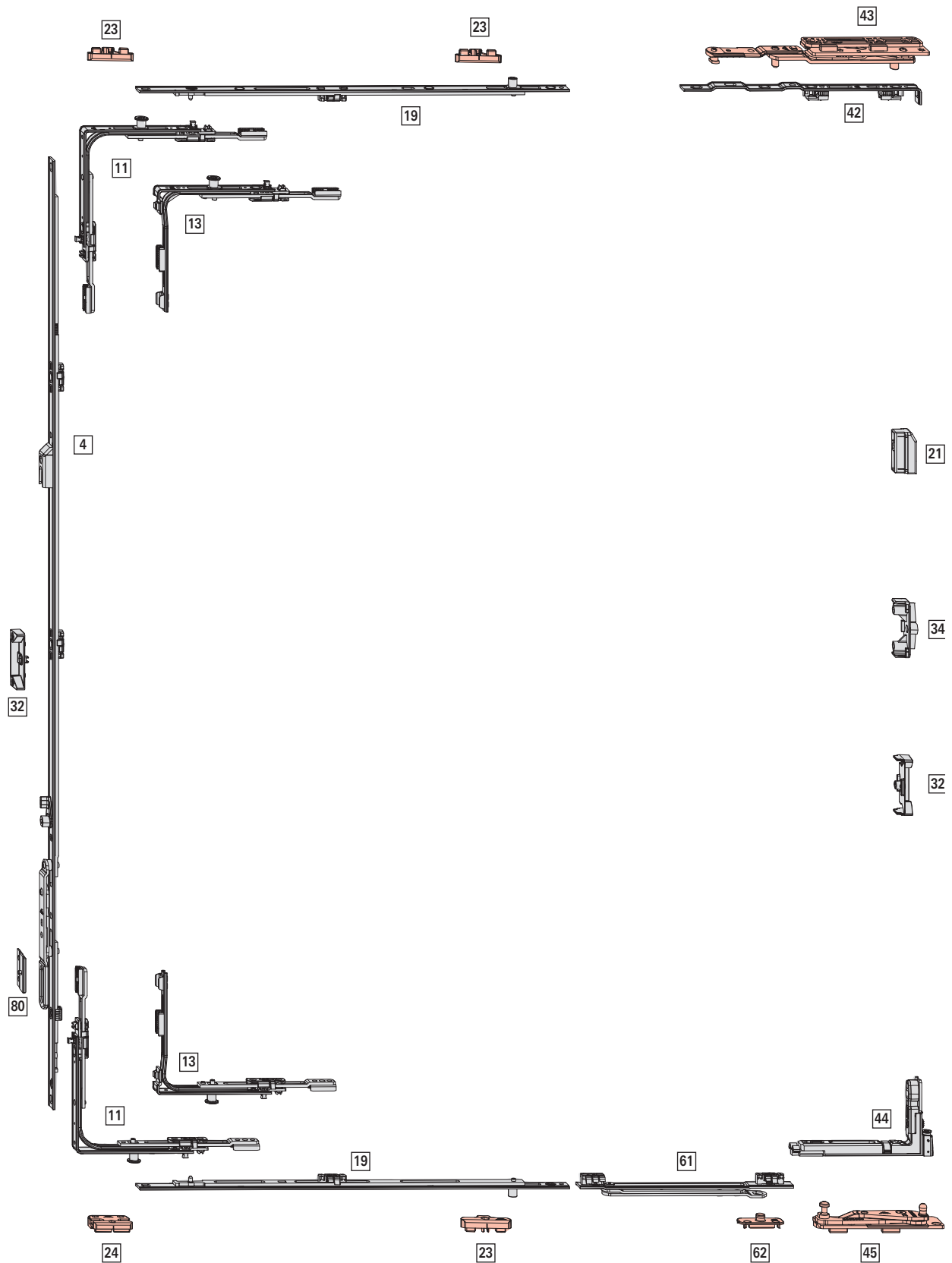
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### 3.2.2.7 Floating-mullion hardware – centre sash (triple-sashed windows)

#### 3.2.2.7.1 Standard – basic security





| Item | Description                                                                                    |
|------|------------------------------------------------------------------------------------------------|
| [5]  | Lever-operated espagnolette Standard – centred / variable handle height → <i>from page 338</i> |
| [11] | Corner drive, standard → <i>from page 352</i>                                                  |
| [13] | Special corner drive, short → <i>from page 353</i>                                             |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                           |
| [21] | Striker for opposite hardware groove → <i>from page 463</i>                                    |
| [23] | Striker → <i>from page 456</i>                                                                 |
| [24] | Striker, security → <i>from page 457</i>                                                       |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                            |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                              |
| [42] | Rebate stay guide → <i>from page 394</i>                                                       |
| [43] | Rebate stay arm → <i>from page 397</i>                                                         |
| [44] | Corner hinge → <i>from page 435</i>                                                            |
| [45] | Pivot rest → <i>from page 438</i>                                                              |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                                     |
| [62] | Turn restrictor 195, frame component → <i>from page 475</i>                                    |
| [80] | Fastening plate → <i>from page 511</i>                                                         |

### Application range

| Basic security                                                                      |                             |               |
|-------------------------------------------------------------------------------------|-----------------------------|---------------|
| Without load transfer                                                               |                             |               |
|    | Sash rebate width<br>(SRW)  | 370 – 1200 mm |
|  | Sash rebate height<br>(SRH) | 370 – 1800 mm |
|  | Sash weight<br>(S.kg)       | Max. 100 kg   |



### INFO

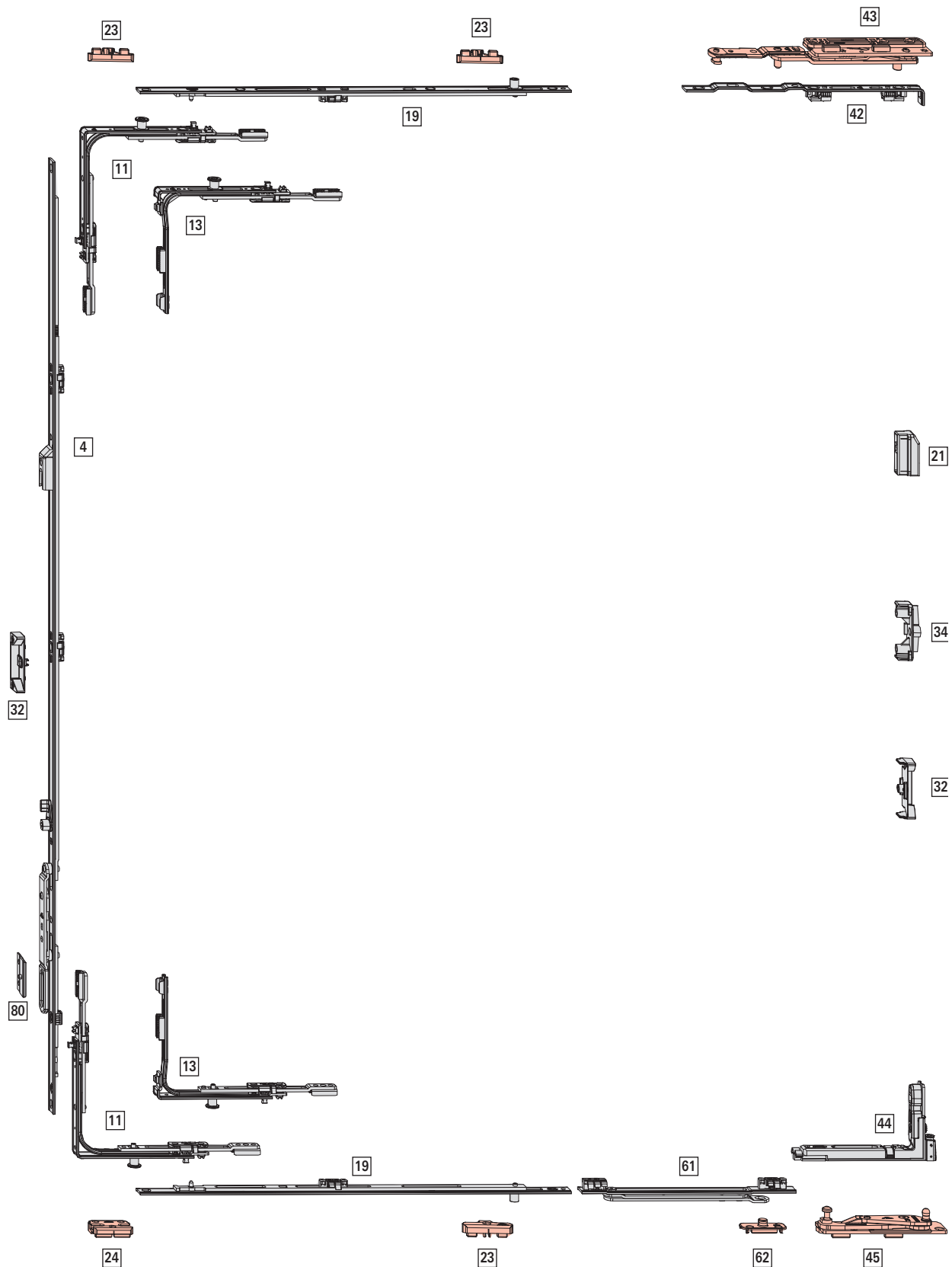
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### 3.2.2.7.2 Plus – basic security





| Item | Description                                                                                |
|------|--------------------------------------------------------------------------------------------|
| [5]  | Lever-operated espagnolette Plus – centred / variable handle height → <i>from page 344</i> |
| [11] | Corner drive, standard → <i>from page 352</i>                                              |
| [13] | Special corner drive, short → <i>from page 353</i>                                         |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                       |
| [21] | Striker for opposite hardware groove → <i>from page 463</i>                                |
| [23] | Striker → <i>from page 456</i>                                                             |
| [24] | Striker, security → <i>from page 457</i>                                                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                        |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>                          |
| [42] | Rebate stay guide → <i>from page 394</i>                                                   |
| [43] | Rebate stay arm → <i>from page 397</i>                                                     |
| [44] | Corner hinge → <i>from page 435</i>                                                        |
| [45] | Pivot rest → <i>from page 438</i>                                                          |
| [61] | Turn restrictor 195, sash component → <i>from page 507</i>                                 |
| [62] | Turn restrictor 195, frame component                                                       |

## Application range

| Basic security                                                                      |                             |               |
|-------------------------------------------------------------------------------------|-----------------------------|---------------|
| Without load transfer                                                               |                             |               |
|    | Sash rebate width<br>(SRW)  | 370 – 1200 mm |
|   | Sash rebate height<br>(SRH) | 420 – 1800 mm |
|  | Sash weight<br>(S.kg)       | Max. 100 kg   |



## INFO

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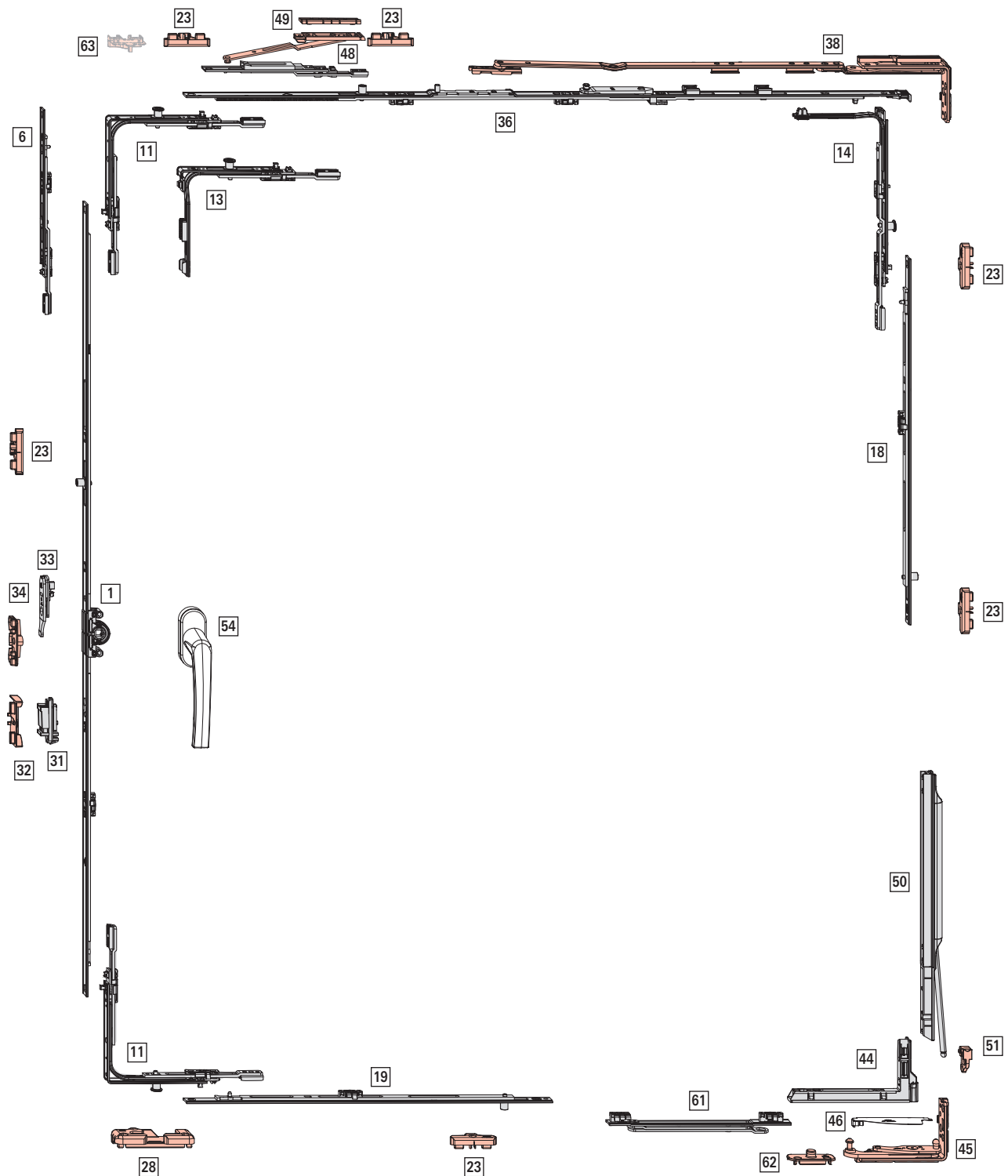
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## 3.3 Hinge side Designo (HA 13)

### 3.3.1 T&T espagnolette, VT – fixed handle height

#### 3.3.1.1 Tilt&Turn hardware

##### 3.3.1.1.1 Basic security







| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>             |
| [11] | Corner drive, standard → <i>from page 352</i>                        |
| [13] | Special corner drive, short → <i>from page 353</i>                   |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                       |
| [28] | Tilt striker → <i>from page 450</i>                                  |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, basic security → <i>from page 370</i>                    |
| [38] | Stay arm → <i>from page 386</i>                                      |
| [44] | Corner hinge → <i>from page 436</i>                                  |
| [45] | Pivot rest → <i>from page 440</i>                                    |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                   |
| [48] | Additional stay arm → <i>from page 470</i>                           |
| [49] | Support plate (profile-related) → <i>from page 516</i>               |
| [50] | Load transfer sash component → <i>from page 443</i>                  |
| [51] | Load transfer frame component → <i>from page 443</i>                 |
| [54] | Handle (see catalogue CTL_1)                                         |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>           |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>          |
| [63] | Night vent → <i>from page 493</i>                                    |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 330 – 1400 mm         | 800 – 1400 mm      |
|                | Sash rebate height (SRH) | 280 – 2600 mm         | 1000 – 2600 mm     |
|                | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

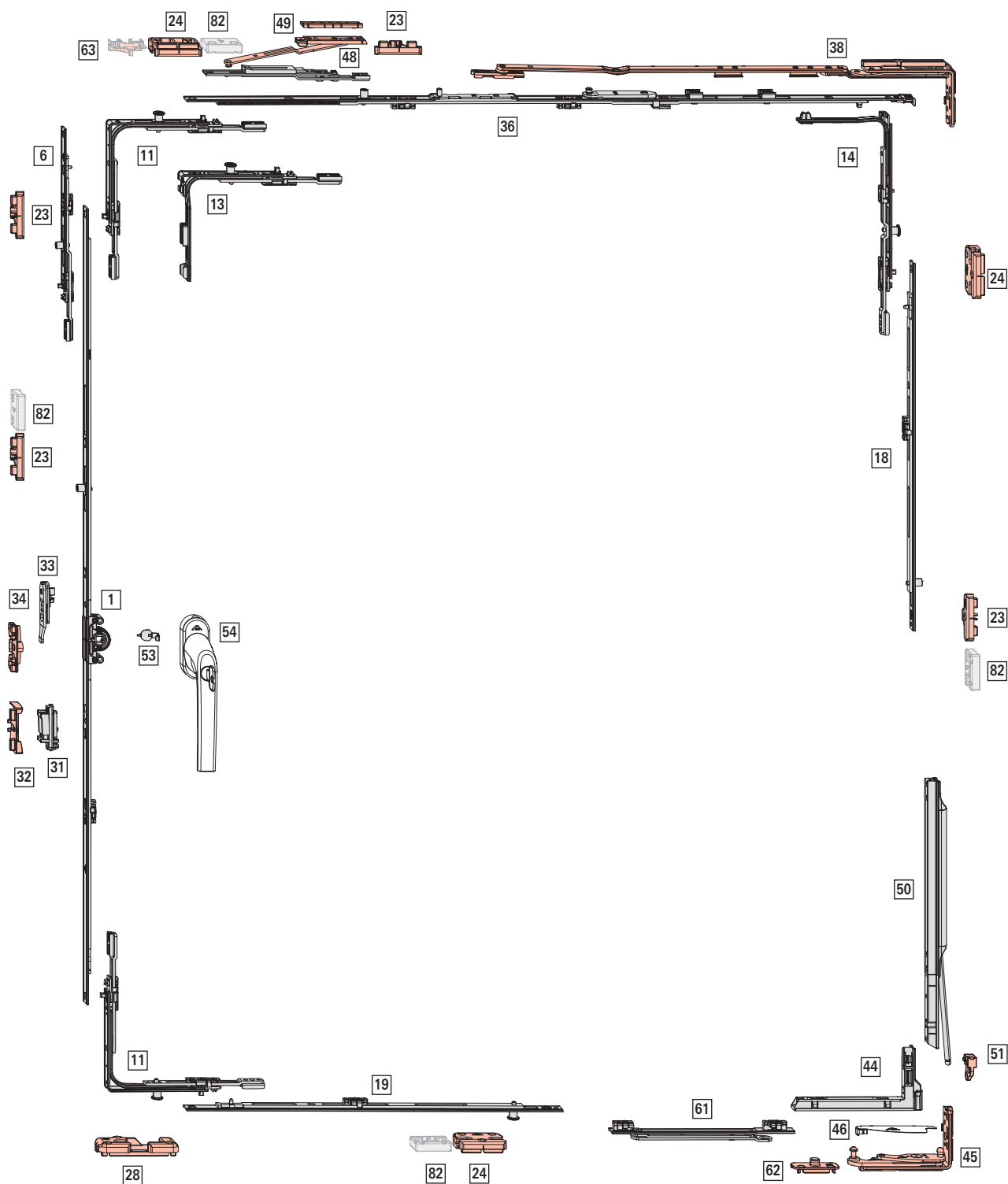
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### 3.3.1.1.2 RC 1 N





| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>             |
| [11] | Corner drive, standard → <i>from page 352</i>                        |
| [13] | Special corner drive, short → <i>from page 353</i>                   |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                       |
| [24] | Striker, security → <i>from page 457</i>                             |
| [28] | Tilt striker → <i>from page 450</i>                                  |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, basic security → <i>from page 370</i>                    |
| [38] | Stay arm → <i>from page 386</i>                                      |
| [44] | Corner hinge → <i>from page 436</i>                                  |
| [45] | Pivot rest → <i>from page 440</i>                                    |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                   |
| [48] | Additional stay arm → <i>from page 470</i>                           |
| [49] | Support plate (profile-related) → <i>from page 516</i>               |
| [50] | Load transfer sash component → <i>from page 443</i>                  |
| [51] | Load transfer frame component → <i>from page 443</i>                 |
| [53] | Drilling protection → <i>from page 509</i>                           |
| [54] | Handle (see catalogue CTL_1)                                         |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>           |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>          |
| [63] | Night vent → <i>from page 493</i>                                    |
| [82] | Anti-jemmy device → <i>from page 510</i>                             |

## Application range

| RC 1 N |                             |                       |                    |
|--------|-----------------------------|-----------------------|--------------------|
|        |                             | Without load transfer | With load transfer |
|        | Sash rebate width<br>(SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|        | Sash rebate height<br>(SRH) | 280 – 2600 mm         | 1000 – 2600 mm     |
|        | Sash weight<br>(S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

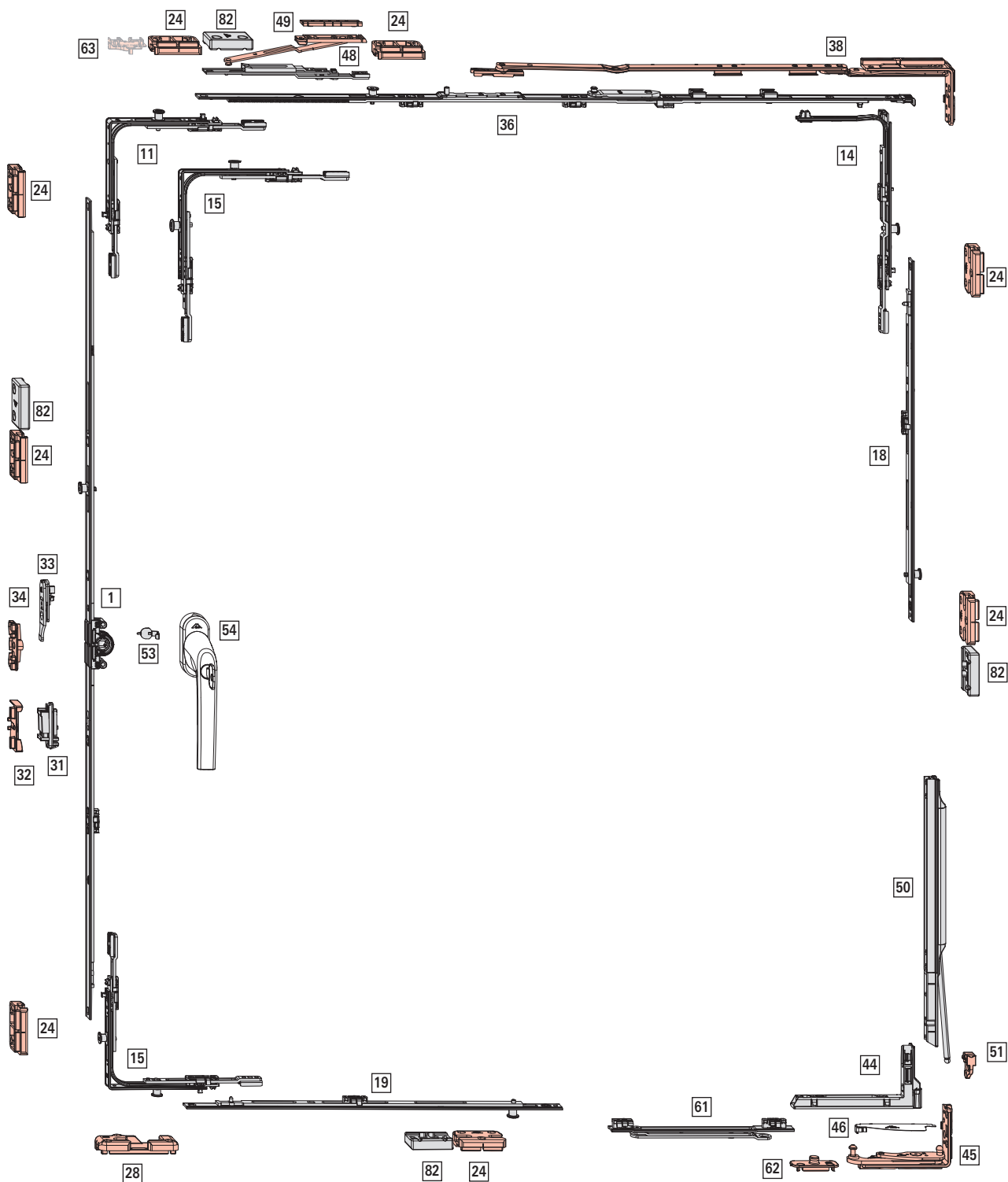
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### 3.3.1.1.3 RC 2 / RC 2 N





| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [11] | Corner drive, standard → <i>from page 352</i>                        |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [15] | Corner drive, standard RC 3 → <i>from page 352</i>                   |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                             |
| [28] | Tilt striker → <i>from page 450</i>                                  |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, security → <i>from page 371</i>                          |
| [38] | Stay arm → <i>386</i>                                                |
| [44] | Corner hinge → <i>from page 436</i>                                  |
| [45] | Pivot rest → <i>from page 440</i>                                    |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                   |
| [48] | Additional stay arm → <i>from page 470</i>                           |
| [49] | Support plate (profile-related) → <i>from page 516</i>               |
| [50] | Load transfer sash component → <i>from page 443</i>                  |
| [51] | Load transfer frame component → <i>from page 443</i>                 |
| [53] | Drilling protection → <i>from page 509</i>                           |
| [54] | Handle (see catalogue CTL_1)                                         |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>           |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>          |
| [63] | Night vent → <i>from page 493</i>                                    |
| [82] | Anti-jemmy device → <i>from page 510</i>                             |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|               | Sash rebate height (SRH) | 510 – 2400 mm         | 1000 – 2400 mm     |
|               | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

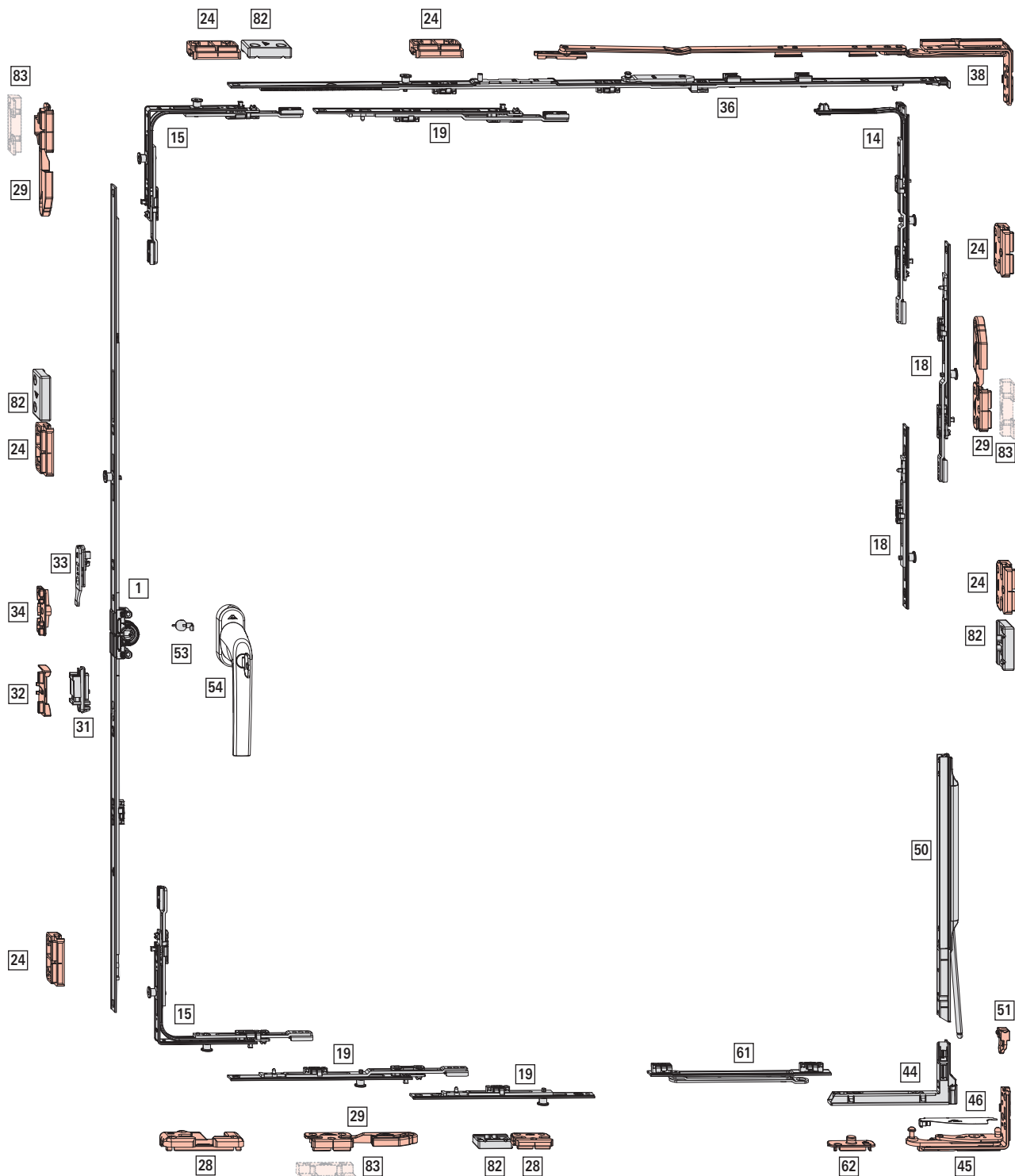
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### 3.3.1.1.4 TiltSafe RC 2 / RC 2 N





| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [15] | Corner drive, standard RC 3 → <i>from page 352</i>                   |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i> |
| [24] | Striker, security → <i>from page 457</i>                             |
| [28] | Tilt striker → <i>from page 450</i>                                  |
| [29] | Security striker for tilt ventilation → <i>from page 461</i>         |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, security → <i>from page 371</i>                          |
| [38] | Stay arm → <i>from page 386</i>                                      |
| [44] | Corner hinge → <i>from page 436</i>                                  |
| [45] | Pivot rest → <i>from page 440</i>                                    |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                   |
| [50] | Load transfer sash component → <i>from page 443</i>                  |
| [51] | Load transfer frame component → <i>from page 443</i>                 |
| [53] | Drilling protection → <i>from page 509</i>                           |
| [54] | Handle (see catalogue CTL_1)                                         |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>           |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>          |
| [82] | Anti-jemmy device → <i>from page 510</i>                             |
| [83] | TiltSafe protective support (optional) → <i>from page 461</i>        |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|               | Sash rebate height (SRH) | 510 – 2400 mm         | 1000 – 2400 mm     |
|               | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

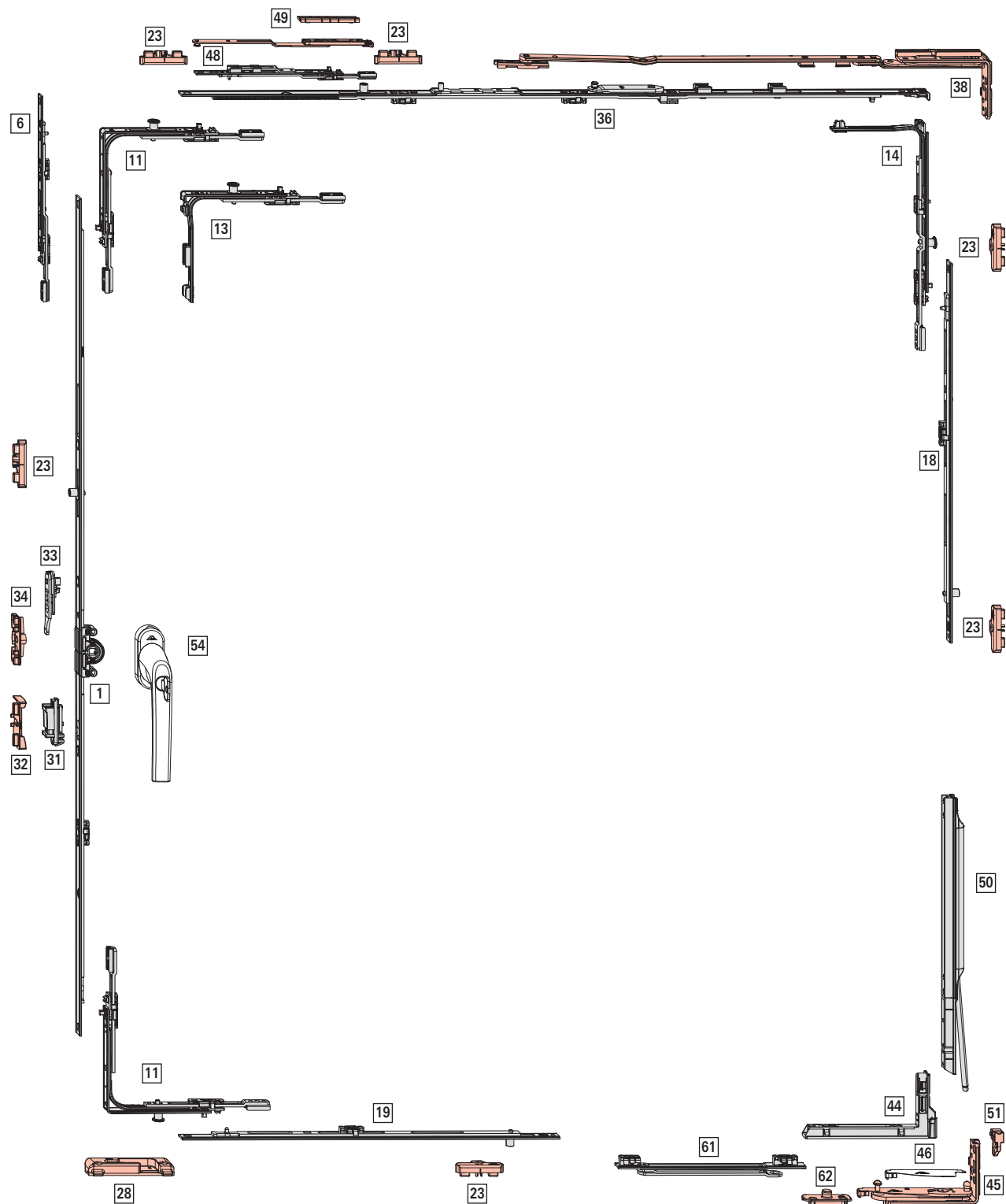
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### 3.3.1.2 TiltFirst hardware

#### 3.3.1.2.1 Basic security







| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>             |
| [11] | Corner drive, standard → <i>from page 352</i>                        |
| [13] | Special corner drive, short → <i>from page 353</i>                   |
| [14] | Sash stay corner drive → <i>from page 356</i>                        |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>   |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                       |
| [28] | Tilt striker, TiltFirst → <i>from page 453</i>                       |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [36] | Stay guide, basic security → <i>from page 370</i>                    |
| [38] | Stay arm, TiltFirst → <i>from page 390</i>                           |
| [44] | Corner hinge → <i>from page 436</i>                                  |
| [45] | Pivot rest → <i>from page 440</i>                                    |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                   |
| [48] | Additional stay arm → <i>from page 470</i>                           |
| [49] | Support plate (profile-related) → <i>from page 516</i>               |
| [50] | Load transfer sash component → <i>from page 443</i>                  |
| [51] | Load transfer frame component → <i>from page 443</i>                 |
| [54] | Handle (see catalogue CTL_1)                                         |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>           |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>          |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 330 – 1400 mm         | 800 – 1400 mm      |
|                | Sash rebate height (SRH) | 280 – 2600 mm         | 1000 – 2600 mm     |
|                | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

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### 3.3.1.3 Turn-Only hardware

#### 3.3.1.3.1 Basic security





| Item | Description                                                          |
|------|----------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>    |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>             |
| [11] | Corner drive, standard → <i>from page 352</i>                        |
| [13] | Special corner drive, short → <i>from page 353</i>                   |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i> |
| [23] | Striker → <i>from page 456</i>                                       |
| [24] | Striker, security → <i>from page 457</i>                             |
| [26] | Centre closer, concealed, frame component → <i>from page 521</i>     |
| [27] | Centre closer, concealed, sash component → <i>from page 521</i>      |
| [31] | Bullet-catch sash component → <i>from page 486</i>                   |
| [32] | Bullet-catch frame component → <i>from page 486</i>                  |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>     |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>    |
| [42] | Rebate stay guide → <i>from page 395</i>                             |
| [43] | Rebate stay arm → <i>from page 399</i>                               |
| [44] | Corner hinge → <i>from page 436</i>                                  |
| [45] | Pivot rest → <i>from page 440</i>                                    |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                   |
| [50] | Load transfer sash component → <i>from page 443</i>                  |
| [51] | Load transfer frame component → <i>from page 443</i>                 |
| [52] | Travel restrictor → <i>from page 523</i>                             |
| [54] | Handle (see catalogue CTL_1)                                         |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>           |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>          |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 370 – 1400 mm         | 800 – 1400 mm      |
|                | Sash rebate height (SRH) | 280 – 2600 mm         | 1000 – 2600 mm     |
|                | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

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### 3.3.1.4 Floating-mullion hardware – standard

#### 3.3.1.4.1 Basic security





| Item | Description                                                                           |
|------|---------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                     |
| [4]  | Lever-operated espagnolette Standard, VT – fixed handle height → <i>from page 335</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                              |
| [11] | Corner drive, standard → <i>from page 352</i>                                         |
| [13] | Special corner drive, short → <i>from page 353</i>                                    |
| [14] | Sash stay corner drive → <i>from page 356</i>                                         |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                    |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                  |
| [23] | Striker → <i>from page 456</i>                                                        |
| [24] | Striker, security → <i>from page 457</i>                                              |
| [26] | Centre closer, concealed, frame component → <i>from page 521</i>                      |
| [27] | Centre closer, concealed, sash component → <i>from page 521</i>                       |
| [28] | Tilt striker → <i>from page 450</i>                                                   |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                    |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                   |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                      |
| [36] | Stay guide, basic security → <i>from page 370</i>                                     |
| [38] | Stay arm → <i>from page 386</i>                                                       |
| [42] | Rebate stay guide → <i>from page 395</i>                                              |
| [43] | Rebate stay arm → <i>from page 399</i>                                                |
| [44] | Corner hinge → <i>from page 436</i>                                                   |
| [45] | Pivot rest → <i>from page 440</i>                                                     |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                                    |
| [48] | Additional stay arm → <i>from page 470</i>                                            |
| [49] | Support plate (profile-related) → <i>from page 516</i>                                |
| [50] | Load transfer sash component → <i>from page 443</i>                                   |
| [51] | Load transfer frame component → <i>from page 443</i>                                  |
| [54] | Handle (see catalogue CTL_1)                                                          |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                            |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                           |
| [80] | Fastening plate → <i>from page 511</i>                                                |
| [81] | Run-up block → <i>from page 514</i>                                                   |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 370 – 1400 mm         | 800 – 1400 mm      |
|                | Sash rebate height (SRH) | 430 – 2600 mm         | 1000 – 2600 mm     |
|                | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

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## Hardware overviews

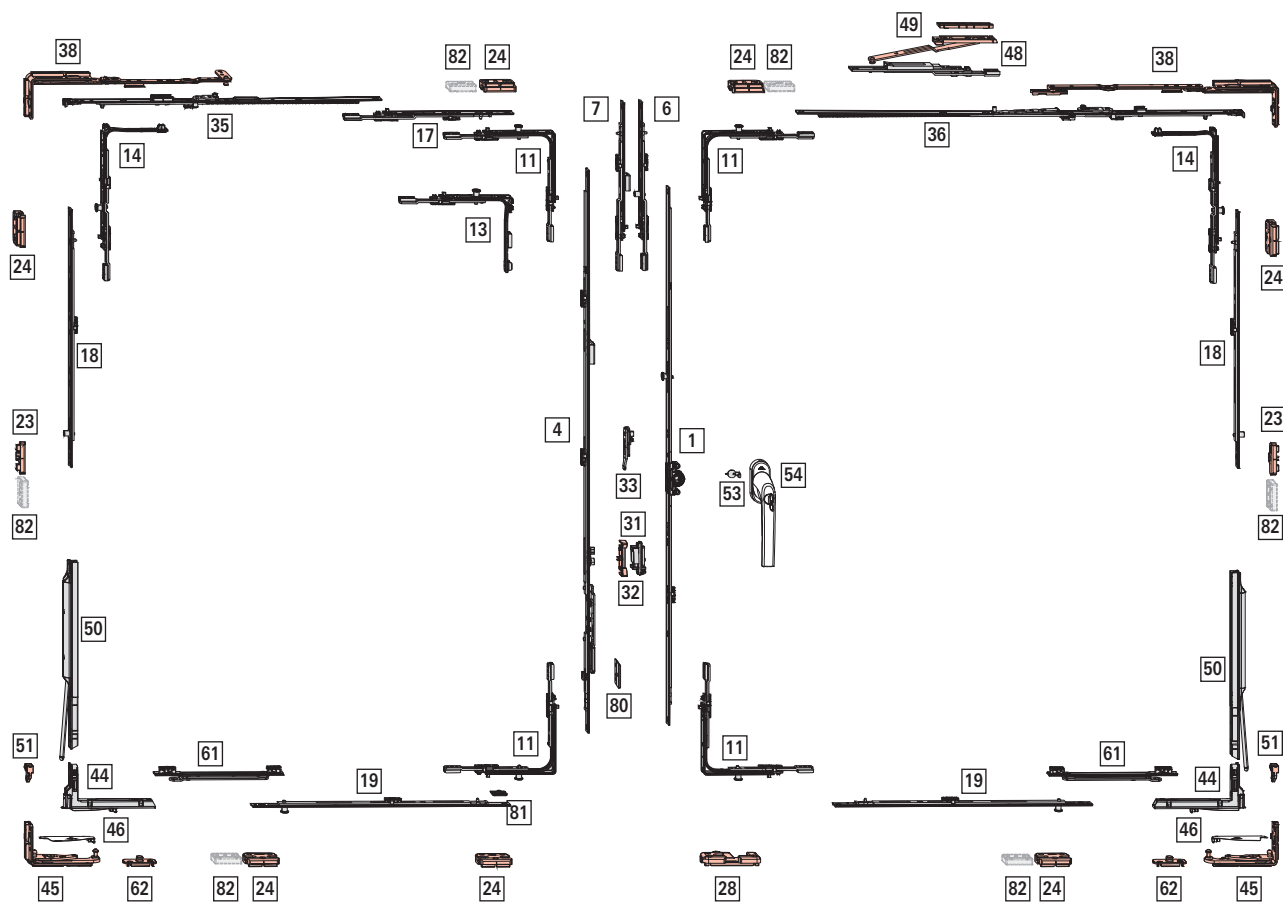
### Hinge side Designo (HA 13)

T&T espagnolette, VT – fixed handle height





### 3.3.1.4.2 RC 1 N







| Item | Description                                                                                |
|------|--------------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                          |
| [4]  | Lever-operated espagnolette Standard, VT – fixed handle height → <i>from page 335</i>      |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                   |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                        |
| [11] | Corner drive, standard → <i>from page 352</i>                                              |
| [13] | Special corner drive, short → <i>from page 353</i>                                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                                              |
| [17] | Centre lock, multipart – standard, horizontal – top, Turn-Only sash → <i>from page 416</i> |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                         |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                       |
| [23] | Striker → <i>from page 456</i>                                                             |
| [24] | Striker, security → <i>from page 457</i>                                                   |
| [28] | Tilt striker → <i>from page 450</i>                                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                           |
| [35] | Turn-Only sash stay guide → <i>from page 371</i>                                           |
| [36] | Stay guide, basic security → <i>from page 370</i>                                          |
| [38] | Stay arm → <i>from page 386</i>                                                            |
| [44] | Corner hinge → <i>from page 436</i>                                                        |
| [45] | Pivot rest → <i>from page 440</i>                                                          |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                                         |
| [48] | Additional stay arm → <i>from page 470</i>                                                 |
| [49] | Support plate (profile-related) → <i>from page 516</i>                                     |
| [50] | Load transfer sash component → <i>from page 443</i>                                        |
| [51] | Load transfer frame component → <i>from page 443</i>                                       |
| [53] | Drilling protection → <i>from page 509</i>                                                 |
| [54] | Handle (see catalogue CTL_1)                                                               |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                                 |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                                |
| [80] | Fastening plate → <i>from page 511</i>                                                     |
| [81] | Run-up block → <i>from page 514</i>                                                        |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                   |

## Application range

| RC 1 N |                          |                       |                    |
|--------|--------------------------|-----------------------|--------------------|
|        |                          | Without load transfer | With load transfer |
|        | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|        | Sash rebate height (SRH) | 430 – 2600 mm         | 1000 – 2600 mm     |
|        | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## **INFO**

### **Roto Con Orders**

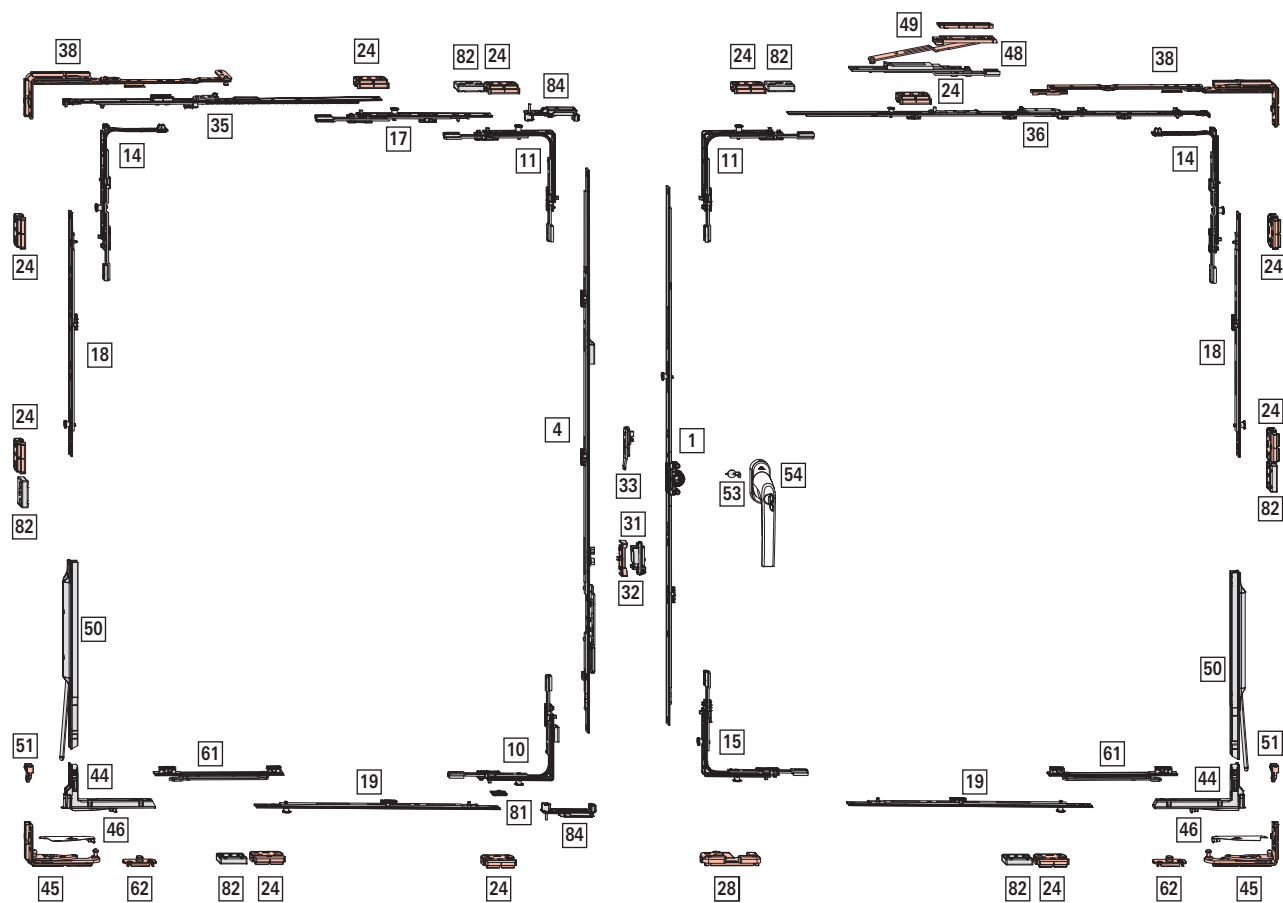
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### 3.3.1.4.3 RC 2 / RC 2 N





| Item | Description                                                                                |
|------|--------------------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                          |
| [4]  | Lever-operated espagnolette Standard, VT – fixed handle height → <i>from page 335</i>      |
| [10] | Floating-mullion corner drive → <i>from page 354</i>                                       |
| [11] | Corner drive, standard → <i>from page 352</i>                                              |
| [14] | Sash stay corner drive → <i>from page 356</i>                                              |
| [15] | Corner drive, standard RC 3 → <i>from page 352</i>                                         |
| [17] | Centre lock, multipart – standard, horizontal – top, Turn-Only sash → <i>from page 416</i> |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>                         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>                       |
| [24] | Striker, security → <i>from page 457</i>                                                   |
| [28] | Tilt striker → <i>from page 450</i>                                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                           |
| [35] | Turn-Only sash stay guide → <i>from page 371</i>                                           |
| [36] | Stay guide, security → <i>from page 371</i>                                                |
| [38] | Stay arm → <i>from page 386</i>                                                            |
| [44] | Corner hinge → <i>from page 436</i>                                                        |
| [45] | Pivot rest → <i>from page 440</i>                                                          |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                                         |
| [48] | Additional stay arm → <i>from page 470</i>                                                 |
| [49] | Support plate (profile-related) → <i>from page 516</i>                                     |
| [50] | Load transfer sash component → <i>from page 443</i>                                        |
| [51] | Load transfer frame component → <i>from page 443</i>                                       |
| [53] | Drilling protection → <i>from page 509</i>                                                 |
| [54] | Handle (see catalogue CTL_1)                                                               |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                                 |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                                |
| [80] | Fastening plate → <i>from page 511</i>                                                     |
| [81] | Run-up block → <i>from page 514</i>                                                        |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                   |
| [84] | Safety device for floating-mullion sash → <i>from page 509</i>                             |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|               | Sash rebate height (SRH) | 600 – 2400 mm         | 1000 – 2400 mm     |
|               | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

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## Hardware overviews

### Hinge side Designo (HA 13)

T&T espagnolette, VT – fixed handle height





### 3.3.1.5 Floating-mullion hardware – Plus

#### 3.3.1.5.1 Basic security







| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                 |
| [4]  | Lever-operated espagnolette Plus, VT – fixed handle height → <i>from page 341</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                          |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [13] | Special corner drive, short → <i>from page 353</i>                                |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>              |
| [23] | Striker → <i>from page 456</i>                                                    |
| [24] | Striker, security → <i>from page 457</i>                                          |
| [26] | Centre closer, concealed, frame component → <i>from page 521</i>                  |
| [27] | Centre closer, concealed, sash component → <i>from page 521</i>                   |
| [28] | Tilt striker → <i>from page 450</i>                                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                  |
| [36] | Stay guide, basic security → <i>from page 370</i>                                 |
| [38] | Stay arm → <i>from page 386</i>                                                   |
| [42] | Rebate stay guide → <i>from page 395</i>                                          |
| [43] | Rebate stay arm → <i>from page 399</i>                                            |
| [44] | Corner hinge → <i>from page 436</i>                                               |
| [45] | Pivot rest → <i>from page 440</i>                                                 |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                                |
| [48] | Additional stay arm → <i>from page 470</i>                                        |
| [49] | Support plate (profile-related) → <i>from page 516</i>                            |
| [50] | Load transfer sash component → <i>from page 443</i>                               |
| [51] | Load transfer frame component → <i>from page 443</i>                              |
| [54] | Handle (see catalogue CTL_1)                                                      |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                        |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                       |
| [80] | Fastening plate → <i>from page 511</i>                                            |
| [81] | Run-up block → <i>from page 514</i>                                               |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 370 – 1400 mm         | 800 – 1400 mm      |
|                | Sash rebate height (SRH) | 430 – 2600 mm         | 1000 – 2600 mm     |
|                | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

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## Hardware overviews

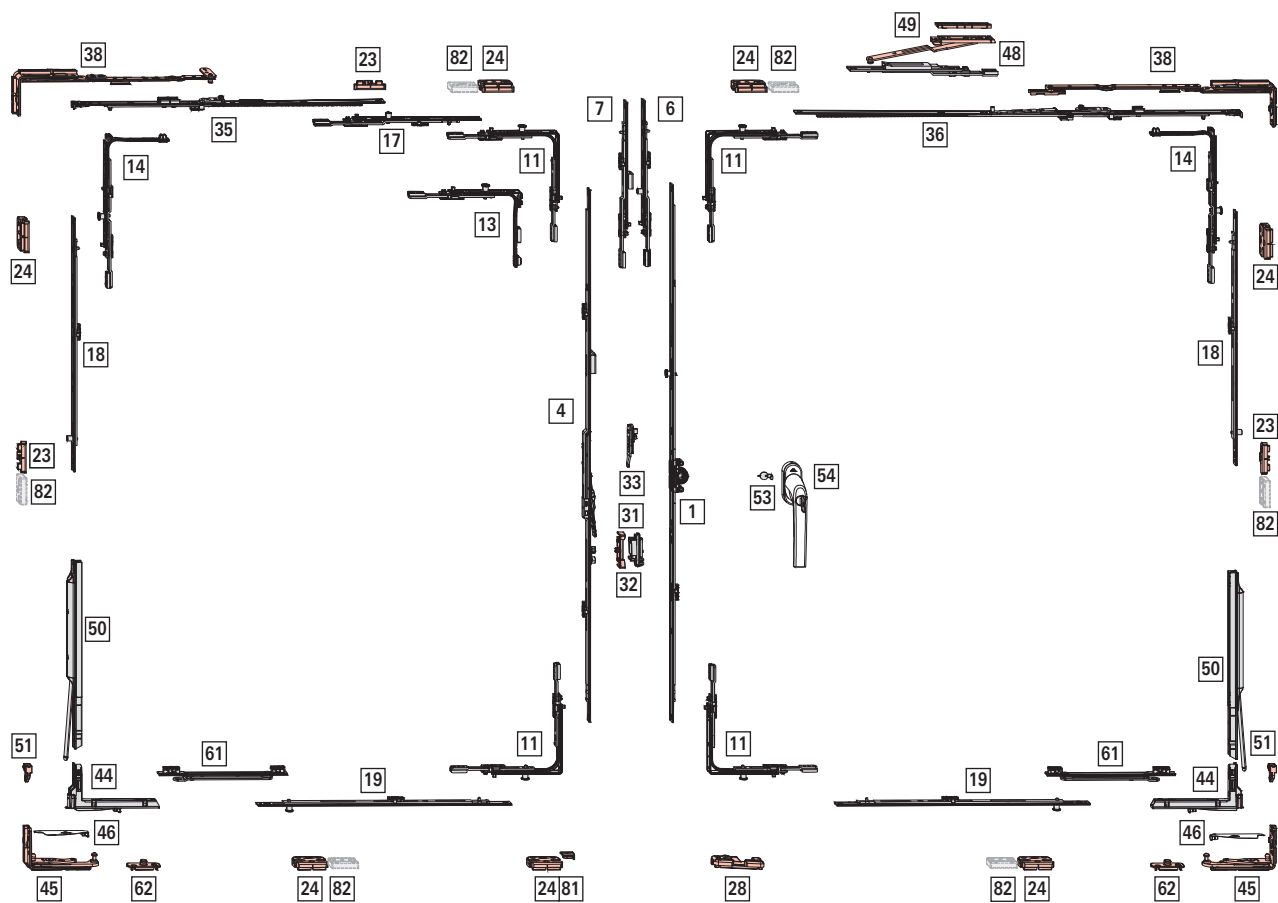
### Hinge side Designo (HA 13)

T&T espagnolette, VT – fixed handle height





### 3.3.1.5.2 RC 1 N





| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                 |
| [4]  | Lever-operated espagnolette Plus, VT – fixed handle height → <i>from page 341</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                          |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                               |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [13] | Special corner drive, short → <i>from page 353</i>                                |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>              |
| [23] | Striker → <i>from page 456</i>                                                    |
| [24] | Striker, security → <i>from page 457</i>                                          |
| [28] | Tilt striker → <i>from page 450</i>                                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                  |
| [35] | Turn-Only sash stay guide → <i>from page 371</i>                                  |
| [36] | Stay guide, basic security → <i>from page 370</i>                                 |
| [38] | Stay arm → <i>from page 386</i>                                                   |
| [44] | Corner hinge → <i>from page 436</i>                                               |
| [45] | Pivot rest → <i>from page 440</i>                                                 |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                                |
| [48] | Additional stay arm → <i>from page 470</i>                                        |
| [49] | Support plate (profile-related) → <i>from page 516</i>                            |
| [50] | Load transfer sash component → <i>from page 443</i>                               |
| [51] | Load transfer frame component → <i>from page 443</i>                              |
| [53] | Drilling protection → <i>from page 509</i>                                        |
| [54] | Handle (see catalogue CTL_1)                                                      |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                        |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                       |
| [80] | Fastening plate → <i>from page 511</i>                                            |
| [81] | Run-up block → <i>from page 514</i>                                               |
| [82] | Anti-jemmy device → <i>from page 510</i>                                          |

## Application range

| RC 1 N |                          |                       |                    |
|--------|--------------------------|-----------------------|--------------------|
|        |                          | Without load transfer | With load transfer |
|        | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|        | Sash rebate height (SRH) | 430 – 2600 mm         | 1000 – 2600 mm     |
|        | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

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## Hardware overviews

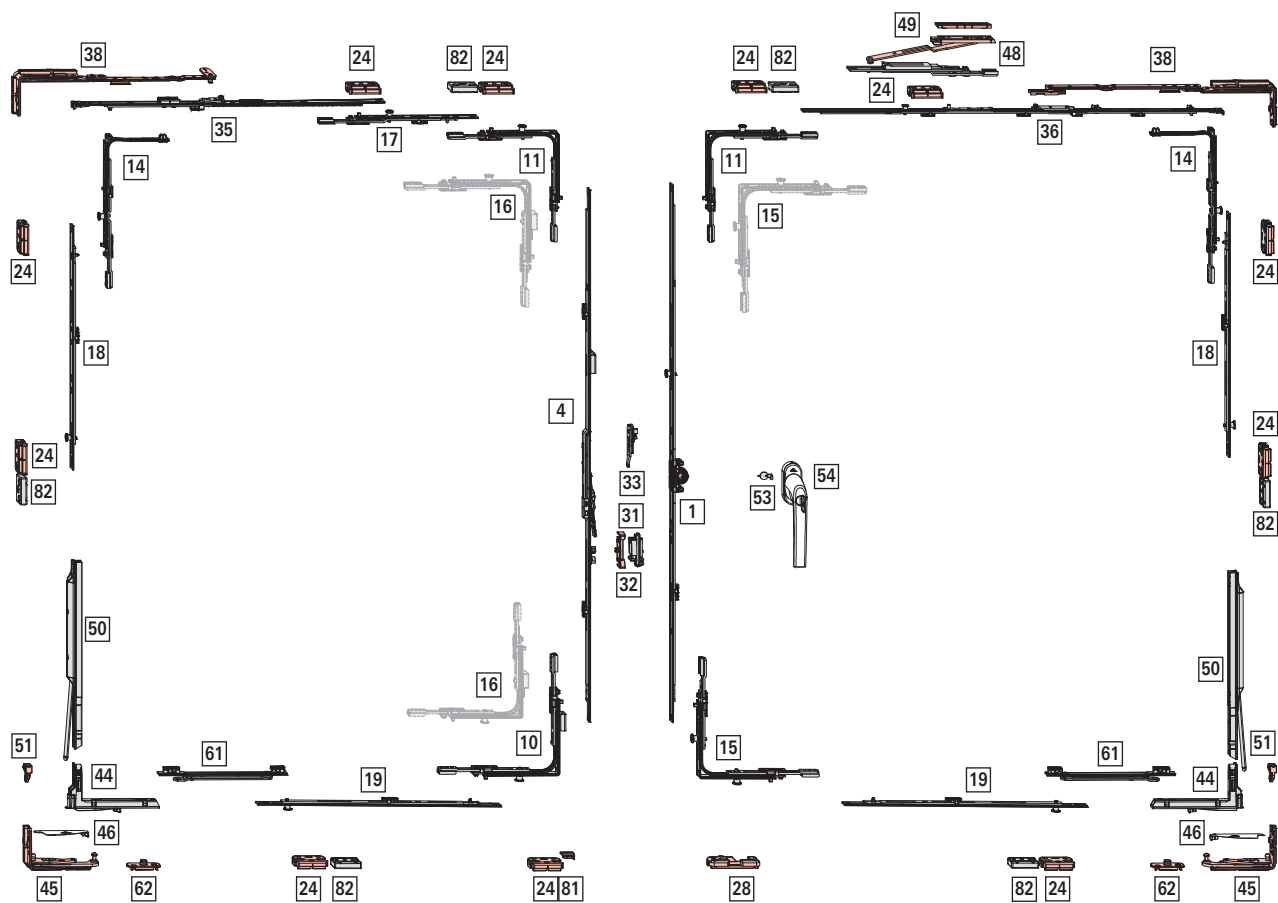
### Hinge side Designo (HA 13)

T&T espagnolette, VT – fixed handle height





### 3.3.1.5.3 RC 2 / RC 2 N







| Item | Description                                                                       |
|------|-----------------------------------------------------------------------------------|
| [1]  | T&T espagnolette, VT – fixed handle height → <i>from page 300</i>                 |
| [4]  | Lever-operated espagnolette Plus, VT – fixed handle height → <i>from page 341</i> |
| [10] | Floating-mullion corner drive → <i>from page 354</i>                              |
| [11] | Corner drive, standard → <i>from page 352</i>                                     |
| [14] | Sash stay corner drive → <i>from page 356</i>                                     |
| [15] | Corner drive, standard RC 3 → <i>from page 352</i>                                |
| [16] | Floating-mullion corner drive – slide guard → <i>from page 354</i>                |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>                |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>              |
| [24] | Striker, security → <i>from page 457</i>                                          |
| [28] | Tilt striker → <i>from page 450</i>                                               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                |
| [32] | Bullet-catch frame component → <i>from page 486</i>                               |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                  |
| [35] | Turn-Only sash stay guide → <i>from page 371</i>                                  |
| [36] | Stay guide, security → <i>from page 371</i>                                       |
| [38] | Stay arm → <i>from page 386</i>                                                   |
| [44] | Corner hinge → <i>from page 436</i>                                               |
| [45] | Pivot rest → <i>from page 440</i>                                                 |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                                |
| [48] | Additional stay arm → <i>from page 470</i>                                        |
| [49] | Support plate (profile-related) → <i>from page 516</i>                            |
| [50] | Load transfer sash component → <i>from page 443</i>                               |
| [51] | Load transfer frame component → <i>from page 443</i>                              |
| [53] | Drilling protection → <i>from page 509</i>                                        |
| [54] | Handle (see catalogue CTL_1)                                                      |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                        |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                       |
| [80] | Fastening plate → <i>from page 511</i>                                            |
| [81] | Run-up block → <i>from page 514</i>                                               |
| [82] | Anti-jemmy device → <i>from page 510</i>                                          |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|               | Sash rebate height (SRH) | 600 – 2400 mm         | 1000 – 2400 mm     |
|               | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

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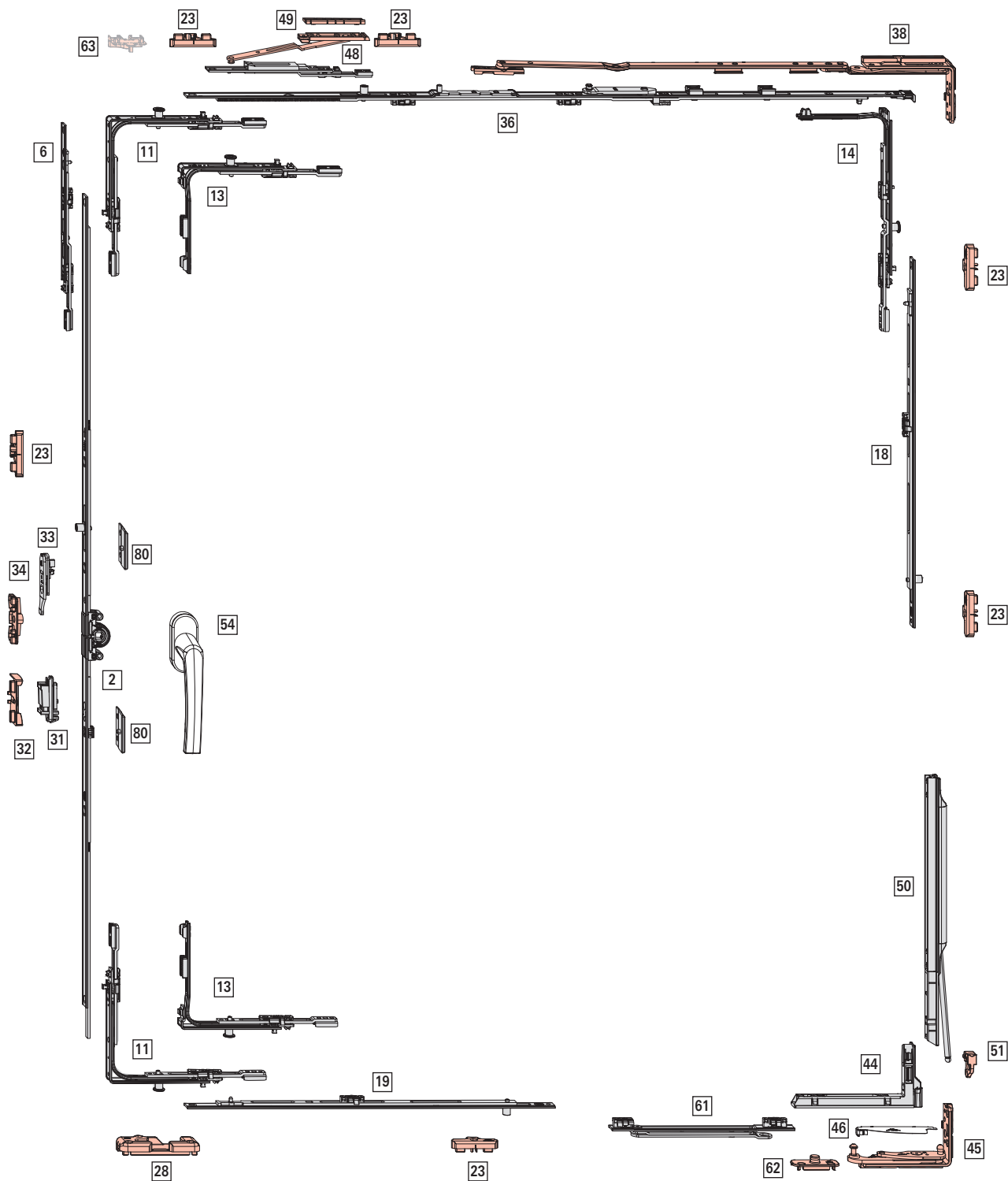


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### 3.3.2 T&T espagnolette – centred / variable handle height

#### 3.3.2.1 Tilt&Turn hardware

##### 3.3.2.1.1 Basic security





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                   |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [13] | Special corner drive, short → <i>from page 353</i>                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>       |
| [23] | Striker → <i>from page 456</i>                                             |
| [28] | Tilt striker → <i>from page 450</i>                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, basic security → <i>from page 370</i>                          |
| [38] | Stay arm → <i>from page 386</i>                                            |
| [44] | Corner hinge → <i>from page 436</i>                                        |
| [45] | Pivot rest → <i>from page 440</i>                                          |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                         |
| [48] | Additional stay arm → <i>from page 470</i>                                 |
| [49] | Support plate (profile-related) → <i>from page 516</i>                     |
| [50] | Load transfer sash component → <i>from page 443</i>                        |
| [51] | Load transfer frame component → <i>from page 443</i>                       |
| [54] | Handle (see catalogue CTL_1)                                               |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                 |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                |
| [63] | Night vent → <i>from page 493</i>                                          |
| [80] | Fastening plate → <i>from page 511</i>                                     |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 330 – 1400 mm         | 800 – 1400 mm      |
|                | Sash rebate height (SRH) | 310 – 2600 mm         | 1000 – 2600 mm     |
|                | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

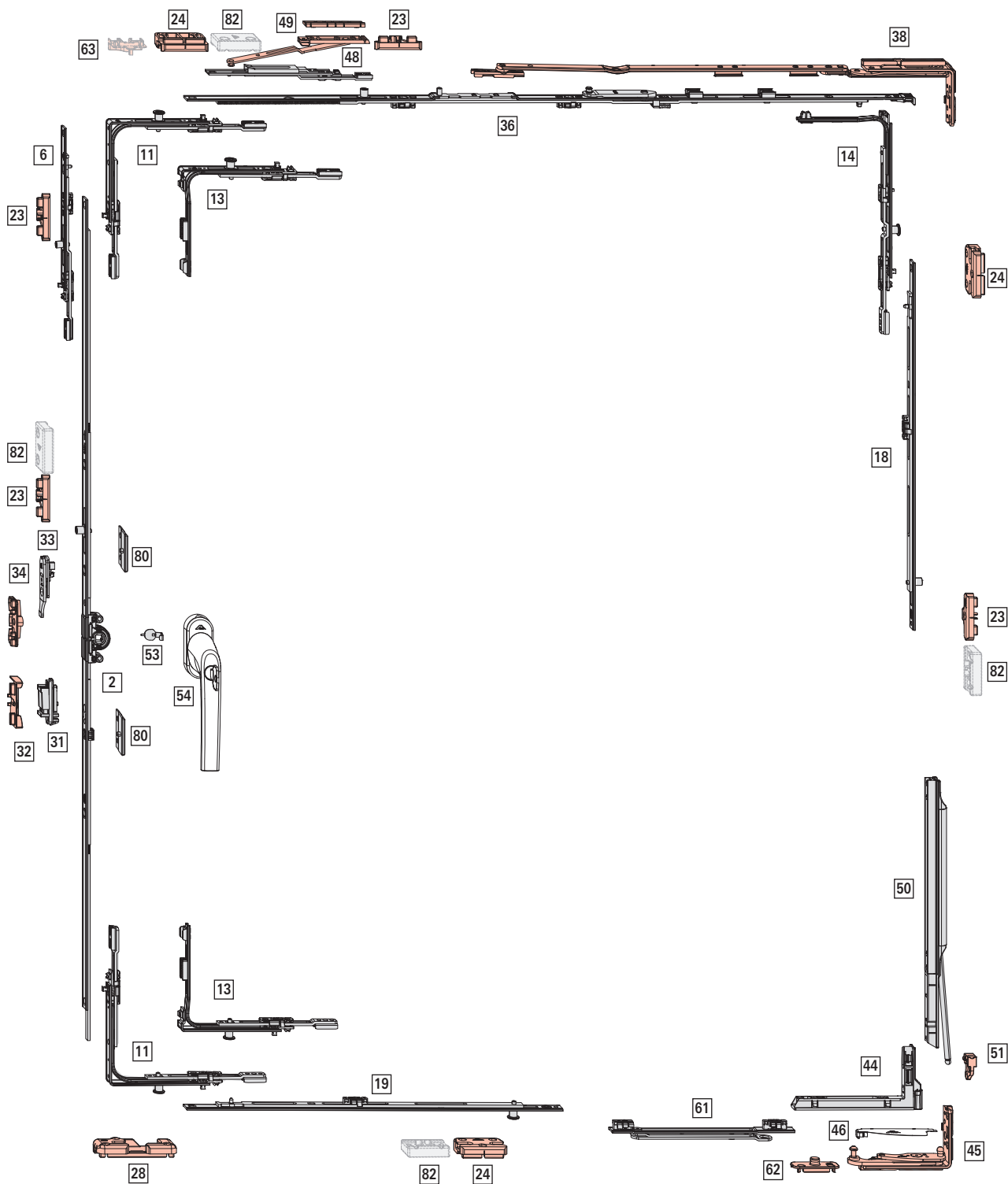
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### 3.3.2.1.2 RC 1 N





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                   |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [13] | Special corner drive, short → <i>from page 353</i>                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>       |
| [23] | Striker → <i>from page 456</i>                                             |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [28] | Tilt striker → <i>from page 450</i>                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, basic security → <i>from page 370</i>                          |
| [38] | Stay arm → <i>from page 386</i>                                            |
| [44] | Corner hinge → <i>from page 436</i>                                        |
| [45] | Pivot rest → <i>from page 440</i>                                          |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                         |
| [48] | Additional stay arm → <i>from page 470</i>                                 |
| [49] | Support plate (profile-related) → <i>from page 516</i>                     |
| [50] | Load transfer sash component → <i>from page 443</i>                        |
| [51] | Load transfer frame component → <i>from page 443</i>                       |
| [53] | Drilling protection → <i>from page 509</i>                                 |
| [54] | Handle (see catalogue CTL_1)                                               |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                 |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                |
| [63] | Night vent → <i>from page 493</i>                                          |
| [80] | Fastening plate → <i>from page 511</i>                                     |
| [82] | Anti-jemmy device → <i>from page 510</i>                                   |

## Application range

| RC 1 N |                          |                       |                    |
|--------|--------------------------|-----------------------|--------------------|
|        |                          | Without load transfer | With load transfer |
|        | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|        | Sash rebate height (SRH) | 310 – 2600 mm         | 1000 – 2600 mm     |
|        | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

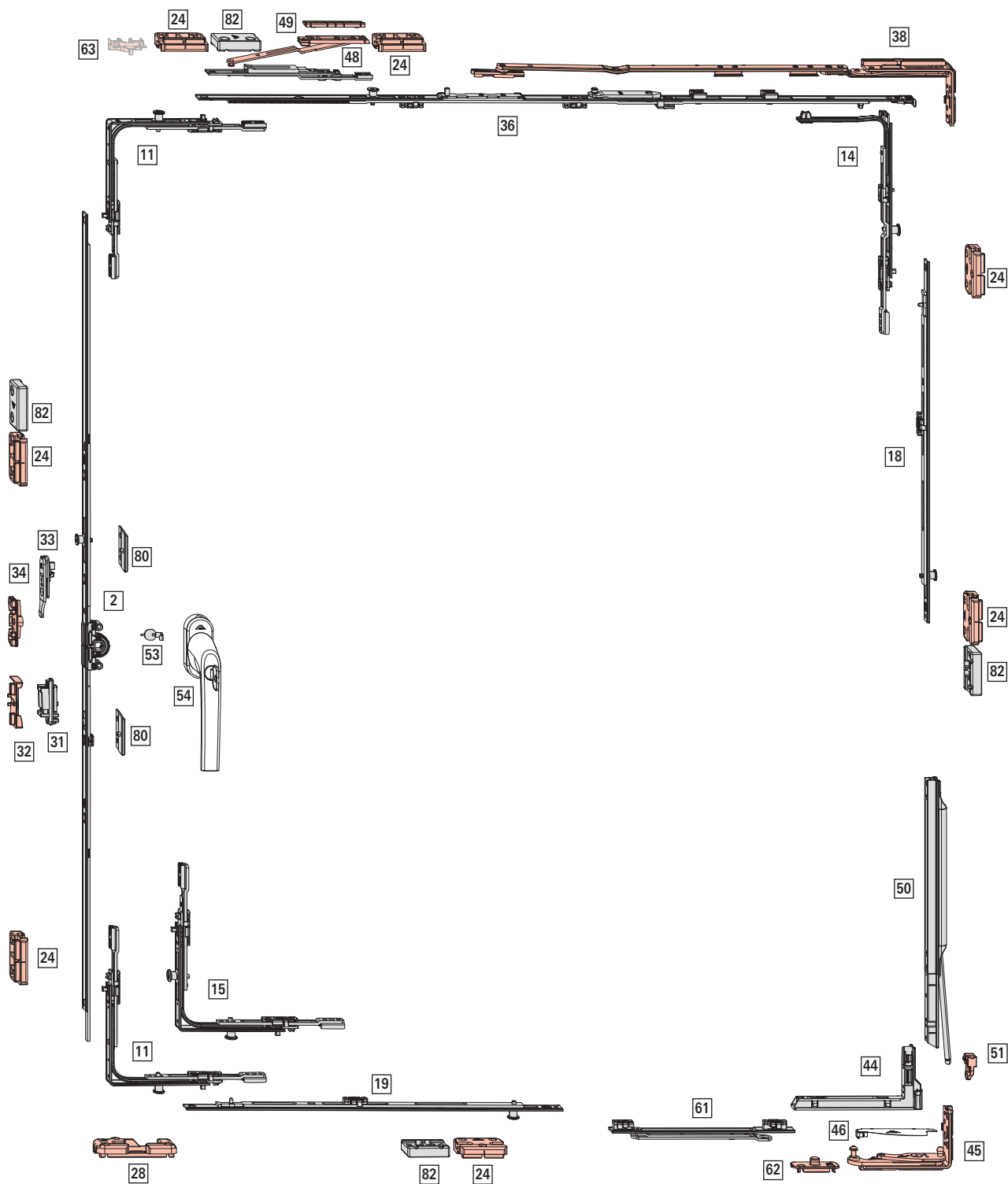
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### 3.3.2.1.3 RC 2 / RC 2 N





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i> |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [15] | Corner drive, standard RC 3 → <i>from page 352</i>                         |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>       |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [28] | Tilt striker → <i>from page 450</i>                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, security → <i>from page 371</i>                                |
| [38] | Stay arm → <i>from page 386</i>                                            |
| [44] | Corner hinge → <i>from page 436</i>                                        |
| [45] | Pivot rest → <i>from page 440</i>                                          |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                         |
| [48] | Additional stay arm → <i>from page 470</i>                                 |
| [49] | Support plate (profile-related) → <i>from page 516</i>                     |
| [50] | Load transfer sash component → <i>from page 443</i>                        |
| [51] | Load transfer frame component → <i>from page 443</i>                       |
| [53] | Drilling protection → <i>from page 509</i>                                 |
| [54] | Handle (see catalogue CTL_1)                                               |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                 |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                |
| [63] | Night vent → <i>from page 493</i>                                          |
| [80] | Fastening plate → <i>from page 511</i>                                     |
| [82] | Anti-jemmy device → <i>from page 510</i>                                   |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|               | Sash rebate height (SRH) | 490 – 2400 mm         | 1000 – 2400 mm     |
|               | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

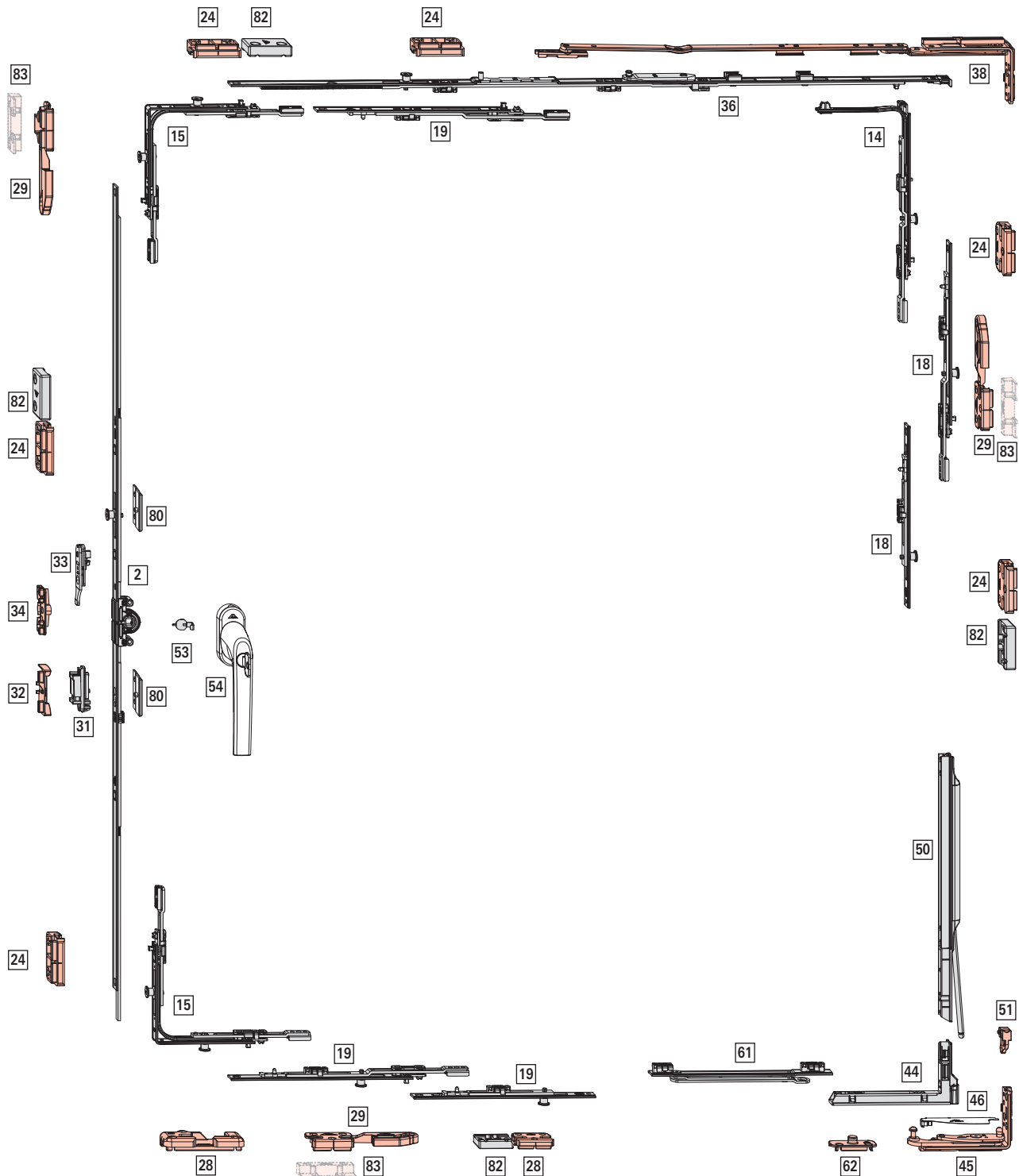
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### 3.3.2.1.4 TiltSafe RC 2 / RC 2 N







| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i> |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [15] | Corner drive, standard RC 3 → <i>from page 352</i>                         |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>       |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [28] | Tilt striker → <i>from page 450</i>                                        |
| [29] | Security striker for tilt ventilation → <i>from page 461</i>               |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, security → <i>from page 371</i>                                |
| [38] | Stay arm → <i>from page 386</i>                                            |
| [44] | Corner hinge → <i>from page 436</i>                                        |
| [45] | Pivot rest → <i>from page 440</i>                                          |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                         |
| [50] | Load transfer sash component → <i>from page 443</i>                        |
| [51] | Load transfer frame component → <i>from page 443</i>                       |
| [53] | Drilling protection → <i>from page 509</i>                                 |
| [54] | Handle (see catalogue CTL_1)                                               |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                 |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                |
| [80] | Fastening plate → <i>from page 511</i>                                     |
| [82] | Anti-jemmy device → <i>from page 510</i>                                   |
| [83] | TiltSafe protective support (optional) → <i>from page 461</i>              |

## Application range

| RC 2 / RC 2 N                                                                       |                          |                       |                    |
|-------------------------------------------------------------------------------------|--------------------------|-----------------------|--------------------|
|                                                                                     |                          | Without load transfer | With load transfer |
|  | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|  | Sash rebate height (SRH) | 490 – 2400 mm         | 1000 – 2400 mm     |
|  | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

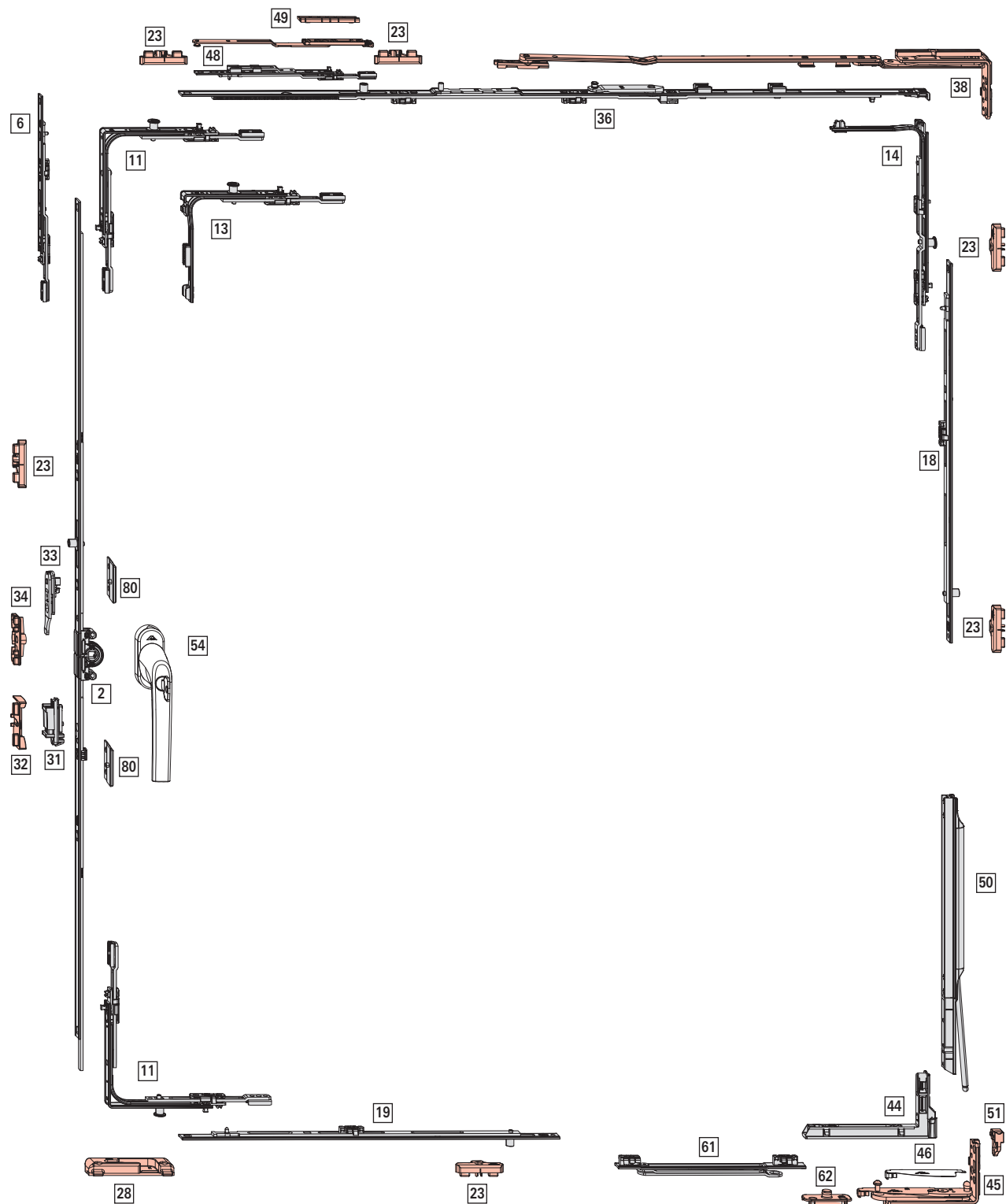
Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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### 3.3.2.2 TiltFirst hardware

#### 3.3.2.2.1 Basic security





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                   |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [13] | Special corner drive, short → <i>from page 353</i>                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                              |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>         |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>       |
| [23] | Striker → <i>from page 456</i>                                             |
| [28] | Tilt striker, TiltFirst → <i>from page 453</i>                             |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [36] | Stay guide, basic security → <i>from page 370</i>                          |
| [38] | Stay arm, TiltFirst → <i>from page 390</i>                                 |
| [44] | Corner hinge → <i>from page 436</i>                                        |
| [45] | Pivot rest → <i>from page 440</i>                                          |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                         |
| [48] | Additional stay arm → <i>from page 470</i>                                 |
| [49] | Support plate (profile-related) → <i>from page 516</i>                     |
| [50] | Load transfer sash component → <i>from page 443</i>                        |
| [51] | Load transfer frame component → <i>from page 443</i>                       |
| [54] | Handle (see catalogue CTL_1)                                               |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                 |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                |
| [80] | Fastening plate → <i>from page 511</i>                                     |

## Application range

|  |                          | Basic security        |                    |
|--|--------------------------|-----------------------|--------------------|
|  |                          | Without load transfer | With load transfer |
|  | Sash rebate width (SRW)  | 330 – 1400 mm         | 800 – 1400 mm      |
|  | Sash rebate height (SRH) | 280 – 2600 mm         | 1000 – 2600 mm     |
|  | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

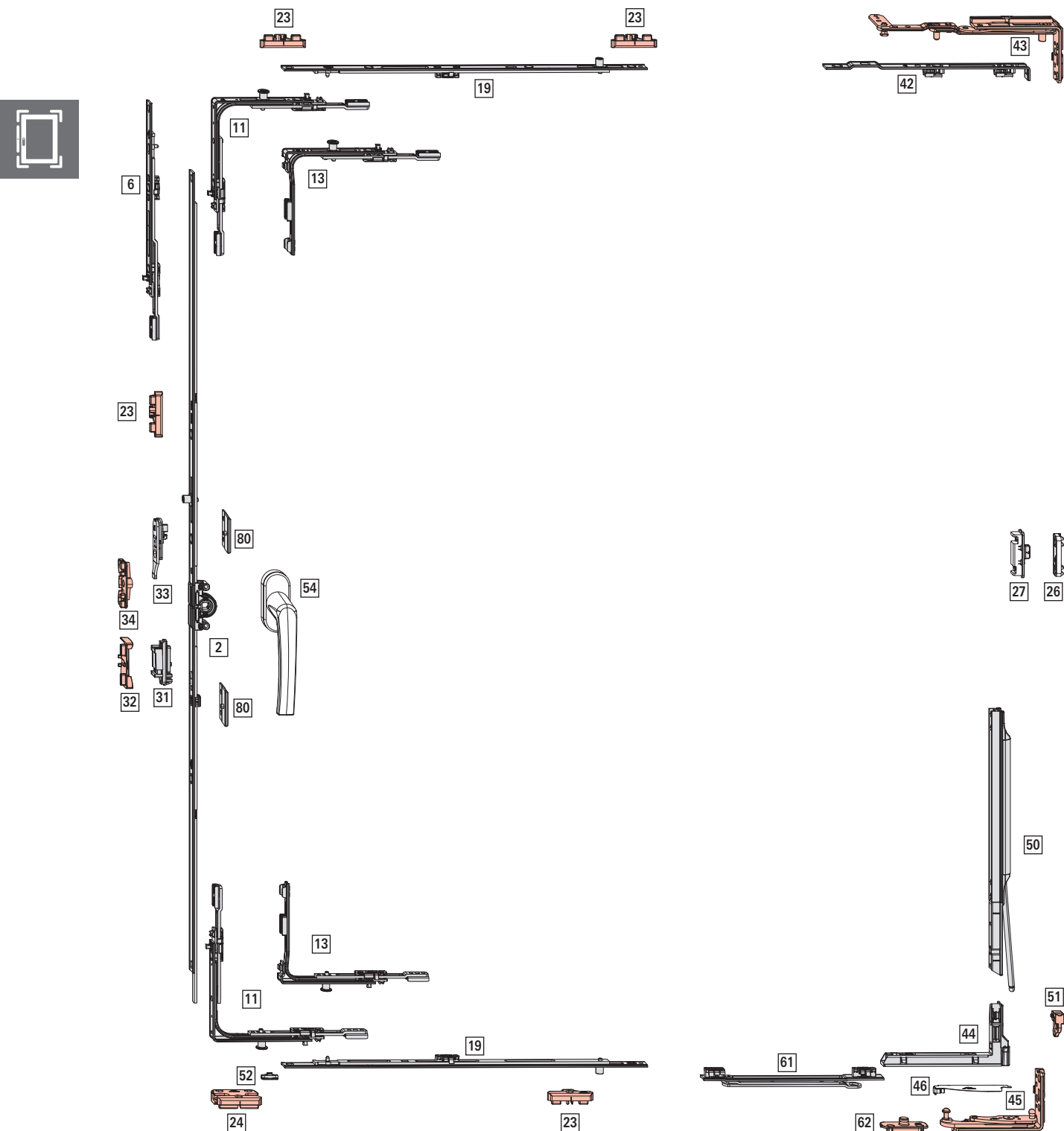
Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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### 3.3.2.3 Turn-Only hardware

#### 3.3.2.3.1 Basic security





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                   |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [13] | Special corner drive, short → <i>from page 353</i>                         |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>       |
| [23] | Striker → <i>from page 456</i>                                             |
| [24] | Striker, security → <i>from page 457</i>                                   |
| [26] | Centre closer, concealed, frame component → <i>from page 521</i>           |
| [27] | Centre closer, concealed, sash component → <i>from page 521</i>            |
| [31] | Bullet-catch sash component → <i>from page 486</i>                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>           |
| [34] | Lifting mishandling device frame component → <i>from page 496</i>          |
| [42] | Rebate stay guide → <i>from page 395</i>                                   |
| [43] | Rebate stay arm → <i>from page 399</i>                                     |
| [44] | Corner hinge → <i>from page 436</i>                                        |
| [45] | Pivot rest → <i>from page 440</i>                                          |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                         |
| [50] | Load transfer sash component → <i>from page 443</i>                        |
| [51] | Load transfer frame component → <i>from page 443</i>                       |
| [52] | Travel restrictor → <i>from page 523</i>                                   |
| [54] | Handle (see catalogue CTL_1)                                               |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                 |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                |
| [80] | Fastening plate → <i>from page 511</i>                                     |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 370 – 1400 mm         | 800 – 1400 mm      |
|                | Sash rebate height (SRH) | 310 – 2600 mm         | 1000 – 2600 mm     |
|                | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

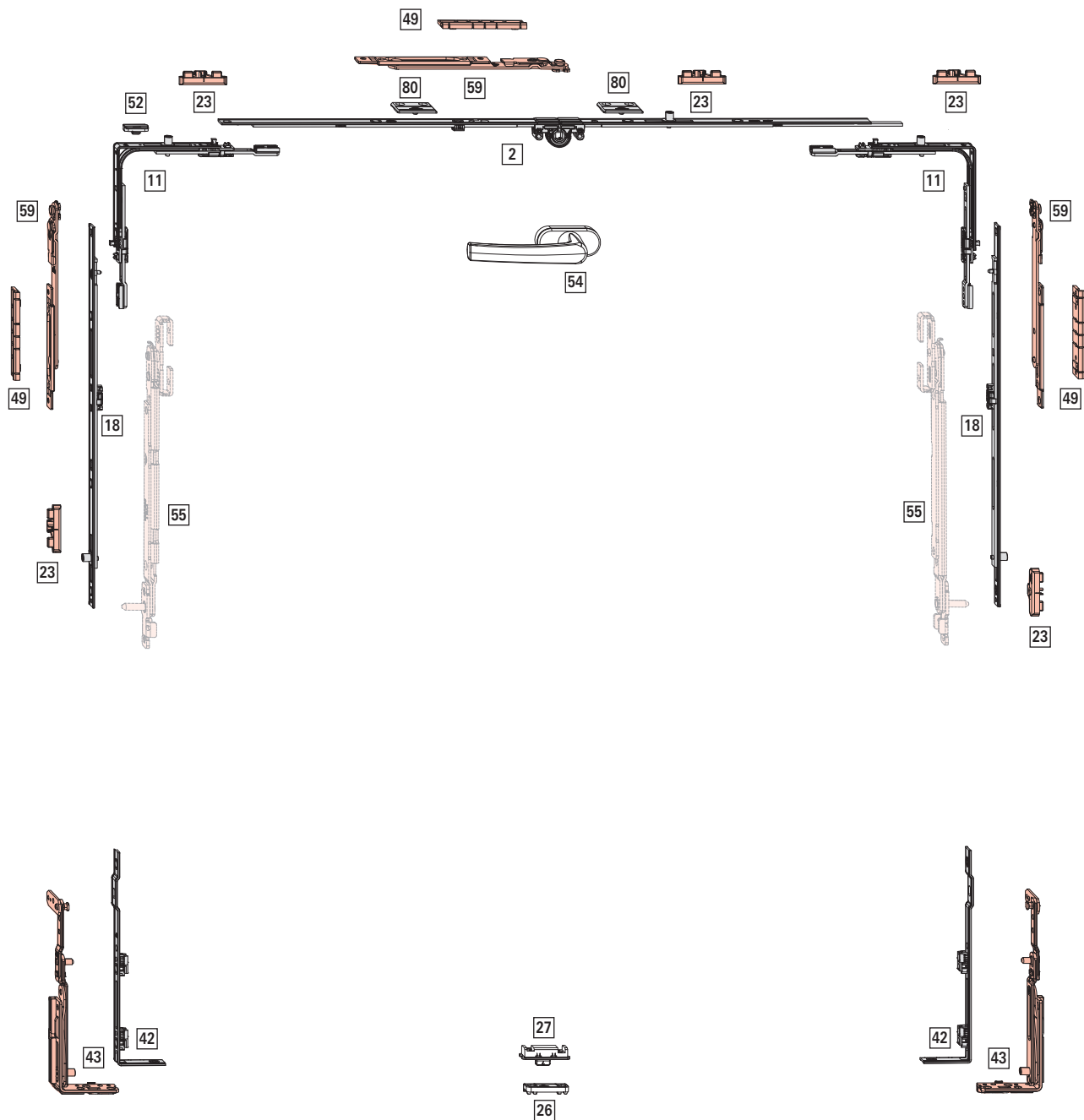
Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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### 3.3.2.4 Tilt-Only hardware

#### 3.3.2.4.1 Basic security





| Item | Description                                                                |
|------|----------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i> |
| [11] | Corner drive, standard → <i>from page 352</i>                              |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>         |
| [23] | Striker → <i>from page 456</i>                                             |
| [26] | Centre closer, concealed, frame component → <i>from page 521</i>           |
| [27] | Centre closer, concealed, sash component → <i>from page 521</i>            |
| [42] | Rebate stay guide → <i>from page 395</i>                                   |
| [43] | Rebate stay arm → <i>from page 399</i>                                     |
| [49] | Support plate (profile-related) → <i>from page 516</i>                     |
| [52] | Travel restrictor → <i>from page 523</i>                                   |
| [54] | Handle (see catalogue CTL_1)                                               |
| [55] | Restrictor and cleaning stay → <i>from page 478</i>                        |
| [59] | Tilt stay set for floating-mullion installation → <i>from page 472</i>     |

### Application range

| Basic security                                                                     |                             |               |
|------------------------------------------------------------------------------------|-----------------------------|---------------|
|   | Sash rebate width<br>(SRW)  | 450 – 1400 mm |
|   | Sash rebate height<br>(SRH) | 370 – 1200 mm |
|  | Sash weight<br>(S.kg)       | Max. 80 kg    |



#### INFO

Restrictor and cleaning stays mandatory for fanlights (in accordance with RAL RG 607 / 12).

Restrictor and cleaning stays up to max. 60 kg.



#### INFO

##### Roto Con Orders

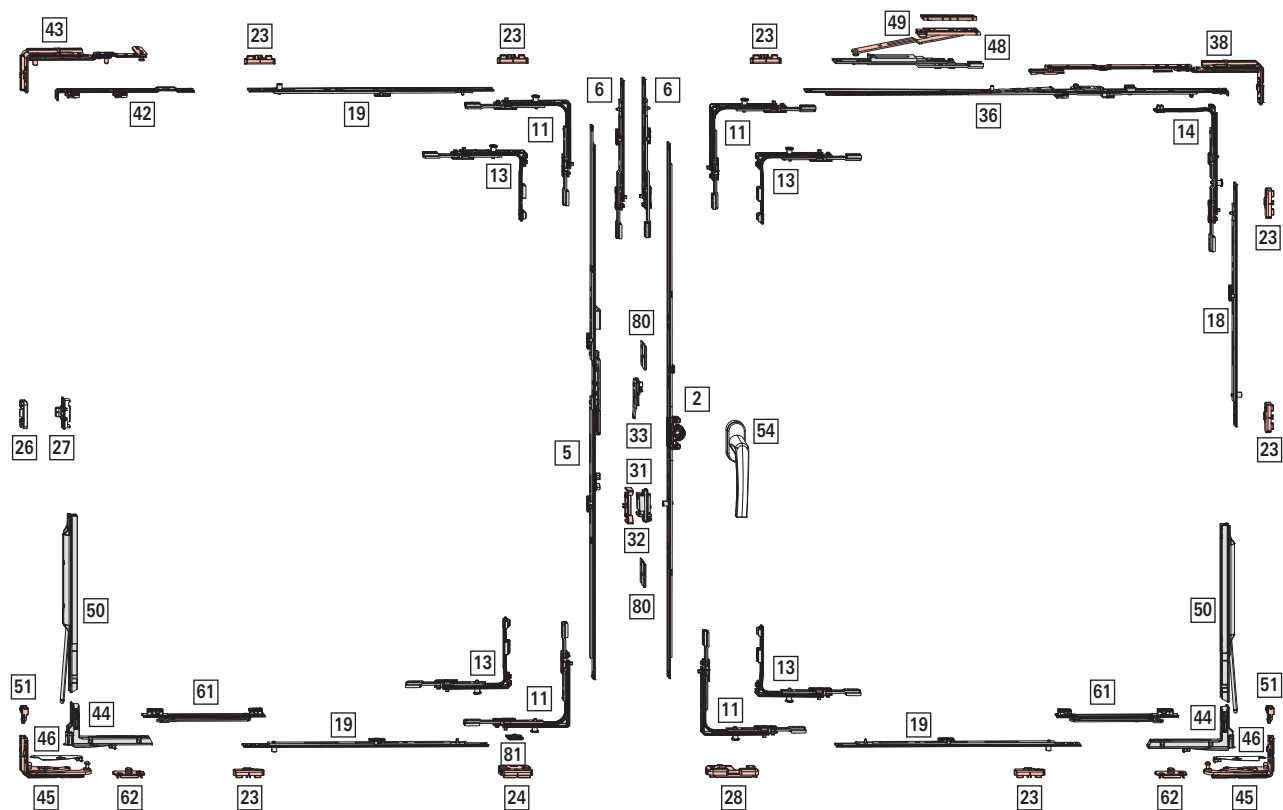
Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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### 3.3.2.5 Floating-mullion hardware – standard

#### 3.3.2.5.1 Basic security







| Item | Description                                                                                    |
|------|------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i>                     |
| [5]  | Lever-operated espagnolette Standard – centred / variable handle height → <i>from page 338</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                       |
| [11] | Corner drive, standard → <i>from page 352</i>                                                  |
| [13] | Special corner drive, short → <i>from page 353</i>                                             |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                  |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                             |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                           |
| [23] | Striker → <i>from page 456</i>                                                                 |
| [24] | Striker, security → <i>from page 457</i>                                                       |
| [26] | Centre closer, concealed, frame component → <i>from page 521</i>                               |
| [27] | Centre closer, concealed, sash component → <i>from page 521</i>                                |
| [28] | Tilt striker → <i>from page 450</i>                                                            |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                             |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                            |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                               |
| [36] | Stay guide, basic security → <i>from page 370</i>                                              |
| [38] | Stay arm → <i>from page 386</i>                                                                |
| [42] | Rebate stay guide → <i>from page 395</i>                                                       |
| [43] | Rebate stay arm → <i>from page 399</i>                                                         |
| [44] | Corner hinge → <i>from page 436</i>                                                            |
| [45] | Pivot rest → <i>from page 440</i>                                                              |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                                             |
| [48] | Additional stay arm → <i>from page 470</i>                                                     |
| [49] | Support plate (profile-related) → <i>from page 516</i>                                         |
| [50] | Load transfer sash component → <i>from page 443</i>                                            |
| [51] | Load transfer frame component → <i>from page 443</i>                                           |
| [54] | Handle (see catalogue CTL_1)                                                                   |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                                     |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                                    |
| [80] | Fastening plate → <i>from page 511</i>                                                         |
| [81] | Run-up block → <i>from page 514</i>                                                            |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 370 – 1400 mm         | 800 – 1400 mm      |
|                | Sash rebate height (SRH) | 370 – 2600 mm         | 1000 – 2600 mm     |
|                | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

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## Hardware overviews

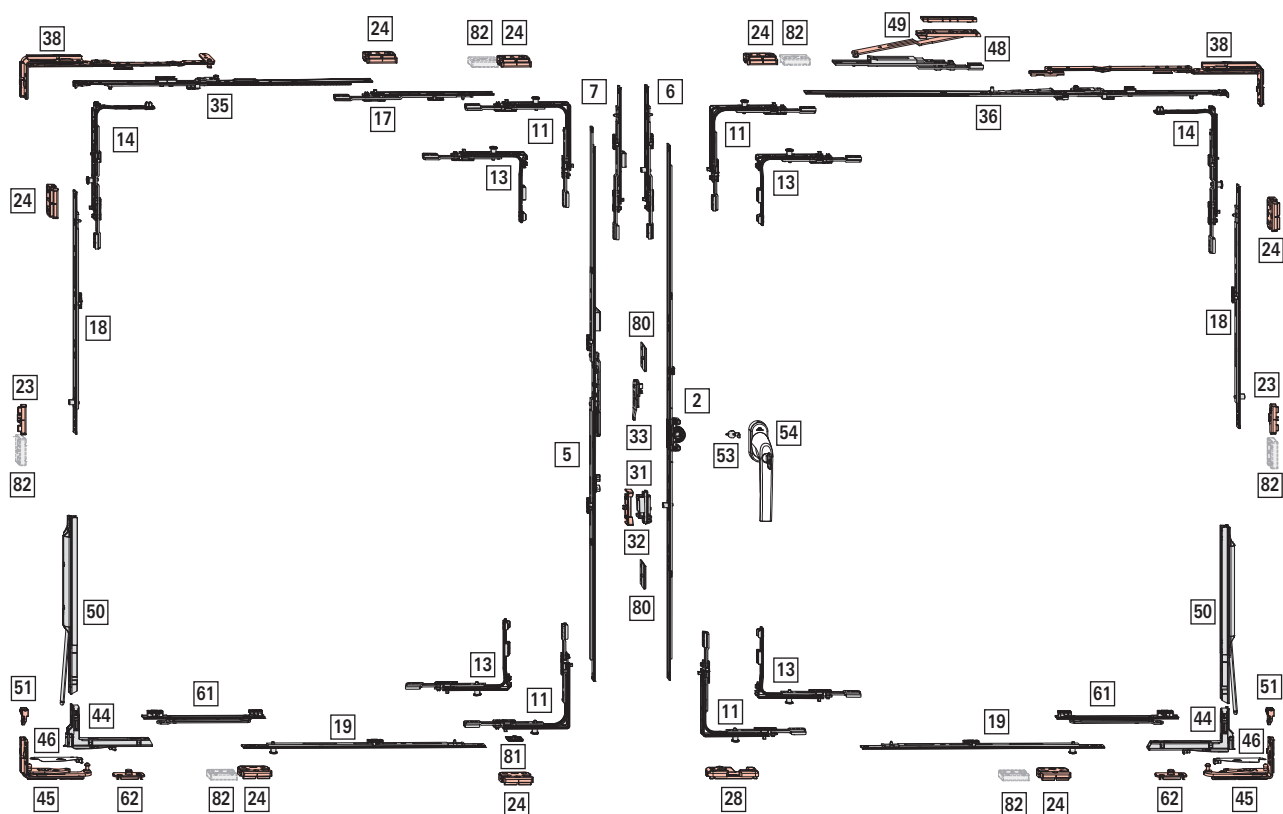
### Hinge side Designo (HA 13)

T&T espagnolette – centred / variable handle height





### 3.3.2.5.2 RC 1 N





| Item | Description                                                                                    |
|------|------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i>                     |
| [5]  | Lever-operated espagnolette Standard – centred / variable handle height → <i>from page 338</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                       |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                            |
| [11] | Corner drive, standard → <i>from page 352</i>                                                  |
| [13] | Special corner drive, short → <i>from page 353</i>                                             |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                  |
| [17] | Centre lock, multipart – standard, horizontal – top, Turn-Only sash → <i>from page 416</i>     |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                             |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                           |
| [23] | Striker → <i>from page 456</i>                                                                 |
| [24] | Striker, security → <i>from page 457</i>                                                       |
| [28] | Tilt striker → <i>from page 450</i>                                                            |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                             |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                            |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                               |
| [35] | Turn-Only sash stay guide → <i>from page 371</i>                                               |
| [36] | Stay guide, basic security → <i>from page 370</i>                                              |
| [38] | Stay arm → <i>from page 386</i>                                                                |
| [44] | Corner hinge → <i>from page 436</i>                                                            |
| [45] | Pivot rest → <i>from page 440</i>                                                              |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                                             |
| [48] | Additional stay arm → <i>from page 470</i>                                                     |
| [49] | Support plate (profile-related) → <i>from page 516</i>                                         |
| [50] | Load transfer sash component → <i>from page 443</i>                                            |
| [51] | Load transfer frame component → <i>from page 443</i>                                           |
| [53] | Drilling protection → <i>from page 509</i>                                                     |
| [54] | Handle (see catalogue CTL_1)                                                                   |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                                     |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                                    |
| [80] | Fastening plate → <i>from page 511</i>                                                         |
| [81] | Run-up block → <i>from page 514</i>                                                            |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                       |

## Application range

| RC 1 N |                          |                       |                    |
|--------|--------------------------|-----------------------|--------------------|
|        |                          | Without load transfer | With load transfer |
|        | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|        | Sash rebate height (SRH) | 370 – 2600 mm         | 1000 – 2600 mm     |
|        | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## **INFO**

### **Roto Con Orders**

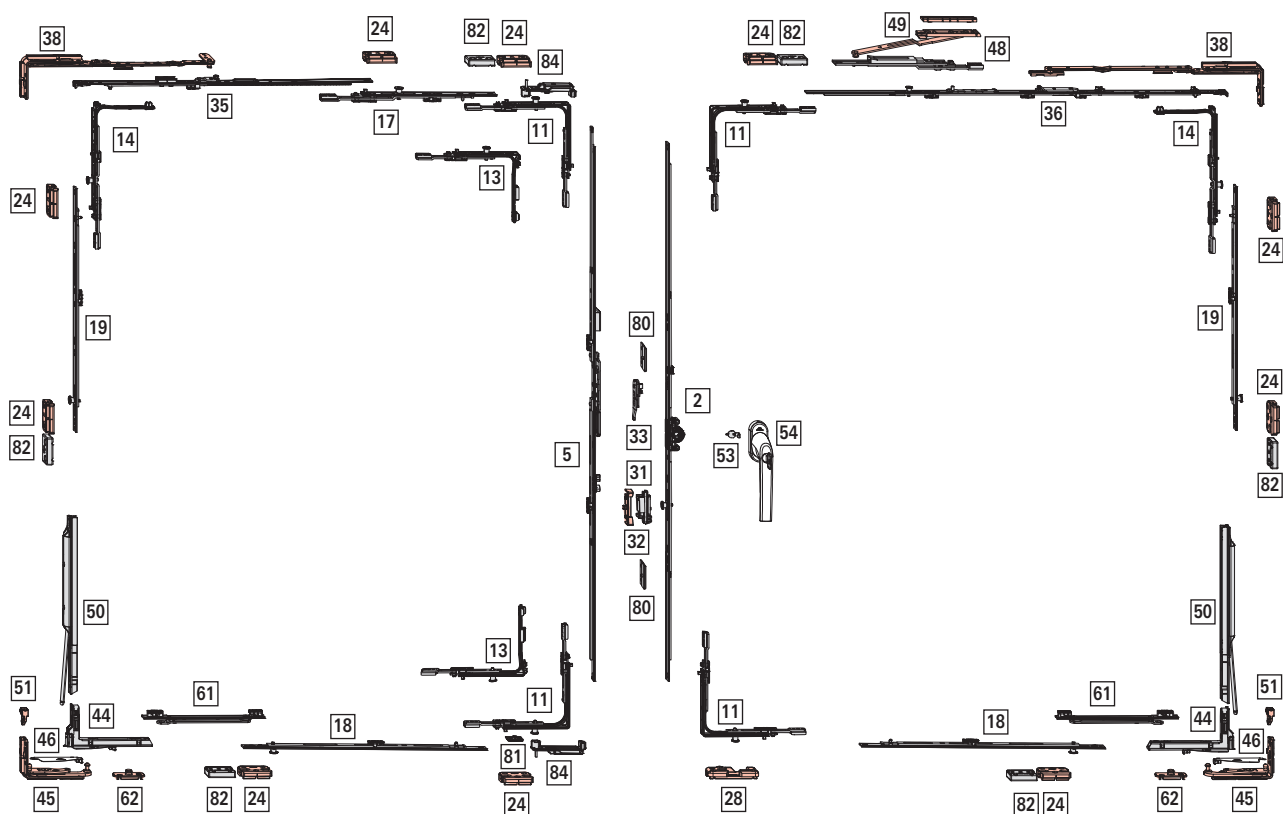
Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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### 3.3.2.5.3 RC 2 / RC 2 N







| Item | Description                                                                                    |
|------|------------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i>                     |
| [5]  | Lever-operated espagnolette Standard – centred / variable handle height → <i>from page 338</i> |
| [11] | Corner drive, standard → <i>from page 352</i>                                                  |
| [13] | Special corner drive, short → <i>from page 353</i>                                             |
| [14] | Sash stay corner drive → <i>from page 356</i>                                                  |
| [17] | Centre lock, multipart – standard, horizontal – top, Turn-Only sash → <i>from page 416</i>     |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>                             |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>                           |
| [24] | Striker, security → <i>from page 457</i>                                                       |
| [28] | Tilt striker → <i>from page 450</i>                                                            |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                             |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                            |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                               |
| [35] | Turn-Only sash stay guide → <i>from page 371</i>                                               |
| [36] | Stay guide, security → <i>from page 371</i>                                                    |
| [38] | Stay arm → <i>from page 386</i>                                                                |
| [44] | Corner hinge → <i>from page 436</i>                                                            |
| [45] | Pivot rest → <i>from page 440</i>                                                              |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                                             |
| [48] | Additional stay arm → <i>from page 470</i>                                                     |
| [49] | Support plate (profile-related) → <i>from page 516</i>                                         |
| [50] | Load transfer sash component → <i>from page 443</i>                                            |
| [51] | Load transfer frame component → <i>from page 443</i>                                           |
| [53] | Drilling protection → <i>from page 509</i>                                                     |
| [54] | Handle (see catalogue CTL_1)                                                                   |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                                     |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                                    |
| [80] | Fastening plate → <i>from page 511</i>                                                         |
| [81] | Run-up block → <i>from page 514</i>                                                            |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                       |
| [84] | Safety device for floating-mullion sash → <i>from page 509</i>                                 |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|               | Sash rebate height (SRH) | 510 – 2400 mm         | 1000 – 2400 mm     |
|               | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

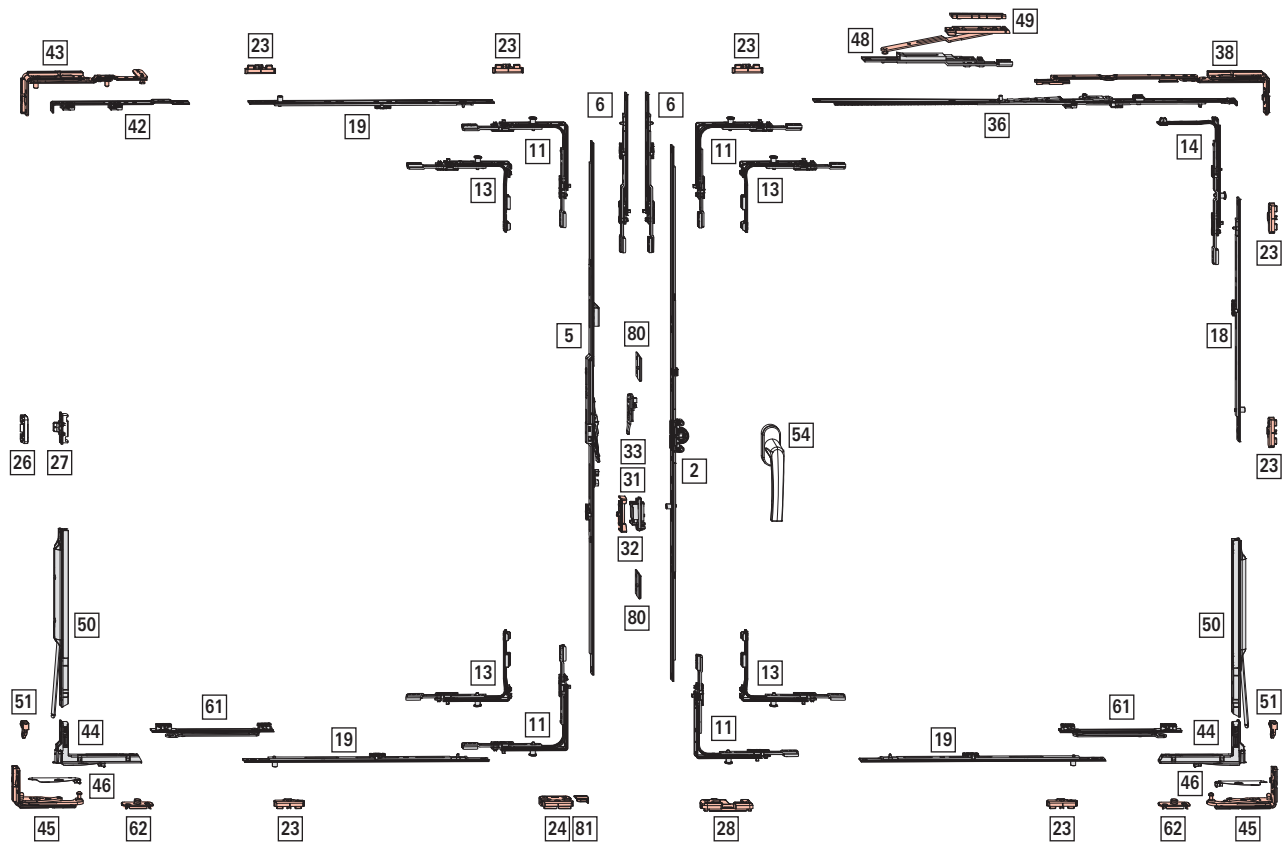
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### 3.3.2.6 Floating-mullion hardware – Plus

#### 3.3.2.6.1 Basic security





| Item | Description                                                                                |
|------|--------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i>                 |
| [5]  | Lever-operated espagnolette Plus – centred / variable handle height → <i>from page 344</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                   |
| [11] | Corner drive, standard → <i>from page 352</i>                                              |
| [13] | Special corner drive, short → <i>from page 353</i>                                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                                              |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                         |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                       |
| [23] | Striker → <i>from page 456</i>                                                             |
| [24] | Striker, security → <i>from page 457</i>                                                   |
| [26] | Centre closer, concealed, frame component → <i>from page 521</i>                           |
| [27] | Centre closer, concealed, sash component → <i>from page 521</i>                            |
| [28] | Tilt striker → <i>from page 450</i>                                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                           |
| [36] | Stay guide, basic security → <i>from page 370</i>                                          |
| [38] | Stay arm → <i>from page 386</i>                                                            |
| [42] | Rebate stay guide → <i>from page 395</i>                                                   |
| [43] | Rebate stay arm → <i>from page 399</i>                                                     |
| [44] | Corner hinge → <i>from page 436</i>                                                        |
| [45] | Pivot rest → <i>from page 440</i>                                                          |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                                         |
| [48] | Additional stay arm → <i>from page 470</i>                                                 |
| [49] | Support plate (profile-related) → <i>from page 516</i>                                     |
| [50] | Load transfer sash component → <i>from page 443</i>                                        |
| [51] | Load transfer frame component → <i>from page 443</i>                                       |
| [54] | Handle (see catalogue CTL_1)                                                               |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                                 |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                                |
| [80] | Fastening plate → <i>from page 511</i>                                                     |
| [81] | Run-up block → <i>from page 514</i>                                                        |

## Application range

| Basic security |                          |                       |                    |
|----------------|--------------------------|-----------------------|--------------------|
|                |                          | Without load transfer | With load transfer |
|                | Sash rebate width (SRW)  | 370 – 1400 mm         | 800 – 1400 mm      |
|                | Sash rebate height (SRH) | 420 – 2600 mm         | 1000 – 2600 mm     |
|                | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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## Hardware overviews

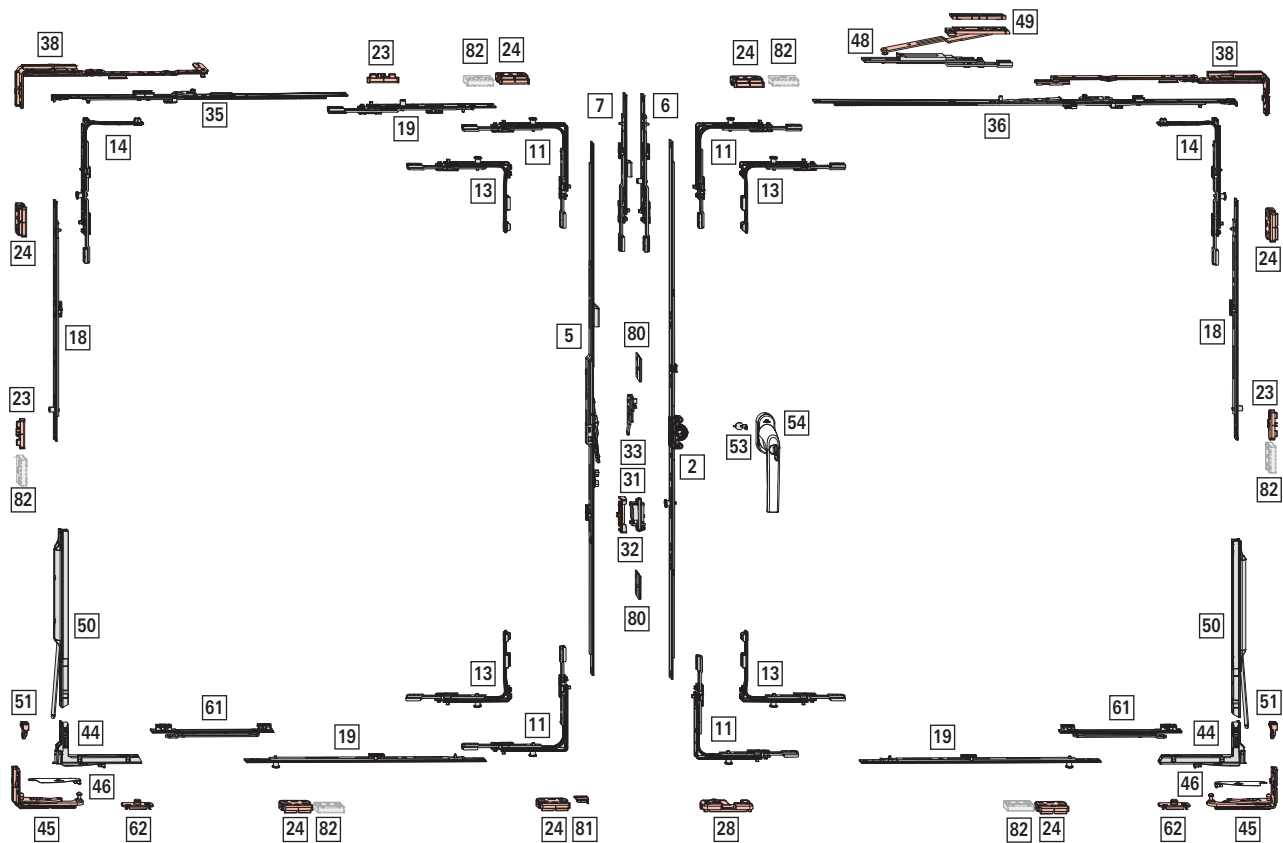
### Hinge side Designo (HA 13)

T&T espagnolette – centred / variable handle height





### 3.3.2.6.2 RC 1 N





| Item | Description                                                                                |
|------|--------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i>                 |
| [5]  | Lever-operated espagnolette Plus – centred / variable handle height → <i>from page 344</i> |
| [6]  | Centre lock, multipart – standard → <i>from page 416</i>                                   |
| [7]  | Floating-mullion centre lock → <i>from page 420</i>                                        |
| [11] | Corner drive, standard → <i>from page 352</i>                                              |
| [13] | Special corner drive, short → <i>from page 353</i>                                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                                              |
| [18] | Centre lock, multipart – standard, vertical → <i>from page 416</i>                         |
| [19] | Centre lock, multipart – standard, horizontal → <i>from page 416</i>                       |
| [23] | Striker → <i>from page 456</i>                                                             |
| [24] | Striker, security → <i>from page 457</i>                                                   |
| [28] | Tilt striker → <i>from page 450</i>                                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                           |
| [35] | Turn-Only sash stay guide → <i>from page 371</i>                                           |
| [36] | Stay guide, basic security → <i>from page 370</i>                                          |
| [38] | Stay arm → <i>from page 386</i>                                                            |
| [44] | Corner hinge → <i>from page 436</i>                                                        |
| [45] | Pivot rest → <i>from page 440</i>                                                          |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                                         |
| [48] | Additional stay arm → <i>from page 470</i>                                                 |
| [49] | Support plate (profile-related) → <i>from page 516</i>                                     |
| [50] | Load transfer sash component → <i>from page 443</i>                                        |
| [51] | Load transfer frame component → <i>from page 443</i>                                       |
| [53] | Drilling protection → <i>from page 509</i>                                                 |
| [54] | Handle (see catalogue CTL_1)                                                               |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                                 |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                                |
| [80] | Fastening plate → <i>from page 511</i>                                                     |
| [81] | Run-up block → <i>from page 514</i>                                                        |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                   |

## Application range

| RC 1 N |                          |                       |                    |
|--------|--------------------------|-----------------------|--------------------|
|        |                          | Without load transfer | With load transfer |
|        | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|        | Sash rebate height (SRH) | 420 – 2600 mm         | 1000 – 2600 mm     |
|        | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

Efficient online hardware configurator for the custom configuration of individual window and door hardware components. All conventional shapes and opening types can be automatically configured quickly and easily. Individual parts lists, including application ranges and an exemplary hardware overview, can be ordered from your responsible sales representative.



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## Hardware overviews

### Hinge side Designo (HA 13)

T&T espagnolette – centred / variable handle height







The image contains two technical diagrams of a vehicle chassis, labeled 'Front' and 'Rear'. Each diagram shows the frame, suspension, and steering components with numbered callouts. The front view (left) includes callouts for the front suspension (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100), the steering rack (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100), and the front axle (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100). The rear view (right) includes callouts for the rear suspension (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100), the rear axle (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100), and the rear differential (e.g., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100).



| Item | Description                                                                                |
|------|--------------------------------------------------------------------------------------------|
| [2]  | T&T espagnolette – centred / variable handle height → <i>from page 310</i>                 |
| [5]  | Lever-operated espagnolette Plus – centred / variable handle height → <i>from page 344</i> |
| [9]  | Floating-mullion corner drive → <i>from page 354</i>                                       |
| [11] | Corner drive, standard → <i>from page 352</i>                                              |
| [13] | Special corner drive, short → <i>from page 353</i>                                         |
| [14] | Sash stay corner drive → <i>from page 356</i>                                              |
| [15] | Corner drive, standard RC 3 → <i>from page 352</i>                                         |
| [16] | Floating-mullion corner drive – slide guard → <i>from page 354</i>                         |
| [18] | Centre lock, multipart – security, vertical → <i>from page 416</i>                         |
| [19] | Centre lock, multipart – security, horizontal → <i>from page 416</i>                       |
| [24] | Striker, security → <i>from page 457</i>                                                   |
| [28] | Tilt striker → <i>from page 450</i>                                                        |
| [31] | Bullet-catch sash component → <i>from page 486</i>                                         |
| [32] | Bullet-catch frame component → <i>from page 486</i>                                        |
| [33] | Lifting mishandling device sash component → <i>from page 498</i>                           |
| [35] | Turn-Only sash stay guide → <i>from page 371</i>                                           |
| [36] | Stay guide, security → <i>from page 371</i>                                                |
| [38] | Stay arm → <i>from page 386</i>                                                            |
| [44] | Corner hinge → <i>from page 436</i>                                                        |
| [45] | Pivot rest → <i>from page 440</i>                                                          |
| [46] | Pivot rest cover (optional) → <i>from page 441</i>                                         |
| [48] | Additional stay arm → <i>from page 470</i>                                                 |
| [49] | Support plate (profile-related) → <i>from page 516</i>                                     |
| [50] | Load transfer sash component → <i>from page 443</i>                                        |
| [51] | Load transfer frame component → <i>from page 443</i>                                       |
| [53] | Drilling protection → <i>from page 509</i>                                                 |
| [54] | Handle (see catalogue CTL_1)                                                               |
| [61] | Turn restrictor 198, sash component → <i>from page 508</i>                                 |
| [62] | Turn restrictor 198, frame component → <i>from page 508</i>                                |
| [80] | Fastening plate → <i>from page 511</i>                                                     |
| [81] | Run-up block → <i>from page 514</i>                                                        |
| [82] | Anti-jemmy device → <i>from page 510</i>                                                   |

## Application range

| RC 2 / RC 2 N |                          |                       |                    |
|---------------|--------------------------|-----------------------|--------------------|
|               |                          | Without load transfer | With load transfer |
|               | Sash rebate width (SRW)  | 450 – 1400 mm         | 800 – 1400 mm      |
|               | Sash rebate height (SRH) | 520 – 2400 mm         | 1000 – 2400 mm     |
|               | Sash weight (S.kg)       | Max. 100 kg           | 80 – 150 kg        |



## INFO

### Roto Con Orders

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## Hardware overviews

### Hinge side Designo (HA 13)

T&T espagnolette – centred / variable handle height













**T&T espagnolette, VT – fixed handle height**

|                                   |     |
|-----------------------------------|-----|
| Backset 8 mm                      | 300 |
| Backset 15 mm                     | 301 |
| Backset 25, 30, 35, 40, 45, 50 mm | 303 |

**T&T espagnolette – centred / variable handle height**

|                                   |     |
|-----------------------------------|-----|
| Backset 8 mm                      | 310 |
| Backset 15 mm                     | 311 |
| Backset 25, 30, 35, 40, 45, 50 mm | 313 |

**T&T espagnolettes – Special solutions**

|                            |     |
|----------------------------|-----|
| T&T adaptable espagnolette | 318 |
| T&T espagnolette – comfort | 322 |

**Turn-Only/Tilt-Only espagnolette**

|                                   |     |
|-----------------------------------|-----|
| Backset 8 mm                      | 323 |
| Backset 15 mm                     | 324 |
| Backset 25, 30, 35, 40, 45, 50 mm | 327 |

**T-O backset espagnolette**

|                                      |     |
|--------------------------------------|-----|
| Adapter for PVC backset espagnolette | 329 |
|--------------------------------------|-----|

**Espagnolette connector**

|                       |     |
|-----------------------|-----|
| VT                    | 330 |
| Protrusion            | 330 |
| Tilt-Only sash        | 331 |
| Lateral Tilt&Turn     | 331 |
| Arched window         | 331 |
| Floating-mullion sash | 332 |

**Floating-mullion sash espagnolette**

|                       |     |
|-----------------------|-----|
| Standard              | 333 |
| Plus                  | 339 |
| Separate toggle lever | 344 |

**Shootbolt**

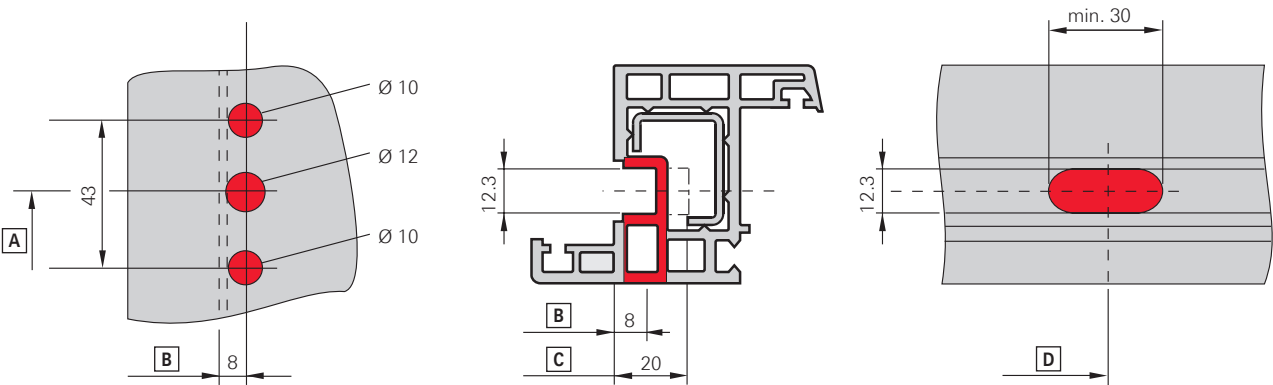
|                          |     |
|--------------------------|-----|
| Opposite hardware groove | 346 |
| Euro-rebate              | 346 |

## 4 Espagnolettes

### 4.1 T&T espagnolette, VT – fixed handle height

#### 4.1.1 Backset 8 mm

##### 4.1.1.1 Drilling and routing pattern



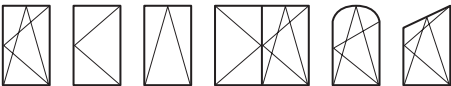
| Assignment | Meaning               |
|------------|-----------------------|
| [A]        | Handle height         |
| [B]        | Backset               |
| [C]        | Minimum routing depth |
| [D]        | Centre of gearbox     |



#### INFO

Ø 10 drilling depth 33 mm (for 16 mm overlap) for countersunk screws M 5 x ... DIN EN ISO 7046.

##### 4.1.1.2 Fixed handle height



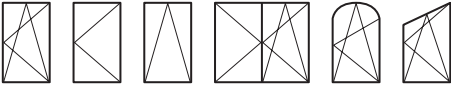
|   |             |      |     |      |   |   |   |       |       |          | Nº     |
|---|-------------|------|-----|------|---|---|---|-------|-------|----------|--------|
| 8 | 300 – 600   | 490  | 200 | 120  | N | N | Y | – / 1 | – / P | Roto Sil | 734530 |
|   | 511 – 710   | 600  | 200 | 170  | Y | N | Y | – / 1 | – / P | Roto Sil | 795325 |
|   | 601 – 800   | 690  | 200 | 263  | N | N | N | – / – | – / – | Roto Sil | 771919 |
|   |             |      | 200 | 263  | N | N | N | 1 / – | E / – | Roto Sil | 893471 |
|   | 801 – 1000  | 890  | 200 | 413  | Y | N | N | 1 / – | E / – | Roto Sil | 771920 |
|   | 1001 – 1200 | 1090 | 200 | 513  | Y | N | N | 1 / – | E / – | Roto Sil | 771921 |
|   | 1201 – 1400 | 1290 | 200 | 563  | Y | N | N | 1 / – | E / – | Roto Sil | 771922 |
|   | 1401 – 1600 | 1490 | 200 | 563  | Y | N | N | 2 / – | E / – | Roto Sil | 771923 |
|   | 1601 – 1800 | 1690 | 200 | 563  | Y | N | N | 2 / – | E / – | Roto Sil | 771924 |
|   |             |      | 200 | 1000 | Y | Y | N | 2 / – | E / – | Roto Sil | 795269 |
|   | 1801 – 2000 | 1890 | 200 | 1000 | Y | Y | N | 2 / – | E / – | Roto Sil | 795271 |
|   | 2001 – 2200 | 2090 | 200 | 1000 | Y | Y | N | 2 / – | E / – | Roto Sil | 795273 |
|   | 2201 – 2400 | 2290 | 200 | 1000 | Y | Y | N | 3 / – | E / – | Roto Sil | 795275 |



**INFO**

A centre lock is required from SRH 2401 mm.

**4.1.1.3 Fixed handle height – security**



|  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 8                                                                                 | 601 – 800                                                                         | 690                                                                               | 200                                                                               | 263                                                                               | N                                                                                   | N                                                                                   | N                                                                                   | – / –                                                                               | – / –                                                                               | Roto Sil                                                                            | 771919                                                                              |
|                                                                                   | 801 – 1000                                                                        | 890                                                                               | 200                                                                               | 413                                                                               | Y                                                                                   | N                                                                                   | N                                                                                   | 1 / –                                                                               | V / –                                                                               | Roto Sil                                                                            | 771940                                                                              |
|                                                                                   | 1001 – 1200                                                                       | 1090                                                                              | 200                                                                               | 513                                                                               | Y                                                                                   | N                                                                                   | N                                                                                   | 1 / –                                                                               | V / –                                                                               | Roto Sil                                                                            | 771941                                                                              |
|                                                                                   | 1201 – 1400                                                                       | 1290                                                                              | 200                                                                               | 563                                                                               | Y                                                                                   | N                                                                                   | N                                                                                   | 1 / –                                                                               | V / –                                                                               | Roto Sil                                                                            | 771942                                                                              |
|                                                                                   | 1401 – 1600                                                                       | 1490                                                                              | 200                                                                               | 563                                                                               | Y                                                                                   | N                                                                                   | N                                                                                   | 2 / –                                                                               | V / –                                                                               | Roto Sil                                                                            | 771943                                                                              |
|                                                                                   | 1601 – 1800                                                                       | 1690                                                                              | 200                                                                               | 563                                                                               | Y                                                                                   | N                                                                                   | N                                                                                   | 2 / –                                                                               | V / –                                                                               | Roto Sil                                                                            | 771944                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 200                                                                               | 1000                                                                              | Y                                                                                   | Y                                                                                   | N                                                                                   | 2 / –                                                                               | V / –                                                                               | Roto Sil                                                                            | 795270                                                                              |
|                                                                                   | 1801 – 2000                                                                       | 1890                                                                              | 200                                                                               | 1000                                                                              | Y                                                                                   | Y                                                                                   | N                                                                                   | 2 / –                                                                               | V / –                                                                               | Roto Sil                                                                            | 795272                                                                              |
|                                                                                   | 2001 – 2200                                                                       | 2090                                                                              | 200                                                                               | 1000                                                                              | Y                                                                                   | Y                                                                                   | N                                                                                   | 3 / –                                                                               | V / –                                                                               | Roto Sil                                                                            | 795274                                                                              |
| 2201 – 2400                                                                       | 2290                                                                              | 200                                                                               | 1000                                                                              | Y                                                                                 | Y                                                                                   | N                                                                                   | 3 / –                                                                               | V / –                                                                               | Roto Sil                                                                            | 795276                                                                              |                                                                                     |

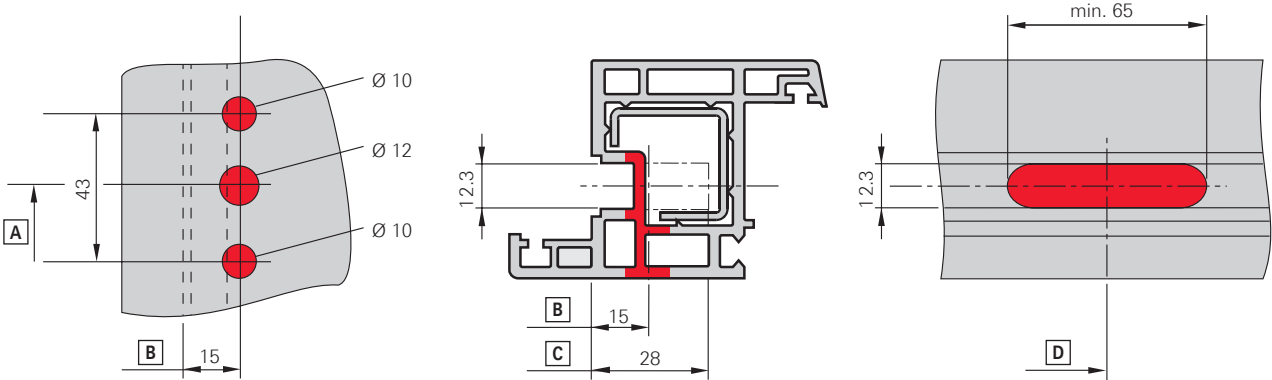


**INFO**

A centre lock is required from SRH 2401 mm.

**4.1.2 Backset 15 mm**

**4.1.2.1 Drilling and routing pattern**



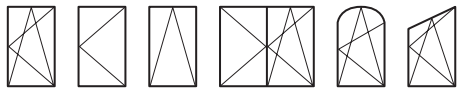
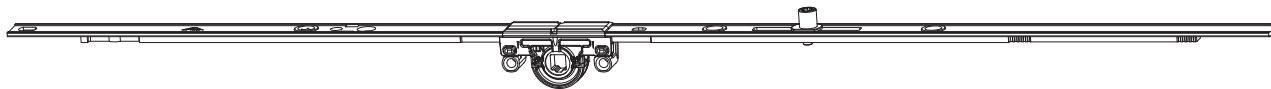
| Assignment | Meaning               |
|------------|-----------------------|
| [A]        | Handle height         |
| [B]        | Backset               |
| [C]        | Minimum routing depth |
| [D]        | Centre of gearbox     |



**INFO**

Ø 10 drilling depth 33 mm (for 16 mm overlap) for countersunk screws M 5 x ... DIN EN ISO 7046.

#### 4.1.2.2 Fixed handle height



| 15 |             |      |     |      |   |   |   |       |       |          | Nº      |
|----|-------------|------|-----|------|---|---|---|-------|-------|----------|---------|
|    | 280 – 570   | 460  | 200 | 120  | N | N | Y | – / 1 | – / P | Roto Sil | 742199  |
|    | 511 – 710   | 600  | 200 | 170  | Y | N | Y | – / 1 | – / P | Roto Sil | 795324  |
|    |             |      | 200 | 170  | Y | N | N | 1 / – | P / – | Roto Sil | 795277  |
|    | 601 – 800   | 690  | 200 | 263  | Y | N | N | – / – | – / – | Roto Sil | 619591  |
|    |             |      | 200 | 263  | N | N | N | 1 / – | E / – | Roto Sil | 2040171 |
|    | 801 – 1000  | 890  | 200 | 413  | Y | N | N | – / – | – / – | Roto Sil | 774233  |
|    |             |      | 200 | 413  | Y | N | N | 1 / – | E / – | Roto Sil | 619592  |
|    | 1001 – 1200 | 1090 | 200 | 513  | Y | N | N | – / – | – / – | Roto Sil | 891693  |
|    |             |      | 200 | 513  | Y | N | N | 1 / – | E / – | Roto Sil | 619593  |
|    | 1201 – 1400 | 1290 | 200 | 563  | Y | N | N | – / – | – / – | Roto Sil | 891694  |
|    |             |      | 200 | 563  | Y | N | N | 1 / – | E / – | Roto Sil | 619594  |
|    | 1401 – 1600 | 1490 | 200 | 563  | Y | N | N | – / – | – / – | Roto Sil | 891700  |
|    |             |      | 200 | 563  | Y | N | N | 2 / – | E / – | Roto Sil | 619595  |
|    | 1601 – 1800 | 1690 | 200 | 563  | Y | N | N | – / – | – / – | Roto Sil | 891701  |
|    |             |      | 200 | 563  | Y | N | N | 2 / – | E / – | Roto Sil | 619596  |
|    |             |      | 200 | 1000 | Y | Y | N | – / – | – / – | Roto Sil | 891702  |
|    |             |      | 200 | 1000 | Y | Y | N | 2 / – | E / – | Roto Sil | 838345  |
|    | 1801 – 2000 | 1890 | 200 | 1000 | Y | Y | N | – / – | – / – | Roto Sil | 891703  |
|    |             |      | 200 | 1000 | Y | Y | N | 2 / – | E / – | Roto Sil | 794637  |
|    | 2001 – 2200 | 2090 | 200 | 1000 | Y | Y | N | – / – | – / – | Roto Sil | 891704  |
|    |             |      | 200 | 1000 | Y | Y | N | 2 / – | E / – | Roto Sil | 795280  |
|    |             |      | 200 | 1000 | Y | Y | N | 3 / – | E / – | Roto Sil | 794638  |
|    | 2201 – 2400 | 2290 | 200 | 1000 | Y | Y | N | – / – | – / – | Roto Sil | 891705  |
|    |             |      | 200 | 1000 | Y | Y | N | 2 / – | E / – | Roto Sil | 795282  |
|    |             |      | 200 | 1000 | Y | Y | N | 3 / – | E / – | Roto Sil | 794639  |

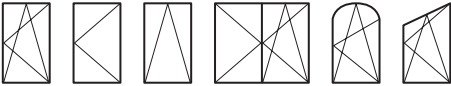
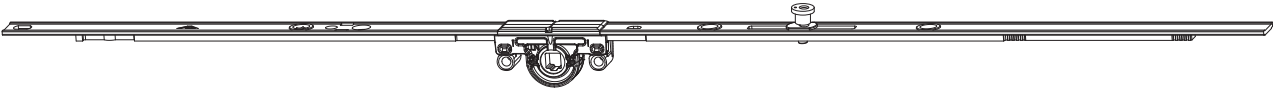


#### INFO

A centre lock is required from SRH 2401 mm.



4.1.2.3 Fixed handle height – security



| 15 | 601 – 800   | 690  | 200 | 263  | Y | N | N | – / – | – / – | Roto Sil | 619591  |
|----|-------------|------|-----|------|---|---|---|-------|-------|----------|---------|
|    | 801 – 1000  | 890  | 200 | 413  | Y | N | N | 1 / – | V / – | Roto Sil | 2040170 |
|    | 1001 – 1200 | 1090 | 200 | 513  | Y | N | N | 1 / – | V / – | Roto Sil | 626543  |
|    | 1201 – 1400 | 1290 | 200 | 563  | Y | N | N | 1 / – | V / – | Roto Sil | 626544  |
|    | 1401 – 1600 | 1490 | 200 | 563  | Y | N | N | 2 / – | V / – | Roto Sil | 626575  |
|    | 1601 – 1800 | 1690 | 200 | 563  | Y | N | N | 2 / – | V / – | Roto Sil | 626576  |
|    |             |      | 200 | 1000 | Y | Y | N | 2 / – | V / – | Roto Sil | 838324  |
|    | 1801 – 2000 | 1890 | 200 | 1000 | Y | Y | N | 2 / – | V / – | Roto Sil | 794641  |
|    | 2001 – 2200 | 2090 | 200 | 1000 | Y | Y | N | 3 / – | V / – | Roto Sil | 794642  |
|    | 2201 – 2400 | 2290 | 200 | 1000 | Y | Y | N | 3 / – | V / – | Roto Sil | 794643  |



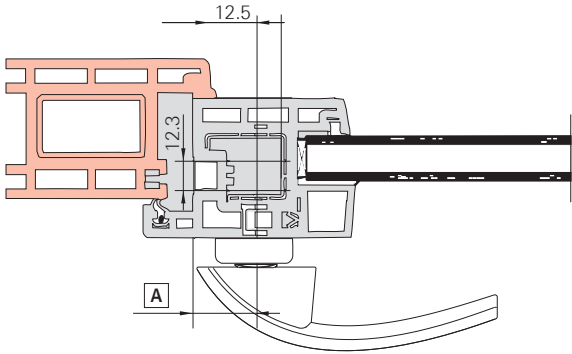
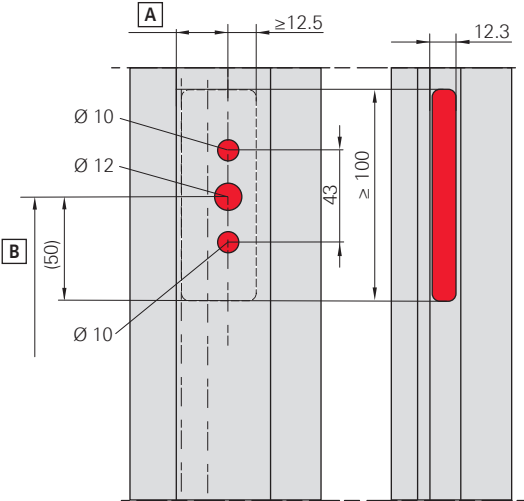
INFO

A centre lock is required from SRH 2401 mm.

4.1.3 Backset 25, 30, 35, 40, 45, 50 mm

4.1.3.1 Drilling and routing pattern

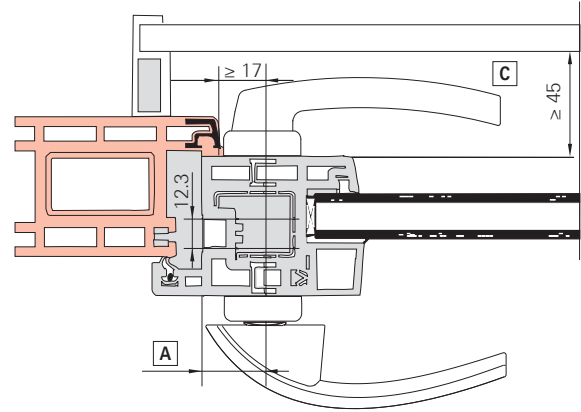
Not lockable



| Assignment | Meaning       |
|------------|---------------|
| [A]        | Backset       |
| [B]        | Handle height |

Backset 25, 30, 35, 40, 45, 50 mm

Technical drawing of a 100 mm high profile with a 12.3 mm wide flange. The drawing shows a cross-section with a central vertical slot and two side slots. Dimensions include a total height of 145 mm (147 mm), a central slot width of 43 mm, and a side slot width of 12.3 mm. The drawing is labeled with 'A' and 'B' at the corners.



| Assignment | Meaning            |
|------------|--------------------|
| [A]        | Backset            |
| [B]        | Handle height      |
| [C]        | On roller shutters |

Cross section: doors (inward opening).

Espagnolettes

T&T espagnolette, VT – fixed handle height

Backset 25, 30, 35, 40, 45, 50 mm



| Assignment | Meaning                                                                                                                                                                                                                                                                              |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [1]        | Espagnolette faceplate – fixed handle height → <i>from page 306</i>                                                                                                                                                                                                                  |
| [2]        | Gearbox → <i>from page 308</i>                                                                                                                                                                                                                                                       |
| [3]        | Lock casing – profile cylinder → <i>from page 308</i><br>Lock casing – round cylinder (not sh.) → <i>from page 308</i>                                                                                                                                                               |
| [A]        | Gearbox which can be installed in the espagnolette faceplate                                                                                                                                                                                                                         |
| [B]        | Lock casing which can be installed in the espagnolette faceplate                                                                                                                                                                                                                     |
|            | <div><b>INFO</b><br/>Lock casing requires an espagnolette faceplate with product feature  bullet catch “J”.</div> |

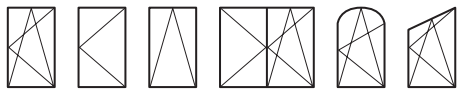


## Espagnolettes

### T&T espagnolette, VT – fixed handle height

Backset 25, 30, 35, 40, 45, 50 mm

#### 4.1.3.3 Espagnolette faceplate – fixed handle height



|  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Basic security                                                                    | 511 – 710                                                                         | 600                                                                               | 200                                                                               | 170                                                                               | Y                                                                                 | N                                                                                 | –                                                                                 | –                                                                                   | Roto Sil                                                                            | 788286                                                                              |                                                                                     |
|                                                                                   | 601 – 800                                                                         | 690                                                                               | 200                                                                               | 263                                                                               | Y                                                                                 | N                                                                                 | –                                                                                 | –                                                                                   | Roto Sil                                                                            | 788302                                                                              |                                                                                     |
|                                                                                   | 801 – 1000                                                                        | 890                                                                               | 200                                                                               | 413                                                                               | Y                                                                                 | N                                                                                 | 1                                                                                 | E                                                                                   | Roto Sil                                                                            | 788303                                                                              |                                                                                     |
|                                                                                   | 1001 – 1200                                                                       | 1090                                                                              | 200                                                                               | 513                                                                               | Y                                                                                 | N                                                                                 | 1                                                                                 | E                                                                                   | Roto Sil                                                                            | 788304                                                                              |                                                                                     |
|                                                                                   | 1201 – 1400                                                                       | 1290                                                                              | 200                                                                               | 563                                                                               | Y                                                                                 | N                                                                                 | 1                                                                                 | E                                                                                   | Roto Sil                                                                            | 788305                                                                              |                                                                                     |
|                                                                                   | 1401 – 1600                                                                       | 1490                                                                              | 200                                                                               | 563                                                                               | Y                                                                                 | N                                                                                 | 2                                                                                 | E                                                                                   | Roto Sil                                                                            | 788306                                                                              |                                                                                     |
|                                                                                   | 1601 – 1800                                                                       | 1690                                                                              | 200                                                                               | 563                                                                               | Y                                                                                 | N                                                                                 | 2                                                                                 | E                                                                                   | Roto Sil                                                                            | 788307                                                                              |                                                                                     |
|                                                                                   |                                                                                   |                                                                                   | 200                                                                               | 1000                                                                              | Y                                                                                 | Y                                                                                 | 2                                                                                 | E                                                                                   | Roto Sil                                                                            | 788308                                                                              |                                                                                     |
|                                                                                   | 1801 – 2000                                                                       | 1890                                                                              | 200                                                                               | 1000                                                                              | Y                                                                                 | Y                                                                                 | 2                                                                                 | E                                                                                   | Roto Sil                                                                            | 788309                                                                              |                                                                                     |
|                                                                                   | 2001 – 2200                                                                       | 2090                                                                              | 200                                                                               | 1000                                                                              | Y                                                                                 | Y                                                                                 | 3                                                                                 | E                                                                                   | Roto Sil                                                                            | 788310                                                                              |                                                                                     |
| 2201 – 2400                                                                       | 2290                                                                              | 200                                                                               | 1000                                                                              | Y                                                                                 | Y                                                                                 | 3                                                                                 | E                                                                                 | Roto Sil                                                                            | 788311                                                                              |                                                                                     |                                                                                     |
| Security                                                                          | 801 – 1000                                                                        | 890                                                                               | 200                                                                               | 413                                                                               | Y                                                                                 | N                                                                                 | 1                                                                                 | V                                                                                   | Roto Sil                                                                            | 795284                                                                              |                                                                                     |
|                                                                                   | 1001 – 1200                                                                       | 1090                                                                              | 200                                                                               | 513                                                                               | Y                                                                                 | N                                                                                 | 1                                                                                 | V                                                                                   | Roto Sil                                                                            | 795285                                                                              |                                                                                     |
|                                                                                   | 1201 – 1400                                                                       | 1290                                                                              | 200                                                                               | 563                                                                               | Y                                                                                 | N                                                                                 | 1                                                                                 | V                                                                                   | Roto Sil                                                                            | 795286                                                                              |                                                                                     |
|                                                                                   | 1401 – 1600                                                                       | 1490                                                                              | 200                                                                               | 563                                                                               | Y                                                                                 | N                                                                                 | 2                                                                                 | V                                                                                   | Roto Sil                                                                            | 795287                                                                              |                                                                                     |
|                                                                                   | 1601 – 1800                                                                       | 1690                                                                              | 200                                                                               | 563                                                                               | Y                                                                                 | N                                                                                 | 2                                                                                 | V                                                                                   | Roto Sil                                                                            | 795288                                                                              |                                                                                     |
|                                                                                   |                                                                                   |                                                                                   | 200                                                                               | 1000                                                                              | Y                                                                                 | Y                                                                                 | 2                                                                                 | V                                                                                   | Roto Sil                                                                            | 788312                                                                              |                                                                                     |
|                                                                                   | 1801 – 2000                                                                       | 1890                                                                              | 200                                                                               | 1000                                                                              | Y                                                                                 | Y                                                                                 | 2                                                                                 | V                                                                                   | Roto Sil                                                                            | 788313                                                                              |                                                                                     |
|                                                                                   | 2001 – 2200                                                                       | 2090                                                                              | 200                                                                               | 1000                                                                              | Y                                                                                 | Y                                                                                 | 3                                                                                 | V                                                                                   | Roto Sil                                                                            | 788314                                                                              |                                                                                     |
| 2201 – 2400                                                                       | 2290                                                                              | 200                                                                               | 1000                                                                              | Y                                                                                 | Y                                                                                 | 3                                                                                 | V                                                                                 | Roto Sil                                                                            | 788315                                                                              |                                                                                     |                                                                                     |

For compatible gearboxes, see → *from page 308*.

For compatible lock casings, see → *from page 308*.



#### INFO

Lock casing requires an espagnolette faceplate with product feature bullet catch “Y”.



#### INFO

A centre lock is required from SRH 2401 mm.





4.1.3.4 Espagnolette faceplate – fixed handle height, second opening sash



|             |      |     |      |   |   |          | Nº      |
|-------------|------|-----|------|---|---|----------|---------|
| 801 – 1000  | 890  | 200 | 413  | N | 1 | Roto Sil | 2027942 |
| 1001 – 1200 | 1090 | 200 | 513  | N | 1 | Roto Sil | 2027943 |
| 1201 – 1400 | 1290 | 200 | 563  | N | 1 | Roto Sil | 2044743 |
| 1401 – 1600 | 1490 | 200 | 563  | N | 2 | Roto Sil | 2027970 |
| 1601 – 1800 | 1690 | 200 | 563  | N | 2 | Roto Sil | 2042225 |
|             |      | 200 | 1000 | Y | 2 | Roto Sil | 2027971 |
| 1801 – 2000 | 1890 | 200 | 1000 | Y | 2 | Roto Sil | 2027972 |
| 2001 – 2200 | 2090 | 200 | 1000 | Y | 3 | Roto Sil | 2027973 |
| 2201 – 2400 | 2290 | 200 | 1000 | Y | 3 | Roto Sil | 2027974 |

For compatible gearboxes, see → *from page 308*.



INFO

A centre lock is required from SRH 2401 mm.

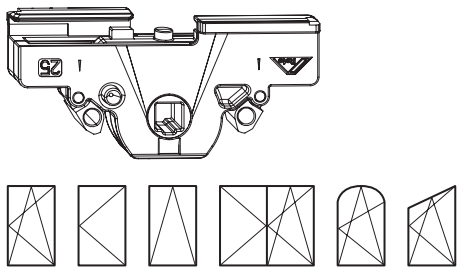


INFO

Stop for lifting mishandling device is integrated.



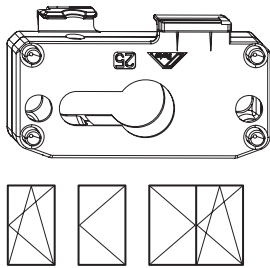
**4.1.3.5 Gearbox**



|  |  |  | Nº     |
|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|
|                                                                                 | 25                                                                                | Roto Sil                                                                          | 787675 |
|                                                                                 | 30                                                                                | Roto Sil                                                                          | 787677 |
|                                                                                 | 35                                                                                | Roto Sil                                                                          | 787678 |
|                                                                                 | 40                                                                                | Roto Sil                                                                          | 787679 |
|                                                                                 | 45                                                                                | Roto Sil                                                                          | 787680 |
|                                                                                 | 50                                                                                | Roto Sil                                                                          | 787681 |

**4.1.3.6 Lock casing**

**Profile cylinders**



|  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|                                                                                   | 25                                                                                  | Roto Sil                                                                            | 787656 |
|                                                                                   | 30                                                                                  | Roto Sil                                                                            | 787658 |
|                                                                                   | 35                                                                                  | Roto Sil                                                                            | 787659 |
|                                                                                   | 40                                                                                  | Roto Sil                                                                            | 787660 |
|                                                                                   | 45                                                                                  | Roto Sil                                                                            | 787661 |
|                                                                                   | 50                                                                                  | Roto Sil                                                                            | 787663 |

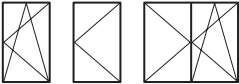
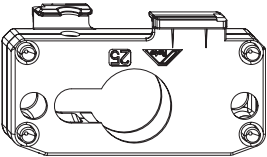
Espagnolettes

T&T espagnolette, VT – fixed handle height

Backset 25, 30, 35, 40, 45, 50 mm



Round cylinders



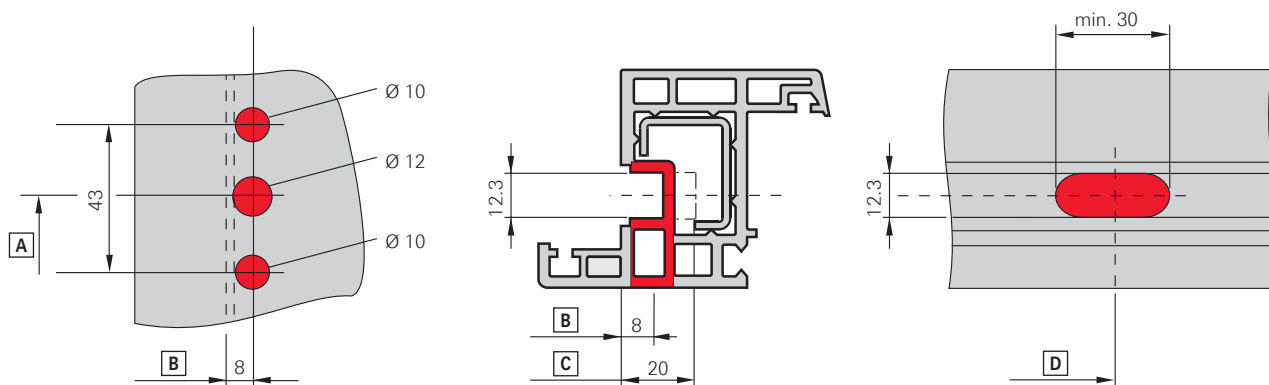
|  |    |  | Nº     |
|-----------------------------------------------------------------------------------|----|-----------------------------------------------------------------------------------|--------|
|                                                                                   | 25 | Roto Sil                                                                          | 788164 |
|                                                                                   | 30 | Roto Sil                                                                          | 788275 |
|                                                                                   | 35 | Roto Sil                                                                          | 788276 |
|                                                                                   | 40 | Roto Sil                                                                          | 788277 |
|                                                                                   | 45 | Roto Sil                                                                          | 788278 |
|                                                                                   | 50 | Roto Sil                                                                          | 788279 |



## 4.2 T&T espagnolette – centred / variable handle height

### 4.2.1 Backset 8 mm

#### 4.2.1.1 Drilling and routing pattern



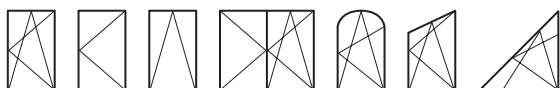
| Assignment | Meaning               |
|------------|-----------------------|
| [A]        | Handle height         |
| [B]        | Backset               |
| [C]        | Minimum routing depth |
| [D]        | Centre of gearbox     |



#### INFO

Ø 10 drilling depth 33 mm (for 16 mm overlap) for countersunk screws M 5 x ... DIN EN ISO 7046.

#### 4.2.1.2 Centred / variable handle height



|   |  |  |  |  |  |  |  |  |  |  |  |
|---|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 8 | 380 – 620                                                                           | 500                                                                                 | 70 / 70                                                                             | 190 – 260                                                                           | N                                                                                   | N                                                                                   | –                                                                                   | –                                                                                     | Roto Sil                                                                              | 259764                                                                                |                                                                                       |
|   | 621 – 1020                                                                          | 800                                                                                 | 200 / 200                                                                           | 311 – 510                                                                           | Y                                                                                   | N                                                                                   | 1                                                                                   | E                                                                                     | Roto Sil                                                                              | 840794                                                                                |                                                                                       |
|   | 801 – 1200                                                                          | 980                                                                                 | 200 / 200                                                                           | 401 – 600                                                                           | Y                                                                                   | N                                                                                   | 1                                                                                   | E                                                                                     | Roto Sil                                                                              | 623646                                                                                |                                                                                       |
|   | 1201 – 1600                                                                         | 1380                                                                                | 200 / 200                                                                           | 601 – 800                                                                           | Y                                                                                   | N                                                                                   | 2                                                                                   | E                                                                                     | Roto Sil                                                                              | 259768                                                                                |                                                                                       |
|   | 1601 – 2000                                                                         | 1780                                                                                | 200 / 200                                                                           | 801 – 1000                                                                          | Y                                                                                   | Y                                                                                   | 2                                                                                   | E                                                                                     | Roto Sil                                                                              | 795374                                                                                |                                                                                       |
|   | 2001 – 2400                                                                         | 2180                                                                                | 200 / 200                                                                           | 1001 – 1200                                                                         | Y                                                                                   | Y                                                                                   | 4                                                                                   | E                                                                                     | Roto Sil                                                                              | 795376                                                                                |                                                                                       |

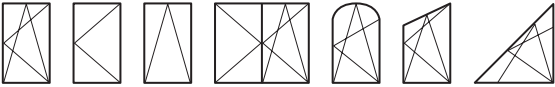


#### INFO

A centre lock is required from SRH 2401 mm.



4.2.1.3 Centred / variable handle height – security



|  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 8                                                                                 | 621 – 1020                                                                        | 800                                                                               | 200 / 200                                                                         | 311 – 510                                                                         | Y                                                                                 | N                                                                                  | 1                                                                                   | V                                                                                   | Roto Sil                                                                            | 840812                                                                              |
|                                                                                   | 801 – 1200                                                                        | 980                                                                               | 200 / 200                                                                         | 401 – 600                                                                         | Y                                                                                 | N                                                                                  | 1                                                                                   | V                                                                                   | Roto Sil                                                                            | 502075                                                                              |
|                                                                                   | 1201 – 1600                                                                       | 1380                                                                              | 200 / 200                                                                         | 601 – 800                                                                         | Y                                                                                 | N                                                                                  | 2                                                                                   | V                                                                                   | Roto Sil                                                                            | 502076                                                                              |
|                                                                                   | 1601 – 2000                                                                       | 1780                                                                              | 200 / 200                                                                         | 801 – 1000                                                                        | Y                                                                                 | Y                                                                                  | 2                                                                                   | V                                                                                   | Roto Sil                                                                            | 795375                                                                              |
|                                                                                   | 2001 – 2400                                                                       | 2180                                                                              | 200 / 200                                                                         | 1001 – 1200                                                                       | Y                                                                                 | Y                                                                                  | 4                                                                                   | V                                                                                   | Roto Sil                                                                            | 795377                                                                              |

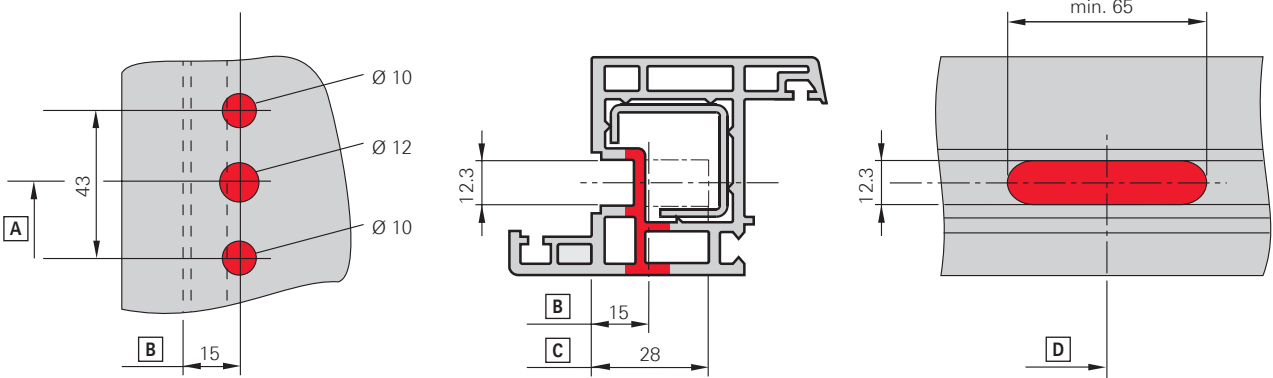


INFO

A centre lock is required from SRH 2401 mm.

4.2.2 Backset 15 mm

4.2.2.1 Drilling and routing pattern



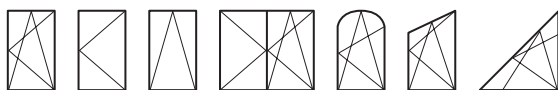
| Assignment | Meaning               |
|------------|-----------------------|
| [A]        | Handle height         |
| [B]        | Backset               |
| [C]        | Minimum routing depth |
| [D]        | Centre of gearbox     |



INFO

Ø 10 drilling depth 33 mm (for 16 mm overlap) for countersunk screws M 5 x ... DIN EN ISO 7046.

#### 4.2.2.2 Centred / variable handle height



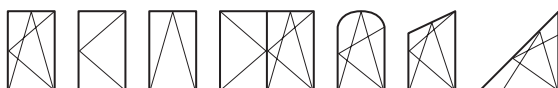
|    |             |      |           |             |   |   |   |   |          |        |  | Nº |
|----|-------------|------|-----------|-------------|---|---|---|---|----------|--------|--|----|
| 15 | 310 – 620   | 430  | 100 / 100 | 310 – 155   | N | N | – | – | Roto Sil | 259717 |  |    |
|    | 310 – 850   | 630  | 200 / 200 | 155 – 425   | N | N | – | – | Roto Sil | 742202 |  |    |
|    | 621 – 800   | 580  | 90 / 90   | 311 – 400   | Y | N | – | – | Roto Sil | 289862 |  |    |
|    | 621 – 800   |      | 90 / 90   | 311 – 400   | Y | N | 1 | E | Roto Sil | 259719 |  |    |
|    | 801 – 1200  | 980  | 200 / 200 | 401 – 600   | Y | N | – | – | Roto Sil | 289863 |  |    |
|    | 801 – 1200  |      | 200 / 200 | 401 – 600   | Y | N | 1 | E | Roto Sil | 259720 |  |    |
|    | 1001 – 1400 | 1180 | 200 / 200 | 501 – 700   | Y | N | 2 | E | Roto Sil | 796459 |  |    |
|    | 1201 – 1600 | 1380 | 200 / 200 | 601 – 800   | Y | N | – | – | Roto Sil | 289864 |  |    |
|    | 1201 – 1600 |      | 200 / 200 | 601 – 800   | Y | N | 2 | E | Roto Sil | 259721 |  |    |
|    | 1601 – 2000 | 1780 | 200 / 200 | 801 – 1000  | Y | Y | – | – | Roto Sil | 289865 |  |    |
|    | 1601 – 2000 |      | 200 / 200 | 801 – 1000  | Y | Y | 2 | E | Roto Sil | 795389 |  |    |
|    | 2001 – 2400 | 2180 | 200 / 200 | 1001 – 1200 | Y | Y | – | – | Roto Sil | 289866 |  |    |
|    | 2001 – 2400 |      | 200 / 200 | 1001 – 1200 | Y | Y | 4 | E | Roto Sil | 795392 |  |    |



#### INFO

A centre lock is required from SRH 2401 mm.

#### 4.2.2.3 Centred / variable handle height – security



|    |             |      |           |             |   |   |   |   |          |        |  | Nº |
|----|-------------|------|-----------|-------------|---|---|---|---|----------|--------|--|----|
| 15 | 310 – 620   | 430  | 100 / 100 | 310 – 155   | N | N | – | – | Roto Sil | 259717 |  |    |
|    | 621 – 800   | 580  | 90 / 90   | 311 – 400   | Y | N | 1 | V | Roto Sil | 355743 |  |    |
|    | 801 – 1200  | 980  | 200 / 200 | 401 – 600   | Y | N | 1 | V | Roto Sil | 355744 |  |    |
|    | 1201 – 1600 | 1380 | 200 / 200 | 601 – 800   | Y | N | 2 | V | Roto Sil | 355745 |  |    |
|    | 1601 – 2000 | 1780 | 200 / 200 | 801 – 1000  | Y | Y | 2 | V | Roto Sil | 795390 |  |    |
|    | 2001 – 2400 | 2180 | 200 / 200 | 1001 – 1200 | Y | Y | 4 | V | Roto Sil | 795393 |  |    |



#### INFO

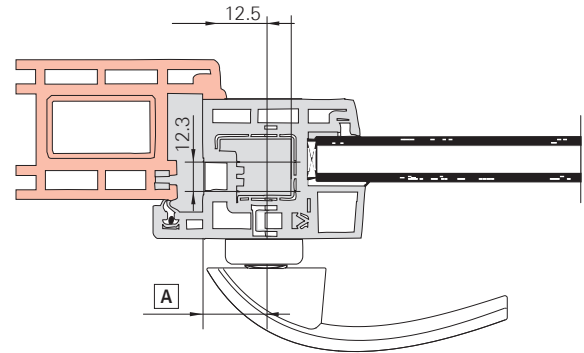
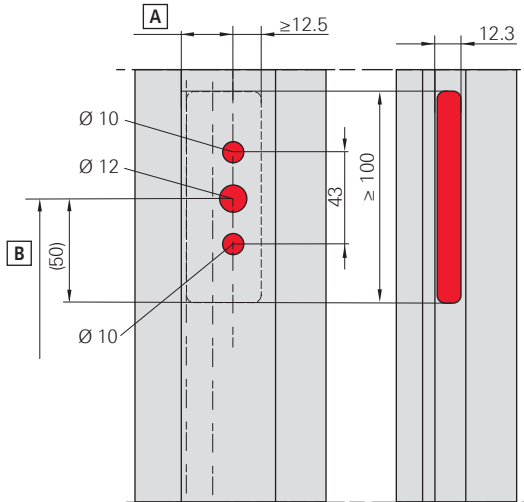
A centre lock is required from SRH 2401 mm.



## 4.2.3 Backset 25, 30, 35, 40, 45, 50 mm

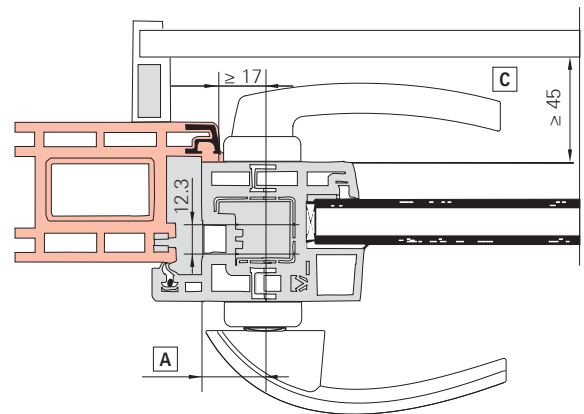
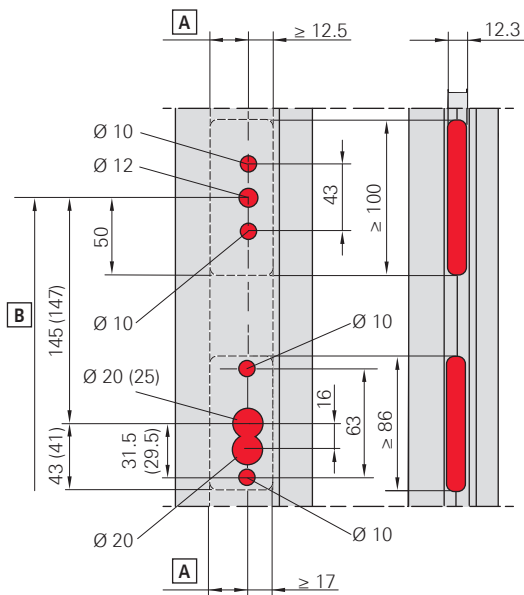
### 4.2.3.1 Drilling and routing pattern

#### Not lockable



| Assignment | Meaning       |
|------------|---------------|
| [A]        | Backset       |
| [B]        | Handle height |

#### Lockable



| Assignment | Meaning            |
|------------|--------------------|
| [A]        | Backset            |
| [B]        | Handle height      |
| [C]        | On roller shutters |



### INFO

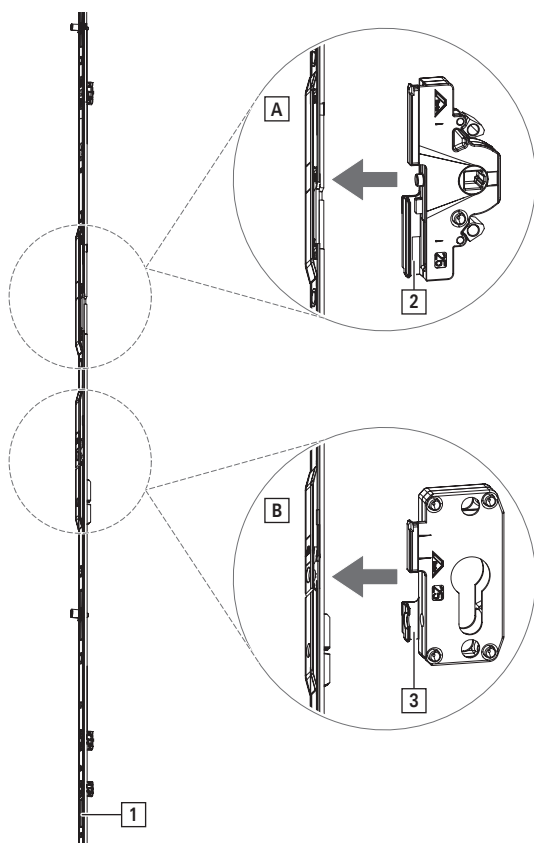
Cross section: doors (inward opening).

## Espagnolettes

### T&T espagnolette – centred / variable handle height

Backset 25, 30, 35, 40, 45, 50 mm

#### 4.2.3.2 Configuration



| Assignment                                                                                                                                                                                                                                                                                                     | Meaning                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| [1]                                                                                                                                                                                                                                                                                                            | Espagnolette faceplate – centred / variable handle height → <i>from page 314</i>                                       |
| [2]                                                                                                                                                                                                                                                                                                            | Gearbox → <i>from page 316</i>                                                                                         |
| [3]                                                                                                                                                                                                                                                                                                            | Lock casing – profile cylinder → <i>from page 316</i><br>Lock casing – round cylinder (not sh.) → <i>from page 316</i> |
| [A]                                                                                                                                                                                                                                                                                                            | Gearbox which can be installed in the espagnolette faceplate                                                           |
| [B]                                                                                                                                                                                                                                                                                                            | Lock casing which can be installed in the espagnolette faceplate                                                       |
| <div>  <b>INFO</b><br/>           Lock casing requires an espagnolette faceplate with product feature  bullet catch “J”.         </div> |                                                                                                                        |

#### 4.2.3.3 Espagnolette faceplate – centred / variable handle height



|  |  |  |  |  |  |  |  # |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Basic security                                                                      | 430 – 920                                                                           | 700                                                                                 | 200 / 200                                                                           | 215 – 460                                                                           | N                                                                                   | N                                                                                   | –                                                                                       | –                                                                                     | Roto Sil                                                                              | 840759 |
|                                                                                     | 621 – 800                                                                           | 580                                                                                 | 90 / 90                                                                             | 311 – 400                                                                           | Y                                                                                   | N                                                                                   | 1                                                                                       | E                                                                                     | Roto Sil                                                                              | 788318 |
|                                                                                     | 801 – 1200                                                                          | 980                                                                                 | 200 / 200                                                                           | 401 – 600                                                                           | Y                                                                                   | N                                                                                   | 1                                                                                       | E                                                                                     | Roto Sil                                                                              | 788320 |
|                                                                                     | 1201 – 1600                                                                         | 1380                                                                                | 200 / 200                                                                           | 601 – 800                                                                           | Y                                                                                   | N                                                                                   | 2                                                                                       | E                                                                                     | Roto Sil                                                                              | 788322 |
|                                                                                     | 1601 – 2000                                                                         | 1780                                                                                | 200 / 200                                                                           | 801 – 1000                                                                          | Y                                                                                   | Y                                                                                   | 2                                                                                       | E                                                                                     | Roto Sil                                                                              | 788324 |
|                                                                                     | 2001 – 2400                                                                         | 2180                                                                                | 200 / 200                                                                           | 1001 – 1200                                                                         | Y                                                                                   | Y                                                                                   | 4                                                                                       | E                                                                                     | Roto Sil                                                                              | 788326 |



## Espagnolettes

### T&T espagnolette – centred / variable handle height

Backset 25, 30, 35, 40, 45, 50 mm



|          |             |      |           |             |   |   |   |   |          | Nº     |
|----------|-------------|------|-----------|-------------|---|---|---|---|----------|--------|
| Security | 621 – 800   | 580  | 90 / 90   | 311 – 400   | Y | N | 1 | V | Roto Sil | 833746 |
|          | 801 – 1200  | 980  | 200 / 200 | 401 – 600   | Y | N | 1 | V | Roto Sil | 833747 |
|          | 1201 – 1600 | 1380 | 200 / 200 | 601 – 800   | Y | N | 2 | V | Roto Sil | 833748 |
|          | 1601 – 2000 | 1780 | 200 / 200 | 801 – 1000  | Y | Y | 2 | V | Roto Sil | 795365 |
|          | 2001 – 2400 | 2180 | 200 / 200 | 1001 – 1200 | Y | Y | 4 | V | Roto Sil | 795367 |

For compatible gearboxes, see → *from page 316*.

For compatible lock casings, see → *from page 316*.



#### INFO

Lock casing requires an espagnolette faceplate with product feature bullet catch “Y”.



#### INFO

A centre lock is required from SRH 2401 mm.

#### 4.2.3.4 Espagnolette faceplate – centred / variable handle height, second opening sash



|             |      |           |             |   |   |          | Nº     |
|-------------|------|-----------|-------------|---|---|----------|--------|
| 801 – 1200  | 980  | 200 / 200 | 401 – 600   | N | 1 | Roto Sil | 788319 |
| 1201 – 1600 | 1380 | 200 / 200 | 601 – 800   | N | 2 | Roto Sil | 788321 |
| 1601 – 2000 | 1780 | 200 / 200 | 801 – 1000  | Y | 2 | Roto Sil | 788323 |
| 2001 – 2400 | 2180 | 200 / 200 | 1001 – 1200 | Y | 4 | Roto Sil | 788325 |

For compatible gearboxes, see → *from page 316*.



#### INFO

A centre lock is required from SRH 2401 mm.



#### INFO

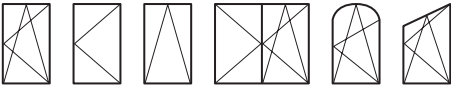
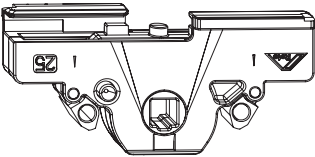
Stop for lifting mishandling device is integrated.

Espagnolettes

T&T espagnolette – centred / variable handle height

Backset 25, 30, 35, 40, 45, 50 mm

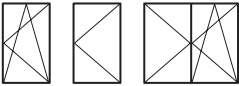
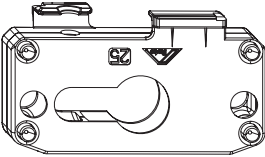
4.2.3.5 Gearbox



|  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|
| 25                                                                                | Roto Sil                                                                          | 787675 |
| 30                                                                                | Roto Sil                                                                          | 787677 |
| 35                                                                                | Roto Sil                                                                          | 787678 |
| 40                                                                                | Roto Sil                                                                          | 787679 |
| 45                                                                                | Roto Sil                                                                          | 787680 |
| 50                                                                                | Roto Sil                                                                          | 787681 |

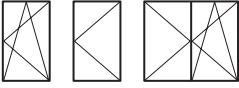
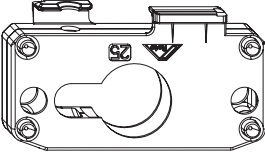
4.2.3.6 Lock casing

Profile cylinder



|  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| 25                                                                                  | Roto Sil                                                                            | 787656 |
| 30                                                                                  | Roto Sil                                                                            | 787658 |
| 35                                                                                  | Roto Sil                                                                            | 787659 |
| 40                                                                                  | Roto Sil                                                                            | 787660 |
| 45                                                                                  | Roto Sil                                                                            | 787661 |
| 50                                                                                  | Roto Sil                                                                            | 787663 |

Round cylinder



|  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| 25                                                                                  | Roto Sil                                                                            | 788164 |
| 30                                                                                  | Roto Sil                                                                            | 788275 |
| 35                                                                                  | Roto Sil                                                                            | 788276 |
| 40                                                                                  | Roto Sil                                                                            | 788277 |

Espagnolettes

T&T espagnolette – centred / variable handle height

Backset 25, 30, 35, 40, 45, 50 mm



|  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|
| 45                                                                                | Roto Sil                                                                          | 788278 |
| 50                                                                                | Roto Sil                                                                          | 788279 |

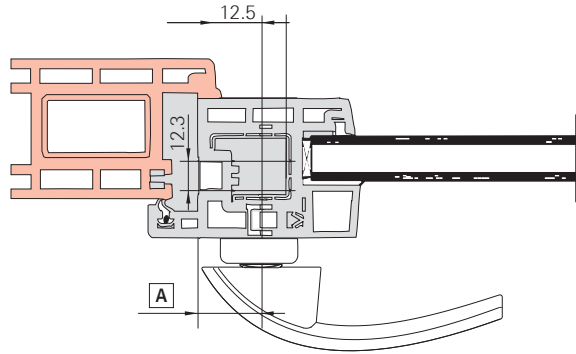
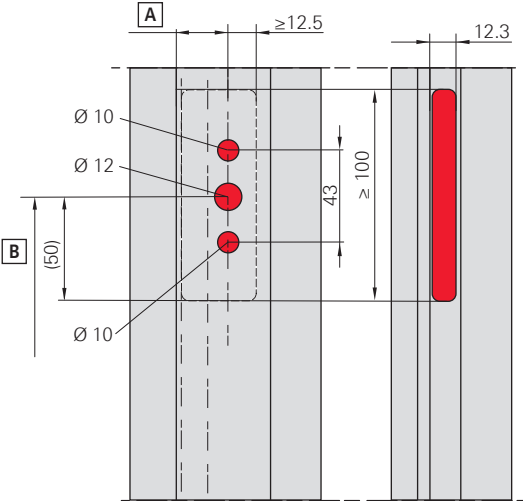


## 4.3 T&T espagnolettes – Special solutions

### 4.3.1 T&T adaptable espagnolette

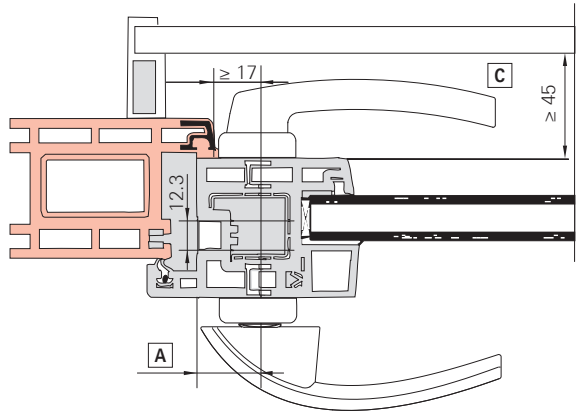
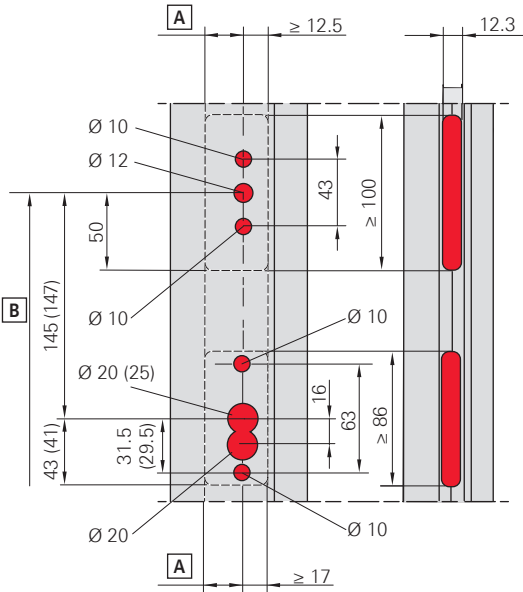
#### 4.3.1.1 Drilling and routing pattern

Not lockable



| Assignment | Meaning       |
|------------|---------------|
| [A]        | Backset       |
| [B]        | Handle height |

Lockable



| Assignment | Meaning            |
|------------|--------------------|
| [A]        | Backset            |
| [B]        | Handle height      |
| [C]        | On roller shutters |

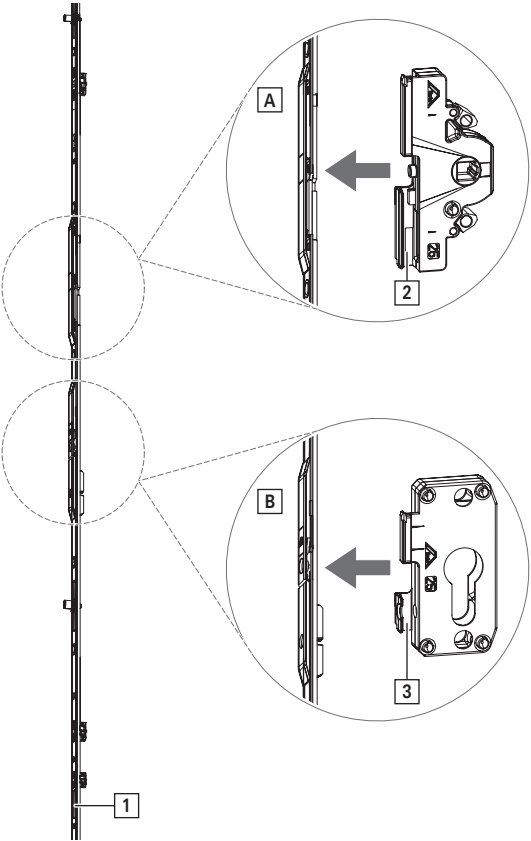


#### INFO

Cross section: doors (inward opening).

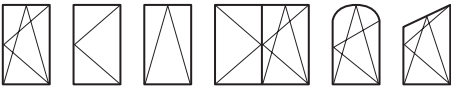


4.3.1.2 Configuration



| Assignment | Meaning                                                                                                                |
|------------|------------------------------------------------------------------------------------------------------------------------|
| [1]        | Espagnolette faceplate – centred / variable handle height → <i>from page 319</i>                                       |
| [2]        | Gearbox → <i>from page 320</i>                                                                                         |
| [3]        | Lock casing – profile cylinder → <i>from page 320</i><br>Lock casing – round cylinder (not sh.) → <i>from page 320</i> |
| [A]        | Gearbox which can be installed in the espagnolette faceplate                                                           |
| [B]        | Lock casing which can be installed in the espagnolette faceplate                                                       |

4.3.1.3 Espagnolette faceplate – centred / variable handle height



|                |            |     |     |   |          |        |
|----------------|------------|-----|-----|---|----------|--------|
|                |            |     |     |   |          |        |
| Basic security | 690 – 2400 | 680 | 200 | Y | Roto Sil | 799011 |

For compatible gearboxes, see → *from page 320*.

For compatible lock casings, see → *from page 320*.



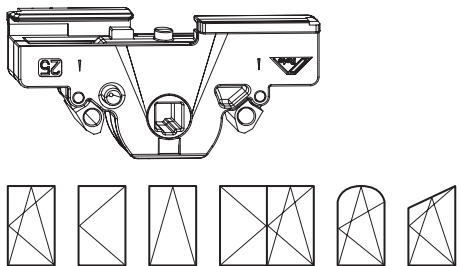
INFO

In conjunction with

Centre lock, couplable: see → *from page 416*.

Espagnolette centre lock: see → *from page 419*.

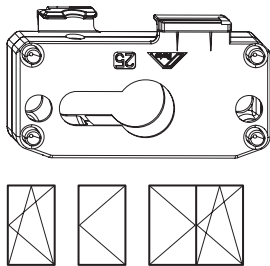
**4.3.1.4 Gearbox**



|  |  |  | Nº     |
|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|
|                                                                                 | 25                                                                                | Roto Sil                                                                          | 787675 |
|                                                                                 | 30                                                                                | Roto Sil                                                                          | 787677 |
|                                                                                 | 35                                                                                | Roto Sil                                                                          | 787678 |
|                                                                                 | 40                                                                                | Roto Sil                                                                          | 787679 |
|                                                                                 | 45                                                                                | Roto Sil                                                                          | 787680 |
|                                                                                 | 50                                                                                | Roto Sil                                                                          | 787681 |

**4.3.1.5 Lock casing**

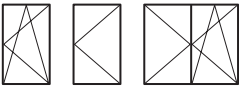
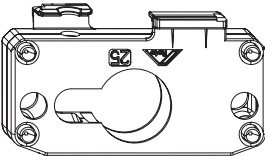
**Profile cylinders**



|  |  |  | Nº     |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|                                                                                 | 25                                                                                  | Roto Sil                                                                            | 787656 |
|                                                                                 | 30                                                                                  | Roto Sil                                                                            | 787658 |
|                                                                                 | 35                                                                                  | Roto Sil                                                                            | 787659 |
|                                                                                 | 40                                                                                  | Roto Sil                                                                            | 787660 |
|                                                                                 | 45                                                                                  | Roto Sil                                                                            | 787661 |
|                                                                                 | 50                                                                                  | Roto Sil                                                                            | 787663 |



Round cylinders

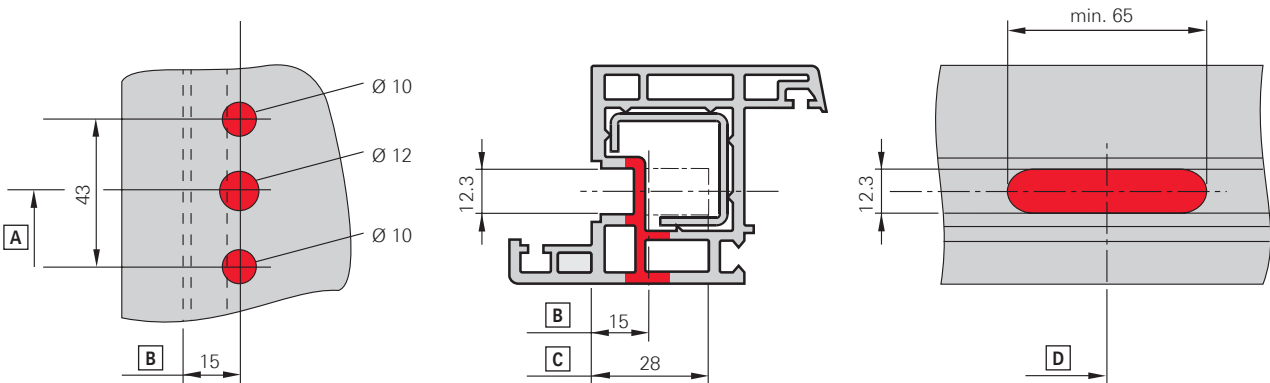


|  |    |  | Nº     |
|-----------------------------------------------------------------------------------|----|-----------------------------------------------------------------------------------|--------|
|                                                                                   | 25 | Roto Sil                                                                          | 788164 |
|                                                                                   | 30 | Roto Sil                                                                          | 788275 |
|                                                                                   | 35 | Roto Sil                                                                          | 788276 |
|                                                                                   | 40 | Roto Sil                                                                          | 788277 |
|                                                                                   | 45 | Roto Sil                                                                          | 788278 |
|                                                                                   | 50 | Roto Sil                                                                          | 788279 |



### 4.3.2 T&T espagnolette – comfort

#### 4.3.2.1 Drilling and routing pattern

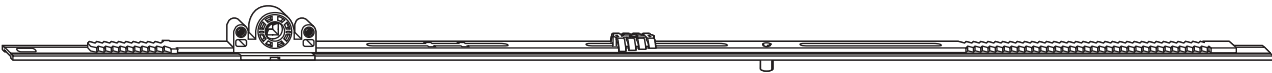


| Assignment | Meaning               |
|------------|-----------------------|
| [A]        | Handle height         |
| [B]        | Backset               |
| [C]        | Minimum routing depth |
| [D]        | Centre of gearbox     |



**INFO**  
Ø 10 drilling depth 33 mm (for 16 mm overlap) for countersunk screws M 5 x ... DIN EN ISO 7046.

#### 4.3.2.2 Backset 15 mm



| 15 | 640 – 850  | 490 | 180 | – | – | Roto Sil | 307029 |
|----|------------|-----|-----|---|---|----------|--------|
|    | 851 – 1400 | 690 | 200 | 1 | E | Roto Sil | 307030 |
|    | 701 – 900  |     | 200 | 1 | V | Roto Sil | 309399 |

For the compatible run-up block with mishandling device, see → *from page 514*.



**INFO**  
Between SRH 901 – 1400 mm with espagnolette extension.

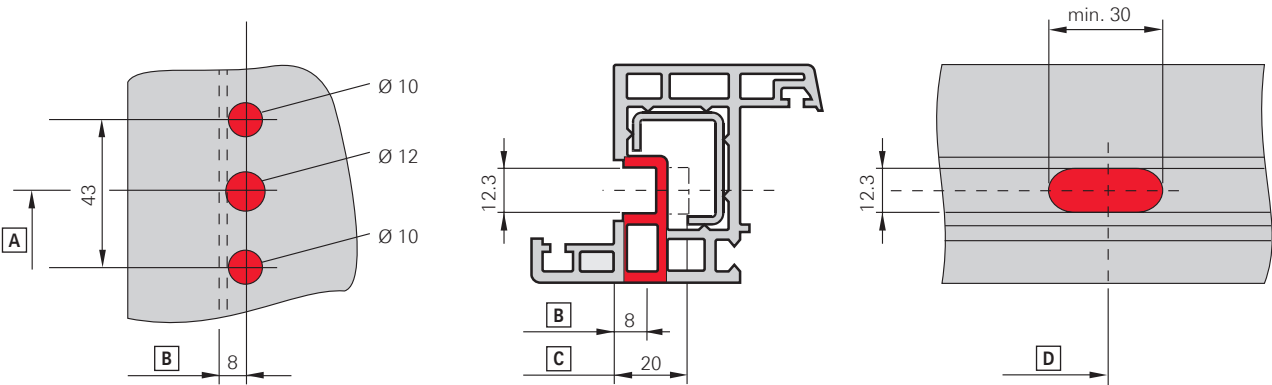




## 4.4 Turn-Only/Tilt-Only espagnolette

### 4.4.1 Backset 8 mm

#### 4.4.1.1 Drilling and routing pattern



| Assignment | Meaning               |
|------------|-----------------------|
| [A]        | Handle height         |
| [B]        | Backset               |
| [C]        | Minimum routing depth |
| [D]        | Centre of gearbox     |



**INFO**  
Ø 10 drilling depth 33 mm (for 16 mm overlap) for countersunk screws M 5 x ... DIN EN ISO 7046.

#### 4.4.1.2 Fixed handle height



|             |             |      |      |      |     |   |   |   |          |          |        | Nº |
|-------------|-------------|------|------|------|-----|---|---|---|----------|----------|--------|----|
| 8           | 400 – 500   | 500  | 100  | 170  | –   | N | N | 2 | P        | Roto Sil | 609213 |    |
|             | 501 – 600   | 600  | 100  | 170  | –   | N | N | 2 | P        | Roto Sil | 609214 |    |
|             | 601 – 700   | 700  | 100  | 263  | 371 | N | N | 2 | P        | Roto Sil | 609235 |    |
|             | 701 – 800   | 800  | 100  | 263  | 371 | N | N | 2 | P        | Roto Sil | 609236 |    |
|             | 801 – 900   | 900  | 100  | 413  | 180 | N | N | 2 | P        | Roto Sil | 609237 |    |
|             |             |      | 100  | 413  | 180 | N | N | 3 | P        | Roto Sil | 609238 |    |
|             | 901 – 1000  | 1000 | 100  | 413  | 180 | N | N | 2 | P        | Roto Sil | 609239 |    |
|             |             |      | 100  | 413  | 180 | N | N | 3 | P        | Roto Sil | 609240 |    |
|             | 1001 – 1100 | 1100 | 100  | 513  | 180 | N | N | 3 | P        | Roto Sil | 609241 |    |
|             | 1101 – 1200 | 1200 | 100  | 513  | 815 | N | N | 3 | P        | Roto Sil | 609242 |    |
|             | 1201 – 1300 | 1300 | 100  | 563  | 815 | N | N | 3 | P        | Roto Sil | 609243 |    |
|             | 1301 – 1400 | 1400 | 100  | 563  | 815 | N | N | 3 | P        | Roto Sil | 609244 |    |
|             | 1401 – 1500 | 1500 | 100  | 563  | 815 | N | N | 3 | P        | Roto Sil | 609245 |    |
|             | 1501 – 1600 | 1600 | 100  | 563  | 815 | N | N | 3 | P        | Roto Sil | 609246 |    |
|             | 1601 – 1700 | 1700 | 100  | 563  | 815 | N | N | 3 | P        | Roto Sil | 609247 |    |
|             | 1701 – 1850 | 1850 | 100  | 563  | 815 | N | N | 4 | P        | Roto Sil | 609248 |    |
|             | 1851 – 2050 | 2050 | 100  | 1000 | 815 | N | Y | 4 | P        | Roto Sil | 795439 |    |
| 2051 – 2250 | 2250        | 100  | 1000 | 815  | N   | Y | 4 | P | Roto Sil | 795440   |        |    |



## INFO

For espagnolettes with a 170 mm handle height, it is not possible to connect a corner drive at the bottom.

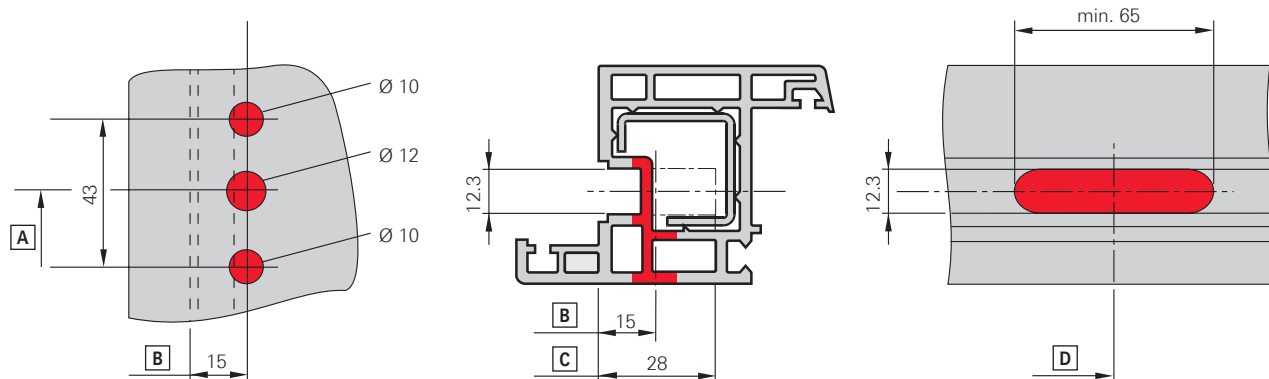
### 4.4.1.3 Centred / variable handle height



|   |             |      |           |            |   |   |   |   |          |        | Nº |
|---|-------------|------|-----------|------------|---|---|---|---|----------|--------|----|
| 8 | 238 – 390   | 238  | 0 / 0     | 88 – 119   | N | N | 1 | E | Roto Sil | 260136 |    |
|   | 391 – 500   | 500  | 55 / 55   | 125 – 250  | N | N | 1 | E | Roto Sil | 260137 |    |
|   | 501 – 800   | 800  | 150 / 150 | 251 – 400  | N | N | 2 | E | Roto Sil | 260138 |    |
|   | 801 – 1100  | 1100 | 150 / 150 | 401 – 550  | N | N | 3 | E | Roto Sil | 260139 |    |
|   | 1101 – 1400 | 1400 | 150 / 150 | 551 – 700  | N | N | 3 | E | Roto Sil | 260140 |    |
|   | 1401 – 1800 | 1800 | 200 / 200 | 701 – 900  | N | Y | 4 | E | Roto Sil | 795425 |    |
|   | 1801 – 2400 | 2400 | 300 / 300 | 901 – 1200 | N | Y | 4 | E | Roto Sil | 795427 |    |

### 4.4.2 Backset 15 mm

#### 4.4.2.1 Drilling and routing pattern



| Assignment | Meaning               |
|------------|-----------------------|
| [A]        | Handle height         |
| [B]        | Backset               |
| [C]        | Minimum routing depth |
| [D]        | Centre of gearbox     |



## INFO

Ø 10 drilling depth 33 mm (for 16 mm overlap) for countersunk screws M 5 x ... DIN EN ISO 7046.



#### 4.4.2.2 Fixed handle height



|  |  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 15                                                                                | 400 – 500                                                                         | 500                                                                               | 100                                                                               | 170                                                                               | –                                                                                 | N                                                                                  | N                                                                                   | 2                                                                                   | E                                                                                   | Roto Sil                                                                            | 600789                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 170                                                                               | –                                                                                 | N                                                                                  | N                                                                                   | 2                                                                                   | P                                                                                   | Roto Sil                                                                            | 487230                                                                              |
|                                                                                   | 501 – 600                                                                         | 600                                                                               | 100                                                                               | 170                                                                               | 308                                                                               | N                                                                                  | N                                                                                   | 2                                                                                   | E                                                                                   | Roto Sil                                                                            | 600790                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 170                                                                               | 308                                                                               | N                                                                                  | N                                                                                   | 2                                                                                   | P                                                                                   | Roto Sil                                                                            | 487231                                                                              |
|                                                                                   | 601 – 700                                                                         | 700                                                                               | 100                                                                               | 263                                                                               | 371                                                                               | N                                                                                  | N                                                                                   | 2                                                                                   | E                                                                                   | Roto Sil                                                                            | 600791                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 263                                                                               | 371                                                                               | N                                                                                  | N                                                                                   | 2                                                                                   | P                                                                                   | Roto Sil                                                                            | 487232                                                                              |
|                                                                                   | 701 – 800                                                                         | 800                                                                               | 100                                                                               | 263                                                                               | 371                                                                               | N                                                                                  | N                                                                                   | 2                                                                                   | E                                                                                   | Roto Sil                                                                            | 600792                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 263                                                                               | 371                                                                               | N                                                                                  | N                                                                                   | 2                                                                                   | P                                                                                   | Roto Sil                                                                            | 487233                                                                              |
|                                                                                   | 801 – 900                                                                         | 900                                                                               | 100                                                                               | 413                                                                               | 180                                                                               | N                                                                                  | N                                                                                   | 2                                                                                   | E                                                                                   | Roto Sil                                                                            | 600793                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 413                                                                               | 180                                                                               | N                                                                                  | N                                                                                   | 2                                                                                   | P                                                                                   | Roto Sil                                                                            | 487234                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 413                                                                               | 180                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | P                                                                                   | Roto Sil                                                                            | 487245                                                                              |
|                                                                                   | 901 – 1000                                                                        | 1000                                                                              | 100                                                                               | 413                                                                               | 180                                                                               | N                                                                                  | N                                                                                   | 2                                                                                   | E                                                                                   | Roto Sil                                                                            | 600794                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 413                                                                               | 180                                                                               | N                                                                                  | N                                                                                   | 2                                                                                   | P                                                                                   | Roto Sil                                                                            | 487246                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 413                                                                               | 180                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | P                                                                                   | Roto Sil                                                                            | 487247                                                                              |
|                                                                                   | 1001 – 1100                                                                       | 1100                                                                              | 100                                                                               | 513                                                                               | 180                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | E                                                                                   | Roto Sil                                                                            | 600815                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 513                                                                               | 180                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | P                                                                                   | Roto Sil                                                                            | 487248                                                                              |
|                                                                                   | 1101 – 1200                                                                       | 1200                                                                              | 100                                                                               | 513                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | E                                                                                   | Roto Sil                                                                            | 600816                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 513                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | P                                                                                   | Roto Sil                                                                            | 487249                                                                              |
|                                                                                   | 1201 – 1300                                                                       | 1300                                                                              | 100                                                                               | 563                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | E                                                                                   | Roto Sil                                                                            | 600817                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 563                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | P                                                                                   | Roto Sil                                                                            | 487250                                                                              |
|                                                                                   | 1301 – 1400                                                                       | 1400                                                                              | 100                                                                               | 563                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | E                                                                                   | Roto Sil                                                                            | 600818                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 563                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | P                                                                                   | Roto Sil                                                                            | 487251                                                                              |
|                                                                                   | 1401 – 1500                                                                       | 1500                                                                              | 100                                                                               | 563                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | E                                                                                   | Roto Sil                                                                            | 600819                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 563                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | P                                                                                   | Roto Sil                                                                            | 487252                                                                              |
|                                                                                   | 1501 – 1600                                                                       | 1600                                                                              | 100                                                                               | 563                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | E                                                                                   | Roto Sil                                                                            | 600820                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 563                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | P                                                                                   | Roto Sil                                                                            | 487253                                                                              |
|                                                                                   | 1601 – 1700                                                                       | 1700                                                                              | 100                                                                               | 563                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | E                                                                                   | Roto Sil                                                                            | 600821                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 563                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 3                                                                                   | P                                                                                   | Roto Sil                                                                            | 487254                                                                              |
|                                                                                   | 1701 – 1850                                                                       | 1850                                                                              | 100                                                                               | 563                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 4                                                                                   | E                                                                                   | Roto Sil                                                                            | 600822                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 100                                                                               | 563                                                                               | 815                                                                               | N                                                                                  | N                                                                                   | 4                                                                                   | P                                                                                   | Roto Sil                                                                            | 487255                                                                              |
|                                                                                   | 1851 – 2050                                                                       | 2050                                                                              | 100                                                                               | 1000                                                                              | 815                                                                               | N                                                                                  | Y                                                                                   | 4                                                                                   | P                                                                                   | Roto Sil                                                                            | 795436                                                                              |
|                                                                                   | 2051 – 2250                                                                       | 2250                                                                              | 100                                                                               | 1000                                                                              | 815                                                                               | N                                                                                  | Y                                                                                   | 4                                                                                   | P                                                                                   | Roto Sil                                                                            | 795438                                                                              |

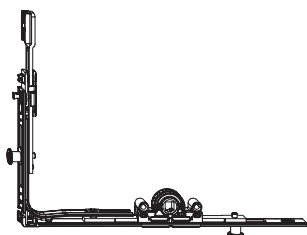


#### 4.4.2.3 Centred / variable handle height



|  |  |  |  |  |  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| 15                                                                                | 180 – 250                                                                         | 180                                                                               | 0 / 0                                                                             | 90 – 125                                                                          | N                                                                                 | N                                                                                 | 1                                                                                   | E                                                                                   | Roto Sil                                                                            | 260129 |
|                                                                                   |                                                                                   |                                                                                   | 0 / 0                                                                             | 90 – 125                                                                          | N                                                                                 | N                                                                                 | 1                                                                                   | P                                                                                   | Roto Sil                                                                            | 288093 |
|                                                                                   | 251 – 500                                                                         | 500                                                                               | 125 / 125                                                                         | 126 – 250                                                                         | N                                                                                 | N                                                                                 | 1                                                                                   | E                                                                                   | Roto Sil                                                                            | 260130 |
|                                                                                   |                                                                                   |                                                                                   | 125 / 125                                                                         | 126 – 250                                                                         | N                                                                                 | N                                                                                 | 1                                                                                   | P                                                                                   | Roto Sil                                                                            | 288094 |
|                                                                                   | 501 – 800                                                                         | 800                                                                               | 150 / 150                                                                         | 251 – 400                                                                         | N                                                                                 | N                                                                                 | 2                                                                                   | E                                                                                   | Roto Sil                                                                            | 260131 |
|                                                                                   |                                                                                   |                                                                                   | 150 / 150                                                                         | 251 – 400                                                                         | N                                                                                 | N                                                                                 | 2                                                                                   | P                                                                                   | Roto Sil                                                                            | 288095 |
|                                                                                   | 801 – 1100                                                                        | 1100                                                                              | 150 / 150                                                                         | 401 – 550                                                                         | N                                                                                 | N                                                                                 | 3                                                                                   | E                                                                                   | Roto Sil                                                                            | 260132 |
|                                                                                   |                                                                                   |                                                                                   | 150 / 150                                                                         | 401 – 550                                                                         | N                                                                                 | N                                                                                 | 3                                                                                   | P                                                                                   | Roto Sil                                                                            | 288096 |
|                                                                                   | 1101 – 1400                                                                       | 1400                                                                              | 150 / 150                                                                         | 551 – 700                                                                         | N                                                                                 | N                                                                                 | 3                                                                                   | E                                                                                   | Roto Sil                                                                            | 260133 |
|                                                                                   |                                                                                   |                                                                                   | 150 / 150                                                                         | 551 – 700                                                                         | N                                                                                 | N                                                                                 | 3                                                                                   | P                                                                                   | Roto Sil                                                                            | 288097 |
|                                                                                   | 1401 – 1800                                                                       | 1800                                                                              | 200 / 200                                                                         | 701 – 900                                                                         | N                                                                                 | Y                                                                                 | 4                                                                                   | E                                                                                   | Roto Sil                                                                            | 795413 |
|                                                                                   |                                                                                   |                                                                                   | 200 / 200                                                                         | 701 – 900                                                                         | N                                                                                 | Y                                                                                 | 4                                                                                   | P                                                                                   | Roto Sil                                                                            | 795414 |
|                                                                                   | 1801 – 2400                                                                       | 2400                                                                              | 300 / 300                                                                         | 901 – 1200                                                                        | N                                                                                 | Y                                                                                 | 4                                                                                   | E                                                                                   | Roto Sil                                                                            | 795415 |
|                                                                                   |                                                                                   |                                                                                   | 300 / 300                                                                         | 901 – 1200                                                                        | N                                                                                 | Y                                                                                 | 4                                                                                   | P                                                                                   | Roto Sil                                                                            | 795416 |

#### 4.4.2.4 Handle position at the bottom

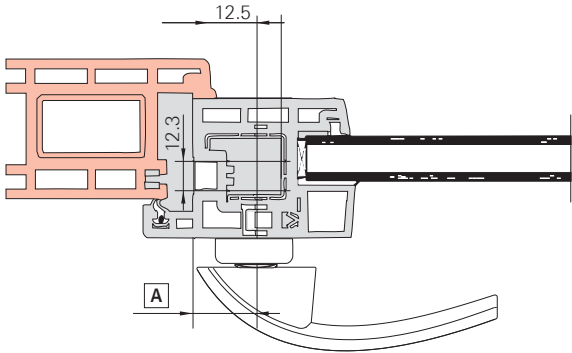
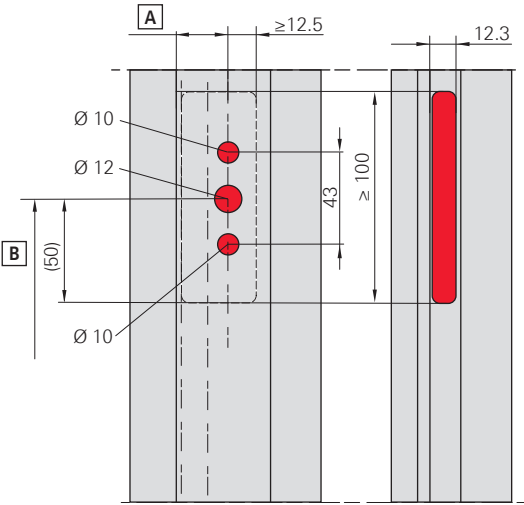


|  |  |  |  |  |  |  |  |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| 15                                                                                  | 230 – 800                                                                           | 230                                                                                 | 0 / 0                                                                               | 120                                                                                 | N                                                                                   | N                                                                                   | Y                                                                                   | 1 / 1                                                                                 | P / P                                                                                 | Roto Sil                                                                              | 610176 |



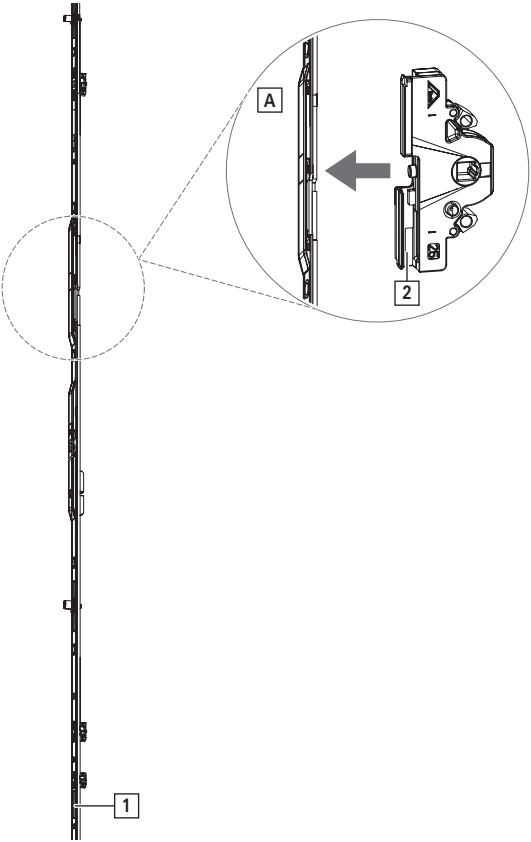
### 4.4.3 Backset 25, 30, 35, 40, 45, 50 mm

#### 4.4.3.1 Drilling and routing pattern



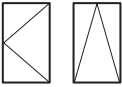
| Assignment | Meaning       |
|------------|---------------|
| [A]        | Backset       |
| [B]        | Handle height |

#### 4.4.3.2 Configuration



| Assignment | Meaning                                                                          |
|------------|----------------------------------------------------------------------------------|
| [1]        | Espagnolette faceplate – centred / variable handle height → <i>from page 328</i> |
| [2]        | Gearbox → <i>from page 328</i>                                                   |
| [A]        | Gearbox which can be installed in the espagnolette faceplate                     |

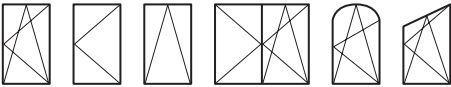
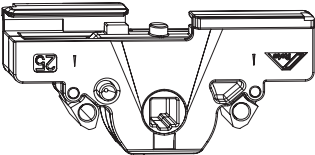
**4.4.3.3 Espagnolette faceplate – centred / variable handle height**



|  |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Basic security                                                                    | 350 – 500                                                                         | 500                                                                               | 75 / 75                                                                           | 175 – 250                                                                         | N                                                                                 | N                                                                                  | 1                                                                                   | E                                                                                   | Roto Sil                                                                            | 788328                                                                              |
|                                                                                   | 501 – 800                                                                         | 800                                                                               | 150 / 150                                                                         | 251 – 400                                                                         | N                                                                                 | N                                                                                  | 2                                                                                   | E                                                                                   | Roto Sil                                                                            | 788329                                                                              |
|                                                                                   | 801 – 1100                                                                        | 1100                                                                              | 150 / 150                                                                         | 401 – 550                                                                         | N                                                                                 | N                                                                                  | 3                                                                                   | E                                                                                   | Roto Sil                                                                            | 788330                                                                              |
|                                                                                   | 1101 – 1400                                                                       | 1400                                                                              | 150 / 150                                                                         | 551 – 700                                                                         | N                                                                                 | N                                                                                  | 3                                                                                   | E                                                                                   | Roto Sil                                                                            | 788331                                                                              |
|                                                                                   | 1401 – 1800                                                                       | 1800                                                                              | 200 / 200                                                                         | 701 – 900                                                                         | N                                                                                 | N                                                                                  | 4                                                                                   | E                                                                                   | Roto Sil                                                                            | 788332                                                                              |
|                                                                                   | 1801 – 2400                                                                       | 2400                                                                              | 300 / 300                                                                         | 901 – 1200                                                                        | N                                                                                 | N                                                                                  | 4                                                                                   | E                                                                                   | Roto Sil                                                                            | 788333                                                                              |
| Security                                                                          | 1401 – 1800                                                                       | 1800                                                                              | 200 / 200                                                                         | 701 – 900                                                                         | N                                                                                 | N                                                                                  | 4                                                                                   | P                                                                                   | Roto Sil                                                                            | 795398                                                                              |
|                                                                                   | 1801 – 2400                                                                       | 2400                                                                              | 300 / 300                                                                         | 901 – 1200                                                                        | N                                                                                 | N                                                                                  | 4                                                                                   | P                                                                                   | Roto Sil                                                                            | 795399                                                                              |

For compatible gearboxes, see → *from page 328*.

**4.4.3.4 Gearbox**

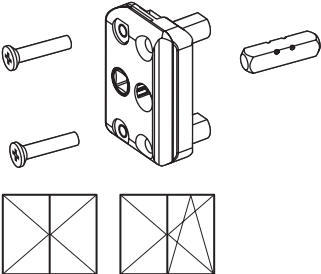


|    |          | Nº     |
|----|----------|--------|
| 25 | Roto Sil | 787675 |
| 30 | Roto Sil | 787677 |
| 35 | Roto Sil | 787678 |
| 40 | Roto Sil | 787679 |
| 45 | Roto Sil | 787680 |
| 50 | Roto Sil | 787681 |



## 4.5 T-O backset espagnolette

### 4.5.1 Adapter for PVC backset espagnolette



|  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Adapter for PVC backset espagnolette                                              | Rehau S729                                                                        | 8                                                                                   | Roto Sil                                                                            | 262346 |
|                                                                                   | Salamander Design 3D                                                              | 8                                                                                   | Roto Sil                                                                            | 262348 |

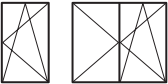
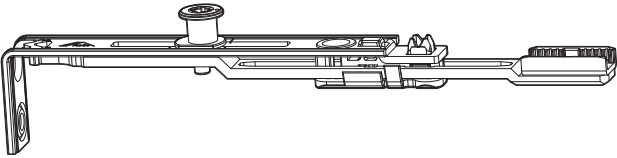


**INFO**

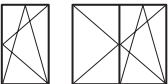
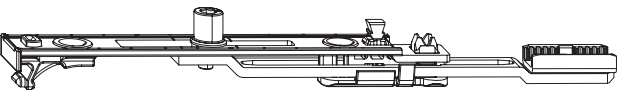
The backset espagnolette adapter can be combined with all espagnolettes. For supported backsets, see technical feature “Backset  ”.

4.6 Espagnolette connector

4.6.1 VT

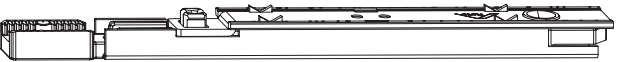


|                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  |  | Nº     |
| VT espagnolette connector with protrusion                                         | 110                                                                               | 1                                                                                 | P                                                                                   | Roto Sil                                                                            | 628290 |

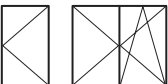
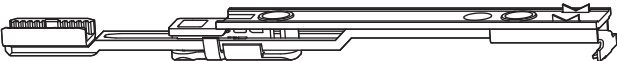


|                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  |  |  | Nº     |
| VT espagnolette connector without protrusion                                        | 110                                                                                 | 1                                                                                    | E                                                                                     | Roto Sil                                                                              | 794225 |

4.6.2 Protrusion



|                                                                                     |                                                                                      |                                                                                       |                                                                                       |        |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  |  | Nº     |
| Espagnolette connector with bolt extension and reverse-action travel                | 110                                                                                  | 11                                                                                    | Roto Sil                                                                              | 312032 |
|                                                                                     | 110                                                                                  | 18                                                                                    | Roto Sil                                                                              | 312033 |

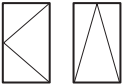
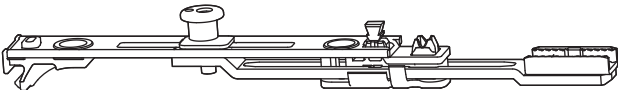


|                                                                                     |                                                                                      |                                                                                       |                                                                                       |        |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  |  | Nº     |
| Espagnolette connector with bolt extension, without reverse-action travel           | 110                                                                                  | 11                                                                                    | Roto Sil                                                                              | 457626 |
|                                                                                     | 110                                                                                  | 14                                                                                    | Roto Sil                                                                              | 349187 |



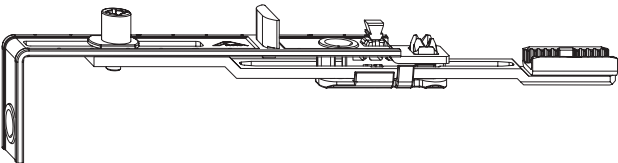


4.6.3 Tilt-Only sash



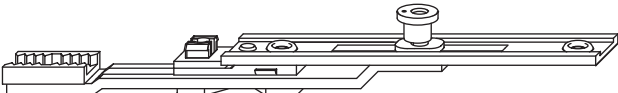
|                                       |  |   |   |          | Nº     |
|---------------------------------------|--|---|---|----------|--------|
|                                       |  |   |   |          |        |
| Tilt-Only sash espagnolette connector |  | 1 | V | Roto Sil | 382716 |

4.6.4 Lateral Tilt&Turn



|                                              |  |        |   |   |          | Nº     |
|----------------------------------------------|--|--------|---|---|----------|--------|
|                                              |  |        |   |   |          |        |
| Espagnolette connector for lateral Tilt&Turn |  | Top    | 1 | E | Roto Sil | 735563 |
|                                              |  | Bottom | 1 | E | Roto Sil | 735562 |

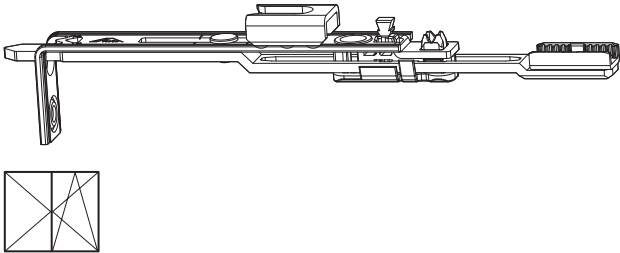
4.6.5 Arched window



|                                           |  |   |   |          | Nº     |
|-------------------------------------------|--|---|---|----------|--------|
|                                           |  |   |   |          |        |
| Espagnolette connector for arched windows |  | 1 | E | Roto Sil | 245688 |
|                                           |  | 1 | V | Roto Sil | 245687 |



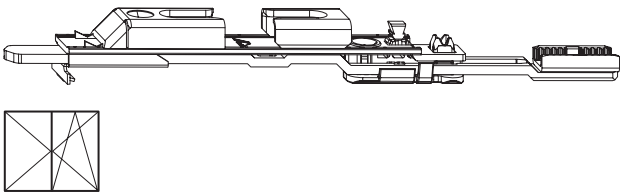
4.6.6 Floating-mullion sash



|           |  |  |  |  |  |
|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Floating-mullion sash espagnolette connector for VT espagnolette connector with protrusion | 110                                                                               | 11                                                                                 | 1                                                                                   | Roto Sil                                                                            | 628701                                                                              |

 **INFO**

Can only be used in combination with standard floating-mullion sash espagnolette.



|                                                                                               |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|            |  |  |  |  |  |
| Floating-mullion sash espagnolette connector for VT espagnolette connector without protrusion | 110                                                                                  | 11                                                                                    | 1                                                                                     | Roto Sil                                                                              | 630573                                                                                |
|                                                                                               | 110                                                                                  | 18                                                                                    | 1                                                                                     | Roto Sil                                                                              | 630572                                                                                |

 **INFO**

Can only be used in combination with standard floating-mullion sash espagnolette.

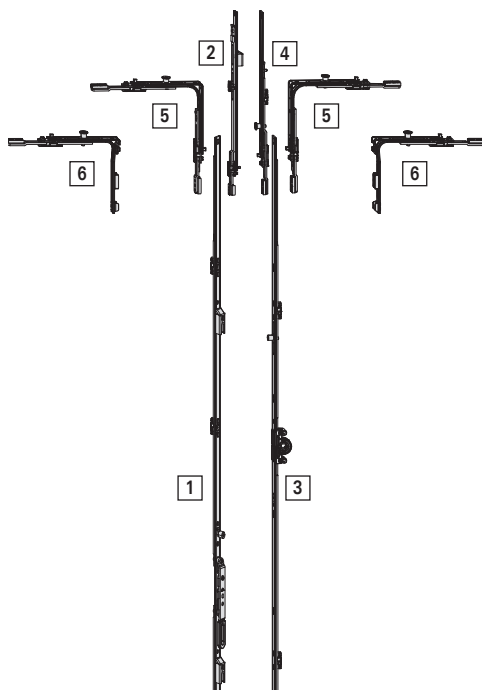


## 4.7 Floating-mullion sash espagnolette

### 4.7.1 Standard

#### 4.7.1.1 VT – fixed handle height

##### 4.7.1.1.1 Possible combinations



| Assignment | Meaning                                    |
|------------|--------------------------------------------|
| [1]        | Lever-operated espagnolette Standard, VT   |
| [2]        | Floating-mullion centre lock               |
| [3]        | T&T espagnolette, VT – fixed handle height |
| [4]        | Centre lock, standard                      |
| [5]        | Corner drive, standard                     |
| [6]        | Special corner drive, short                |

#### Determining the espagnolettes

1. Determine the element's sash rebate height (SRH).



#### INFO

Refer to the tables below for possible combinations and the required corner drive [5] + [6].

2. Select the lever-operated espagnolette Standard, VT [1] using the *sash rebate height (SRH)* and *length of the component*.

**Optional:** determine the floating-mullion centre lock [2]. → *from page 420*

3. Select the T&T espagnolette, VT – fixed handle height [3] using the *length of the component*.

- ☐ T&T espagnolette, VT – fixed handle height, backset 8 mm → *from page 300*
- ☐ T&T espagnolette, VT – fixed handle height, backset 15 mm → *from page 300*
- ☐ T&T espagnolette, VT – fixed handle height, backset 25, 30, 35, 40, 45, 50 mm → *from page 300*

**Optional:** determine the centre lock, standard [4] → *from page 416*.

**Espagnolettes**  
**Floating-mullion sash espagnolette**  
Standard

Backset 8 mm

| Application range |                  | Lever-operated espagnolette, standard VT |                                                    | T&T espagnolette, VT |               |     |                                               |
|-------------------|------------------|------------------------------------------|----------------------------------------------------|----------------------|---------------|-----|-----------------------------------------------|
| SRH               | Component length | Toggle lever position                    | Corner drive type                                  | Component length     | Handle height | LMD | Corner drive type                             |
| 431 – 510         | 600              | 233                                      | Special corner drive, short → <i>from page 353</i> | 490                  | 120           | N   | Corner drive, standard → <i>from page 352</i> |
| 511 – 600         |                  |                                          | Corner drive, standard → <i>from page 352</i>      | 600                  | 170           | N   | Corner drive, standard → <i>from page 352</i> |
| 601 – 800         | 690              | 325                                      | Corner drive, standard → <i>from page 352</i>      | 690                  | 263           | N   | Corner drive, standard → <i>from page 352</i> |
| 801 – 1000        | 890              | 335                                      | Corner drive, standard → <i>from page 352</i>      | 890                  | 413           | Y   | Corner drive, standard → <i>from page 352</i> |
| 1001 – 1200       | 1090             | 335                                      | Corner drive, standard → <i>from page 352</i>      | 1090                 | 513           | Y   | Corner drive, standard → <i>from page 352</i> |
| 1201 – 1400       | 1290             | 335                                      | Corner drive, standard → <i>from page 352</i>      | 1290                 | 563           | Y   | Corner drive, standard → <i>from page 352</i> |
| 1401 – 1600       | 1490             | 335                                      | Corner drive, standard → <i>from page 352</i>      | 1490                 | 563           | Y   | Corner drive, standard → <i>from page 352</i> |
| 1601 – 1800       | 1690             | 335                                      | Corner drive, standard → <i>from page 352</i>      | 1690                 | 563 / 1000    | Y   | Corner drive, standard → <i>from page 352</i> |
| 1801 – 2000       | 1890             | 640                                      | Corner drive, standard → <i>from page 352</i>      | 1890                 | 1000          | Y   | Corner drive, standard → <i>from page 352</i> |
| 2001 – 2200       | 2090             | 640                                      | Corner drive, standard → <i>from page 352</i>      | 2090                 | 1000          | Y   | Corner drive, standard → <i>from page 352</i> |
| 2201 – 2400       | 2290             | 640                                      | Corner drive, standard → <i>from page 352</i>      | 2290                 | 1000          | Y   | Corner drive, standard → <i>from page 352</i> |



**INFO**

A centre lock is required from SRH 2401 mm.

Backset of 15 mm and above

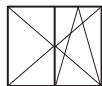
| Application range |                  | Lever-operated espagnolette Standard, VT |                                                    | T&T espagnolette, VT |               |     |                                                    |
|-------------------|------------------|------------------------------------------|----------------------------------------------------|----------------------|---------------|-----|----------------------------------------------------|
| SRH               | Component length | Toggle lever position                    | Corner drive type                                  | Component length     | Handle height | LMD | Corner drive type                                  |
| 280 – 370         | 445              | 156                                      | Special corner drive, short → <i>from page 353</i> | 460                  | 120           | N   | Special corner drive, short → <i>from page 353</i> |
| 371 – 555         |                  |                                          | Corner drive, standard → <i>from page 352</i>      | 460                  | 120           | N   | Corner drive, standard → <i>from page 352</i>      |
| 431 – 510         | 600              | 195                                      | Special corner drive, short → <i>from page 353</i> | 460                  | 120           | N   | Corner drive, standard → <i>from page 352</i>      |
| 511 – 600         |                  |                                          | Corner drive, standard → <i>from page 352</i>      | 600                  | 170           | Y   | Corner drive, standard → <i>from page 352</i>      |
| 601 – 800         | 690              | 300                                      | Corner drive, standard → <i>from page 352</i>      | 690                  | 263           | Y   | Corner drive, standard → <i>from page 352</i>      |
| 801 – 1000        | 890              | 490                                      | Corner drive, standard → <i>from page 352</i>      | 890                  | 413           | Y   | Corner drive, standard → <i>from page 352</i>      |
| 1001 – 1200       | 1090             | 335                                      | Corner drive, standard → <i>from page 352</i>      | 1090                 | 513           | Y   | Corner drive, standard → <i>from page 352</i>      |
| 1201 – 1400       | 1290             | 335                                      | Corner drive, standard → <i>from page 352</i>      | 1290                 | 563           | Y   | Corner drive, standard → <i>from page 352</i>      |
| 1401 – 1600       | 1490             | 335                                      | Corner drive, standard → <i>from page 352</i>      | 1490                 | 563           | Y   | Corner drive, standard → <i>from page 352</i>      |
| 1601 – 1800       | 1690             | 335                                      | Corner drive, standard → <i>from page 352</i>      | 1690                 | 563 / 1000    | Y   | Corner drive, standard → <i>from page 352</i>      |
| 1801 – 2000       | 1890             | 640                                      | Corner drive, standard → <i>from page 352</i>      | 1890                 | 1000          | Y   | Corner drive, standard → <i>from page 352</i>      |
| 2001 – 2200       | 2090             | 640                                      | Corner drive, standard → <i>from page 352</i>      | 2090                 | 1000          | Y   | Corner drive, standard → <i>from page 352</i>      |
| 2201 – 2400       | 2290             | 640                                      | Corner drive, standard → <i>from page 352</i>      | 2290                 | 1000          | Y   | Corner drive, standard → <i>from page 352</i>      |



## INFO

A centre lock is required from SRH 2401 mm.

### 4.7.1.1.2 Backset 8 to 50 mm



|  |  |  |  |  |  |  |  |  |  |  |  |  | Nº |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----|
| 8                                                                                 | 431 – 710                                                                         | 600                                                                               | 200                                                                               | 233                                                                               | N                                                                                 | N                                                                                 | –                                                                                   | Y                                                                                   | – / 1                                                                               | – / P                                                                               | Roto Sil                                                                            | 810974                                                                              |    |
|                                                                                   | 601 – 800                                                                         | 690                                                                               | 200                                                                               | 325                                                                               | N                                                                                 | N                                                                                 | –                                                                                   | N                                                                                   | –                                                                                   | –                                                                                   | Roto Sil                                                                            | 771953                                                                              |    |
|                                                                                   | 801 – 1000                                                                        | 890                                                                               | 200                                                                               | 335                                                                               | N                                                                                 | N                                                                                 | 1                                                                                   | N                                                                                   | –                                                                                   | –                                                                                   | Roto Sil                                                                            | 771954                                                                              |    |
| 15<br>25<br>30<br>35<br>40<br>45<br>50                                            | 280 – 555                                                                         | 445                                                                               | 200                                                                               | 156                                                                               | N                                                                                 | N                                                                                 | –                                                                                   | Y                                                                                   | – / 1                                                                               | – / P                                                                               | Roto Sil                                                                            | 2003815                                                                             |    |
|                                                                                   | 431 – 710                                                                         | 600                                                                               | 200                                                                               | 195                                                                               | Y                                                                                 | N                                                                                 | –                                                                                   | Y                                                                                   | – / 1                                                                               | – / P                                                                               | Roto Sil                                                                            | 795462                                                                              |    |
|                                                                                   | 601 – 800                                                                         | 690                                                                               | 200                                                                               | 300                                                                               | Y                                                                                 | N                                                                                 | –                                                                                   | N                                                                                   | –                                                                                   | –                                                                                   | Roto Sil                                                                            | 763116                                                                              |    |
|                                                                                   | 801 – 1000                                                                        | 890                                                                               | 200                                                                               | 490                                                                               | Y                                                                                 | N                                                                                 | 1                                                                                   | N                                                                                   | –                                                                                   | –                                                                                   | Roto Sil                                                                            | 763117                                                                              |    |
| 8<br>15<br>25<br>30<br>35<br>40<br>45<br>50                                       | 1001 – 1200                                                                       | 1090                                                                              | 200                                                                               | 335                                                                               | Y                                                                                 | N                                                                                 | 1                                                                                   | N                                                                                   | –                                                                                   | –                                                                                   | Roto Sil                                                                            | 763118                                                                              |    |
|                                                                                   | 1201 – 1400                                                                       | 1290                                                                              | 200                                                                               | 335                                                                               | Y                                                                                 | N                                                                                 | 1                                                                                   | N                                                                                   | –                                                                                   | –                                                                                   | Roto Sil                                                                            | 763119                                                                              |    |
|                                                                                   | 1401 – 1600                                                                       | 1490                                                                              | 200                                                                               | 335                                                                               | Y                                                                                 | N                                                                                 | 2                                                                                   | N                                                                                   | –                                                                                   | –                                                                                   | Roto Sil                                                                            | 763120                                                                              |    |
|                                                                                   | 1601 – 1800                                                                       | 1690                                                                              | 200                                                                               | 335                                                                               | Y                                                                                 | Y                                                                                 | 2                                                                                   | N                                                                                   | –                                                                                   | –                                                                                   | Roto Sil                                                                            | 795474                                                                              |    |
|                                                                                   | 1801 – 2000                                                                       | 1890                                                                              | 200                                                                               | 640                                                                               | Y                                                                                 | Y                                                                                 | 2                                                                                   | N                                                                                   | –                                                                                   | –                                                                                   | Roto Sil                                                                            | 795476                                                                              |    |
|                                                                                   | 2001 – 2200                                                                       | 2090                                                                              | 200                                                                               | 640                                                                               | Y                                                                                 | Y                                                                                 | 3                                                                                   | N                                                                                   | –                                                                                   | –                                                                                   | Roto Sil                                                                            | 795478                                                                              |    |
|                                                                                   | 2201 – 2400                                                                       | 2290                                                                              | 200                                                                               | 640                                                                               | Y                                                                                 | Y                                                                                 | 3                                                                                   | N                                                                                   | –                                                                                   | –                                                                                   | Roto Sil                                                                            | 795480                                                                              |    |



## INFO

Lifting mishandling device (stop for floating-mullion sash espagnolette) preassembled as standard.

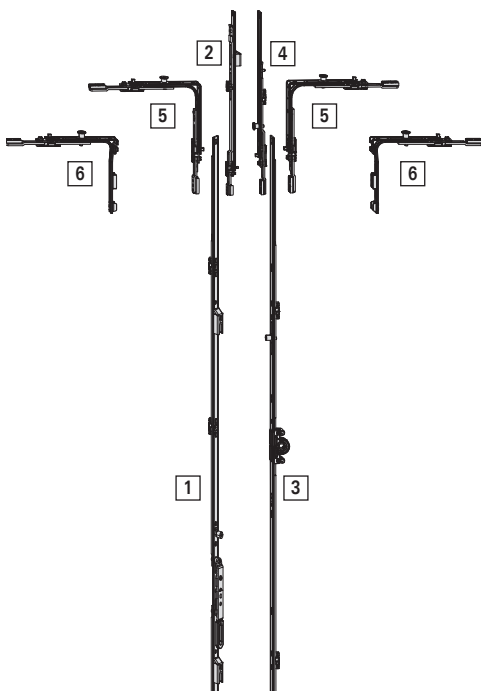


## INFO

When using the lever-operated espagnolette, standard (RC 1 N, RC 2, RC 2 N), fit the stay guide for Turn-Only sashes → *from page 369*

#### 4.7.1.2 Centred / variable handle height

##### 4.7.1.2.1 Possible combinations



| Assignment | Meaning                                             |
|------------|-----------------------------------------------------|
| [1]        | Lever-operated espagnolette, standard               |
| [2]        | Floating-mullion centre lock                        |
| [3]        | T&T espagnolette – centred / variable handle height |
| [4]        | Centre lock, standard                               |
| [5]        | Corner drive, standard                              |
| [6]        | Special corner drive, short                         |

#### Determining the espagnolettes

1. Determine the element's sash rebate height (SRH).



#### INFO

Refer to the tables below for possible combinations and the required corner drive [5] + [6].

2. Select the lever-operated espagnolette, standard [1] using the *sash rebate height (SRH)* and *length of the component*.

**Optional:** determine the floating-mullion centre lock [2]. → *from page 420*

3. Select the T&T espagnolette – centred / variable handle height [3] using the *length of the component*.

- ☐ T&T espagnolette – centred / variable handle height, backset 8 mm → *from page 310*
- ☐ T&T espagnolette – centred / variable handle height, backset 15 mm → *from page 310*
- ☐ T&T espagnolette – centred / variable handle height, backset 25, 30, 35, 40, 45, 50 mm → *from page 310*

**Optional:** determine the centre lock, standard [4]. → *from page 416*



Backset 8 mm

| Application range |                  | Lever-operated espagnolette, standard |                                                       | T&T espagnolette |               |     |                                                  |
|-------------------|------------------|---------------------------------------|-------------------------------------------------------|------------------|---------------|-----|--------------------------------------------------|
| SRH               | Component length | Toggle lever position                 | Corner drive type                                     | Component length | Handle height | LMD | Corner drive type                                |
| 621 – 800         | 680              | 235 – 275                             | Special corner drive, short<br>→ <i>from page 353</i> | 800              | 311 – 510     | N   | Corner drive, standard<br>→ <i>from page 352</i> |
| 801 – 900         |                  | 276 – 335                             | Corner drive, standard → <i>from page 352</i>         | 980              | 351 – 400     | N   | Corner drive, standard<br>→ <i>from page 352</i> |
| 901 – 1200        | 980              | 249 – 448                             | Corner drive, standard → <i>from page 352</i>         |                  | 401 – 600     | Y   | Corner drive, standard<br>→ <i>from page 352</i> |
| 1201 – 1600       | 1380             | 448 – 658                             | Corner drive, standard → <i>from page 352</i>         | 1380             | 601 – 800     | Y   | Corner drive, standard<br>→ <i>from page 352</i> |
| 1601 – 2000       | 1780             | 680 – 880                             | Corner drive, standard → <i>from page 352</i>         | 1780             | 801 – 1000    | Y   | Corner drive, standard<br>→ <i>from page 352</i> |
| 2001 – 2400       | 2180             | 880 – 1080                            | Corner drive, standard → <i>from page 352</i>         | 2180             | 1001 – 1200   | Y   | Corner drive, standard<br>→ <i>from page 352</i> |



### INFO

A centre lock is required from SRH 2401 mm.

Backset of 15 mm and above

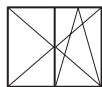
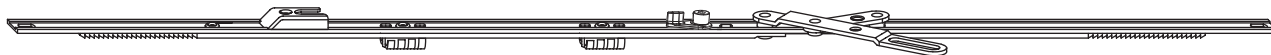
| Application range |                  | Lever-operated espagnolette, standard |                                                       | T&T espagnolette |               |     |                                                       |
|-------------------|------------------|---------------------------------------|-------------------------------------------------------|------------------|---------------|-----|-------------------------------------------------------|
| SRH               | Component length | Toggle lever position                 | Corner drive type                                     | Component length | Handle height | LMD | Corner drive type                                     |
| 370 – 450         | 400              | 255 – 265                             | Special corner drive, short<br>→ <i>from page 353</i> | 430              | 215 – 225     | N   | Special corner drive, short<br>→ <i>from page 353</i> |
| 451 – 520         |                  | 266 – 300                             | Special corner drive, short<br>→ <i>from page 353</i> |                  | 226 – 260     | N   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 521 – 620         |                  | 301 – 350                             | Corner drive, standard → <i>from page 352</i>         |                  | 261 – 310     | N   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 621 – 650         | 680              | 393 – 407                             | Special corner drive, short<br>→ <i>from page 353</i> | 580              | 311 – 400     | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 651 – 800         |                  | 408 – 482                             | Corner drive, standard → <i>from page 352</i>         |                  |               |     |                                                       |
| 801 – 1200        | 980              | 482 – 682                             | Corner drive, standard → <i>from page 352</i>         | 980              | 401 – 600     | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 1201 – 1600       | 1380             | 448 – 648                             | Corner drive, standard → <i>from page 352</i>         | 1380             | 601 – 800     | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 1601 – 2000       | 1780             | 680 – 880                             | Corner drive, standard → <i>from page 352</i>         | 1780             | 801 – 1000    | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 2001 – 2400       | 2180             | 880 – 1080                            | Corner drive, standard → <i>from page 352</i>         | 2180             | 1001 – 1200   | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |



### INFO

A centre lock is required from SRH 2401 mm.

#### 4.7.1.2.2 Backset 8 to 50 mm



|  |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 8                                                                                 | 621 – 900                                                                         | 680                                                                               | 125 / 120                                                                         | 236 – 375                                                                         | N                                                                                 | N                                                                                  | 1                                                                                   | Roto Sil                                                                            | 242726                                                                              |
|                                                                                   | 901 – 1200                                                                        | 980                                                                               | 200 / 200                                                                         | 298 – 448                                                                         | Y                                                                                 | N                                                                                  | 1                                                                                   | Roto Sil                                                                            | 791986                                                                              |
| 15                                                                                | 431 – 620                                                                         | 500                                                                               | 100 / 100                                                                         | 225 – 350                                                                         | N                                                                                 | N                                                                                  | –                                                                                   | Roto Sil                                                                            | 233418                                                                              |
| 25                                                                                | 621 – 800                                                                         | 630                                                                               | 100 / 100                                                                         | 393 – 482                                                                         | Y                                                                                 | N                                                                                  | 1                                                                                   | Roto Sil                                                                            | 763125                                                                              |
| 30                                                                                | 801 – 1200                                                                        | 980                                                                               | 200 / 200                                                                         | 482 – 682                                                                         | Y                                                                                 | N                                                                                  | 1                                                                                   | Roto Sil                                                                            | 763126                                                                              |
| 35                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 40                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 45                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 50                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 8                                                                                 | 1201 – 1600                                                                       | 1380                                                                              | 200 / 200                                                                         | 448 – 658                                                                         | Y                                                                                 | N                                                                                  | 2                                                                                   | Roto Sil                                                                            | 763127                                                                              |
| 15                                                                                | 1601 – 2000                                                                       | 1780                                                                              | 200 / 200                                                                         | 680 – 880                                                                         | Y                                                                                 | Y                                                                                  | 2                                                                                   | Roto Sil                                                                            | 795482                                                                              |
| 25                                                                                | 2001 – 2400                                                                       | 2180                                                                              | 200 / 200                                                                         | 880 – 1080                                                                        | Y                                                                                 | Y                                                                                  | 4                                                                                   | Roto Sil                                                                            | 795484                                                                              |
| 30                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 35                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 40                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 45                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 50                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |



#### INFO

A retainer clasp is mandatory for lever-operated espagnolettes on RC 2 / RC 2 N double-sashed windows.  
See → *from page 509*.



#### INFO

Lifting mishandling device (stop for floating-mullion sash espagnolette) preassembled as standard.



#### INFO

When using the lever-operated espagnolette, standard (RC 1 N, RC 2, RC 2 N), fit the stay guide for Turn-Only sashes → *from page 369*

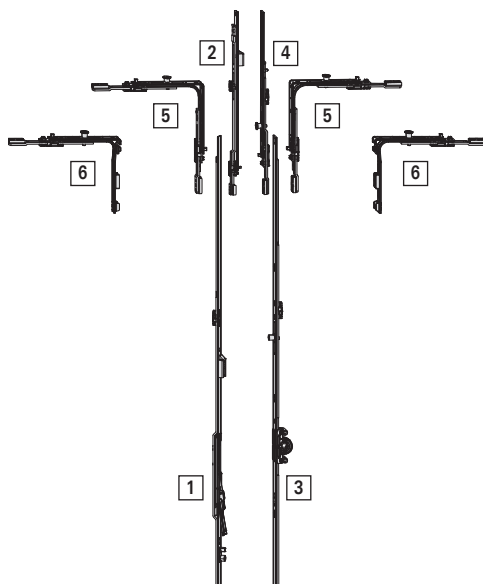




## 4.7.2 Plus

### 4.7.2.1 VT – fixed handle height

#### 4.7.2.1.1 Possible combinations



| Assignment | Meaning                                    |
|------------|--------------------------------------------|
| [1]        | Lever-operated espagnolette Plus, VT       |
| [2]        | Floating-mullion centre lock               |
| [3]        | T&T espagnolette, VT – fixed handle height |
| [4]        | Centre lock, standard                      |
| [5]        | Corner drive, standard                     |
| [6]        | Special corner drive, short                |

#### Determining the espagnolettes

1. Determine the element's sash rebate height (SRH).



#### INFO

Refer to the tables below for possible combinations and the required corner drive [5] + [6].

2. Select the lever-operated espagnolette Plus, VT [1] using the *sash rebate height (SRH)* and *length of the component*.

**Optional:** determine the floating-mullion centre lock [2]. → *from page 420*

3. Select the T&T espagnolette, VT – fixed handle height [3] using the *length of the component*.

- T&T espagnolette, VT – fixed handle height, backset 8 mm → *from page 300*
- T&T espagnolette, VT – fixed handle height, backset 15 mm → *from page 300*
- T&T espagnolette, VT – fixed handle height, backset 25, 30, 35, 40, 45, 50 mm → *from page 300*

**Optional:** determine the centre lock, standard [4]. → *from page 416*

**Espagnolettes**  
**Floating-mullion sash espagnolette**  
**Plus**

Backset 8 mm

| Application range<br>SRH | Lever-operated espagnolette Plus, VT |                       |                                                       | T&T espagnolette, VT |               |     |                                               |
|--------------------------|--------------------------------------|-----------------------|-------------------------------------------------------|----------------------|---------------|-----|-----------------------------------------------|
|                          | Component length                     | Toggle lever position | Corner drive type                                     | Component length     | Handle height | LMD | Corner drive type                             |
| 431 – 510                | 600                                  | 233                   | Special corner drive, short<br>→ <i>from page 353</i> | 490                  | 120           | N   | Corner drive, standard → <i>from page 352</i> |
| 511 – 600                |                                      |                       | Corner drive, standard → <i>from page 352</i>         | 600                  | 170           | N   | Corner drive, standard → <i>from page 352</i> |
| 601 – 800                | 690                                  | 325                   | Corner drive, standard → <i>from page 352</i>         | 690                  | 263           | N   | Corner drive, standard → <i>from page 352</i> |
| 801 – 1000               | 890                                  | 335                   | Corner drive, standard → <i>from page 352</i>         | 890                  | 413           | Y   | Corner drive, standard → <i>from page 352</i> |
| 1001 – 1200              | 1090                                 | 335                   | Corner drive, standard → <i>from page 352</i>         | 1090                 | 513           | Y   | Corner drive, standard → <i>from page 352</i> |
| 1201 – 1400              | 1290                                 | 335                   | Corner drive, standard → <i>from page 352</i>         | 1290                 | 563           | Y   | Corner drive, standard → <i>from page 352</i> |
| 1401 – 1600              | 1490                                 | 335                   | Corner drive, standard → <i>from page 352</i>         | 1490                 | 563           | Y   | Corner drive, standard → <i>from page 352</i> |
| 1601 – 1800              | 1690                                 | 335                   | Corner drive, standard → <i>from page 352</i>         | 1690                 | 563 / 1000    | Y   | Corner drive, standard → <i>from page 352</i> |
| 1801 – 2000              | 1890                                 | 640                   | Corner drive, standard → <i>from page 352</i>         | 1890                 | 1000          | Y   | Corner drive, standard → <i>from page 352</i> |
| 2001 – 2200              | 2090                                 | 640                   | Corner drive, standard → <i>from page 352</i>         | 2090                 | 1000          | Y   | Corner drive, standard → <i>from page 352</i> |
| 2201 – 2400              | 2290                                 | 640                   | Corner drive, standard → <i>from page 352</i>         | 2290                 | 1000          | Y   | Corner drive, standard → <i>from page 352</i> |



**INFO**

A centre lock is required from SRH 2401 mm.

Backset of 15 mm and above

| Application range<br>SRH | Lever-operated espagnolette Plus, VT |                       |                                                       | T&T espagnolette, VT |               |     |                                               |
|--------------------------|--------------------------------------|-----------------------|-------------------------------------------------------|----------------------|---------------|-----|-----------------------------------------------|
|                          | Component length                     | Toggle lever position | Corner drive type                                     | Component length     | Handle height | LMD | Corner drive type                             |
| 431 – 510                | 600                                  | 195                   | Special corner drive, short<br>→ <i>from page 353</i> | 460                  | 120           | N   | Corner drive, standard → <i>from page 352</i> |
| 511 – 600                |                                      |                       | Corner drive, standard → <i>from page 352</i>         | 600                  | 170           | Y   | Corner drive, standard → <i>from page 352</i> |
| 601 – 800                | 690                                  | 300                   | Corner drive, standard → <i>from page 352</i>         | 690                  | 263           | Y   | Corner drive, standard → <i>from page 352</i> |
| 801 – 1000               | 890                                  | 490                   | Corner drive, standard → <i>from page 352</i>         | 890                  | 413           | Y   | Corner drive, standard → <i>from page 352</i> |
| 1001 – 1200              | 1090                                 | 335                   | Corner drive, standard → <i>from page 352</i>         | 1090                 | 513           | Y   | Corner drive, standard → <i>from page 352</i> |
| 1201 – 1400              | 1290                                 | 335                   | Corner drive, standard → <i>from page 352</i>         | 1290                 | 563           | Y   | Corner drive, standard → <i>from page 352</i> |
| 1401 – 1600              | 1490                                 | 335                   | Corner drive, standard → <i>from page 352</i>         | 1490                 | 563           | Y   | Corner drive, standard → <i>from page 352</i> |
| 1601 – 1800              | 1690                                 | 335                   | Corner drive, standard → <i>from page 352</i>         | 1690                 | 563 / 1000    | Y   | Corner drive, standard → <i>from page 352</i> |
| 1801 – 2000              | 1890                                 | 640                   | Corner drive, standard → <i>from page 352</i>         | 1890                 | 1000          | Y   | Corner drive, standard → <i>from page 352</i> |
| 2001 – 2200              | 2090                                 | 640                   | Corner drive, standard → <i>from page 352</i>         | 2090                 | 1000          | Y   | Corner drive, standard → <i>from page 352</i> |
| 2201 – 2400              | 2290                                 | 640                   | Corner drive, standard → <i>from page 352</i>         | 2290                 | 1000          | Y   | Corner drive, standard → <i>from page 352</i> |



**INFO**

A centre lock is required from SRH 2401 mm.



#### 4.7.2.1.2 Backset 8 to 50 mm



| 8  | 431 – 710   | 600  | 200 | 144 | Y | N | – | Y | – / 1 | – / P | Roto Sil | 2007106 |
|----|-------------|------|-----|-----|---|---|---|---|-------|-------|----------|---------|
| 15 | 601 – 800   | 690  | 200 | 234 | Y | N | – | – | –     | –     | Roto Sil | 2007116 |
| 25 | 801 – 1000  | 890  | 200 | 396 | Y | N | 1 | – | –     | –     | Roto Sil | 2007117 |
| 30 | 1001 – 1200 | 1090 | 200 | 496 | Y | N | 1 | – | –     | –     | Roto Sil | 2007118 |
| 35 | 1201 – 1400 | 1290 | 200 | 546 | Y | N | 1 | – | –     | –     | Roto Sil | 2007119 |
| 40 | 1401 – 1600 | 1490 | 200 | 546 | Y | N | 2 | – | –     | –     | Roto Sil | 2007120 |
| 45 | 1601 – 1800 | 1690 | 200 | 546 | Y | Y | 2 | – | –     | –     | Roto Sil | 2007121 |
| 50 | 1801 – 2000 | 1890 | 200 | 546 | Y | Y | 2 | – | –     | –     | Roto Sil | 2007122 |
|    | 2001 – 2200 | 2090 | 200 | 546 | Y | Y | 3 | – | –     | –     | Roto Sil | 2007123 |
|    | 2201 – 2400 | 2290 | 200 | 546 | Y | Y | 3 | – | –     | –     | Roto Sil | 2007124 |



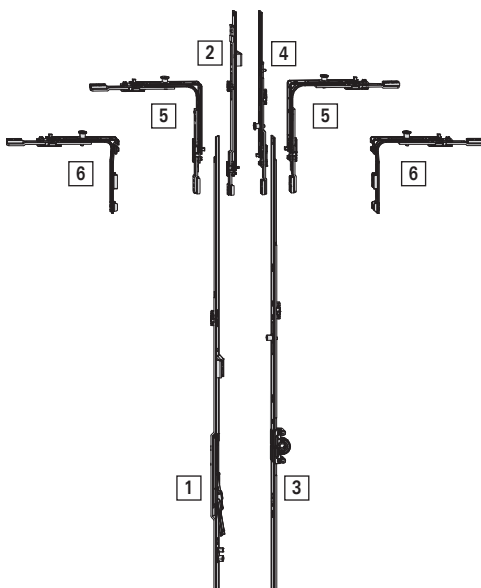
**INFO**  
 Lifting mishandling device (stop for floating-mullion sash espagnolette) preassembled as standard.



**INFO**  
 When using the lever-operated espagnolette Plus (RC 1 N, RC 2, RC 2 N), fit the basic security stay guide (Tilt&Turn) or security stay guide (Tilt&Turn) → *from page 368*

## 4.7.2.2 Centred / variable handle height

### 4.7.2.2.1 Possible combinations



| Assignment | Meaning                                             |
|------------|-----------------------------------------------------|
| [1]        | Lever-operated espagnolette Plus                    |
| [2]        | Floating-mullion centre lock                        |
| [3]        | T&T espagnolette – centred / variable handle height |
| [4]        | Centre lock, standard                               |
| [5]        | Corner drive, standard                              |
| [6]        | Special corner drive, short                         |

### Determining the espagnolettes

1. Determine the element's sash rebate height (SRH).



#### INFO

Refer to the tables below for possible combinations and the required corner drive [5] + [6].

2. Select the lever-operated espagnolette Plus [1] using the *sash rebate height (SRH)* and *length of the component*.

**Optional:** determine the floating-mullion centre lock [2]. → *from page 420*

3. Select the T&T espagnolette – centred / variable handle height [3] using the *length of the component*.

- ☐ T&T espagnolette – centred / variable handle height, backset 8 mm → *from page 310*
- ☐ T&T espagnolette – centred / variable handle height, backset 15 mm → *from page 310*
- ☐ T&T espagnolette – centred / variable handle height, backset 25, 30, 35, 40, 45, 50 mm → *from page 310*

**Optional:** determine the centre lock, standard [4]. → *from page 416*



Backset 8 mm

| Application range |                  | Lever-operated espagnolette Plus |                                                       | T&T espagnolette |               |     |                                                       |
|-------------------|------------------|----------------------------------|-------------------------------------------------------|------------------|---------------|-----|-------------------------------------------------------|
| SRH               | Component length | Toggle lever position            | Corner drive type                                     | Component length | Handle height | LMD | Corner drive type                                     |
| 431 – 520         | 400              | 194 – 239                        | Special corner drive, short<br>→ <i>from page 353</i> | 500              | 215 – 260     | N   | Special corner drive, short<br>→ <i>from page 353</i> |
| 521 – 620         |                  | 240 – 289                        | Corner drive, standard → <i>from page 352</i>         |                  | 261 – 310     | N   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 621 – 720         | 680              | 290 – 329                        | Special corner drive, short<br>→ <i>from page 353</i> | 800              | 311 – 510     | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 721 – 800         |                  | 330 – 379                        | Corner drive, standard → <i>from page 352</i>         |                  |               |     |                                                       |
| 801 – 1200        | 980              | 380 – 579                        | Corner drive, standard → <i>from page 352</i>         | 980              | 401 – 600     | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 1201 – 1600       | 1380             | 580 – 779                        | Corner drive, standard → <i>from page 352</i>         | 1380             | 601 – 800     | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 1601 – 2000       | 1780             | 780 – 979                        | Corner drive, standard → <i>from page 352</i>         | 1780             | 801 – 1000    | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 2001 – 2400       | 2180             | 980 – 1179                       | Corner drive, standard → <i>from page 352</i>         | 2180             | 1001 – 1200   | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |



## INFO

A centre lock is required from SRH 2401 mm.

Backset of 15 mm and above

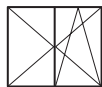
| Application range |                  | Lever-operated espagnolette Plus |                                                       | T&T espagnolette |               |     |                                                       |
|-------------------|------------------|----------------------------------|-------------------------------------------------------|------------------|---------------|-----|-------------------------------------------------------|
| SRH               | Component length | Toggle lever position            | Corner drive type                                     | Component length | Handle height | LMD | Corner drive type                                     |
| 420 – 450         | 400              | 194 – 204                        | Special corner drive, short<br>→ <i>from page 353</i> | 430              | 215 – 225     | N   | Special corner drive, short<br>→ <i>from page 353</i> |
| 451 – 520         |                  | 205 – 239                        | Special corner drive, short<br>→ <i>from page 353</i> |                  | 226 – 260     | N   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 521 – 620         |                  | 240 – 289                        | Corner drive, standard → <i>from page 352</i>         |                  | 261 – 310     | N   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 621 – 700         | 680              | 290 – 329                        | Special corner drive, short<br>→ <i>from page 353</i> | 580              | 311 – 400     | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 701 – 800         |                  | 330 – 379                        | Corner drive, standard → <i>from page 352</i>         |                  |               |     |                                                       |
| 801 – 1200        | 980              | 380 – 579                        | Corner drive, standard → <i>from page 352</i>         | 980              | 401 – 600     | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 1201 – 1600       | 1380             | 580 – 779                        | Corner drive, standard → <i>from page 352</i>         | 1380             | 601 – 800     | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 1601 – 2000       | 1780             | 780 – 979                        | Corner drive, standard → <i>from page 352</i>         | 1780             | 801 – 1000    | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |
| 2001 – 2400       | 2180             | 980 – 1179                       | Corner drive, standard → <i>from page 352</i>         | 2180             | 1001 – 1200   | Y   | Corner drive, standard<br>→ <i>from page 352</i>      |



## INFO

A centre lock is required from SRH 2401 mm.

#### 4.7.2.2 Backset 8 to 50 mm



|    |  |  |  |  |  |  |  |  |  |
|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 8  | 431 – 620                                                                         | 400                                                                               | 100 / 100                                                                         | 194 – 289                                                                         | N                                                                                 | N                                                                                  | –                                                                                   | Roto Sil                                                                            | 2007128                                                                             |
| 15 | 621 – 800                                                                         | 680                                                                               | 100 / 100                                                                         | 290 – 379                                                                         | Y                                                                                 | N                                                                                  | 1                                                                                   | Roto Sil                                                                            | 2007129                                                                             |
| 25 | 801 – 1200                                                                        | 980                                                                               | 200 / 200                                                                         | 380 – 579                                                                         | Y                                                                                 | N                                                                                  | 1                                                                                   | Roto Sil                                                                            | 2007130                                                                             |
| 30 | 1001 – 1400                                                                       | 1180                                                                              | 200 / 200                                                                         | 480 – 679                                                                         | Y                                                                                 | N                                                                                  | 1                                                                                   | Roto Sil                                                                            | 2007131                                                                             |
| 35 | 1201 – 1600                                                                       | 1380                                                                              | 200 / 200                                                                         | 580 – 779                                                                         | Y                                                                                 | N                                                                                  | 2                                                                                   | Roto Sil                                                                            | 2007132                                                                             |
| 40 | 1601 – 2000                                                                       | 1780                                                                              | 200 / 200                                                                         | 780 – 979                                                                         | Y                                                                                 | Y                                                                                  | 2                                                                                   | Roto Sil                                                                            | 2007133                                                                             |
| 45 | 2001 – 2400                                                                       | 2180                                                                              | 200 / 200                                                                         | 980 – 1179                                                                        | Y                                                                                 | Y                                                                                  | 4                                                                                   | Roto Sil                                                                            | 2007134                                                                             |
| 50 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |



#### INFO

Lifting mishandling device (stop for floating-mullion sash espagnolette) preassembled as standard.



#### INFO

When using the lever-operated espagnolette Plus (RC 1 N, RC 2, RC 2 N), fit the basic security stay guide (Tilt&Turn) or security stay guide (Tilt&Turn) → *from page 368*

### 4.7.3 Separate toggle lever

#### 4.7.3.1 Fixed handle height



| 8  |  | 431 – 710   | 600  | 200 | 233 |  | Roto Sil | 787399 |  |
|----|--|-------------|------|-----|-----|--|----------|--------|--|
|    |  | 601 – 800   | 690  | 200 | 335 |  | Roto Sil | 338124 |  |
|    |  | 801 – 1000  | 890  | 200 | 195 |  | Roto Sil | 291770 |  |
| 15 |  | 431 – 710   | 600  | 200 | 195 |  | Roto Sil | 788502 |  |
| 25 |  | 601 – 800   | 690  | 200 | 195 |  | Roto Sil | 338125 |  |
| 30 |  | 801 – 1000  | 890  | 200 | 490 |  | Roto Sil | 291746 |  |
| 35 |  |             |      |     |     |  |          |        |  |
| 40 |  |             |      |     |     |  |          |        |  |
| 45 |  |             |      |     |     |  |          |        |  |
| 50 |  |             |      |     |     |  |          |        |  |
| 8  |  | 1001 – 1200 | 1090 | 200 | 335 |  | Roto Sil | 291747 |  |
| 15 |  | 1201 – 1400 | 1290 | 200 | 335 |  | Roto Sil | 291748 |  |
| 25 |  | 1401 – 1600 | 1490 | 200 | 335 |  | Roto Sil | 291749 |  |
| 30 |  | 1601 – 1800 | 1690 | 200 | 335 |  | Roto Sil | 291750 |  |
| 35 |  | 1801 – 2000 | 1890 | 200 | 640 |  | Roto Sil | 291751 |  |
| 40 |  | 2001 – 2200 | 2090 | 200 | 640 |  | Roto Sil | 291762 |  |
| 45 |  | 2201 – 2400 | 2290 | 200 | 640 |  | Roto Sil | 291763 |  |
| 50 |  |             |      |     |     |  |          |        |  |

For the compatible separate toggle lever, see → *from page 345*.



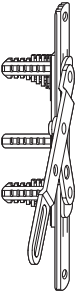
4.7.3.2 Centred / variable handle height



|    |             |      |           |            |          | Nº     |
|----|-------------|------|-----------|------------|----------|--------|
| 8  | 370 – 620   | 400  | 100 / 100 | 225 – 350  | Roto Sil | 293629 |
| 15 | 621 – 800   | 680  | 100 / 100 | 393 – 482  | Roto Sil | 293631 |
| 25 | 801 – 1200  | 980  | 200 / 200 | 482 – 682  | Roto Sil | 293633 |
| 30 | 1201 – 1600 | 1380 | 200 / 200 | 448 – 658  | Roto Sil | 293635 |
| 40 | 1601 – 2000 | 1780 | 200 / 200 | 680 – 890  | Roto Sil | 293636 |
| 45 | 2001 – 2400 | 2180 | 200 / 200 | 880 – 1090 | Roto Sil | 293637 |

For the compatible separate toggle lever, see → from page 345.

4.7.3.3 Separate toggle lever



|                       |          | Nº     |
|-----------------------|----------|--------|
| Separate toggle lever | Roto Sil | 291743 |



INFO

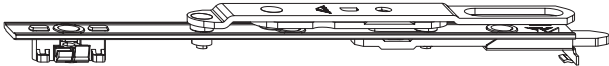
Is necessary for each floating-mullion sash espagnolette with separate toggle lever.



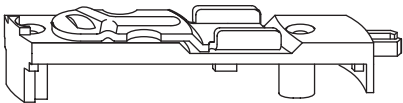
4.8 Shootbolt

4.8.1 Opposite hardware groove

4.8.1.1 Standard

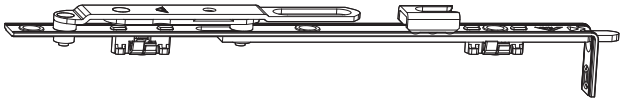


|  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|
| 200                                                                               | Roto Sil                                                                          | 633419 |
| 390                                                                               | Roto Sil                                                                          | 618666 |



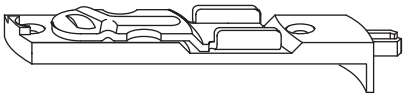
|  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------|
| 97                                                                                | Roto Sil                                                                          | 305638 |

4.8.1.2 VT



|  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| 265                                                                                 | Roto Sil                                                                            | 628710 |

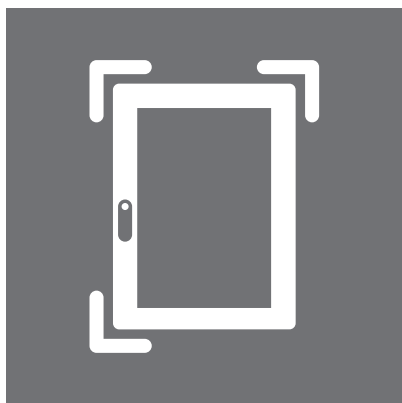
4.8.2 Euro-rebate



|  |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| 97                                                                                  | 18                                                                                  | 12                                                                                  | Roto Sil                                                                              | 260189 |













## Standard

See page 352

---

## Short

See page 353

---

## Floating mullion

Standard 354

---

Threshold 354

---

## Threshold

See page 355

---

## Sash stay

See page 356

---

## Special solutions

Arched window 357

---

Pitched window 357

---

Night vent 358

---

Backset espagnolette and reverse-action espagnolette 358

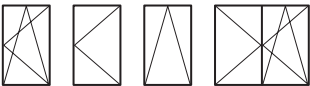
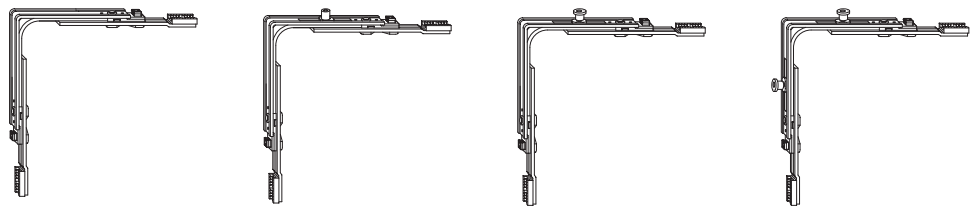
---

Striker and protrusion 359

---

5 Corner drives

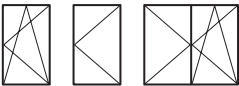
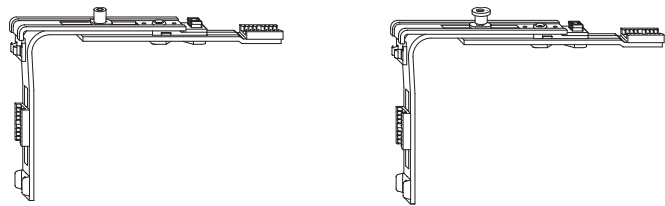
5.1 Standard



|  |  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Corner drive, standard                                                            | 110 / 110                                                                         | –                                                                                 | –                                                                                 | Top                                                                                 | Roto Sil                                                                            | 339785 |
| Standard corner drive                                                             |                                                                                   | 1                                                                                 | E                                                                                 | Top                                                                                 | Roto Sil                                                                            | 260275 |
|                                                                                   |                                                                                   | 1                                                                                 | P                                                                                 | Top<br>Bottom                                                                       | Roto Sil                                                                            | 260277 |
|                                                                                   |                                                                                   | 1                                                                                 | V                                                                                 | Top<br>Bottom                                                                       | Roto Sil                                                                            | 260272 |
|                                                                                   |                                                                                   | 2                                                                                 | V                                                                                 | Top<br>Bottom                                                                       | Roto Sil                                                                            | 260274 |



**5.2 Short**

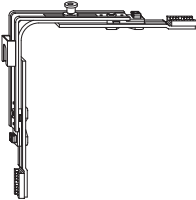


|  |  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Special short corner drive                                                        | 110 / 10                                                                          | 1                                                                                 | E                                                                                 | Top                                                                                 | Roto Sil                                                                            | 260280 |
|                                                                                   |                                                                                   | 1                                                                                 | P                                                                                 | Top<br>Bottom                                                                       | Roto Sil                                                                            | 260282 |
|                                                                                   |                                                                                   | 1                                                                                 | V                                                                                 | Top<br>Bottom                                                                       | Roto Sil                                                                            | 281288 |



**5.3 Floating mullion**

**5.3.1 Standard**



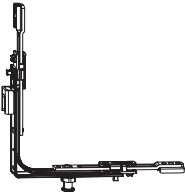
|  |  |  |  # |  # |  |  |  |  | Nº |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----|
| Floating mullion corner drive                                                     | 110 / 110                                                                         | Second opening sash                                                               | 1                                                                                   | 1                                                                                    | V                                                                                   | Top                                                                                 | Roto Sil                                                                            | 313538                                                                              |    |
|                                                                                   |                                                                                   |                                                                                   | 1                                                                                   | 1                                                                                    | V                                                                                   | Bottom                                                                              | Roto Sil                                                                            | 367227                                                                              |    |
|                                                                                   |                                                                                   | Second opening sash / slide guard                                                 | 1                                                                                   | 1                                                                                    | V                                                                                   | Top                                                                                 | Roto Sil                                                                            | 839223                                                                              |    |
|                                                                                   |                                                                                   |                                                                                   | 1                                                                                   | 1                                                                                    | V                                                                                   | Bottom                                                                              | Roto Sil                                                                            | 839224                                                                              |    |



**INFO**

Corner drives with integrated slide guard can only be used with the lever-operated espagnolette Plus.

**5.3.2 Threshold**

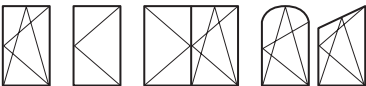
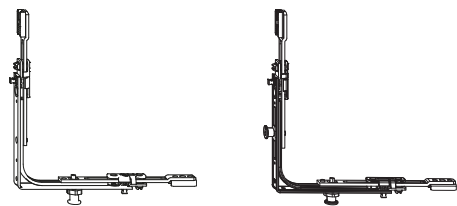


|  |  |  |  |  |  |  |  |  |  | Nº |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----|
| Floating mullion corner drive                                                       | 110 / 110                                                                           | Second opening sash / welded-on striker                                             | 7                                                                                   | 1                                                                                   | 1                                                                                    | V                                                                                     | Bottom                                                                                | Roto Sil                                                                              | 823316                                                                                |    |
|                                                                                     |                                                                                     |                                                                                     | 10                                                                                  | 1                                                                                   | 1                                                                                    | V                                                                                     | Bottom                                                                                | Roto Sil                                                                              | 794779                                                                                |    |
|                                                                                     |                                                                                     | Second opening sash / built-in slide guard                                          | 7                                                                                   | 1                                                                                   | 1                                                                                    | V                                                                                     | Bottom                                                                                | Roto Sil                                                                              | 858513                                                                                |    |
|                                                                                     |                                                                                     | Second opening sash / welded-on striker                                             | 10                                                                                  | 1                                                                                   | 1                                                                                    | V                                                                                     | Bottom                                                                                | Roto Sil                                                                              | 858515                                                                                |    |





**5.4 Threshold**



|  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Threshold corner drive                                                            | 110 / 110                                                                         | Corner drive, standard; locking cam, extended                                     | 7                                                                                  | 1                                                                                   | V                                                                                   | Roto Sil                                                                            | 642264                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 7                                                                                  | 2                                                                                   | V                                                                                   | Roto Sil                                                                            | 823317                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 10                                                                                 | 1                                                                                   | V                                                                                   | Roto Sil                                                                            | 614456                                                                              |
|                                                                                   |                                                                                   |                                                                                   | 10                                                                                 | 2                                                                                   | V                                                                                   | Roto Sil                                                                            | 794778                                                                              |



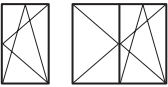
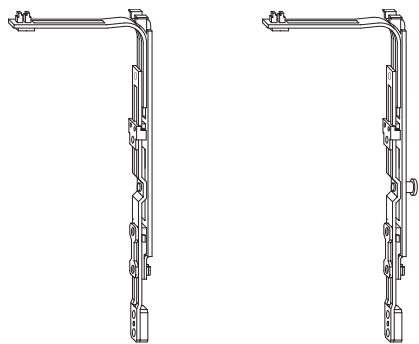
**INFO**  
**Connecting thresholds**

The following document provides a detailed description of how to connect thresholds to the Roto NX hardware system.



**IMO 347**

**5.5 Sash stay**

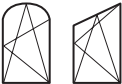
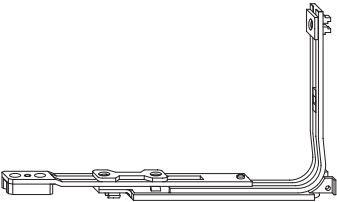


|                        |         | # |   |          | Nº     |
|------------------------|---------|---|---|----------|--------|
| Sash stay corner drive | 180 / 0 | – | – | Roto Sil | 293521 |
|                        |         | 1 | P | Roto Sil | 260286 |
|                        |         | 1 | V | Roto Sil | 260284 |



## 5.6 Special solutions

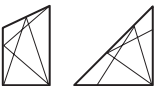
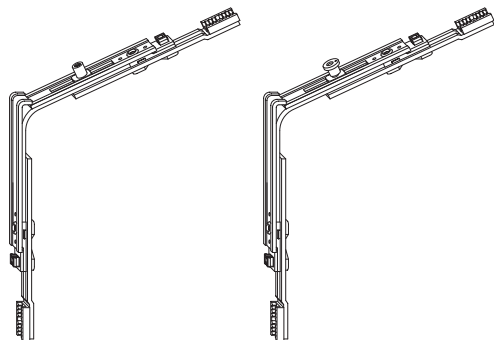
### 5.6.1 Arched window



|                                                                                   |                                                                                   |                                                                                    |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  | Nº     |
| Corner drive for arched windows                                                   | 110 / 0                                                                           | Standard                                                                           | Roto Sil                                                                            | 255273 |

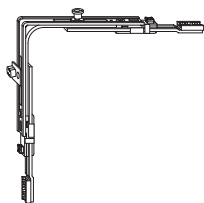


### 5.6.2 Pitched window



|                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  |  |  | Nº     |
| Corner drive for pitched windows                                                    | 110 / 110                                                                           | 1                                                                                   | E                                                                                     | Roto Sil                                                                              | 260279 |
|                                                                                     |                                                                                     | 1                                                                                   | V                                                                                     | Roto Sil                                                                              | 260278 |

5.6.3 Night vent

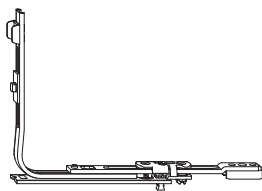


|  |  |  |  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Night vent corner drive                                                           | 110 / 110                                                                         | 9                                                                                 | 20                                                                                | 1                                                                                 | P                                                                                  | Left                                                                                | Roto Sil                                                                            | 389819 |
|                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1                                                                                 | P                                                                                  | Right                                                                               | Roto Sil                                                                            | 389818 |
|                                                                                   |                                                                                   | 13                                                                                | 30                                                                                | 1                                                                                 | P                                                                                  | Left                                                                                | Roto Sil                                                                            | 389817 |
|                                                                                   |                                                                                   |                                                                                   |                                                                                   | 1                                                                                 | P                                                                                  | Right                                                                               | Roto Sil                                                                            | 389816 |



**INFO**  
Components cannot be used in conjunction with hinge side P and hinge side T.

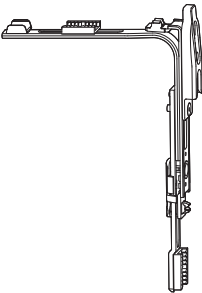
5.6.4 Backset espagnolette and reverse-action espagnolette



|  |  |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Corner drive for backset espagnolette and reverse-action espagnolette               | 110 / 0                                                                             | –                                                                                     | –                                                                                     | Roto Sil                                                                              | 383480 |
|                                                                                     |                                                                                     | 1                                                                                     | V                                                                                     | Roto Sil                                                                              | 553749 |



5.6.5 Striker and protrusion



|                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  |  | Nº     |
| Corner drive with striker and bolt extension                                      | 110 / 10                                                                          | –                                                                                 | 1                                                                                   | Roto Sil                                                                            | 484686 |











**Frame clearances**

|                            |     |
|----------------------------|-----|
| Hinge side P               | 364 |
| Hinge side C               | 366 |
| Hinge side Designo (HA 13) | 367 |

**Cover caps**

|              |     |
|--------------|-----|
| Hinge side P | 407 |
|--------------|-----|

**Stay guide**

|                            |     |
|----------------------------|-----|
| Hinge side P               | 368 |
| Hinge side C               | 369 |
| Hinge side Designo (HA 13) | 370 |

**Stay arm**

|                            |     |
|----------------------------|-----|
| Hinge side P               | 372 |
| Hinge side C               | 379 |
| Hinge side Designo (HA 13) | 386 |

**Forcibly controlled scissor stay**

|              |     |
|--------------|-----|
| Hinge side P | 393 |
|--------------|-----|

**Rebate stay guide**

|                            |     |
|----------------------------|-----|
| Hinge side P               | 394 |
| Hinge side C               | 394 |
| Hinge side Designo (HA 13) | 395 |

**Rebate stay arm**

|                            |     |
|----------------------------|-----|
| Hinge side P               | 396 |
| Hinge side C               | 397 |
| Hinge side Designo (HA 13) | 399 |

**Turn-Only/Tilt-Only rebate hinge**

|              |     |
|--------------|-----|
| Hinge side P | 402 |
|--------------|-----|

**Turn-Only/Tilt-Only overlap hinge**

|              |     |
|--------------|-----|
| Hinge side P | 403 |
|--------------|-----|

**Stay bearing**

|                   |     |
|-------------------|-----|
| Hinge side P      | 404 |
| Stay-bearing pins | 406 |

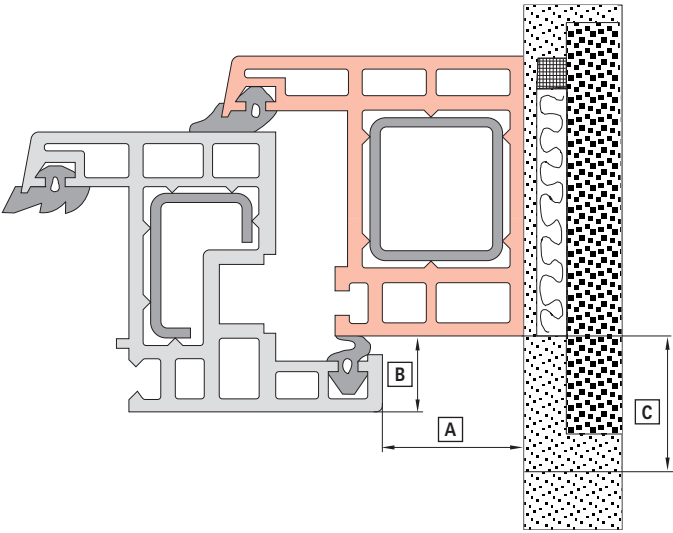
## 6 Sash stay

### 6.1 Frame clearances

#### 6.1.1 Hinge side P

##### 6.1.1.1 Frame clearance

Frame clearances with a 20 mm overlap width.



| Sash weight | Opening angle    | Frame clearance [A] | Overlap height [B] | Free area [C] |
|-------------|------------------|---------------------|--------------------|---------------|
| 130 kg      | Approx. 180° [4] | ≥ 21.0 mm           | ≥ 16 mm            | 100 mm        |
| 150 kg      | Approx. 150° [5] | ≥ 26.5 mm           | ≥ 16 mm            | 100 mm        |



#### INFO

Clearances including cover caps.  
Opening angle up to 20 mm overlap height.



#### DANGER

##### Risk of death caused by damage to bearing components!

Large overlap heights [B] or components near the reveal (such as skirting boards) may result in excessive leverage on the hinge side. This can damage the bearing components and cause the sash to fall.

- ▶ In the free area [C], the sash must not come into contact with the reveal or components near the reveal.
- ▶ With a reveal depth of < 100 mm, check whether a turn restrictor is required.



#### ATTENTION

##### Property damage caused by damage to bearing components!

Large overlap heights [B] or components near the reveal (such as skirting boards) may result in excessive leverage on the hinge side. This can damage the bearing components and cause the sash to fall.

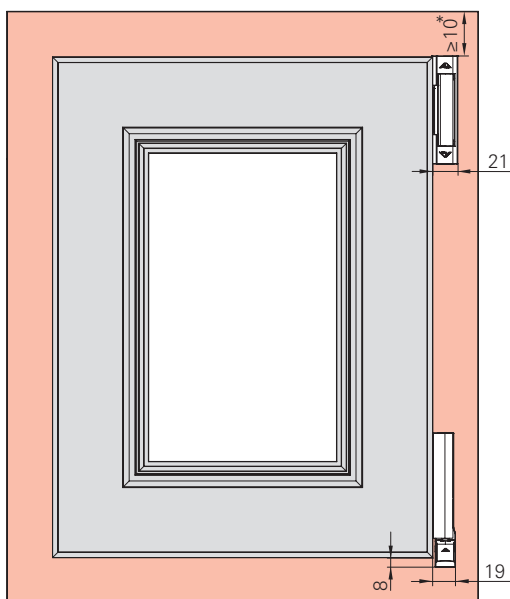
- ▶ In the free area [C], the sash must not come into contact with the reveal or components near the reveal.
- ▶ With a reveal depth of < 100 mm, check whether a turn restrictor is required.

[4] The opening angle may be less than 180° depending on the reveal.

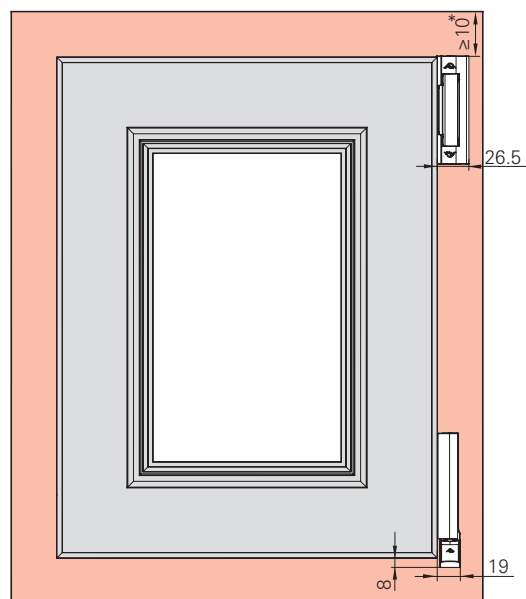
[5] The opening angle may be less than 150° depending on the reveal.



**Sash weight 130 kg**



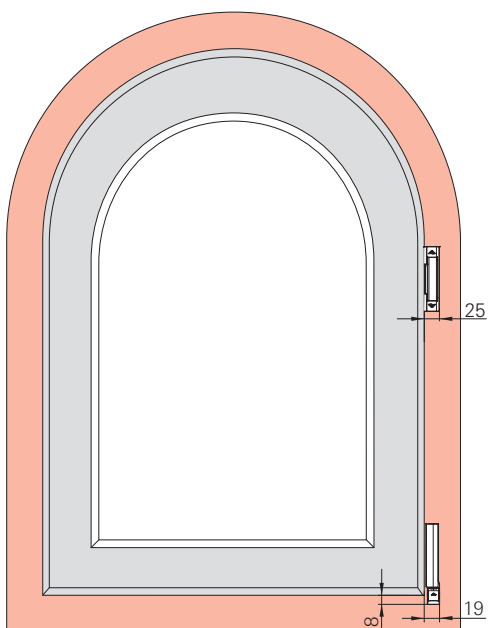
**Sash weight 150 kg**



\* For dismantling the stay-bearing pin, leave at least 10 mm clearance from the reveal.

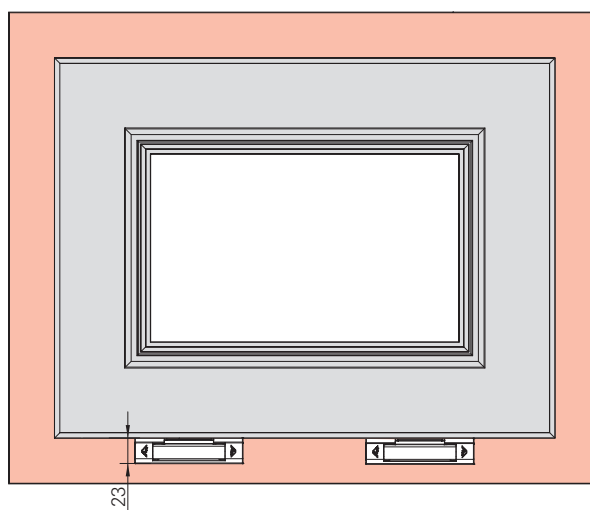
**Arch**

Sash weight 80 kg

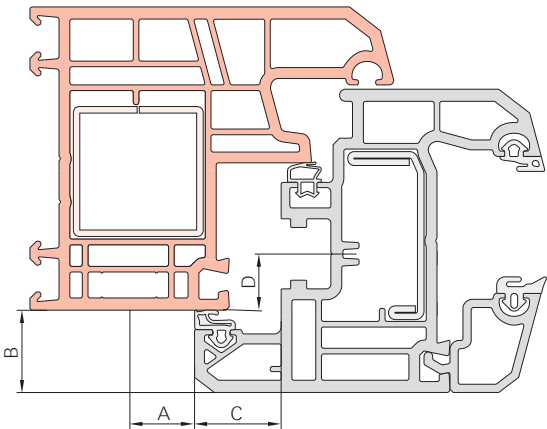


**Tilt-Only hardware**

Sash weight 80 kg



6.1.2 Hinge side C



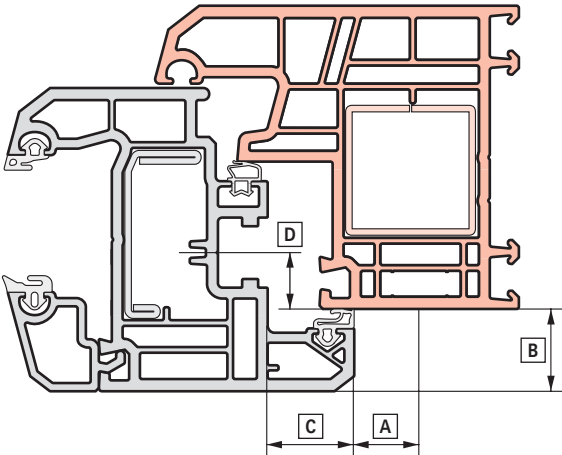
Frame clearances (in mm) with the sash opened from 0° to 90°.

| Axis dimension [D] | Overlap height [B] | Overlap width [C] | Frame clearance [A] |
|--------------------|--------------------|-------------------|---------------------|
| 13                 | 16                 | 18                | 3.5                 |
|                    | 20                 | 18                | 7.1                 |
|                    | 24                 | 18                | 10.8                |
|                    | 16                 | 20                | 2.6                 |
|                    | 20                 | 20                | 6                   |
|                    | 24                 | 20                | 9.6                 |
|                    | 16                 | 22                | 2                   |
|                    | 20                 | 22                | 5                   |
|                    | 24                 | 22                | 8.4                 |

The dimensions in the table apply to components in the delivery state (not adjusted).



6.1.3 Hinge side Designo (HA 13)



Frame clearances (in mm) with the sash opened from 0° to 90°.

|                            | Opening angle | Frame clearance [A] | Overlap height [B] | Overlap width [C] | Hardware axis [D] |
|----------------------------|---------------|---------------------|--------------------|-------------------|-------------------|
| Hinge side Designo (HA 13) | 90°           | 6.4                 | 16                 | 18                | 13                |
|                            | 90°           | 8.8                 | 20                 | 18                | 13                |
|                            | 90°           | 11.7                | 24                 | 18                | 13                |
|                            | 90°           | 6.1                 | 16                 | 20                | 13                |
|                            | 90°           | 8.4                 | 20                 | 20                | 13                |
|                            | 90°           | 11                  | 24                 | 20                | 13                |
|                            | 90°           | 5.9                 | 16                 | 22                | 13                |
|                            | 90°           | 8                   | 20                 | 22                | 13                |
|                            | 90°           | 10.5                | 24                 | 22                | 13                |

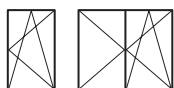
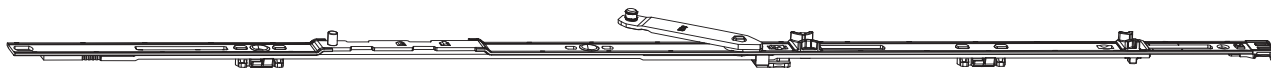


The dimensions in the table apply to components in the delivery state (not adjusted).

## 6.2 Stay guide

### 6.2.1 Hinge side P

#### 6.2.1.1 Basic security – RC 1 N



|   |   |             |      |     |     |   |   |          | Nº     |
|---|---|-------------|------|-----|-----|---|---|----------|--------|
| Y | Y | 290 – 410   | 300  | 120 | 150 | – | – | Roto Sil | 787345 |
|   |   | 411 – 600   | 490  | 190 | 250 | – | – | Roto Sil | 787346 |
|   |   | 601 – 800   | 690  | 200 | 350 | – | – | Roto Sil | 787347 |
|   |   | 801 – 1000  | 890  | 200 | 500 | – | – | Roto Sil | 787348 |
|   |   |             | 890  | 200 | 500 | 1 | E | Roto Sil | 788617 |
|   |   | 1001 – 1200 | 1090 | 200 | 500 | – | – | Roto Sil | 787350 |
|   |   |             | 1090 | 200 | 500 | 1 | E | Roto Sil | 787349 |
|   |   | 1201 – 1400 | 1290 | 200 | 500 | 1 | E | Roto Sil | 787351 |



#### INFO

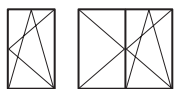
Additional stay arm required from SRW 1400 mm.

#### 6.2.1.2 Security – RC 2 / RC 2 N



|   |   |             |      |     |     |   |   |          | Nº     |
|---|---|-------------|------|-----|-----|---|---|----------|--------|
| Y | Y | 801 – 1000  | 890  | 200 | 500 | 1 | V | Roto Sil | 787360 |
|   |   | 1001 – 1200 | 1090 | 200 | 500 | 1 | V | Roto Sil | 787361 |
|   |   | 1201 – 1400 | 1290 | 200 | 500 | 1 | V | Roto Sil | 787362 |

#### 6.2.1.3 Security – RC 3



|   |   |            |     |     |     |   |   |          | Nº     |
|---|---|------------|-----|-----|-----|---|---|----------|--------|
| Y | Y | 801 – 1000 | 890 | 200 | 350 | 1 | V | Roto Sil | 787358 |



**INFO**

Centre lock (200 mm, 1 V cam) required from SRW 1001 mm.  
Additional stay arm also required from SRW 1201 mm.

**6.2.1.4 Turn-Only sash**



|                |            |     |     |     |   |   |          | Nº     |
|----------------|------------|-----|-----|-----|---|---|----------|--------|
| Basic security | 290 – 410  | 300 | 120 | 150 | – | – | Roto Sil | 787366 |
|                | 411 – 600  | 490 | 190 | 250 | – | – | Roto Sil | 787367 |
|                | 601 – 800  | 690 | 200 | 350 | – | – | Roto Sil | 787368 |
|                | 801 – 1000 | 890 | 200 | 500 | 1 | E | Roto Sil | 787369 |
| Security       | 801 – 1000 | 890 | 200 | 500 | 1 | V | Roto Sil | 787370 |



**INFO**

Can only be used in combination with lever-operated espagnolette, standard.



**INFO**

Centre lock required from SRW 711 mm.



**6.2.2 Hinge side C**

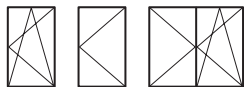
**6.2.2.1 Basic security**



|             |      |     |     |   |   |          | Nº      |
|-------------|------|-----|-----|---|---|----------|---------|
| 340 – 600   | 490  | 160 | 250 | – | – | Roto Sil | 2005271 |
| 601 – 800   | 690  | 200 | 350 | – | – | Roto Sil | 2005272 |
| 801 – 1000  | 890  | 200 | 500 | 1 | E | Roto Sil | 2005273 |
| 1001 – 1200 | 1090 | 200 | 500 | 1 | E | Roto Sil | 2005274 |
| 1201 – 1400 | 1290 | 200 | 500 | 1 | E | Roto Sil | 2005275 |

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

### 6.2.2.2 Security



|             |      |     |     |   |   |          | Nº      |
|-------------|------|-----|-----|---|---|----------|---------|
| 340 – 600   | 490  | 160 | 250 | – | – | Roto Sil | 2005271 |
| 601 – 800   | 690  | 200 | 350 | – | – | Roto Sil | 2005272 |
| 801 – 1000  | 890  | 200 | 500 | 1 | V | Roto Sil | 2005276 |
| 1001 – 1200 | 1090 | 200 | 500 | 1 | V | Roto Sil | 2005277 |
| 1201 – 1400 | 1290 | 200 | 500 | 1 | V | Roto Sil | 2005278 |

With S.kg > 150 kg, stay guide 500 must be mounted with fastening plate 255211.

### 6.2.2.3 Turn-Only sash



|           |     |     |     |          | Nº      |
|-----------|-----|-----|-----|----------|---------|
| 411 – 600 | 490 | 150 | 250 | Roto Sil | 2005279 |
| 511 – 710 | 600 | 200 | 250 | Roto Sil | 2005280 |



#### INFO

Can only be used in combination with lever-operated espagnolette, standard.

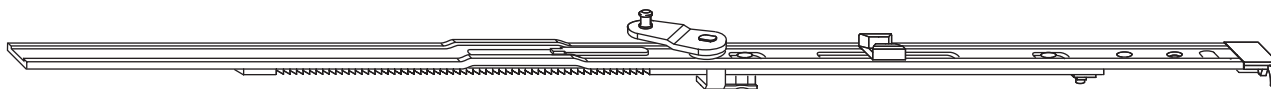


#### INFO

Centre lock required from SRW 711 mm.

## 6.2.3 Hinge side Designo (HA 13)

### 6.2.3.1 Basic security



|             |      |     |     |   |   |                  |          | Nº     |
|-------------|------|-----|-----|---|---|------------------|----------|--------|
| 330 – 600   | 490  | 170 | 250 | – | – | Anti-slam device | Roto Sil | 385393 |
| 601 – 800   | 690  | 200 | 350 | – | – | –                | Roto Sil | 385394 |
| 801 – 1000  | 890  | 200 | 500 | 1 | E | –                | Roto Sil | 385415 |
| 1001 – 1200 | 1090 | 200 | 500 | 1 | E | –                | Roto Sil | 385416 |

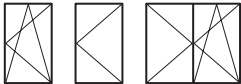
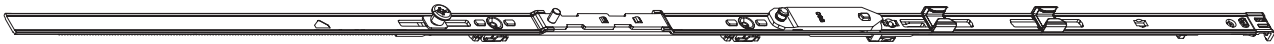




**INFO**

Additional stay arm required from SRW 1201 mm.

**6.2.3.2 Security**



|             |      |     |     |   |   |          | Nº     |
|-------------|------|-----|-----|---|---|----------|--------|
| 801 – 1000  | 890  | 200 | 500 | 1 | V | Roto Sil | 450373 |
| 1001 – 1200 | 1090 | 200 | 500 | 1 | V | Roto Sil | 450374 |



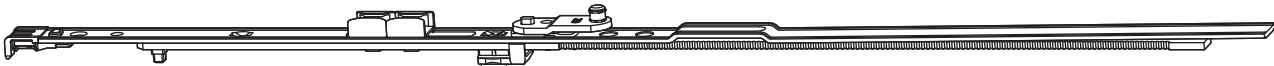
**INFO**

Additional stay arm required from SRW 1201 mm.



**6.2.3.3 Turn-Only sash**

**Lever-operated espagnolette – Standard**



|          |           |     |     |     |   |   |              |          | Nº     |
|----------|-----------|-----|-----|-----|---|---|--------------|----------|--------|
| Security | 430 – 510 | 400 | 80  | 250 | – | – | Travel 18 mm | Roto Sil | 482571 |
|          | 511 – 710 | 600 | 200 | 250 | – | – | Travel 18 mm | Roto Sil | 815784 |



**INFO**

Centre lock required from SRW 711 mm.

**Lever-operated espagnolette – Plus**



|          |           |     |     |     |   |   |          | Nº      |
|----------|-----------|-----|-----|-----|---|---|----------|---------|
| Security | 601 – 800 | 690 | 200 | 250 | – | – | Roto Sil | 2003336 |



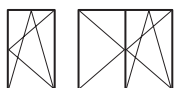
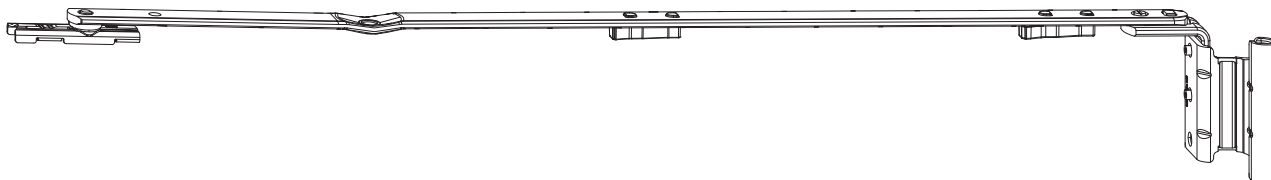
**INFO**

Centre lock required from SRW 801 mm.

## 6.3 Stay arm

### 6.3.1 Hinge side P

#### 6.3.1.1 Standard



|  |  |  |  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| 12/18-9                                                                           | 290 – 410                                                                         | 150                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787217  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787218  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788440  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788441  |
|                                                                                   | 411 – 600                                                                         | 250                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787219  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787220  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788442  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788443  |
|                                                                                   | 601 – 800                                                                         | 350                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787221  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787222  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788444  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788445  |
|                                                                                   | 801 – 1400                                                                        | 500                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787223  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787224  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788446  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788447  |
| 12/20-9                                                                           | 290 – 410                                                                         | 150                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787225  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787226  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788448  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788449  |
|                                                                                   | 411 – 600                                                                         | 250                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787227  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787228  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788450  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788451  |
|                                                                                   | 601 – 800                                                                         | 350                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787229  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787230  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788452  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788453  |
|                                                                                   | 801 – 1400                                                                        | 500                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787231  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787232  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788454  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788455  |
| 12/18-13                                                                          | 290 – 410                                                                         | 150                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 2007269 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 2007270 |
|                                                                                   | 411 – 600                                                                         | 250                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 2007271 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 2007272 |
|                                                                                   | 601 – 800                                                                         | 350                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 2007273 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 2007274 |
|                                                                                   | 801 – 1400                                                                        | 500                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 2007275 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 2007276 |



|  |  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| 12/20-13                                                                          | 290 – 410                                                                         | 150                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787233 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787234 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788456 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788457 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Left                                                                                | 795092 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Right                                                                               | 795093 |
|                                                                                   | 411 – 600                                                                         | 250                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787235 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787236 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788458 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788459 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Left                                                                                | 795094 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Right                                                                               | 795095 |
|                                                                                   | 601 – 800                                                                         | 350                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787237 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787238 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788460 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788461 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Left                                                                                | 795096 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Right                                                                               | 795097 |
|                                                                                   | 801 – 1400                                                                        | 500                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787239 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787240 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788462 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788463 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Left                                                                                | 795098 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Right                                                                               | 795099 |
| 12/21-13                                                                          | 290 – 410                                                                         | 150                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 795132 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 795133 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 817199 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 817200 |
|                                                                                   | 411 – 600                                                                         | 250                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 795134 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 795135 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 817201 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 817202 |
|                                                                                   | 601 – 800                                                                         | 350                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 795136 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 795137 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 817203 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 817204 |
|                                                                                   | 801 – 1400                                                                        | 500                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 795138 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 795139 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 817205 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 817206 |
| 12/22-13                                                                          | 290 – 410                                                                         | 150                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787241 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787242 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788464 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788465 |
|                                                                                   | 411 – 600                                                                         | 250                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787243 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787244 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788466 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788467 |
|                                                                                   | 601 – 800                                                                         | 350                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787245 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787246 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788468 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788469 |
|                                                                                   | 801 – 1400                                                                        | 500                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 787247 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 787248 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 788470 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 788471 |

For compatible stay bearings, see → *from page 404* → *from page 404*.

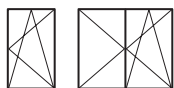
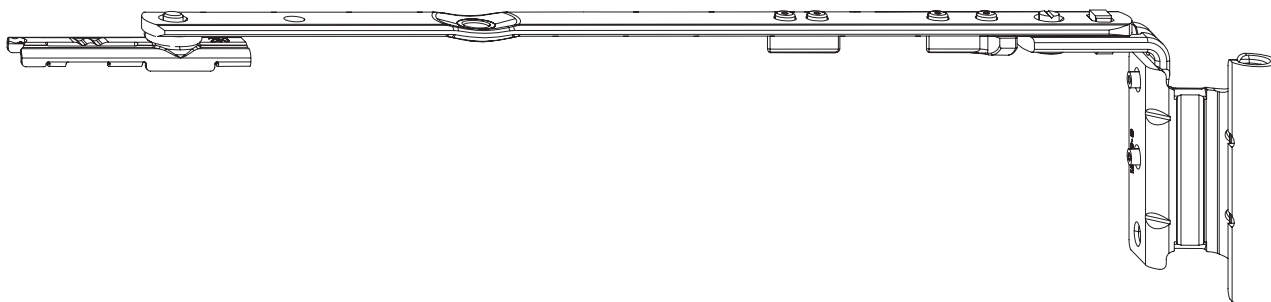
For compatible cover caps, see → *from page 408*.



### INFO

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

#### 6.3.1.2 TiltFirst (TF)



|          |            |     |   |          |       | Nº      |
|----------|------------|-----|---|----------|-------|---------|
| 12/18-9  | 290 – 410  | 150 | N | Roto Sil | Left  | 814684  |
|          |            |     | N | Roto Sil | Right | 814695  |
|          | 411 – 600  | 250 | N | Roto Sil | Left  | 814696  |
|          |            |     | N | Roto Sil | Right | 814697  |
|          | 601 – 800  | 350 | N | Roto Sil | Left  | 814698  |
|          |            |     | N | Roto Sil | Right | 814699  |
|          | 801 – 1400 | 500 | N | Roto Sil | Left  | 814700  |
|          |            |     | N | Roto Sil | Right | 814701  |
| 12/20-9  | 290 – 410  | 150 | N | Roto Sil | Left  | 814703  |
|          |            |     | N | Roto Sil | Left  | 814704  |
|          | 411 – 600  | 250 | N | Roto Sil | Left  | 814705  |
|          |            |     | N | Roto Sil | Right | 814706  |
|          | 601 – 800  | 350 | N | Roto Sil | Left  | 814707  |
|          |            |     | N | Roto Sil | Right | 814708  |
|          | 801 – 1400 | 500 | N | Roto Sil | Left  | 814709  |
|          |            |     | N | Roto Sil | Right | 814710  |
| 12/18-13 | 290 – 410  | 150 | N | Roto Sil | Left  | 2007277 |
|          |            |     | N | Roto Sil | Right | 2007278 |
|          | 411 – 600  | 250 | N | Roto Sil | Left  | 2007279 |
|          |            |     | N | Roto Sil | Right | 2007280 |
|          | 601 – 800  | 350 | N | Roto Sil | Left  | 2007281 |
|          |            |     | N | Roto Sil | Right | 2007282 |
|          | 801 – 1400 | 500 | N | Roto Sil | Left  | 2007283 |
|          |            |     | N | Roto Sil | Right | 2007284 |



|  |  |  |  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| 12/20-13                                                                          | 290 – 410                                                                         | 150                                                                               | N                                                                                 | Roto Sil                                                                           | Left                                                                                | 814711  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Roto Sil                                                                           | Right                                                                               | 814712  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Titanium                                                                           | Left                                                                                | 2047215 |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Titanium                                                                           | Right                                                                               | 2047216 |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | White                                                                              | Left                                                                                | 814727  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | White                                                                              | Right                                                                               | 814728  |
|                                                                                   | 411 – 600                                                                         | 250                                                                               | N                                                                                 | Roto Sil                                                                           | Left                                                                                | 814713  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Roto Sil                                                                           | Right                                                                               | 814714  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Titanium                                                                           | Left                                                                                | 2047217 |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Titanium                                                                           | Right                                                                               | 2047218 |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | White                                                                              | Left                                                                                | 814729  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | White                                                                              | Right                                                                               | 814730  |
|                                                                                   | 601 – 800                                                                         | 350                                                                               | N                                                                                 | Roto Sil                                                                           | Left                                                                                | 814715  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Roto Sil                                                                           | Right                                                                               | 814716  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Titanium                                                                           | Left                                                                                | 2047219 |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Titanium                                                                           | Right                                                                               | 2047220 |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | White                                                                              | Left                                                                                | 814731  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | White                                                                              | Right                                                                               | 814732  |
|                                                                                   | 801 – 1400                                                                        | 500                                                                               | N                                                                                 | Roto Sil                                                                           | Left                                                                                | 814717  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Roto Sil                                                                           | Right                                                                               | 814718  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Titanium                                                                           | Left                                                                                | 2047221 |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Titanium                                                                           | Right                                                                               | 2047222 |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | White                                                                              | Left                                                                                | 814733  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | White                                                                              | Right                                                                               | 814734  |
| 12/21-13                                                                          | 290 – 410                                                                         | 150                                                                               | N                                                                                 | Roto Sil                                                                           | Left                                                                                | 895923  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Roto Sil                                                                           | Right                                                                               | 895924  |
|                                                                                   | 411 – 600                                                                         | 250                                                                               | N                                                                                 | Roto Sil                                                                           | Left                                                                                | 895925  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Roto Sil                                                                           | Right                                                                               | 895926  |
|                                                                                   | 601 – 800                                                                         | 350                                                                               | N                                                                                 | Roto Sil                                                                           | Left                                                                                | 895927  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Roto Sil                                                                           | Right                                                                               | 895928  |
|                                                                                   | 801 – 1400                                                                        | 500                                                                               | N                                                                                 | Roto Sil                                                                           | Left                                                                                | 895929  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Roto Sil                                                                           | Right                                                                               | 895930  |
| 12/22-13                                                                          | 290 – 410                                                                         | 150                                                                               | N                                                                                 | Roto Sil                                                                           | Left                                                                                | 814719  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Roto Sil                                                                           | Right                                                                               | 814720  |
|                                                                                   | 411 – 600                                                                         | 250                                                                               | N                                                                                 | Roto Sil                                                                           | Left                                                                                | 814721  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Roto Sil                                                                           | Right                                                                               | 814722  |
|                                                                                   | 601 – 800                                                                         | 350                                                                               | N                                                                                 | Roto Sil                                                                           | Left                                                                                | 814723  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Roto Sil                                                                           | Right                                                                               | 814724  |
|                                                                                   | 801 – 1400                                                                        | 500                                                                               | N                                                                                 | Roto Sil                                                                           | Left                                                                                | 814725  |
|                                                                                   |                                                                                   |                                                                                   | N                                                                                 | Roto Sil                                                                           | Right                                                                               | 814726  |



For compatible stay bearings, see → *from page 404* → *from page 404*.

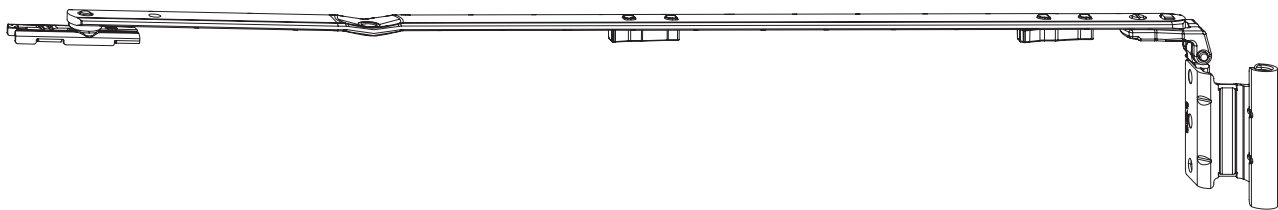
For compatible cover caps, see → *from page 408*.



#### INFO

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

6.3.1.3 Pitched window (PW)



|          |            |     |   |          |       | Nº      |
|----------|------------|-----|---|----------|-------|---------|
| 12/18-9  | 290 – 410  | 150 | Y | Roto Sil | Left  | 795148  |
|          |            |     | Y | Roto Sil | Right | 795149  |
|          | 411 – 600  | 250 | Y | Roto Sil | Left  | 795150  |
|          |            |     | Y | Roto Sil | Right | 795151  |
|          | 601 – 800  | 350 | Y | Roto Sil | Left  | 795152  |
|          |            |     | Y | Roto Sil | Right | 795153  |
|          | 801 – 1400 | 500 | Y | Roto Sil | Left  | 795154  |
|          |            |     | Y | Roto Sil | Right | 795155  |
| 12/20-9  | 290 – 410  | 150 | Y | Roto Sil | Left  | 795156  |
|          |            |     | Y | Roto Sil | Right | 795157  |
|          | 411 – 600  | 250 | Y | Roto Sil | Left  | 795158  |
|          |            |     | Y | Roto Sil | Right | 795159  |
|          | 601 – 800  | 350 | Y | Roto Sil | Left  | 795160  |
|          |            |     | Y | Roto Sil | Right | 795161  |
|          | 801 – 1400 | 500 | Y | Roto Sil | Left  | 795162  |
|          |            |     | Y | Roto Sil | Right | 795163  |
| 12/18-13 | 290 – 410  | 150 | Y | Roto Sil | Left  | 2007285 |
|          |            |     | Y | Roto Sil | Right | 2007286 |
|          | 411 – 600  | 250 | Y | Roto Sil | Left  | 2007287 |
|          |            |     | Y | Roto Sil | Right | 2007288 |
|          | 601 – 800  | 350 | Y | Roto Sil | Left  | 2007289 |
|          |            |     | Y | Roto Sil | Right | 2007290 |
|          | 801 – 1400 | 500 | Y | Roto Sil | Left  | 2007291 |
|          |            |     | Y | Roto Sil | Right | 2007292 |



|  |  |  |  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| 12/20-13                                                                          | 290 – 410                                                                         | 150                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 795164  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 795165  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Left                                                                                | 2047121 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Right                                                                               | 2047123 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 795180  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 795181  |
|                                                                                   | 411 – 600                                                                         | 250                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 795166  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 795167  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Left                                                                                | 2047124 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Right                                                                               | 2047210 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 795182  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 795183  |
|                                                                                   | 601 – 800                                                                         | 350                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 795168  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 795169  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Left                                                                                | 2047211 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Right                                                                               | 2047212 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 795184  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 795185  |
|                                                                                   | 801 – 1400                                                                        | 500                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 795170  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 795171  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Left                                                                                | 2047213 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Titanium                                                                           | Right                                                                               | 2047214 |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Left                                                                                | 795186  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | White                                                                              | Right                                                                               | 795187  |
| 12/22-13                                                                          | 290 – 410                                                                         | 150                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 795188  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 795189  |
|                                                                                   | 411 – 600                                                                         | 250                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 795190  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 795191  |
|                                                                                   | 601 – 800                                                                         | 350                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 795192  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 795193  |
|                                                                                   | 801 – 1400                                                                        | 500                                                                               | Y                                                                                 | Roto Sil                                                                           | Left                                                                                | 795194  |
|                                                                                   |                                                                                   |                                                                                   | Y                                                                                 | Roto Sil                                                                           | Right                                                                               | 795195  |



For compatible stay bearings, see → *from page 404* → *from page 404*.

For compatible cover caps, see → *from page 408*.

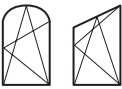
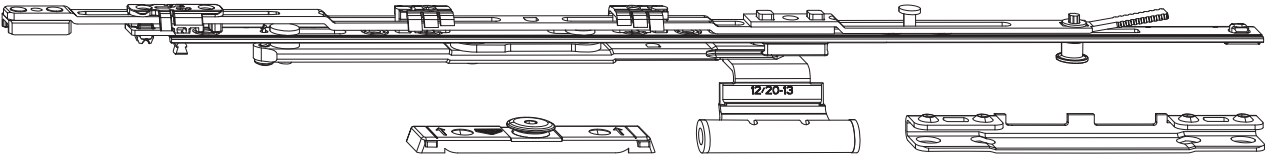
For the end piece, see → *from page 523*.



## INFO

With SRH < 500 mm, set the tilt depth to 80 mm (with sash stay from size 250 and above).

6.3.1.4 Arched window set



|  |  # |  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| 12/18-9                                                                           | 1                                                                                   | V                                                                                 | Roto Sil                                                                          | –                                                                                   | 896116  |
| 12/20-9                                                                           | 1                                                                                   | V                                                                                 | Roto Sil                                                                          | –                                                                                   | 896117  |
| 12/18-13                                                                          | 1                                                                                   | V                                                                                 | Roto Sil                                                                          | –                                                                                   | 2007293 |
| 12/20-13                                                                          | 1                                                                                   | V                                                                                 | Roto Sil                                                                          | –                                                                                   | 896118  |
|                                                                                   | 1                                                                                   | V                                                                                 | White                                                                             | –                                                                                   | 896120  |
|                                                                                   | 1                                                                                   | V                                                                                 | Titanium                                                                          | –                                                                                   | 2007009 |
| 12/22-13                                                                          | 1                                                                                   | V                                                                                 | Roto Sil                                                                          | –                                                                                   | 896119  |

For compatible stay bearings, see → from page 406→ from page 404.

For compatible cover caps, see → from page 408.



INFO

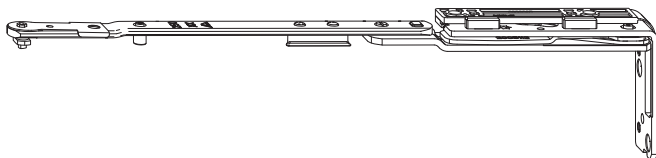
For systems 12/18-9, 12/20-9 and 12/22-13, it may be necessary to trim the sash gasket in the area of the stay hinge, depending on the profile system.





## 6.3.2 Hinge side C

### 6.3.2.1 Standard – stay arm 250

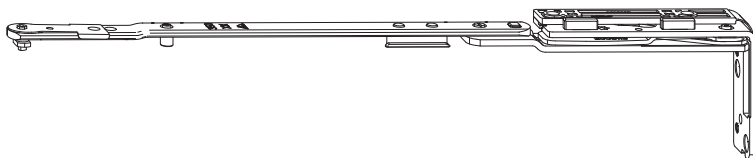


|                                  |     |          |       | Nº      |
|----------------------------------|-----|----------|-------|---------|
| Gealan S3000                     | 250 | Roto Sil | Left  | 2008548 |
| Gealan S7000                     | 250 | Roto Sil | Right | 2008549 |
| Gealan S8000                     |     |          |       |         |
| Gealan S9000                     |     |          |       |         |
| Kömmerling 88 Plus               | 250 | Roto Sil | Left  | 2008554 |
| Kömmerling Eurodur 3S            | 250 | Roto Sil | Right | 2008555 |
| Kömmerling Eurofutur Classic     |     |          |       |         |
| Kömmerling Eurofutur Elegance    |     |          |       |         |
| Rehau S969 Synego                | 250 | Roto Sil | Left  | 2008560 |
| Rehau S980 Geneo                 | 250 | Roto Sil | Right | 2008561 |
| Rehau S986 EuroDesign 86         |     |          |       |         |
| Rehau Total70R Reversible window |     |          |       |         |
| Rehau S735 MD                    | 250 | Roto Sil | Left  | 2008566 |
| Rehau S799 Brillant Design       | 250 | Roto Sil | Right | 2008567 |
| KBE 70 AD                        | 250 | Roto Sil | Left  | 2008572 |
| Kömmerling 76                    | 250 | Roto Sil | Right | 2008573 |
| Kömmerling C70 Gold              |     |          |       |         |
| Trocal 76                        |     |          |       |         |
| Profine 76                       |     |          |       |         |
| Profine 88                       |     |          |       |         |
| Aluplast energeto 8000           | 250 | Roto Sil | Left  | 2008584 |
| Aluplast Ideal 4000              | 250 | Roto Sil | Right | 2008585 |
| Aluplast Ideal 5000              |     |          |       |         |
| Aluplast Ideal 7000              |     |          |       |         |
| Schüco Corona MD                 |     |          |       |         |
| Brüggmann AD 13                  | 250 | Roto Sil | Left  | 2008590 |
| Brüggmann MD 13                  | 250 | Roto Sil | Right | 2008591 |
| LB Profile Pad                   |     |          |       |         |
| Salamander BluEvolution 73       |     |          |       |         |
| Salamander BluEvolution 82       |     |          |       |         |
| Salamander GreenEvolution 76     |     |          |       |         |
| Veka Alphaline 90                |     |          |       |         |
| Veka Softline 70 MD              |     |          |       |         |
| Veka Softline 76 AD              |     |          |       |         |
| Veka Softline 76 MD              |     |          |       |         |
| Veka Softline 82 AD              |     |          |       |         |
| Veka Softline 82 MD              |     |          |       |         |
| Veka Topline AD 13               |     |          |       |         |
| Veka M70                         |     |          |       |         |
| Veka Topline MD 13               |     |          |       |         |
| Inoutic Prestige                 | 250 | Roto Sil | Left  | 2008596 |
| Inoutic Eforte                   | 250 | Roto Sil | Right | 2008597 |
| Salamander 2D                    | 250 | Roto Sil | Left  | 2008602 |
| Salamander 3D                    | 250 | Roto Sil | Right | 2008603 |
| Salamander Design Streamline 76  |     |          |       |         |
| Salamander BluEvolution 92       | 250 | Roto Sil | Left  | 2008608 |
|                                  | 250 | Roto Sil | Right | 2008609 |
| Schüco CT70 AD                   | 250 | Roto Sil | Left  | 2008620 |
| Schüco CT70 MD                   | 250 | Roto Sil | Right | 2008621 |
| Schüco SI82 MD                   |     |          |       |         |
| Schüco LivIng 82 MD              |     |          |       |         |
| Gealan Kubus                     | 250 | Roto Sil | Left  | 2008638 |
| Gealan Kontur                    | 250 | Roto Sil | Right | 2008639 |
| Deceuninck Elegant               | 250 | Roto Sil | Left  | 2008650 |
| Deceuninck Zendow                | 250 | Roto Sil | Right | 2008651 |



|  |  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Rehau Artevo                                                                      | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 2036876 |
|                                                                                   | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 2036880 |

### 6.3.2.2 Standard – stay arm 350

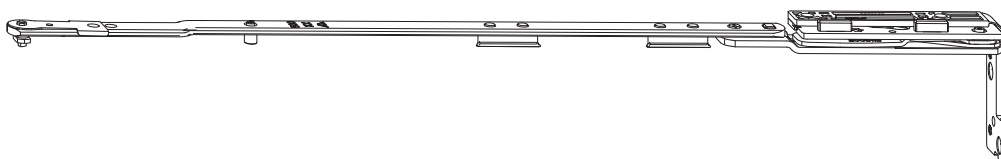


|                                                                                                                                                                                                                                                                 |  |  |  | Nº      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
|  Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>Gealan S9000                                                                                                                                                                                                    | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008550 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008551 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008556 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008557 |
| Kömmerling 88 Plus<br>Kömmerling Eurodur 3S<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                                                                                                                                                                                                                                     | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008556 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008557 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008562 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008563 |
| Rehau S969 Synego<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86<br>Rehau Total70R Reversible window                                                                                                                                                                                                                                            | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008562 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008563 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008568 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008569 |
| KBE 70 AD<br>Kömmerling 76<br>Kömmerling C70 Gold<br>Trocal 76<br>Profine 76<br>Profine 88                                                                                                                                                                                                                                                       | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008574 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008575 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008580 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008581 |
| Aluplast energeto 8000<br>Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast Ideal 7000<br>Schüco Corona MD                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008586 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008587 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008592 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008593 |
| Brüggmann AD 13<br>Brüggmann MD 13<br>LB Profile Pad<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76<br>Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Softline 76 AD<br>Veka Softline 76 MD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka M70<br>Veka Topline MD 13 | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008592 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008593 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008598 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008599 |
| Salamander 2D<br>Salamander 3D<br>Salamander Design Streamline 76                                                                                                                                                                                                                                                                                | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008604 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008605 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008610 |
|                                                                                                                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008611 |



|  |  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Schüco CT70 AD                                                                    | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008622 |
| Schüco CT70 MD                                                                    | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008623 |
| Schüco SI82 MD                                                                    |                                                                                   |                                                                                    |                                                                                     |         |
| Schüco LivIng 82 MD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Gealan Kubus                                                                      | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008640 |
| Gealan Kontur                                                                     | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008641 |
| Deceuninck Elegant                                                                | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008652 |
| Deceuninck Zendow                                                                 | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008653 |
| Rehau Artevo                                                                      | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2036881 |
|                                                                                   | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2036882 |

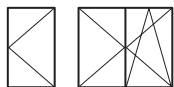
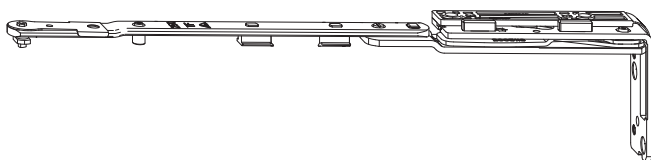
### 6.3.2.3 Standard – stay arm 500



|  |  |  |  | Nº      |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------|
| Gealan S3000                                                                       | 500                                                                                | Roto Sil                                                                            | Left                                                                                 | 2008552 |
| Gealan S7000                                                                       | 500                                                                                | Roto Sil                                                                            | Right                                                                                | 2008553 |
| Gealan S8000                                                                       |                                                                                    |                                                                                     |                                                                                      |         |
| Gealan S9000                                                                       |                                                                                    |                                                                                     |                                                                                      |         |
| Kömmerling 88 Plus                                                                 | 500                                                                                | Roto Sil                                                                            | Left                                                                                 | 2008558 |
| Kömmerling Eurodur 3S                                                              | 500                                                                                | Roto Sil                                                                            | Right                                                                                | 2008559 |
| Kömmerling Eurofutur Classic                                                       |                                                                                    |                                                                                     |                                                                                      |         |
| Kömmerling Eurofutur Elegance                                                      |                                                                                    |                                                                                     |                                                                                      |         |
| Rehau S969 Synego                                                                  | 500                                                                                | Roto Sil                                                                            | Left                                                                                 | 2008564 |
| Rehau S980 Geneo                                                                   | 500                                                                                | Roto Sil                                                                            | Right                                                                                | 2008565 |
| Rehau S986 EuroDesign 86                                                           |                                                                                    |                                                                                     |                                                                                      |         |
| Rehau Total70R Reversible window                                                   |                                                                                    |                                                                                     |                                                                                      |         |
| Rehau S735 MD                                                                      | 500                                                                                | Roto Sil                                                                            | Left                                                                                 | 2008570 |
| Rehau S799 Brillant Design                                                         | 500                                                                                | Roto Sil                                                                            | Right                                                                                | 2008571 |
| KBE 70 AD                                                                          | 500                                                                                | Roto Sil                                                                            | Left                                                                                 | 2008576 |
| Kömmerling 76                                                                      | 500                                                                                | Roto Sil                                                                            | Right                                                                                | 2008577 |
| Kömmerling C70 Gold                                                                |                                                                                    |                                                                                     |                                                                                      |         |
| Trocal 76                                                                          |                                                                                    |                                                                                     |                                                                                      |         |
| Profine 76                                                                         |                                                                                    |                                                                                     |                                                                                      |         |
| Profine 88                                                                         |                                                                                    |                                                                                     |                                                                                      |         |
| Aluplast Ideal 2000                                                                | 500                                                                                | Roto Sil                                                                            | Left                                                                                 | 2008582 |
|                                                                                    | 500                                                                                | Roto Sil                                                                            | Right                                                                                | 2008583 |
| Aluplast energeto 8000                                                             | 500                                                                                | Roto Sil                                                                            | Left                                                                                 | 2008588 |
| Aluplast Ideal 4000                                                                | 500                                                                                | Roto Sil                                                                            | Right                                                                                | 2008589 |
| Aluplast Ideal 5000                                                                |                                                                                    |                                                                                     |                                                                                      |         |
| Aluplast Ideal 7000                                                                |                                                                                    |                                                                                     |                                                                                      |         |
| Schüco Corona MD                                                                   |                                                                                    |                                                                                     |                                                                                      |         |
| Brüggmann AD 13                                                                    | 500                                                                                | Roto Sil                                                                            | Left                                                                                 | 2008594 |
| Brüggmann MD 13                                                                    | 500                                                                                | Roto Sil                                                                            | Right                                                                                | 2008595 |
| LB Profile Pad                                                                     |                                                                                    |                                                                                     |                                                                                      |         |
| Salamander BluEvolution 73                                                         |                                                                                    |                                                                                     |                                                                                      |         |
| Salamander BluEvolution 82                                                         |                                                                                    |                                                                                     |                                                                                      |         |
| Salamander GreenEvolution 76                                                       |                                                                                    |                                                                                     |                                                                                      |         |
| Veka Alphaline 90                                                                  |                                                                                    |                                                                                     |                                                                                      |         |
| Veka Softline 70 AD                                                                |                                                                                    |                                                                                     |                                                                                      |         |
| Veka Softline 70 MD                                                                |                                                                                    |                                                                                     |                                                                                      |         |
| Veka Softline 76 AD                                                                |                                                                                    |                                                                                     |                                                                                      |         |
| Veka Softline 76 MD                                                                |                                                                                    |                                                                                     |                                                                                      |         |
| Veka Softline 82 MD                                                                |                                                                                    |                                                                                     |                                                                                      |         |
| Veka Topline AD 13                                                                 |                                                                                    |                                                                                     |                                                                                      |         |
| Veka M70                                                                           |                                                                                    |                                                                                     |                                                                                      |         |
| Veka Topline MD 13                                                                 |                                                                                    |                                                                                     |                                                                                      |         |

|  |  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Inoutic Prestige                                                                  | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008600 |
| Inoutic Eforte                                                                    | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008601 |
| Salamander 2D                                                                     | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008606 |
| Salamander 3D                                                                     | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008607 |
| Salamander Design Streamline 76                                                   |                                                                                   |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 92                                                        | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008612 |
|                                                                                   | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008613 |
| Schüco CT70 AD                                                                    | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008624 |
| Schüco CT70 MD                                                                    | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008625 |
| Schüco SI82 MD                                                                    |                                                                                   |                                                                                    |                                                                                     |         |
| Schüco LivIng 82 MD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Gealan Kubus                                                                      | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008642 |
| Gealan Kontur                                                                     | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008643 |
| Deceuninck Elegant                                                                | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008654 |
| Deceuninck Zendow                                                                 | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008655 |
| Rehau Artevo                                                                      | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2036883 |
|                                                                                   | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2036884 |

#### 6.3.2.4 TiltFirst (TF) – stay arm 250



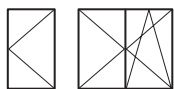
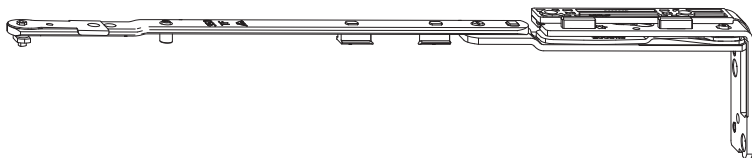
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|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|
| Gealan S3000                                                                        | 250                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008656 |
| Gealan S7000                                                                        | 250                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008657 |
| Gealan S8000                                                                        |                                                                                     |                                                                                      |                                                                                       |         |
| Gealan S9000                                                                        |                                                                                     |                                                                                      |                                                                                       |         |
| Kömmerling 88 Plus                                                                  | 250                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008662 |
| Kömmerling Eurodur 3S                                                               | 250                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008663 |
| Kömmerling Eurofutur Classic                                                        |                                                                                     |                                                                                      |                                                                                       |         |
| Kömmerling Eurofutur Elegance                                                       |                                                                                     |                                                                                      |                                                                                       |         |
| Rehau S969 Synego                                                                   | 250                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008668 |
| Rehau S980 Geneo                                                                    | 250                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008669 |
| Rehau S986 EuroDesign 86                                                            |                                                                                     |                                                                                      |                                                                                       |         |
| Rehau S735 MD                                                                       | 250                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008674 |
| Rehau S799 Brillant Design                                                          | 250                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008675 |
| KBE 70 AD                                                                           | 250                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008680 |
| Kömmerling 76                                                                       | 250                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008681 |
| Trocal 76                                                                           |                                                                                     |                                                                                      |                                                                                       |         |
| Profine 76                                                                          |                                                                                     |                                                                                      |                                                                                       |         |
| Profine 88                                                                          |                                                                                     |                                                                                      |                                                                                       |         |
| Aluplast Ideal 2000                                                                 | 250                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008686 |
|                                                                                     | 250                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008687 |
| Aluplast energeto 8000                                                              | 250                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008692 |
| Aluplast Ideal 4000                                                                 | 250                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008693 |
| Aluplast Ideal 5000                                                                 |                                                                                     |                                                                                      |                                                                                       |         |
| Aluplast Ideal 7000                                                                 |                                                                                     |                                                                                      |                                                                                       |         |
| Schüco Corona MD                                                                    |                                                                                     |                                                                                      |                                                                                       |         |



|  |  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Brüggmann AD 13                                                                   | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 2008698 |
| Brüggmann MD 13                                                                   | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 2008699 |
| LB Profile Pad                                                                    |                                                                                   |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 73                                                        |                                                                                   |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 82                                                        |                                                                                   |                                                                                    |                                                                                     |         |
| Salamander GreenEvolution 76                                                      |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Alphaline 90                                                                 |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Softline 70 MD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Softline 76 AD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Softline 76 MD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Softline 82 AD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Softline 82 MD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Topline AD 13                                                                |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Topline MD 13                                                                |                                                                                   |                                                                                    |                                                                                     |         |
| Inoutic Prestige                                                                  | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 2008710 |
| Inoutic Eforte                                                                    | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 2008711 |
| Salamander BluEvolution 92                                                        | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 2008716 |
|                                                                                   | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 2008717 |
| Gealan Linear                                                                     | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 2008734 |
|                                                                                   | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 2008735 |
| Schüco CT70 AD                                                                    | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 2008758 |
| Schüco CT70 MD                                                                    | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 2008759 |
| Schüco SI82 MD                                                                    |                                                                                   |                                                                                    |                                                                                     |         |
| Schüco LivIng 82 MD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Deceuninck Elegant                                                                | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 2008776 |
| Deceuninck Zendow                                                                 | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 2008777 |
| Rehau Artevo                                                                      | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 2036885 |
|                                                                                   | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 2036886 |



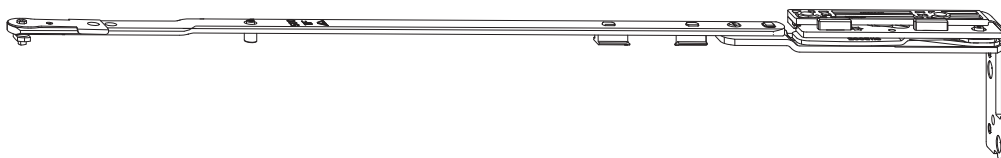
### 6.3.2.5 TiltFirst (TF) – stay arm 350



|  |  |  |  | Nº      |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|
| Gealan S3000                                                                        | 350                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008658 |
| Gealan S7000                                                                        | 350                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008659 |
| Gealan S8000                                                                        |                                                                                     |                                                                                      |                                                                                       |         |
| Gealan S9000                                                                        |                                                                                     |                                                                                      |                                                                                       |         |
| Kömmerling 88 Plus                                                                  | 350                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008664 |
| Kömmerling Eurodur 3S                                                               | 350                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008665 |
| Kömmerling Eurofutur Classic                                                        |                                                                                     |                                                                                      |                                                                                       |         |
| Kömmerling Eurofutur Elegance                                                       |                                                                                     |                                                                                      |                                                                                       |         |
| Rehau S969 Synego                                                                   | 350                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008670 |
| Rehau S980 Geneo                                                                    | 350                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008671 |
| Rehau S986 EuroDesign 86                                                            |                                                                                     |                                                                                      |                                                                                       |         |
| Rehau S735 MD                                                                       | 350                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008676 |
| Rehau S799 Brillant Design                                                          | 350                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008677 |
| KBE 70 AD                                                                           | 350                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008682 |
| Kömmerling 76                                                                       | 350                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008683 |
| Trocal 76                                                                           |                                                                                     |                                                                                      |                                                                                       |         |
| Profine 76                                                                          |                                                                                     |                                                                                      |                                                                                       |         |
| Profine 88                                                                          |                                                                                     |                                                                                      |                                                                                       |         |
| Aluplast Ideal 2000                                                                 | 350                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008688 |
|                                                                                     | 350                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008689 |

|  |  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Aluplast energeto 8000                                                            | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008694 |
| Aluplast Ideal 4000                                                               | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008695 |
| Aluplast Ideal 5000                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Aluplast Ideal 7000                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Schüco Corona MD                                                                  |                                                                                   |                                                                                    |                                                                                     |         |
| Brüggmann AD 13                                                                   | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008700 |
| Brüggmann MD 13                                                                   | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008701 |
| LB Profile Pad                                                                    |                                                                                   |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 73                                                        |                                                                                   |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 82                                                        |                                                                                   |                                                                                    |                                                                                     |         |
| Salamander GreenEvolution 76                                                      |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Alphaline 90                                                                 |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Softline 70 MD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Softline 76 AD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Softline 76 MD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Softline 82 AD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Softline 82 MD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Topline AD 13                                                                |                                                                                   |                                                                                    |                                                                                     |         |
| Veka Topline MD 13                                                                |                                                                                   |                                                                                    |                                                                                     |         |
| Inoutic Prestige                                                                  | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008712 |
| Inoutic Eforte                                                                    | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008713 |
| Salamander BluEvolution 92                                                        | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008718 |
|                                                                                   | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008719 |
| Gealan Linear                                                                     | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008736 |
|                                                                                   | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008737 |
| Schüco CT70 AD                                                                    | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008760 |
| Schüco CT70 MD                                                                    | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008761 |
| Schüco SI82 MD                                                                    |                                                                                   |                                                                                    |                                                                                     |         |
| Schüco Living 82 MD                                                               |                                                                                   |                                                                                    |                                                                                     |         |
| Deceuninck Elegant                                                                | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2008778 |
| Deceuninck Zendow                                                                 | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2008779 |
| Rehau Artevo                                                                      | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 2036887 |
|                                                                                   | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 2036888 |

### 6.3.2.6 TiltFirst (TF) – stay arm 500



|  |  |  |  | Nº      |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|
| Gealan S3000                                                                        | 500                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008660 |
| Gealan S7000                                                                        | 500                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008661 |
| Gealan S8000                                                                        |                                                                                     |                                                                                      |                                                                                       |         |
| Gealan S9000                                                                        |                                                                                     |                                                                                      |                                                                                       |         |
| Kömmerling 88 Plus                                                                  | 500                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008666 |
| Kömmerling Eurodur 3S                                                               | 500                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008667 |
| Kömmerling Eurofutur Classic                                                        |                                                                                     |                                                                                      |                                                                                       |         |
| Kömmerling Eurofutur Elegance                                                       |                                                                                     |                                                                                      |                                                                                       |         |
| Rehau S969 Synego                                                                   | 500                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008672 |
| Rehau S980 Geneo                                                                    | 500                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008673 |
| Rehau S986 EuroDesign 86                                                            |                                                                                     |                                                                                      |                                                                                       |         |
| Rehau S735 MD                                                                       | 500                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008678 |
| Rehau S799 Brillant Design                                                          | 500                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008679 |
| KBE 70 AD                                                                           | 500                                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008684 |
| Kömmerling 76                                                                       | 500                                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008685 |
| Trocal 76                                                                           |                                                                                     |                                                                                      |                                                                                       |         |
| Profine 76                                                                          |                                                                                     |                                                                                      |                                                                                       |         |
| Profine 88                                                                          |                                                                                     |                                                                                      |                                                                                       |         |

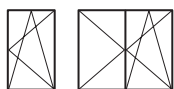
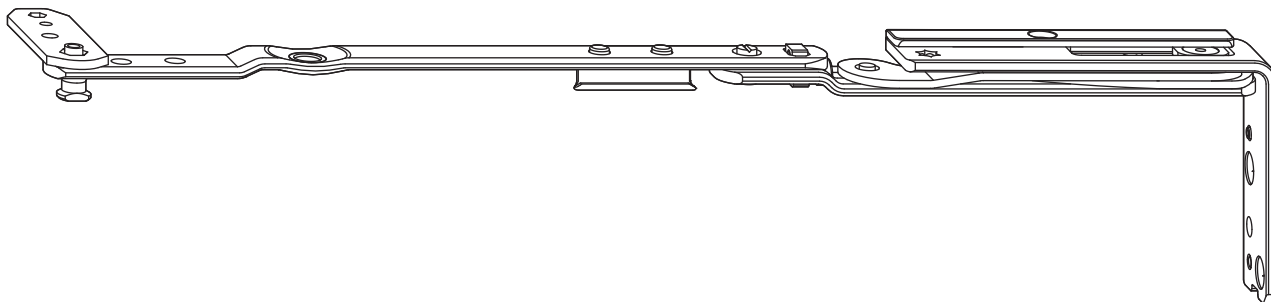


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| Aluplast Ideal 2000                                                                                                                                                                                                                                                                                                                  | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008690 |
|                                                                                                                                                                                                                                                                                                                                      | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008691 |
| Aluplast energeto 8000<br>Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast Ideal 7000<br>Schüco Corona MD                                                                                                                                                                                                                      | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008696 |
|                                                                                                                                                                                                                                                                                                                                      | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008697 |
| Brüggmann AD 13<br>Brüggmann MD 13<br>LB Profile Pad<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76<br>Veka Alphaline 90<br>Veka Softline 70 MD<br>Veka Softline 76 AD<br>Veka Softline 76 MD<br>Veka Softline 82 AD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka Topline MD 13 | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008702 |
|                                                                                                                                                                                                                                                                                                                                      | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008703 |
|                                                                                                                                                                                                                                                                                                                                      |                                                                                   |                                                                                    |                                                                                     |         |
|                                                                                                                                                                                                                                                                                                                                      |                                                                                   |                                                                                    |                                                                                     |         |
|                                                                                                                                                                                                                                                                                                                                      |                                                                                   |                                                                                    |                                                                                     |         |
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|                                                                                                                                                                                                                                                                                                                                      |                                                                                   |                                                                                    |                                                                                     |         |
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|                                                                                                                                                                                                                                                                                                                                      |                                                                                   |                                                                                    |                                                                                     |         |
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|                                                                                                                                                                                                                                                                                                                                      |                                                                                   |                                                                                    |                                                                                     |         |
| Inoutic Prestige                                                                                                                                                                                                                                                                                                                     | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008714 |
| Inoutic Eforte                                                                                                                                                                                                                                                                                                                       | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008715 |
| Salamander BluEvolution 92                                                                                                                                                                                                                                                                                                           | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008720 |
|                                                                                                                                                                                                                                                                                                                                      | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008721 |
| Gealan Linear                                                                                                                                                                                                                                                                                                                        | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008738 |
|                                                                                                                                                                                                                                                                                                                                      | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008739 |
| Schüco CT70 AD                                                                                                                                                                                                                                                                                                                       | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008762 |
| Schüco CT70 MD                                                                                                                                                                                                                                                                                                                       | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008763 |
| Schüco SI82 MD                                                                                                                                                                                                                                                                                                                       |                                                                                   |                                                                                    |                                                                                     |         |
| Schüco Living 82 MD                                                                                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    |                                                                                     |         |
| Deceuninck Elegant<br>Deceuninck Zendow                                                                                                                                                                                                                                                                                              | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2008780 |
|                                                                                                                                                                                                                                                                                                                                      | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2008781 |
| Rehau Artevo                                                                                                                                                                                                                                                                                                                         | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 2036889 |
|                                                                                                                                                                                                                                                                                                                                      | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 2036890 |



### 6.3.3 Hinge side Designo (HA 13)

#### 6.3.3.1 Standard – stay arm 250



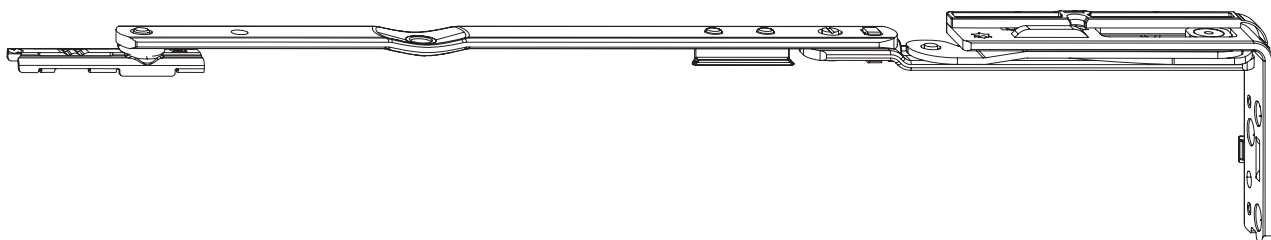
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| Aluplast Ideal 2000                                                                                                                                                                                                                                                                                                | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 623968 |
|                                                                                                                                                                                                                                                                                                                    | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 623967 |
| Aluplast Ideal 4000                                                                                                                                                                                                                                                                                                | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 628938 |
| Aluplast Ideal 5000                                                                                                                                                                                                                                                                                                | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 628937 |
| Aluplast Ideal 8000                                                                                                                                                                                                                                                                                                |                                                                                   |                                                                                    |                                                                                     |        |
| Schüco Corona MD                                                                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast energeto 5000 view                                                                                                                                                                                                                                                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast energeto 7000                                                                                                                                                                                                                                                                                             |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast Ideal 7000                                                                                                                                                                                                                                                                                                |                                                                                   |                                                                                    |                                                                                     |        |
| Brüggmann AD 13<br>Brüggmann MD 13<br>Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76<br>Veka Softline 76 AD<br>Veka Softline 76 MD | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 635229 |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
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| Brüggmann AD 13<br>Brüggmann MD 13<br>Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Brüggmann AD 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76<br>Veka Softline 76 AD<br>Veka Softline 76 MD            | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 635228 |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
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| Deceuninck Eforte                                                                                                                                                                                                                                                                                                  | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 635396 |
|                                                                                                                                                                                                                                                                                                                    | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 635395 |
| Deceuninck Prestige                                                                                                                                                                                                                                                                                                |                                                                                   |                                                                                    |                                                                                     |        |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Inoutic AD 13                                                                                                                                                                                                                                                                                                      |                                                                                   |                                                                                    |                                                                                     |        |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Inoutic MD 100                                                                                                                                                                                                                                                                                                     |                                                                                   |                                                                                    |                                                                                     |        |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Elegant                                                                                                                                                                                                                                                                                                 | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 812024 |
|                                                                                                                                                                                                                                                                                                                    | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 812023 |
| Deceuninck Legend                                                                                                                                                                                                                                                                                                  |                                                                                   |                                                                                    |                                                                                     |        |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
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| KBE 76                                                                                                                                                                                                                                                                                                             |                                                                                   |                                                                                    |                                                                                     |        |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| KBE 88 MD                                                                                                                                                                                                                                                                                                          |                                                                                   |                                                                                    |                                                                                     |        |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 76                                                                                                                                                                                                                                                                                                      |                                                                                   |                                                                                    |                                                                                     |        |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 88 MD                                                                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    |                                                                                     |        |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Trocal 76                                                                                                                                                                                                                                                                                                          |                                                                                   |                                                                                    |                                                                                     |        |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Trocal 88 MD                                                                                                                                                                                                                                                                                                       |                                                                                   |                                                                                    |                                                                                     |        |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Zendow                                                                                                                                                                                                                                                                                                  | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 623948 |
|                                                                                                                                                                                                                                                                                                                    | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 623947 |
| KBE 70 AD                                                                                                                                                                                                                                                                                                          |                                                                                   |                                                                                    |                                                                                     |        |
|                                                                                                                                                                                                                                                                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Gealan Kubus                                                                                                                                                                                                                                                                                                       | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 807532 |
|                                                                                                                                                                                                                                                                                                                    | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 807531 |





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| Gealan S3000                                                                      | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 606334 |
| Gealan S7000                                                                      | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 606326 |
| Gealan S8000                                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 88 Plus                                                                | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 606347 |
| Kömmerling Eurodur 3S                                                             | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 606346 |
| Kömmerling Eurofutur Classic                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling Eurofutur Elegance                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S735 MD                                                                     | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 610950 |
| Rehau S788                                                                        | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 610949 |
| Rehau S799 Brillant Design                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S980 Geneo                                                                  | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 606364 |
|                                                                                   | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 606363 |
| Salamander 2D                                                                     | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 635510 |
| Salamander 3D                                                                     | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 635509 |
| Salamander Streamline 76                                                          |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander BluEvolution 92                                                        | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 635620 |
|                                                                                   | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 635619 |
| Schüco CT70 AD                                                                    | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 764817 |
| Schüco CT70 MD                                                                    | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 764816 |
| Schüco SI82 MD                                                                    |                                                                                   |                                                                                    |                                                                                     |        |

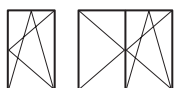
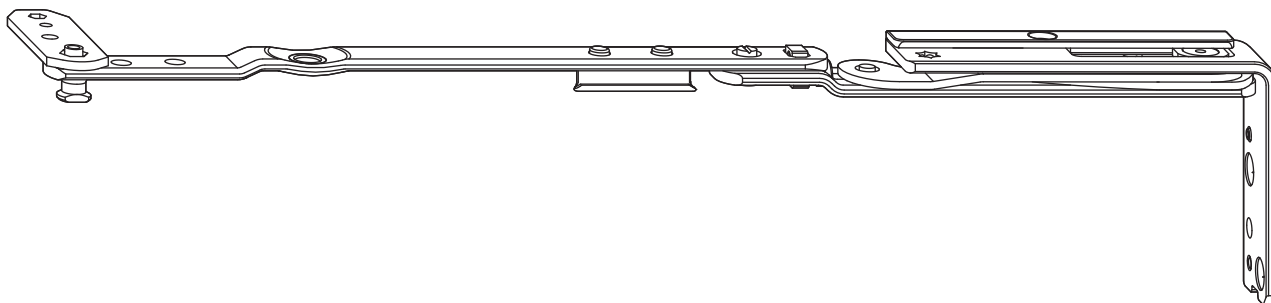
### 6.3.3.2 Standard – stay arm 350



|  |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000                                                                 | 350                                                                                 | Roto Sil                                                                             | Left                                                                                  | 623970 |
|                                                                                     | 350                                                                                 | Roto Sil                                                                             | Right                                                                                 | 623969 |
| Aluplast Ideal 4000                                                                 | 350                                                                                 | Roto Sil                                                                             | Left                                                                                  | 628941 |
| Aluplast Ideal 5000                                                                 | 350                                                                                 | Roto Sil                                                                             | Right                                                                                 | 628939 |
| Aluplast Ideal 8000                                                                 |                                                                                     |                                                                                      |                                                                                       |        |
| Schüco Corona MD                                                                    |                                                                                     |                                                                                      |                                                                                       |        |
| Aluplast energeto 5000 view                                                         |                                                                                     |                                                                                      |                                                                                       |        |
| Aluplast energeto 7000                                                              |                                                                                     |                                                                                      |                                                                                       |        |
| Aluplast Ideal 7000                                                                 |                                                                                     |                                                                                      |                                                                                       |        |
| Brüggmann AD 13                                                                     | 350                                                                                 | Roto Sil                                                                             | Left                                                                                  | 635231 |
| Brüggmann MD 13                                                                     | 350                                                                                 | Roto Sil                                                                             | Right                                                                                 | 635230 |
| Veka Alphaline 90                                                                   |                                                                                     |                                                                                      |                                                                                       |        |
| Veka Softline 70 AD                                                                 |                                                                                     |                                                                                      |                                                                                       |        |
| Veka Softline 70 MD                                                                 |                                                                                     |                                                                                      |                                                                                       |        |
| Veka Softline 82 MD                                                                 |                                                                                     |                                                                                      |                                                                                       |        |
| Veka Topline AD 13                                                                  |                                                                                     |                                                                                      |                                                                                       |        |
| Veka Topline MD 13                                                                  |                                                                                     |                                                                                      |                                                                                       |        |
| Salamander BluEvolution 73                                                          |                                                                                     |                                                                                      |                                                                                       |        |
| Salamander BluEvolution 82                                                          |                                                                                     |                                                                                      |                                                                                       |        |
| Salamander GreenEvolution 76                                                        |                                                                                     |                                                                                      |                                                                                       |        |
| Veka Softline 76 AD                                                                 |                                                                                     |                                                                                      |                                                                                       |        |
| Veka Softline 76 MD                                                                 |                                                                                     |                                                                                      |                                                                                       |        |
| Deceuninck Eforte                                                                   | 350                                                                                 | Roto Sil                                                                             | Left                                                                                  | 635398 |
| Deceuninck Prestige                                                                 | 350                                                                                 | Roto Sil                                                                             | Right                                                                                 | 635397 |
| Inoutic AD 13                                                                       |                                                                                     |                                                                                      |                                                                                       |        |
| Inoutic MD 100                                                                      |                                                                                     |                                                                                      |                                                                                       |        |

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| Deceuninck Elegant                                                                | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 812066 |
| Deceuninck Legend                                                                 | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 812065 |
| KBE 76                                                                            |                                                                                   |                                                                                    |                                                                                     |        |
| KBE 88 MD                                                                         |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 76                                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 88 MD                                                                  |                                                                                   |                                                                                    |                                                                                     |        |
| Trocal 76                                                                         |                                                                                   |                                                                                    |                                                                                     |        |
| Trocal 88 MD                                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Zendow                                                                 | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 623950 |
| KBE 70 AD                                                                         | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 623949 |
| Gealan Kubus                                                                      | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 807534 |
|                                                                                   | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 807533 |
| Gealan S3000                                                                      | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 606336 |
| Gealan S7000                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 606335 |
| Gealan S8000                                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 88 Plus                                                                | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 606349 |
| Kömmerling Eurodur 3S                                                             | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 606348 |
| Kömmerling Eurofutur Classic                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling Eurofutur Elegance                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S735 MD                                                                     | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 610952 |
| Rehau S788                                                                        | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 610951 |
| Rehau S799 Brillant Design                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S980 Geneo                                                                  | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 606366 |
|                                                                                   | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 606365 |
| Salamander 2D                                                                     | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 635512 |
| Salamander 3D                                                                     | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 635511 |
| Salamander Streamline 76                                                          |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander BluEvolution 92                                                        | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 635622 |
|                                                                                   | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 635621 |
| Schüco CT70 AD                                                                    | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 764819 |
| Schüco CT70 MD                                                                    | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 764818 |
| Schüco SI82 MD                                                                    |                                                                                   |                                                                                    |                                                                                     |        |

### 6.3.3.3 Standard – stay arm 500



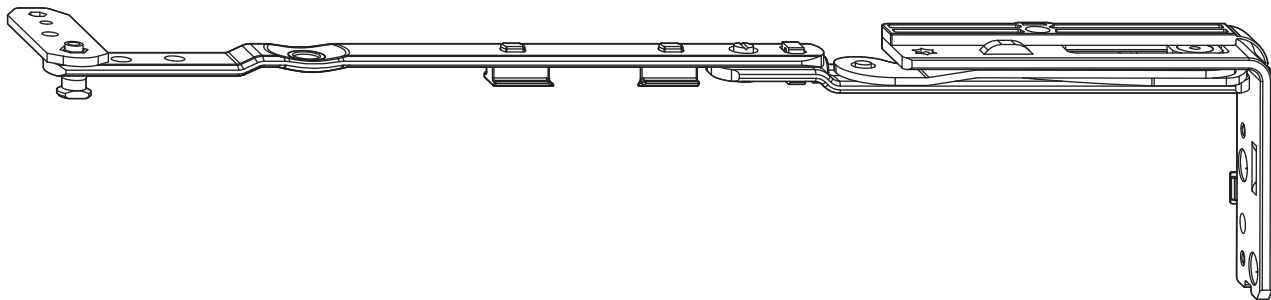
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| Aluplast Ideal 2000                                                                 | 500                                                                                 | Roto Sil                                                                             | Left                                                                                  | 623972 |
|                                                                                     | 500                                                                                 | Roto Sil                                                                             | Right                                                                                 | 623971 |
| Aluplast Ideal 4000                                                                 | 500                                                                                 | Roto Sil                                                                             | Left                                                                                  | 628948 |
| Aluplast Ideal 5000                                                                 | 500                                                                                 | Roto Sil                                                                             | Right                                                                                 | 628947 |
| Aluplast Ideal 8000                                                                 |                                                                                     |                                                                                      |                                                                                       |        |
| Schüco Corona MD                                                                    |                                                                                     |                                                                                      |                                                                                       |        |
| Aluplast energeto 5000 view                                                         |                                                                                     |                                                                                      |                                                                                       |        |
| Aluplast energeto 7000                                                              |                                                                                     |                                                                                      |                                                                                       |        |
| Aluplast Ideal 7000                                                                 |                                                                                     |                                                                                      |                                                                                       |        |



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| Brüggmann AD 13                                                                   | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 635233 |
| Brüggmann MD 13                                                                   | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 635232 |
| Veka Alphaline 90                                                                 |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 70 AD                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 70 MD                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 82 MD                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Topline AD 13                                                                |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Topline MD 13                                                                |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander BluEvolution 73                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander BluEvolution 82                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander GreenEvolution 76                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 76 AD                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 76 MD                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Eforte                                                                 | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 635400 |
| Deceuninck Prestige                                                               | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 635399 |
| Inoutic AD 13                                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Inoutic MD 100                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Elegant                                                                | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 812068 |
| Deceuninck Legend                                                                 | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 812067 |
| KBE 76                                                                            |                                                                                   |                                                                                    |                                                                                     |        |
| KBE 88 MD                                                                         |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 76                                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 88 MD                                                                  |                                                                                   |                                                                                    |                                                                                     |        |
| Trocal 76                                                                         |                                                                                   |                                                                                    |                                                                                     |        |
| Trocal 88 MD                                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Zendow                                                                 | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 623952 |
| KBE 70 AD                                                                         | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 623951 |
| Gealan Kubus                                                                      | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 807536 |
|                                                                                   | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 807535 |
| Gealan S3000                                                                      | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 606339 |
| Gealan S7000                                                                      | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 606338 |
| Gealan S8000                                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 88 Plus                                                                | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 606353 |
| Kömmerling Eurodur 3S                                                             | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 606352 |
| Kömmerling Eurofutur Classic                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling Eurofutur Elegance                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S735 MD                                                                     | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 610954 |
| Rehau S788                                                                        | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 610953 |
| Rehau S799 Brillant Design                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S980 Geneo                                                                  | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 606369 |
|                                                                                   | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 606367 |
| Salamander 2D                                                                     | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 635514 |
| Salamander 3D                                                                     | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 635513 |
| Salamander Streamline 76                                                          |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander BluEvolution 92                                                        | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 635624 |
|                                                                                   | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 635623 |
| Schüco CT70 AD                                                                    | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 764821 |
| Schüco CT70 MD                                                                    | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 764820 |
| Schüco SI82 MD                                                                    |                                                                                   |                                                                                    |                                                                                     |        |



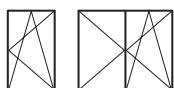
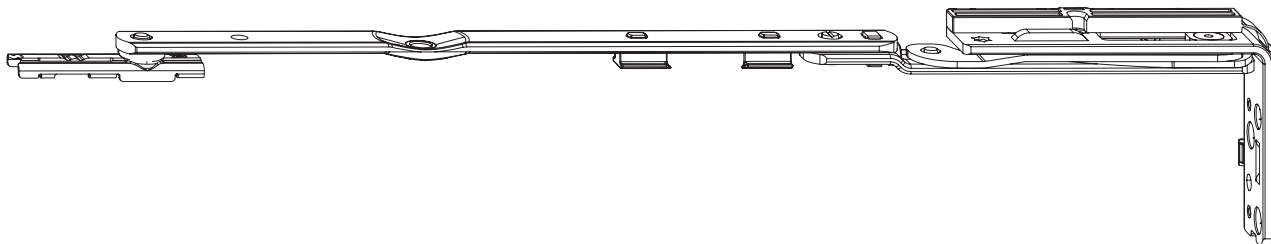
### 6.3.3.4 TiltFirst (TF) – stay arm 250



|  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000                                                               | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 643271 |
|                                                                                   | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 643270 |
| Aluplast Ideal 4000                                                               | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 643247 |
| Aluplast Ideal 5000                                                               | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 643246 |
| Aluplast Ideal 8000                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Schüco Corona MD                                                                  |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast energeto 5000 view                                                       |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast energeto 7000                                                            |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast Ideal 7000                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Brüggmann AD 13                                                                   | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 643277 |
| Brüggmann MD 13                                                                   | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 643276 |
| Veka Alphaline 90                                                                 |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 70 AD                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 70 MD                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 82 MD                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Topline AD 13                                                                |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Topline MD 13                                                                |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander BluEvolution 73                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander BluEvolution 82                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander GreenEvolution 76                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Eforte                                                                 | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 643259 |
| Deceuninck Prestige                                                               | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 643258 |
| Inoutic AD 13                                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Inoutic MD 100                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Elegant                                                                | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 757738 |
| Deceuninck Legend                                                                 | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 757737 |
| KBE 76                                                                            |                                                                                   |                                                                                    |                                                                                     |        |
| KBE 88 MD                                                                         |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 76                                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 88 MD                                                                  |                                                                                   |                                                                                    |                                                                                     |        |
| Trocal 76                                                                         |                                                                                   |                                                                                    |                                                                                     |        |
| Trocal 88 MD                                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Zendow                                                                 | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 643253 |
| KBE 70 AD                                                                         | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 643252 |
| Gealan S3000                                                                      | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 638965 |
| Gealan S7000                                                                      | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 638944 |
| Gealan S8000                                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 88 Plus                                                                | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 643265 |
| Kömmerling Eurodur 3S                                                             | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 643264 |
| Kömmerling Eurofutur Classic                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling Eurofutur Elegance                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S735 MD                                                                     | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 640572 |
| Rehau S788                                                                        | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 640573 |
| Rehau S799 Brillant Design                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S980 Geneo                                                                  | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 640566 |
|                                                                                   | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 640567 |
|                                                                                   |                                                                                   |                                                                                    |                                                                                     |        |
| Schüco CT70 AD                                                                    | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 764825 |
| Schüco CT70 MD                                                                    | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 764824 |
| Schüco SI82 MD                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 70 MD                                                               | 250                                                                               | Roto Sil                                                                           | Left                                                                                | 636481 |
|                                                                                   | 250                                                                               | Roto Sil                                                                           | Right                                                                               | 636480 |



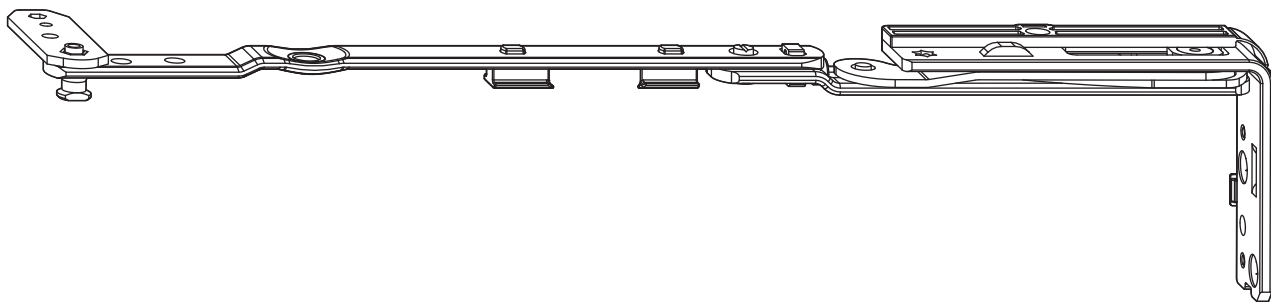
### 6.3.3.5 TiltFirst (TF) – stay arm 350



|                                                                                                                                                                                     |  |  |  | Nº     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 643273 |
|                                                                                                                                                                                                                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 643272 |
| Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast Ideal 8000<br>Schüco Corona MD<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 7000                                                                                                | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 643249 |
|                                                                                                                                                                                                                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 643248 |
| Brüggmann AD 13<br>Brüggmann MD 13<br>Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76 | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 643279 |
|                                                                                                                                                                                                                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 643278 |
| Deceuninck Eforte<br>Deceuninck Prestige<br>Inoutic AD 13<br>Inoutic MD 100                                                                                                                                                                                          | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 643261 |
|                                                                                                                                                                                                                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 643260 |
| Deceuninck Elegant<br>Deceuninck Legend<br>KBE 76<br>KBE 88 MD<br>Kömmerling 76<br>Kömmerling 88 MD<br>Trocac 76<br>Trocac 88 MD                                                                                                                                     | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 757740 |
|                                                                                                                                                                                                                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 757739 |
| Deceuninck Zendow<br>KBE 70 AD                                                                                                                                                                                                                                       | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 643255 |
|                                                                                                                                                                                                                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 643254 |
| Gealan S3000<br>Gealan S7000<br>Gealan S8000                                                                                                                                                                                                                         | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 638967 |
|                                                                                                                                                                                                                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 638966 |
| Kömmerling 88 Plus<br>Kömmerling Eurodur 3S<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                                                                                                                                                         | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 643267 |
|                                                                                                                                                                                                                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 643266 |
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design                                                                                                                                                                                                            | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 640574 |
|                                                                                                                                                                                                                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 640575 |
| Rehau S980 Geneo                                                                                                                                                                                                                                                     | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 640568 |
|                                                                                                                                                                                                                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 640569 |
| Schüco CT70 AD<br>Schüco CT70 MD<br>Schüco SI82 MD                                                                                                                                                                                                                   | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 764827 |
|                                                                                                                                                                                                                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 764826 |
| Veka Softline 70 MD                                                                                                                                                                                                                                                  | 350                                                                               | Roto Sil                                                                           | Left                                                                                | 636484 |
|                                                                                                                                                                                                                                                                      | 350                                                                               | Roto Sil                                                                           | Right                                                                               | 636483 |



### 6.3.3.6 TiltFirst (TF) – stay arm 500



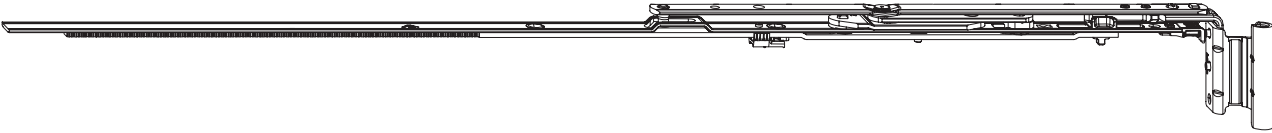
|  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000                                                               | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 643275 |
|                                                                                   | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 643274 |
| Aluplast Ideal 4000                                                               | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 643251 |
| Aluplast Ideal 5000                                                               | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 643250 |
| Aluplast Ideal 8000                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Schüco Corona MD                                                                  |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast energeto 5000 view                                                       |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast energeto 7000                                                            |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast Ideal 7000                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Brüggmann AD 13                                                                   | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 643281 |
| Brüggmann MD 13                                                                   | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 643280 |
| Veka Alphaline 90                                                                 |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 70 AD                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 70 MD                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 82 MD                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Topline AD 13                                                                |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Topline MD 13                                                                |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander BluEvolution 73                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander BluEvolution 82                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander GreenEvolution 76                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Eforte                                                                 | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 643263 |
| Deceuninck Prestige                                                               | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 643262 |
| Inoutic AD 13                                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Inoutic MD 100                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Elegant                                                                | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 757742 |
| Deceuninck Legend                                                                 | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 757741 |
| KBE 76                                                                            |                                                                                   |                                                                                    |                                                                                     |        |
| KBE 88 MD                                                                         |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 76                                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 88 MD                                                                  |                                                                                   |                                                                                    |                                                                                     |        |
| Trocal 76                                                                         |                                                                                   |                                                                                    |                                                                                     |        |
| Trocal 88 MD                                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Zendow                                                                 | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 643257 |
| KBE 70 AD                                                                         | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 643256 |
| Gealan S3000                                                                      | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 638969 |
| Gealan S7000                                                                      | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 638968 |
| Gealan S8000                                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 88 Plus                                                                | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 643269 |
| Kömmerling Eurodur 3S                                                             | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 643268 |
| Kömmerling Eurofutur Classic                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling Eurofutur Elegance                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S735 MD                                                                     | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 640576 |
| Rehau S788                                                                        | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 640577 |
| Rehau S799 Brillant Design                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S980 Geneo                                                                  | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 640570 |
|                                                                                   | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 640571 |
| Schüco CT70 AD                                                                    | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 764829 |
| Schüco CT70 MD                                                                    | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 764828 |
| Schüco SI82 MD                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 70 MD                                                               | 500                                                                               | Roto Sil                                                                           | Left                                                                                | 636516 |
|                                                                                   | 500                                                                               | Roto Sil                                                                           | Right                                                                               | 636515 |



## 6.4 Forcibly controlled scissor stay

### 6.4.1 Hinge side P

#### 6.4.1.1 Comfort



|          |            |     |     |     |            |   |   |          |       | Nº     |
|----------|------------|-----|-----|-----|------------|---|---|----------|-------|--------|
| 12/20-9  | 460 – 600  | 490 | 190 | 250 | max. 50 kg | – | – | Roto Sil | Left  | 795042 |
|          |            | 490 | 190 | 250 | max. 50 kg | – | – | Roto Sil | Right | 795043 |
|          | 601 – 800  | 690 | 200 | 350 | max. 50 kg | – | – | Roto Sil | Left  | 795044 |
|          |            | 690 | 200 | 350 | max. 50 kg | – | – | Roto Sil | Right | 795045 |
|          | 801 – 1000 | 890 | 200 | 500 | max. 50 kg | 1 | E | Roto Sil | Left  | 795046 |
|          |            | 890 | 200 | 500 | max. 50 kg | 1 | E | Roto Sil | Right | 795047 |
| 12/20-13 | 460 – 600  | 490 | 190 | 250 | max. 50 kg | – | – | Roto Sil | Left  | 795032 |
|          |            | 490 | 190 | 250 | max. 50 kg | – | – | Roto Sil | Right | 795033 |
|          | 601 – 800  | 690 | 200 | 350 | max. 50 kg | – | – | Roto Sil | Left  | 795036 |
|          |            | 690 | 200 | 350 | max. 50 kg | – | – | Roto Sil | Right | 795037 |
|          | 801 – 1000 | 890 | 200 | 500 | max. 50 kg | 1 | E | Roto Sil | Left  | 795040 |
|          |            | 890 | 200 | 500 | max. 50 kg | 1 | E | Roto Sil | Right | 795041 |
|          |            | 890 | 200 | 500 | max. 50 kg | 1 | V | Roto Sil | Left  | 795048 |
|          |            | 890 | 200 | 500 | max. 50 kg | 1 | V | Roto Sil | Right | 795049 |

For compatible stay bearings, see → *from page 404*.

For compatible cover caps, see → *from page 408*.

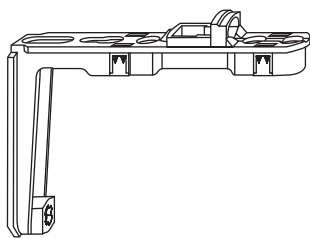


#### INFO

Between SRW 1001 – 1400 mm with espagnolette extension.

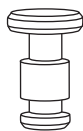
## 6.5 Rebate stay guide

### 6.5.1 Hinge side P



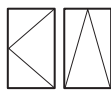
|                                                                                   |                                                                                    |                                                                                     |        |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  | Nº     |
| Rebate stay guide for hinge side P / T / A16                                      | 110 / 65                                                                           | Roto Sil                                                                            | 331488 |

For compatible rebate stay arms, see → *from page 396*.



|                                                                                     |                                                                                       |        |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  | Nº     |
| Packer for Tilt-Only sash                                                           | Roto Sil                                                                              | 230651 |

### 6.5.2 Hinge side C



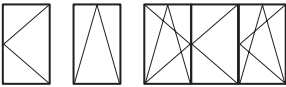
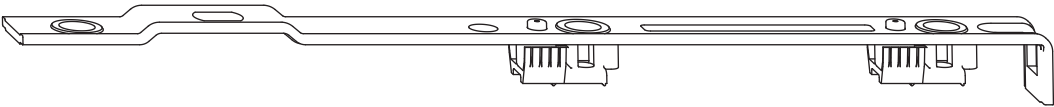
|                                                                                     |                                                                                     |                                                                                       |         |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|
|  |  |  | Nº      |
| For Turn-Only sashes                                                                | 220 / 15                                                                            | Roto Sil                                                                              | 2005701 |
| For Tilt-Only sashes                                                                | 220 / 50                                                                            | Roto Sil                                                                              | 2005281 |

For compatible rebate stay arms, see → *from page 397*.





6.5.3 Hinge side Designo (HA 13)



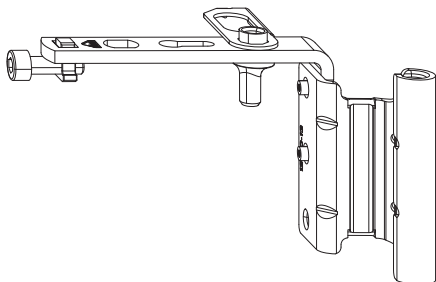
|  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| For Turn-Only sashes                                                              | 224 / 15                                                                          | Roto Sil                                                                            | 477255 |
| For Tilt-Only sashes                                                              | 224 / 50                                                                          | Roto Sil                                                                            | 640563 |

For compatible rebate stay arms, see → *from page 399*.



## 6.6 Rebate stay arm

### 6.6.1 Hinge side P



|  |  |  | Nº      |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|--------|
| 12/18-9                                                                           | Roto Sil                                                                          | Left                                                                                | 787371  |        |
|                                                                                   |                                                                                   | Right                                                                               | 787372  |        |
|                                                                                   | White                                                                             | Left                                                                                | 788472  |        |
|                                                                                   |                                                                                   | Right                                                                               | 788473  |        |
| 12/20-9                                                                           | Roto Sil                                                                          | Left                                                                                | 787373  |        |
|                                                                                   |                                                                                   | Right                                                                               | 787374  |        |
|                                                                                   | White                                                                             | Left                                                                                | 788474  |        |
|                                                                                   |                                                                                   | Right                                                                               | 788475  |        |
| 12/18-13                                                                          | Roto Sil                                                                          | Left                                                                                | 2007299 |        |
| Right                                                                             |                                                                                   | 2007300                                                                             |         |        |
| 12/20-13                                                                          |                                                                                   | Left                                                                                | 787375  |        |
|                                                                                   |                                                                                   | Right                                                                               | 787376  |        |
|                                                                                   |                                                                                   | White                                                                               | Left    | 788476 |
|                                                                                   |                                                                                   |                                                                                     | Right   | 788477 |
| Titanium                                                                          | Left                                                                              | 795210                                                                              |         |        |
|                                                                                   | Right                                                                             | 795211                                                                              |         |        |
| 12/21-13                                                                          | Roto Sil                                                                          | Left                                                                                | 817207  |        |
|                                                                                   |                                                                                   | Right                                                                               | 817208  |        |
|                                                                                   | White                                                                             | Left                                                                                | 817209  |        |
|                                                                                   |                                                                                   | Right                                                                               | 817210  |        |
| 12/22-13                                                                          | Roto Sil                                                                          | Left                                                                                | 787377  |        |
|                                                                                   |                                                                                   | Right                                                                               | 787378  |        |
|                                                                                   | White                                                                             | Left                                                                                | 788478  |        |
|                                                                                   |                                                                                   | Right                                                                               | 788479  |        |

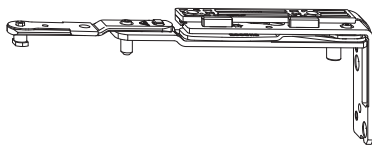
For compatible stay bearings, see → *from page 404.*

For the compatible rebate stay guide, see → *from page 394.*



## 6.6.2 Hinge side C

### 6.6.2.1 Standard



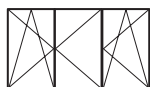
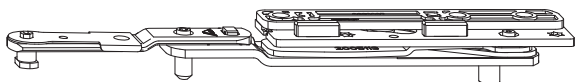
|  |  |  | Nº      |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Gealan S3000                                                                      | Roto Sil                                                                           | Left                                                                                | 2008803 |
| Gealan S7000                                                                      | Roto Sil                                                                           | Right                                                                               | 2008804 |
| Gealan S8000                                                                      |                                                                                    |                                                                                     |         |
| Gealan S9000                                                                      |                                                                                    |                                                                                     |         |
| Kömmerling 88 Plus                                                                | Roto Sil                                                                           | Left                                                                                | 2008805 |
| Kömmerling Eurodur 3S                                                             | Roto Sil                                                                           | Right                                                                               | 2008806 |
| Kömmerling Eurofutur Classic                                                      |                                                                                    |                                                                                     |         |
| Kömmerling Eurofutur Elegance                                                     |                                                                                    |                                                                                     |         |
| Rehau S969 Synego                                                                 | Roto Sil                                                                           | Left                                                                                | 2008807 |
| Rehau S980 Geneo                                                                  | Roto Sil                                                                           | Right                                                                               | 2008808 |
| Rehau S986 EuroDesign 86                                                          |                                                                                    |                                                                                     |         |
| Rehau Total70R Reversible window                                                  |                                                                                    |                                                                                     |         |
| Rehau S735 MD                                                                     | Roto Sil                                                                           | Left                                                                                | 2008809 |
| Rehau S799 Brillant Design                                                        | Roto Sil                                                                           | Right                                                                               | 2008810 |
| KBE 70 AD                                                                         | Roto Sil                                                                           | Left                                                                                | 2008811 |
| Kömmerling 76                                                                     | Roto Sil                                                                           | Right                                                                               | 2008812 |
| Kömmerling C70 Gold                                                               |                                                                                    |                                                                                     |         |
| Trocal 76                                                                         |                                                                                    |                                                                                     |         |
| Profine 76                                                                        |                                                                                    |                                                                                     |         |
| Profine 88                                                                        |                                                                                    |                                                                                     |         |
| Aluplast Ideal 2000                                                               | Roto Sil                                                                           | Left                                                                                | 2008813 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 2008814 |
| Aluplast energeto 8000                                                            | Roto Sil                                                                           | Left                                                                                | 2008815 |
| Aluplast Ideal 4000                                                               | Roto Sil                                                                           | Right                                                                               | 2008816 |
| Aluplast Ideal 5000                                                               |                                                                                    |                                                                                     |         |
| Aluplast Ideal 7000                                                               |                                                                                    |                                                                                     |         |
| Schüco Corona MD                                                                  |                                                                                    |                                                                                     |         |
| Brüggmann AD 13                                                                   | Roto Sil                                                                           | Left                                                                                | 2008817 |
| Brüggmann MD 13                                                                   | Roto Sil                                                                           | Right                                                                               | 2008818 |
| LB Profile Pad                                                                    |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 73                                                        |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 82                                                        |                                                                                    |                                                                                     |         |
| Salamander GreenEvolution 76                                                      |                                                                                    |                                                                                     |         |
| Veka Alphaline 90                                                                 |                                                                                    |                                                                                     |         |
| Veka Softline 70 MD                                                               |                                                                                    |                                                                                     |         |
| Veka Softline 76 AD                                                               |                                                                                    |                                                                                     |         |
| Veka Softline 76 MD                                                               |                                                                                    |                                                                                     |         |
| Veka Softline 82 AD                                                               |                                                                                    |                                                                                     |         |
| Veka Softline 82 MD                                                               |                                                                                    |                                                                                     |         |
| Veka Topline AD 13                                                                |                                                                                    |                                                                                     |         |
| Veka M70                                                                          |                                                                                    |                                                                                     |         |
| Veka Topline MD 13                                                                |                                                                                    |                                                                                     |         |
| Inoutic Prestige                                                                  | Roto Sil                                                                           | Left                                                                                | 2008819 |
| Inoutic Eforte                                                                    | Roto Sil                                                                           | Right                                                                               | 2008820 |
| Salamander 2D                                                                     | Roto Sil                                                                           | Left                                                                                | 2008821 |
| Salamander 3D                                                                     | Roto Sil                                                                           | Right                                                                               | 2008822 |
| Salamander Design Streamline 76                                                   |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 92                                                        | Roto Sil                                                                           | Left                                                                                | 2008823 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 2008824 |
| Schüco CT70 AD                                                                    | Roto Sil                                                                           | Left                                                                                | 2008829 |
| Schüco CT70 MD                                                                    | Roto Sil                                                                           | Right                                                                               | 2008830 |
| Schüco SI82 MD                                                                    |                                                                                    |                                                                                     |         |
| Schüco Living 82 MD                                                               |                                                                                    |                                                                                     |         |
| Gealan Kubus                                                                      | Roto Sil                                                                           | Left                                                                                | 2008837 |
| Gealan Kontur                                                                     | Roto Sil                                                                           | Right                                                                               | 2008838 |



|  |  |  | Nº      |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Deceuninck Elegant<br>Deceuninck Zendow                                           | Roto Sil                                                                           | Left                                                                                | 2008841 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 2008842 |
| Rehau Artevo                                                                      | Roto Sil                                                                           | Left                                                                                | 2036891 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 2036892 |

Compatible rebate stay guide → *from page 394*

### 6.6.2.2 Triple-sashed windows (centre sash)



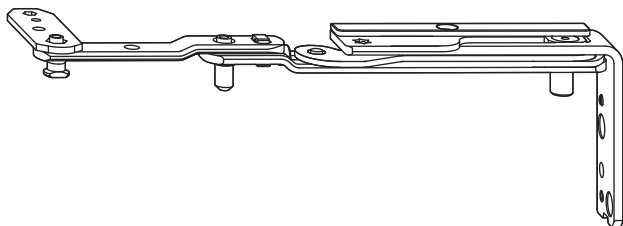
|                                                                                                                                                                                                                                                     |  |  | Nº      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>Gealan S9000                                                                                                                                                                                                                                                                         | Roto Sil                                                                           | Left                                                                                | 2008845 |
|                                                                                                                                                                                                                                                                                                                                      | Roto Sil                                                                           | Right                                                                               | 2008846 |
|                                                                                                                                                                                                                                                                                                                                      | Roto Sil                                                                           | Left                                                                                | 2008847 |
|                                                                                                                                                                                                                                                                                                                                      | Roto Sil                                                                           | Right                                                                               | 2008848 |
| Kömmerling 3S<br>Kömmerling 88 Plus<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                                                                                                                                                                                                                                 | Roto Sil                                                                           | Left                                                                                | 2008849 |
|                                                                                                                                                                                                                                                                                                                                      | Roto Sil                                                                           | Right                                                                               | 2008850 |
| Rehau S969 Synego<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86                                                                                                                                                                                                                                                                    | Roto Sil                                                                           | Left                                                                                | 2008851 |
|                                                                                                                                                                                                                                                                                                                                      | Roto Sil                                                                           | Right                                                                               | 2008852 |
| KBE 70 AD<br>Kömmerling 76<br>Trocal 76<br>Profine 76<br>Profine 88                                                                                                                                                                                                                                                                  | Roto Sil                                                                           | Left                                                                                | 2008853 |
|                                                                                                                                                                                                                                                                                                                                      | Roto Sil                                                                           | Right                                                                               | 2008854 |
| Aluplast Ideal 2000                                                                                                                                                                                                                                                                                                                  | Roto Sil                                                                           | Left                                                                                | 2008855 |
|                                                                                                                                                                                                                                                                                                                                      | Roto Sil                                                                           | Right                                                                               | 2008856 |
| Aluplast energeto 8000<br>Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast Ideal 7000<br>Schüco Corona MD                                                                                                                                                                                                                      | Roto Sil                                                                           | Left                                                                                | 2008859 |
|                                                                                                                                                                                                                                                                                                                                      | Roto Sil                                                                           | Right                                                                               | 2008860 |
| Brüggmann AD 13<br>Brüggmann MD 13<br>LB Profile Pad<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76<br>Veka Alphaline 90<br>Veka Softline 70 MD<br>Veka Softline 76 AD<br>Veka Softline 76 MD<br>Veka Softline 82 AD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka Topline MD 13 | Roto Sil                                                                           | Left                                                                                | 2008861 |
|                                                                                                                                                                                                                                                                                                                                      | Roto Sil                                                                           | Right                                                                               | 2008862 |
| Salamander 2D<br>Salamander 3D<br>Salamander Design 3D<br>Salamander Design Streamline 76                                                                                                                                                                                                                                            | Roto Sil                                                                           | Left                                                                                | 2008865 |
|                                                                                                                                                                                                                                                                                                                                      | Roto Sil                                                                           | Right                                                                               | 2008866 |
| Rehau Artevo                                                                                                                                                                                                                                                                                                                         | Roto Sil                                                                           | Left                                                                                | 2036893 |
|                                                                                                                                                                                                                                                                                                                                      | Roto Sil                                                                           | Right                                                                               | 2036894 |

Compatible rebate stay guide → *from page 394*



## 6.6.3 Hinge side Designo (HA 13)

### 6.6.3.1 Standard



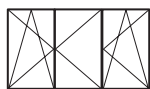
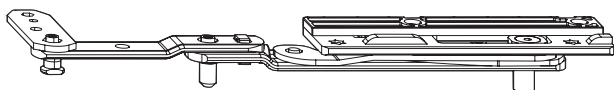
|                                                                                                                                                                                                                                                                                                                  |          |       | Nº     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------|--------|
| Aluplast Ideal 2000                                                                                                                                                                                                                                                                                              | Roto Sil | Left  | 623966 |
|                                                                                                                                                                                                                                                                                                                  | Roto Sil | Right | 623965 |
| Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast Ideal 8000<br>Schüco Corona MD<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 7000                                                                                                                                            | Roto Sil | Left  | 628936 |
|                                                                                                                                                                                                                                                                                                                  | Roto Sil | Right | 628914 |
| Brügmann AD 13<br>Brügmann MD 13<br>Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76<br>Veka Softline 76 AD<br>Veka Softline 76 MD | Roto Sil | Left  | 635227 |
|                                                                                                                                                                                                                                                                                                                  | Roto Sil | Right | 635226 |
| Deceuninck Eforte<br>Deceuninck Prestige<br>Inoutic AD 13<br>Inoutic MD 100                                                                                                                                                                                                                                      | Roto Sil | Left  | 635274 |
|                                                                                                                                                                                                                                                                                                                  | Roto Sil | Right | 635273 |
| Deceuninck Elegant<br>Deceuninck Legend<br>KBE 76<br>KBE 88 MD<br>Kömmerling 76<br>Kömmerling 88 MD<br>Trocal 76<br>Trocal 88 MD                                                                                                                                                                                 | Roto Sil | Left  | 812022 |
|                                                                                                                                                                                                                                                                                                                  | Roto Sil | Right | 812021 |
| Deceuninck Zendow<br>KBE 70 AD                                                                                                                                                                                                                                                                                   | Roto Sil | Left  | 623946 |
|                                                                                                                                                                                                                                                                                                                  | Roto Sil | Right | 623945 |
| Gealan Kubus                                                                                                                                                                                                                                                                                                     | Roto Sil | Left  | 807530 |
|                                                                                                                                                                                                                                                                                                                  | Roto Sil | Right | 807529 |
| Gealan S3000<br>Gealan S7000<br>Gealan S8000                                                                                                                                                                                                                                                                     | Roto Sil | Left  | 606325 |
|                                                                                                                                                                                                                                                                                                                  | Roto Sil | Right | 606324 |
| Kömmerling 88 Plus<br>Kömmerling Eurodur 3S<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                                                                                                                                                                                                     | Roto Sil | Left  | 606345 |
|                                                                                                                                                                                                                                                                                                                  | Roto Sil | Right | 606344 |
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design                                                                                                                                                                                                                                                        | Roto Sil | Left  | 610948 |
|                                                                                                                                                                                                                                                                                                                  | Roto Sil | Right | 610947 |
| Rehau S980 Geneo                                                                                                                                                                                                                                                                                                 | Roto Sil | Left  | 606362 |
|                                                                                                                                                                                                                                                                                                                  | Roto Sil | Right | 606361 |
| Salamander 2D<br>Salamander 3D<br>Salamander Streamline 76                                                                                                                                                                                                                                                       | Roto Sil | Left  | 635508 |
|                                                                                                                                                                                                                                                                                                                  | Roto Sil | Right | 635507 |



|  |  |  | Nº     |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Salamander BluEvolution 92                                                        | Roto Sil                                                                           | Left                                                                                | 635618 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 635617 |
| Schüco CT70 AD<br>Schüco CT70 MD<br>Schüco SI82 MD                                | Roto Sil                                                                           | Left                                                                                | 764815 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 764794 |
| Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD                   | Roto Sil                                                                           | Left                                                                                | 606388 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 606387 |

For the compatible rebate stay guide, see → *from page 395*.

### 6.6.3.2 Triple-sashed windows (centre sash)



|                                                                                                                         |  |  | Nº     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>Schüco CT70 AD<br>Schüco CT70 MD<br>Schüco SI82 MD<br>Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD                                                                        | Roto Sil                                                                          | Left                                                                                | 741501 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 741500 |
| Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast Ideal 8000<br>Schüco Corona AD<br>Schüco Corona MD<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 7000                | Roto Sil                                                                          | Left                                                                                | 741515 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 741504 |
| Brüggmann AD 13<br>Brüggmann MD 13<br>Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander GreenEvolution 76 | Roto Sil                                                                          | Left                                                                                | 738588 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 738554 |
| Deceuninck Eforte<br>Deceuninck Prestige<br>Inoutic AD 13<br>Inoutic MD 100                                                                                                                              | Roto Sil                                                                          | Left                                                                                | 741497 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 741496 |
| Gealan S3000<br>Gealan S7000<br>Gealan S8000                                                                                                                                                             | Roto Sil                                                                          | Left                                                                                | 766738 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 766739 |
| KBE 76<br>KBE 88 MD<br>Kömmerling 76<br>Kömmerling 88 MD<br>Trocal 76<br>Trocal 88 MD                                                                                                                    | Roto Sil                                                                          | Left                                                                                | 766121 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 766122 |
| Rehau S730 AD<br>Rehau S735 MD<br>Rehau S799 Brillant Design                                                                                                                                             | Roto Sil                                                                          | Left                                                                                | 766742 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 766743 |
| Rehau S969 Synego<br>Rehau S980 Geneo<br>Salamander BluEvolution 92                                                                                                                                      | Roto Sil                                                                          | Left                                                                                | 766766 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 766767 |



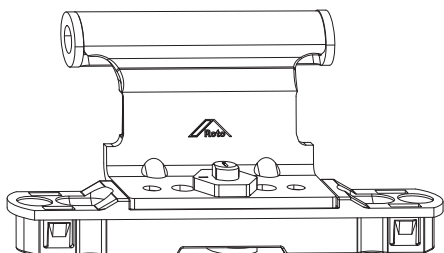
|   |  |  | Nº     |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Salamander 2D<br>Salamander 3D<br>Salamander Design 3D<br>Salamander Streamline 76 | Roto Sil                                                                          | Left                                                                                | 766770 |
|                                                                                    | Roto Sil                                                                          | Right                                                                               | 766771 |

For the compatible rebate stay guide, see → *from page 395*.



## 6.7 Turn-Only/Tilt-Only rebate hinge

### 6.7.1 Hinge side P



|  |  |  |  |  |  | Nº     |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| 12/18-9                                                                          | ±3.0 mm                                                                           | —                                                                                 | With compensation                                                                 | Y                                                                                   | Roto Sil                                                                            | 787379 |
|                                                                                  |                                                                                   |                                                                                   | With compensation                                                                 | Y                                                                                   | White                                                                               | 788480 |
|                                                                                  | —                                                                                 | —                                                                                 | Without compensation                                                              | Y                                                                                   | Roto Sil                                                                            | 787380 |
|                                                                                  |                                                                                   |                                                                                   | Without compensation                                                              | Y                                                                                   | White                                                                               | 788481 |
| 12/20-9                                                                          | ±3.0 mm                                                                           | —                                                                                 | With compensation                                                                 | Y                                                                                   | Roto Sil                                                                            | 787383 |
|                                                                                  |                                                                                   |                                                                                   | With compensation                                                                 | Y                                                                                   | White                                                                               | 788484 |
|                                                                                  | —                                                                                 | —                                                                                 | Without compensation                                                              | Y                                                                                   | Roto Sil                                                                            | 787384 |
|                                                                                  |                                                                                   |                                                                                   | Without compensation                                                              | Y                                                                                   | White                                                                               | 788485 |
| 12/18-13                                                                         | ±3.0 mm                                                                           | —                                                                                 | With compensation                                                                 | Y                                                                                   | Roto Sil                                                                            | 787381 |
|                                                                                  |                                                                                   |                                                                                   | With compensation                                                                 | Y                                                                                   | White                                                                               | 788482 |
|                                                                                  | —                                                                                 | —                                                                                 | Without compensation                                                              | Y                                                                                   | Roto Sil                                                                            | 787382 |
|                                                                                  |                                                                                   |                                                                                   | Without compensation                                                              | Y                                                                                   | White                                                                               | 788483 |
| 12/20-13                                                                         | ±3.0 mm                                                                           | —                                                                                 | With compensation                                                                 | Y                                                                                   | Roto Sil                                                                            | 787387 |
|                                                                                  |                                                                                   |                                                                                   | With compensation                                                                 | Y                                                                                   | White                                                                               | 788488 |
|                                                                                  |                                                                                   |                                                                                   | With compensation                                                                 | Y                                                                                   | Titanium                                                                            | 795264 |
|                                                                                  | —                                                                                 | —                                                                                 | Without compensation                                                              | Y                                                                                   | Roto Sil                                                                            | 787388 |
|                                                                                  |                                                                                   |                                                                                   | Without compensation                                                              | Y                                                                                   | White                                                                               | 788489 |
|                                                                                  |                                                                                   |                                                                                   | Without compensation                                                              | Y                                                                                   | Titanium                                                                            | 795265 |
| 12/21-13                                                                         | ±3.0 mm                                                                           | —                                                                                 | With compensation                                                                 | Y                                                                                   | Roto Sil                                                                            | 787389 |
|                                                                                  |                                                                                   |                                                                                   | With compensation                                                                 | Y                                                                                   | White                                                                               | 788490 |
|                                                                                  | —                                                                                 | —                                                                                 | Without compensation                                                              | Y                                                                                   | Roto Sil                                                                            | 787390 |
|                                                                                  |                                                                                   |                                                                                   | Without compensation                                                              | Y                                                                                   | White                                                                               | 788491 |
| 12/22-13                                                                         | ±3.0 mm                                                                           | —                                                                                 | With compensation                                                                 | Y                                                                                   | Roto Sil                                                                            | 787391 |
|                                                                                  |                                                                                   |                                                                                   | With compensation                                                                 | Y                                                                                   | White                                                                               | 788492 |
|                                                                                  | —                                                                                 | —                                                                                 | Without compensation                                                              | Y                                                                                   | Roto Sil                                                                            | 787392 |
|                                                                                  |                                                                                   |                                                                                   | Without compensation                                                              | Y                                                                                   | White                                                                               | 788493 |

For compatible stay bearings, see → *from page 404*.

For compatible cover caps, see → *from page 408*.



#### INFO

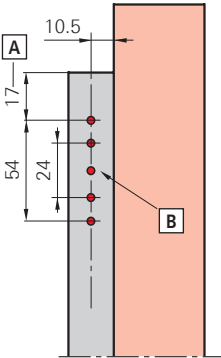
On Turn-Only sashes, Turn-Only/Tilt-Only rebate hinges must only be used as a supporting central hinge.





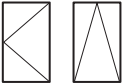
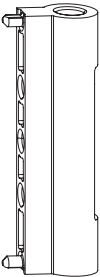
## 6.8 Turn-Only/Tilt-Only overlap hinge

### Installation and description



| Assignment | Meaning                      |
|------------|------------------------------|
| [A]        | With 20 mm overlap           |
| [B]        | Ø 3 mm, drill hole 5 mm deep |

### 6.8.1 Hinge side P



|                     |            |   |            |          |           |
|---------------------|------------|---|------------|----------|-----------|
|                     |            |   |            |          |           |
| 12/20-9<br>12/20-13 | max. 80 kg | Y | 2 x Ø 3 mm | Roto Sil | Nº 787400 |

For compatible stay bearings, see → from page 405.

For compatible cover caps, see → from page 410.



## 6.9 Stay bearing

### 6.9.1 Hinge side P

## Installation and description

**Standard – P 3/130 | P 6/130**



| Assignment | Meaning                                            | System            |
|------------|----------------------------------------------------|-------------------|
| [A]        | 16.5 mm                                            | 12/18–9, 12/18–13 |
|            | 18.5 mm                                            | 12/20–9, 12/20–13 |
|            | 19.5 mm                                            | 12/21–13          |
|            | 20.5 mm                                            | 12/22–13          |
| [B]        | Stay bearing centre                                | –                 |
| [C]        | P 3/130 stay bearing, drill hole Ø 3 mm, 4 mm deep | –                 |
|            | P 6/130 stay bearing, drill hole Ø 6 mm, 9 mm deep |                   |

### Standard – P 6/150



| Assignment | Meaning                                            | System            |
|------------|----------------------------------------------------|-------------------|
| [A]        | 16.5 mm                                            | 12/18–9, 12/18–13 |
|            | 18.5 mm                                            | 12/20–9, 12/20–13 |
|            | 19.5 mm                                            | 12/21–13          |
|            | 20.5 mm                                            | 12/22–13          |
| [B]        | Stay bearing centre                                | –                 |
| [C]        | P 6/150 stay bearing, drill hole Ø 6 mm, 9 mm deep | –                 |



6.9.1.1 Standard – P 3/130 | P 6/130



|         |             |   |            |          | Nº     |
|---------|-------------|---|------------|----------|--------|
| P 3/130 | max. 130 kg | Y | 2 x Ø 3 mm | Roto Sil | 859171 |
|         |             |   |            | White    | 859174 |
|         |             |   |            | Titanium | 859964 |
| P 6/130 |             |   | 2 x Ø 6 mm | Roto Sil | 859172 |
|         |             |   |            | White    | 859960 |
|         |             |   |            | Titanium | 859965 |

One stay-bearing pin is required for every stay bearing. For details, see → from page 406.

For compatible cover caps, see → from page 407.



6.9.1.2 Standard – P 6/150

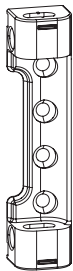


|         |             |   |            |          | Nº     |
|---------|-------------|---|------------|----------|--------|
| P 6/150 | max. 150 kg | Y | 2 x Ø 6 mm | Roto Sil | 859173 |
|         |             |   |            | White    | 859961 |
|         |             |   |            | Titanium | 859966 |

One stay-bearing pin is required for every stay bearing. For details, see → from page 406.

For compatible cover caps, see → from page 407.

6.9.1.3 Laterally adjustable



|  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| P 3/100                                                                           | max. 100 kg                                                                       | Y                                                                                 | 2 x Ø 3 mm                                                                         | Roto Sil                                                                            | 840384 |
|                                                                                   |                                                                                   |                                                                                   |                                                                                    | White                                                                               | 840401 |
|                                                                                   |                                                                                   |                                                                                   |                                                                                    | Titanium                                                                            | 840402 |
| P 6/100                                                                           |                                                                                   |                                                                                   | 2 x Ø 6 mm                                                                         | Roto Sil                                                                            | 840403 |
|                                                                                   |                                                                                   |                                                                                   |                                                                                    | White                                                                               | 840404 |
|                                                                                   |                                                                                   |                                                                                   |                                                                                    | Titanium                                                                            | 840405 |

One stay-bearing pin is required for every stay bearing. For details, see → from page 406.

For compatible cover caps, see → from page 408.

6.9.2 Stay-bearing pins



|  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Stay-bearing pin                                                                    | 86                                                                                  | Roto Sil                                                                              | 834705 |



## 6.10 Cover caps

### 6.10.1 Hinge side P

#### 6.10.1.1 Stay bearing – standard

##### Cover caps



|  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| P 3/130<br>P 6/130                                                                | R01.1                                                                             | Natural silver                                                                      | 861148  |
|                                                                                   | R01.2                                                                             | Nickel silver                                                                       | 861149  |
|                                                                                   | R01.3                                                                             | Titanium                                                                            | 861155  |
|                                                                                   | R03.1                                                                             | Brass matt                                                                          | 861156  |
|                                                                                   | R03.2                                                                             | Brass, polished                                                                     | 861160  |
|                                                                                   | R04.1                                                                             | Grey brown                                                                          | 861152  |
|                                                                                   | R04.3                                                                             | Olive brown                                                                         | 861153  |
|                                                                                   | R04.4                                                                             | Black brown                                                                         | 861154  |
|                                                                                   | R05.3                                                                             | Medium bronze                                                                       | 861165  |
|                                                                                   | R05.5                                                                             | Bronze                                                                              | 861166  |
|                                                                                   | R06.2                                                                             | Jet black                                                                           | 862558  |
|                                                                                   | R06.2M                                                                            | Jet black, matt                                                                     | 2032811 |
|                                                                                   | R07.2                                                                             | Traffic white                                                                       | 861167  |
|                                                                                   | R07.2M                                                                            | Traffic white, matt                                                                 | 2000339 |
|                                                                                   | R07.2M                                                                            | Traffic white, matt                                                                 | 2046015 |
|                                                                                   | R07.3                                                                             | Cream                                                                               | 861168  |
|                                                                                   | SF                                                                                | Special colour                                                                      | 862560  |
| P 6/150                                                                           | R01.1                                                                             | Natural silver                                                                      | 861169  |
|                                                                                   | R01.2                                                                             | Nickel silver                                                                       | 861170  |
|                                                                                   | R01.3                                                                             | Titanium                                                                            | 861171  |
|                                                                                   | R03.1                                                                             | Brass matt                                                                          | 861172  |
|                                                                                   | R03.2                                                                             | Brass, polished                                                                     | 861174  |
|                                                                                   | R04.1                                                                             | Grey brown                                                                          | 861175  |
|                                                                                   | R04.3                                                                             | Olive brown                                                                         | 861176  |
|                                                                                   | R04.4                                                                             | Black brown                                                                         | 861177  |
|                                                                                   | R05.3                                                                             | Medium bronze                                                                       | 861178  |
|                                                                                   | R05.5                                                                             | Bronze                                                                              | 861179  |
|                                                                                   | R06.2                                                                             | Jet black                                                                           | 862562  |
|                                                                                   | R07.2                                                                             | Traffic white                                                                       | 861197  |
|                                                                                   | R07.3                                                                             | Cream                                                                               | 861198  |
|                                                                                   | SF                                                                                | Special colour                                                                      | 862563  |

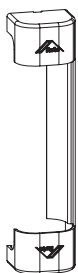


## Plug



|  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| P 6/150                                                                           | R01.3                                                                             | Titanium                                                                            | 788500 |
|                                                                                   | R07.2                                                                             | Traffic white                                                                       | 788435 |

## 6.10.1.2 Stay bearing – laterally adjustable



|  |  |  |  | Nº      |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------|
| P 3/100<br>P 6/100                                                                 | R01.1                                                                              | Natural silver                                                                     | –                                                                                    | 840406  |
|                                                                                    | R01.2                                                                              | Nickel silver                                                                      | –                                                                                    | 840407  |
|                                                                                    | R01.3                                                                              | Titanium                                                                           | –                                                                                    | 840408  |
|                                                                                    | R03.1                                                                              | Brass matt                                                                         | –                                                                                    | 840409  |
|                                                                                    | R03.2                                                                              | Brass, polished                                                                    | –                                                                                    | 840415  |
|                                                                                    | R04.1                                                                              | Grey brown                                                                         | –                                                                                    | 840416  |
|                                                                                    | R04.3                                                                              | Olive brown                                                                        | –                                                                                    | 840417  |
|                                                                                    | R04.4                                                                              | Black brown                                                                        | –                                                                                    | 840418  |
|                                                                                    | R05.3                                                                              | Medium bronze                                                                      | –                                                                                    | 840419  |
|                                                                                    | R05.5                                                                              | Bronze                                                                             | –                                                                                    | 840420  |
|                                                                                    | R06.2                                                                              | Jet black                                                                          | –                                                                                    | 2005470 |
|                                                                                    | R07.3                                                                              | Cream                                                                              | –                                                                                    | 840421  |
|                                                                                    | R07.2                                                                              | Traffic white                                                                      | –                                                                                    | 840422  |
|                                                                                    | R07.2M                                                                             | Traffic white, matt                                                                | –                                                                                    | 2001938 |
|                                                                                    | SF                                                                                 | Special colour                                                                     | –                                                                                    | 840423  |

## 6.10.1.3 Stay arm and Turn-Only / Tilt-Only rebate hinge



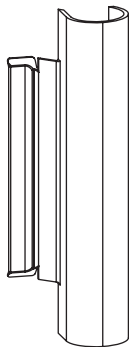
### INFO

Compatible with the following components:

- Stay arm – standard
- Stay arm – TiltFirst (TF)
- Stay arm – pitched window (SF)
- Stay arm – arched window
- Turn-Only / Tilt-Only rebate hinge



With link



|  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| 12/18-9<br>12/20-9<br>12/20-13<br>12/21-13<br>12/22-13                            | R01.1                                                                             | Natural silver                                                                      | 788403  |
|                                                                                   | R01.2                                                                             | Nickel silver                                                                       | 810816  |
|                                                                                   | R01.3                                                                             | Titanium                                                                            | 788404  |
|                                                                                   | R03.1                                                                             | Brass matt                                                                          | 788405  |
|                                                                                   | R03.2                                                                             | Brass, polished                                                                     | 810817  |
|                                                                                   | R04.1                                                                             | Grey brown                                                                          | 788406  |
|                                                                                   | R04.3                                                                             | Olive brown                                                                         | 810818  |
|                                                                                   | R04.4                                                                             | Black brown                                                                         | 788407  |
|                                                                                   | R05.3                                                                             | Medium bronze                                                                       | 788408  |
|                                                                                   | R05.5                                                                             | Bronze                                                                              | 788409  |
|                                                                                   | R06.2                                                                             | Jet black                                                                           | 821926  |
|                                                                                   | R06.2M                                                                            | Jet black, matt                                                                     | 2001937 |
|                                                                                   | R07.2                                                                             | Traffic white                                                                       | 788410  |
|                                                                                   | R07.2M                                                                            | Traffic white, matt                                                                 | 2001936 |
|                                                                                   | R07.3                                                                             | Cream                                                                               | 810819  |
|                                                                                   | SF                                                                                | Special colour                                                                      | 840752  |



#### Without link



|  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| 12/18-9<br>12/20-9<br>12/20-13<br>12/21-13<br>12/22-13                            | R01.1                                                                             | Natural silver                                                                      | 788395  |
|                                                                                   | R01.2                                                                             | Nickel silver                                                                       | 795969  |
|                                                                                   | R01.3                                                                             | Titanium                                                                            | 788396  |
|                                                                                   | R03.1                                                                             | Brass matt                                                                          | 788397  |
|                                                                                   | R03.2                                                                             | Brass, polished                                                                     | 795974  |
|                                                                                   | R04.1                                                                             | Grey brown                                                                          | 788398  |
|                                                                                   | R04.3                                                                             | Olive brown                                                                         | 795979  |
|                                                                                   | R04.4                                                                             | Black brown                                                                         | 788399  |
|                                                                                   | R05.3                                                                             | Medium bronze                                                                       | 788400  |
|                                                                                   | R05.5                                                                             | Bronze                                                                              | 788401  |
|                                                                                   | R06.2                                                                             | Jet black                                                                           | 894965  |
|                                                                                   | R07.2                                                                             | Traffic white                                                                       | 788402  |
|                                                                                   | R07.2M                                                                            | Traffic white, matt                                                                 | 2001950 |
|                                                                                   | R07.3                                                                             | Cream                                                                               | 795984  |
|                                                                                   | SF                                                                                | Special colour                                                                      | 840747  |

#### 6.10.1.4 Turn-Only/Tilt-Only overlap hinge



|  |  |  | Nº      |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|
| 12/20-9<br>12/20-13                                                                 | R01.1                                                                               | Natural silver                                                                        | 792387  |
|                                                                                     | R01.2                                                                               | Nickel silver                                                                         | 810820  |
|                                                                                     | R01.3                                                                               | Titanium                                                                              | 792388  |
|                                                                                     | R03.1                                                                               | Brass matt                                                                            | 810821  |
|                                                                                     | R03.2                                                                               | Brass, polished                                                                       | 810822  |
|                                                                                     | R04.1                                                                               | Grey brown                                                                            | 792389  |
|                                                                                     | R04.3                                                                               | Olive brown                                                                           | 810823  |
|                                                                                     | R04.4                                                                               | Black brown                                                                           | 792390  |
|                                                                                     | R05.3                                                                               | Medium bronze                                                                         | 792391  |
|                                                                                     | R05.5                                                                               | Bronze                                                                                | 810825  |
|                                                                                     | R06.2                                                                               | Jet black                                                                             | 2029912 |
|                                                                                     | R07.2                                                                               | Traffic white                                                                         | 792392  |
|                                                                                     | R07.3                                                                               | Cream                                                                                 | 810824  |
|                                                                                     | SF                                                                                  | Special colour                                                                        | 840748  |











**Multipart**

|                |     |
|----------------|-----|
| Standard       | 416 |
| Security       | 416 |
| Thresholds     | 417 |
| Can be cropped | 418 |
| Espagnolette   | 419 |

**Floating mullion**

|          |     |
|----------|-----|
| See page | 420 |
|----------|-----|

**Reverse-action**

|          |     |
|----------|-----|
| See page | 421 |
|----------|-----|

**Height of claw 21 mm**

|          |     |
|----------|-----|
| See page | 422 |
|----------|-----|

**Arched window**

|                             |     |
|-----------------------------|-----|
| Standard                    | 423 |
| Horizontal arched component | 423 |
| Arched component, vertical  | 424 |

**Comfort**

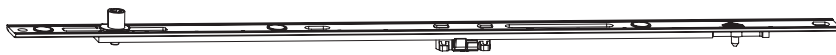
|          |     |
|----------|-----|
| See page | 425 |
|----------|-----|

## 7 Centre locks

### 7.1 Multipart

#### 7.1.1 Standard

Couplable on one side



|  |  |  # |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| N                                                                                 | 400                                                                               | 1                                                                                   | E                                                                                 | –                                                                                   | Roto Sil                                                                            | 255280 |
|                                                                                   | 400                                                                               | 1                                                                                   | E                                                                                 | Cam position -4 mm                                                                  | Roto Sil                                                                            | 593607 |
|                                                                                   | 600                                                                               | 1                                                                                   | E                                                                                 | –                                                                                   | Roto Sil                                                                            | 255281 |

Couplable on both sides



|  |  |  # |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Y                                                                                   | 200                                                                                 | –                                                                                     | –                                                                                   | –                                                                                    | Roto Sil                                                                              | 308267 |
|                                                                                     |                                                                                     | –                                                                                     | –                                                                                   | LMD mount                                                                            | Roto Sil                                                                              | 767639 |
|                                                                                     |                                                                                     | 1                                                                                     | E                                                                                   | –                                                                                    | Roto Sil                                                                              | 450821 |
|                                                                                     | 400                                                                                 | –                                                                                     | –                                                                                   | –                                                                                    | Roto Sil                                                                              | 297858 |
|                                                                                     |                                                                                     | 1                                                                                     | E                                                                                   | –                                                                                    | Roto Sil                                                                              | 280346 |
|                                                                                     |                                                                                     | 1                                                                                     | E                                                                                   | –                                                                                    | Roto Sil                                                                              | 255282 |
|                                                                                     | 600                                                                                 | 1                                                                                     | E                                                                                   | –                                                                                    | Roto Sil                                                                              | 255282 |
|                                                                                     |                                                                                     | 1                                                                                     | E                                                                                   | –                                                                                    | Roto Sil                                                                              | 255282 |

#### 7.1.2 Security

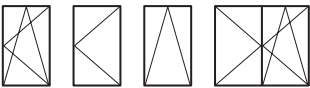
Couplable on one side



|  |  |  # |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| N                                                                                   | 200                                                                                 | 1                                                                                     | P                                                                                   | –                                                                                     | Roto Sil                                                                              | 255284 |
|                                                                                     |                                                                                     | 1                                                                                     | V                                                                                   | –                                                                                     | Roto Sil                                                                              | 296853 |
|                                                                                     | 400                                                                                 | 1                                                                                     | P                                                                                   | –                                                                                     | Roto Sil                                                                              | 255285 |
|                                                                                     |                                                                                     | 1                                                                                     | P                                                                                   | Cam position -4 mm                                                                    | Roto Sil                                                                              | 593611 |
|                                                                                     |                                                                                     | 1                                                                                     | V                                                                                   | –                                                                                     | Roto Sil                                                                              | 296854 |
|                                                                                     |                                                                                     | 1                                                                                     | V                                                                                   | Cam position -4 mm                                                                    | Roto Sil                                                                              | 593612 |
|                                                                                     | 600                                                                                 | 1                                                                                     | P                                                                                   | –                                                                                     | Roto Sil                                                                              | 255286 |
|                                                                                     |                                                                                     | 1                                                                                     | V                                                                                   | –                                                                                     | Roto Sil                                                                              | 296855 |



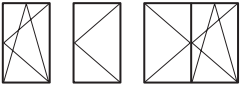
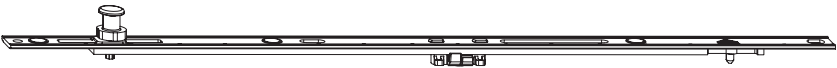
Couplable on both sides



|  |  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Y                                                                                 | 130                                                                               | 1                                                                                 | V                                                                                 | –                                                                                   | Roto Sil                                                                            | 567456 |
|                                                                                   |                                                                                   | 1                                                                                 | P                                                                                 | –                                                                                   | Roto Sil                                                                            | 622880 |
|                                                                                   |                                                                                   | 1                                                                                 | V                                                                                 | Special packaging                                                                   | Roto Sil                                                                            | 337708 |
|                                                                                   | 400                                                                               | 1                                                                                 | P                                                                                 | –                                                                                   | Roto Sil                                                                            | 622881 |
|                                                                                   |                                                                                   | 1                                                                                 | V                                                                                 | Special packaging                                                                   | Roto Sil                                                                            | 337710 |
|                                                                                   |                                                                                   | 1                                                                                 | P                                                                                 | –                                                                                   | Roto Sil                                                                            | 622882 |
|                                                                                   | 600                                                                               | 1                                                                                 | V                                                                                 | –                                                                                   | Roto Sil                                                                            | 296852 |
|                                                                                   |                                                                                   | 1                                                                                 | V                                                                                 | Special packaging                                                                   | Roto Sil                                                                            | 337711 |

7.1.3 Thresholds

Couplable on one side



|  |  |  |  |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| N                                                                                   | 200                                                                                 | 1                                                                                   | V                                                                                   | 7                                                                                   | Extended locking cam                                                                  | Roto Sil                                                                              | 625214 |
|                                                                                     | 400                                                                                 | 1                                                                                   | V                                                                                   | 7                                                                                   | Extended locking cam                                                                  | Roto Sil                                                                              | 625225 |
|                                                                                     |                                                                                     | 1                                                                                   | V                                                                                   | 10                                                                                  | Extended locking cam                                                                  | Roto Sil                                                                              | 566651 |
|                                                                                     | 600                                                                                 | 1                                                                                   | V                                                                                   | 7                                                                                   | Extended locking cam                                                                  | Roto Sil                                                                              | 625226 |



**INFO**  
**Connecting thresholds**

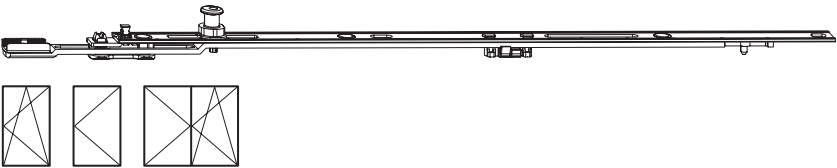
The following document provides a detailed description of how to connect thresholds to the Roto NX hardware system.



**IMO 347**

**Centre locks**  
**Multipart**  
Can be cropped

**Couplable on both sides**



|  |  |  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Y                                                                                 | 200                                                                               | 1                                                                                 | V                                                                                 | 10                                                                                | Extended locking cam                                                                | Roto Sil                                                                            | 618552 |
|                                                                                   | 400                                                                               | 1                                                                                 | V                                                                                 | 10                                                                                | Extended locking cam                                                                | Roto Sil                                                                            | 618554 |
|                                                                                   |                                                                                   | 1                                                                                 | V                                                                                 | 12                                                                                | Extended locking cam                                                                | Roto Sil                                                                            | 741408 |
|                                                                                   | 600                                                                               | 1                                                                                 | V                                                                                 | 7                                                                                 | Extended locking cam                                                                | Roto Sil                                                                            | 625227 |
|                                                                                   |                                                                                   | 1                                                                                 | V                                                                                 | 10                                                                                | Extended locking cam                                                                | Roto Sil                                                                            | 618553 |



**INFO**  
**Connecting thresholds**

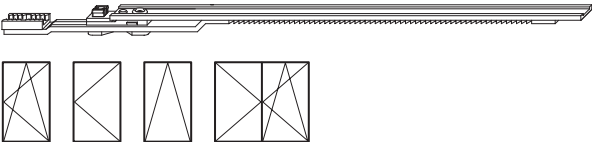
The following document provides a detailed description of how to connect thresholds to the Roto NX hardware system.



**IMO 347**

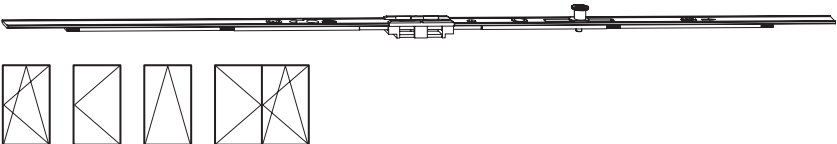
**7.1.4 Can be cropped**

**Can be cropped on one side**



|  |  |  |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Y                                                                                   | 330                                                                                 | 200                                                                                 | –                                                                                   | –                                                                                     | Roto Sil                                                                              | 489993 |
|                                                                                     |                                                                                     | 200                                                                                 | 1                                                                                   | V                                                                                     | Roto Sil                                                                              | 861349 |

**Can be cropped on both sides**



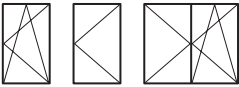
|  |  |  |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Y                                                                                   | 980                                                                                 | 200 / 200                                                                           | 1                                                                                   | P                                                                                     | Roto Sil                                                                              | 610174 |





7.1.5 Espagnolette

Couplable on both sides



|  |  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Y                                                                                 | 400                                                                               | 1                                                                                 | E                                                                                 | –                                                                                  | Roto Sil                                                                            | 260193 |
|                                                                                   |                                                                                   | 1                                                                                 | V                                                                                 | –                                                                                  | Roto Sil                                                                            | 257598 |

Second opening sash



|  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------|
| Y                                                                                 | 400                                                                               | 1                                                                                  | Second opening sash                                                                 | Roto Sil                                                                             | 260195 |



7.2 Floating mullion



|  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Y                                                                                 | 200                                                                               | Bottom                                                                            | 1                                                                                 | Roto Sil                                                                            | 280342 |
|                                                                                   |                                                                                   | Top                                                                               | 1                                                                                 | Roto Sil                                                                            | 450822 |
|                                                                                   | 400                                                                               | Bottom                                                                            | 1                                                                                 | Roto Sil                                                                            | 280343 |
|                                                                                   |                                                                                   | Top                                                                               | 1                                                                                 | Roto Sil                                                                            | 280345 |
|                                                                                   | 600                                                                               | Bottom                                                                            | 1                                                                                 | Roto Sil                                                                            | 609059 |
|                                                                                   |                                                                                   | Top                                                                               | 1                                                                                 | Roto Sil                                                                            | 280331 |





### 7.3 Reverse-action

#### Couplable on one side



|   |     |                                       |   |   |          |        |
|---|-----|---------------------------------------|---|---|----------|--------|
|   |     |                                       |   |   |          | Nº     |
| N | 400 | To be used horizontally at the bottom | 2 | P | Roto Sil | 330079 |

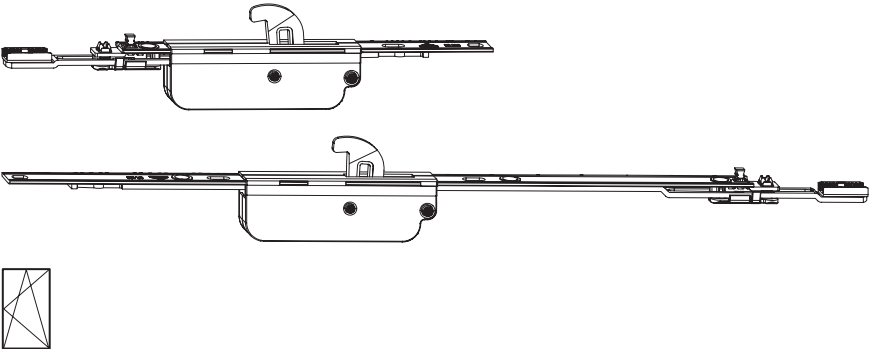
#### Couplable on both sides



|   |     |                                                                         |   |   |          |        |
|---|-----|-------------------------------------------------------------------------|---|---|----------|--------|
|   |     |                                                                         |   |   |          | Nº     |
| Y | 400 | To be used horizontally at the bottom, below the handle height          | 2 | P | Roto Sil | 373968 |
|   |     | To be used horizontally at the top, above the handle height, hinge side | 2 | P | Roto Sil | 377263 |



7.4 Height of claw 21 mm



|  |  |                                                 |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Y                                                                                 | 200                                                                               | Vertically at the top of the espagnolette side, horizontally at the bottom; horizontally at the bottom if a threshold is installed | Roto Sil                                                                            | 365299 |
|                                                                                   | 400                                                                               |                                                                                                                                    | Roto Sil                                                                            | 365300 |



**INFO**  
**Connecting thresholds**

The following document provides a detailed description of how to connect thresholds to the Roto NX hardware system.



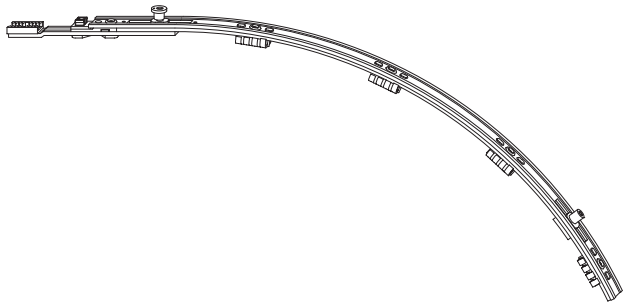
IMO 347



## 7.5 Arched window

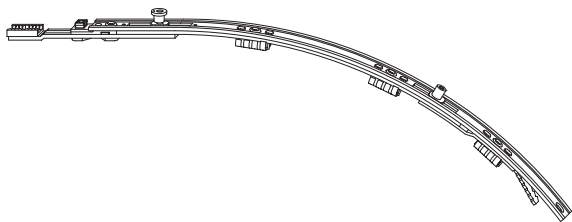
### 7.5.1 Standard

Couplable on one side



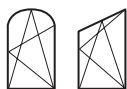
|  |  |  |  |  |  |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| N                                                                                 | 750                                                                               | 2 / –                                                                             | E / –                                                                             | Roto Sil                                                                            | 245736                                                                              |
|                                                                                   |                                                                                   | 1 / 1                                                                             | V / E                                                                             | Roto Sil                                                                            | 245735                                                                              |

Couplable on both sides



| Y | 590 | 2 / – | E / – | Roto Sil | 245734 |
|---|-----|-------|-------|----------|--------|
|   |     | 1 / 1 | V / E | Roto Sil | 245733 |

### 7.5.2 Horizontal arched component



|             |      |     |   |   |          | Nº     |
|-------------|------|-----|---|---|----------|--------|
| 400 – 500   | 380  | 200 | – | – | Roto Sil | 812595 |
| 501 – 700   | 480  | 200 | – | – | Roto Sil | 245729 |
| 701 – 900   | 680  | 200 | 1 | E | Roto Sil | 245730 |
| 901 – 1100  | 880  | 200 | 1 | E | Roto Sil | 245731 |
| 1101 – 1300 | 1080 | 200 | 1 | E | Roto Sil | 245732 |

### 7.5.3 Arched component, vertical



|             |      |     |   |       |       |          | Nº     |
|-------------|------|-----|---|-------|-------|----------|--------|
| 500 – 700   | 420  | 200 | Y | – / – | – / – | Roto Sil | 245715 |
| 701 – 900   | 620  | 200 | N | 1 / – | E / – | Roto Sil | 245717 |
|             |      | 200 | N | 1 / 1 | V / E | Roto Sil | 245716 |
| 901 – 1100  | 820  | 200 | N | 1 / – | E / – | Roto Sil | 245719 |
|             |      | 200 | N | 1 / 1 | V / E | Roto Sil | 245718 |
| 1101 – 1300 | 1020 | 200 | N | 1 / – | E / – | Roto Sil | 245721 |
|             |      | 200 | N | 1 / 1 | V / E | Roto Sil | 245720 |
| 1301 – 1500 | 1220 | 200 | N | 2 / – | E / – | Roto Sil | 245723 |
|             |      | 200 | N | 1 / 1 | V / E | Roto Sil | 245722 |
| 1501 – 1700 | 1420 | 200 | N | 2 / – | E / – | Roto Sil | 245725 |
|             |      | 200 | N | 1 / 2 | V / E | Roto Sil | 245724 |
| 1701 – 1900 | 1620 | 200 | N | 2 / – | E / – | Roto Sil | 245727 |
|             |      | 200 | N | 1 / 2 | V / E | Roto Sil | 245726 |





7.6 Comfort



|             |      |     |   |   |          | Nº     |
|-------------|------|-----|---|---|----------|--------|
| 530 – 600   | 380  | 200 | – | – | Roto Sil | 812595 |
| 601 – 800   | 690  | 200 | – | – | Roto Sil | 774165 |
| 801 – 1000  | 890  | 200 | 1 | E | Roto Sil | 774174 |
| 1001 – 1200 | 1090 | 200 | 1 | E | Roto Sil | 774175 |
| 1201 – 1400 | 1290 | 200 | 1 | E | Roto Sil | 774176 |
| 1401 – 1600 | 1490 | 200 | 2 | E | Roto Sil | 774177 |













### Frame clearances

|                            |     |
|----------------------------|-----|
| Hinge side P               | 430 |
| Hinge side C               | 432 |
| Hinge side Designo (HA 13) | 433 |

### Corner hinges

|                            |     |
|----------------------------|-----|
| Hinge side P               | 434 |
| Hinge side C (HA 13)       | 435 |
| Hinge side Designo (HA 13) | 436 |

### Pivot rests

|                            |     |
|----------------------------|-----|
| Hinge side P               | 437 |
| Hinge side C               | 438 |
| Hinge side Designo (HA 13) | 440 |

### Load transfer

|                            |     |
|----------------------------|-----|
| Hinge side C               | 443 |
| Hinge side Designo (HA 13) | 443 |

### Cover caps

|              |     |
|--------------|-----|
| Hinge side P | 444 |
|--------------|-----|

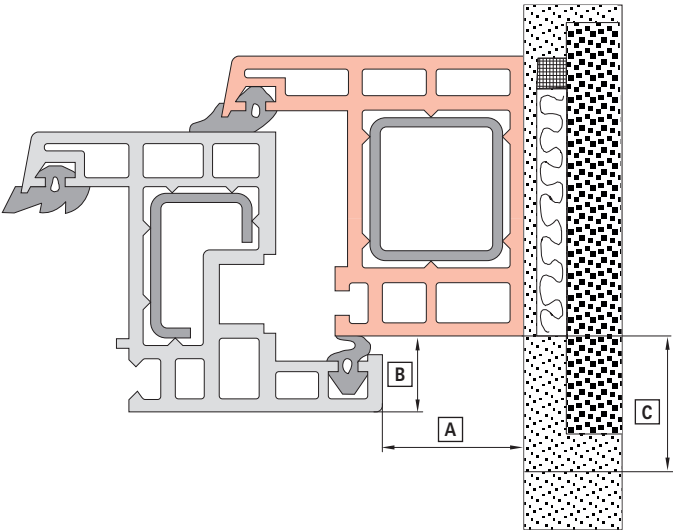
## 8 Corner hinges / pivot rests

### 8.1 Frame clearances

#### 8.1.1 Hinge side P

##### 8.1.1.1 Frame clearance

Frame clearances with a 20 mm overlap width.



| Sash weight | Opening angle    | Frame clearance [A] | Overlap height [B] | Free area [C] |
|-------------|------------------|---------------------|--------------------|---------------|
| 130 kg      | Approx. 180° [6] | ≥ 21.0 mm           | ≥ 16 mm            | 100 mm        |
| 150 kg      | Approx. 150° [7] | ≥ 26.5 mm           | ≥ 16 mm            | 100 mm        |



#### INFO

Clearances including cover caps.  
 Opening angle up to 20 mm overlap height.



#### DANGER

##### Risk of death caused by damage to bearing components!

Large overlap heights [B] or components near the reveal (such as skirting boards) may result in excessive leverage on the hinge side. This can damage the bearing components and cause the sash to fall.

- ▶ In the free area [C], the sash must not come into contact with the reveal or components near the reveal.
- ▶ With a reveal depth of < 100 mm, check whether a turn restrictor is required.



#### ATTENTION

##### Property damage caused by damage to bearing components!

Large overlap heights [B] or components near the reveal (such as skirting boards) may result in excessive leverage on the hinge side. This can damage the bearing components and cause the sash to fall.

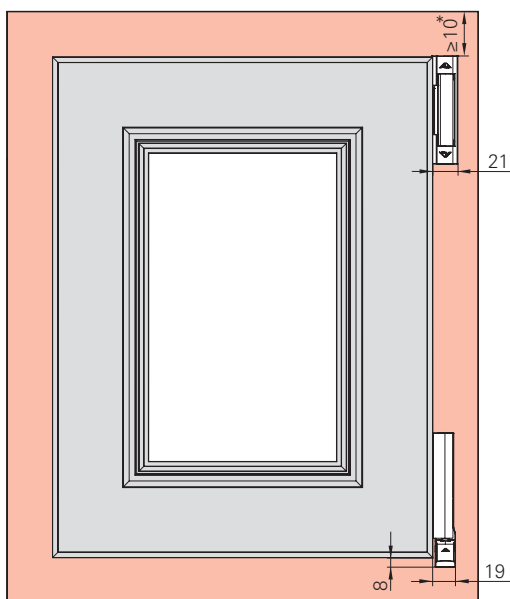
- ▶ In the free area [C], the sash must not come into contact with the reveal or components near the reveal.
- ▶ With a reveal depth of < 100 mm, check whether a turn restrictor is required.

[6] The opening angle may be less than 180° depending on the reveal.

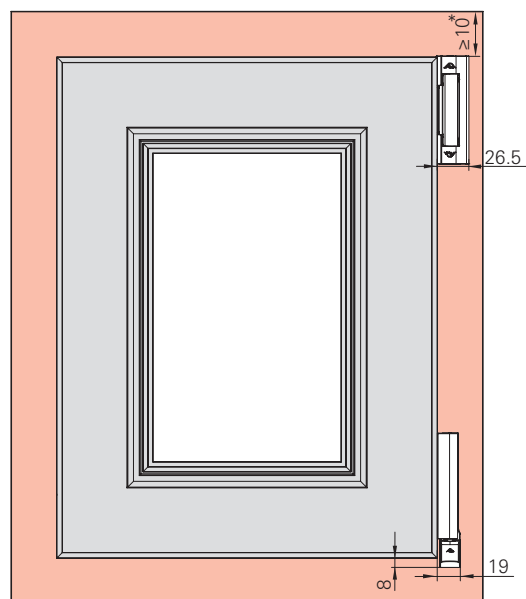
[7] The opening angle may be less than 150° depending on the reveal.



**Sash weight 130 kg**



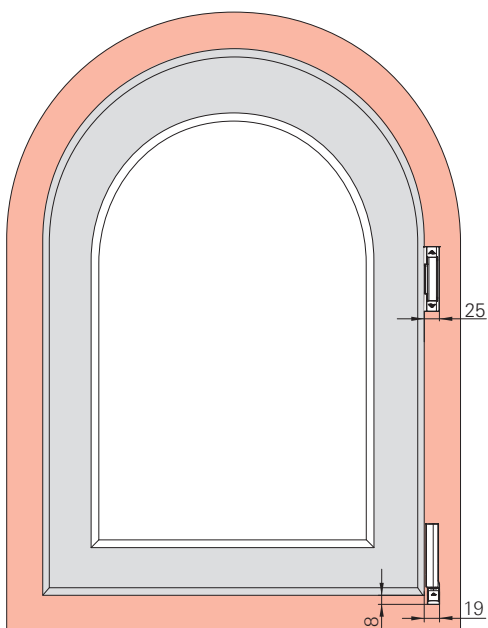
**Sash weight 150 kg**



\* For dismantling the stay-bearing pin, leave at least 10 mm clearance from the reveal.

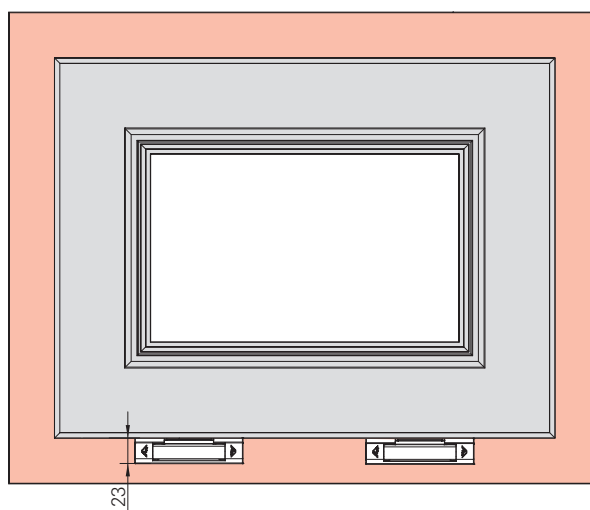
**Arch**

Sash weight 80 kg



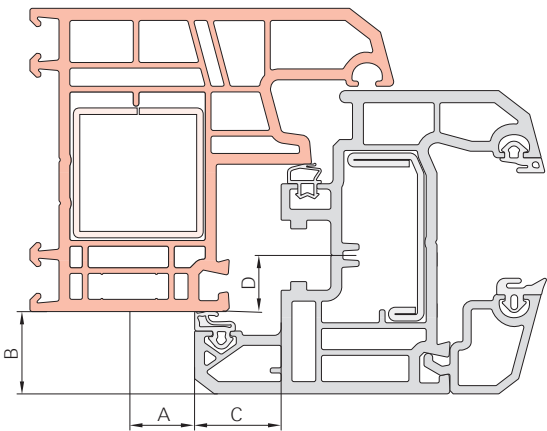
**Tilt-Only hardware**

Sash weight 80 kg



**8.1.2 Hinge side C**

**8.1.2.1 Hinge side C**



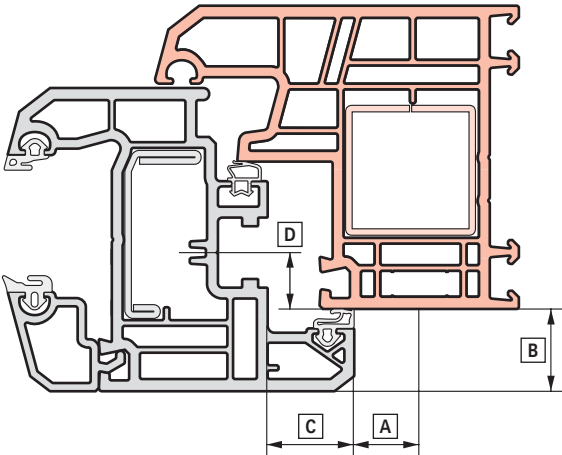
Frame clearances (in mm) with the sash opened from 0° to 90°.

| Axis dimension [D] | Overlap height [B] | Overlap width [C] | Frame clearance [A] |
|--------------------|--------------------|-------------------|---------------------|
| 13                 | 16                 | 18                | 3.5                 |
|                    | 20                 | 18                | 7.1                 |
|                    | 24                 | 18                | 10.8                |
|                    | 16                 | 20                | 2.6                 |
|                    | 20                 | 20                | 6                   |
|                    | 24                 | 20                | 9.6                 |
|                    | 16                 | 22                | 2                   |
|                    | 20                 | 22                | 5                   |
|                    | 24                 | 22                | 8.4                 |

The dimensions in the table apply to components in the delivery state (not adjusted).



**8.1.3 Hinge side Designo (HA 13)**



Frame clearances (in mm) with the sash opened from 0° to 90°.

|                            | Opening angle | Frame clearance [A] | Overlap height [B] | Overlap width [C] | Hardware axis [D] |
|----------------------------|---------------|---------------------|--------------------|-------------------|-------------------|
| Hinge side Designo (HA 13) | 90°           | 6.4                 | 16                 | 18                | 13                |
|                            | 90°           | 8.8                 | 20                 | 18                | 13                |
|                            | 90°           | 11.7                | 24                 | 18                | 13                |
|                            | 90°           | 6.1                 | 16                 | 20                | 13                |
|                            | 90°           | 8.4                 | 20                 | 20                | 13                |
|                            | 90°           | 11                  | 24                 | 20                | 13                |
|                            | 90°           | 5.9                 | 16                 | 22                | 13                |
|                            | 90°           | 8                   | 20                 | 22                | 13                |
|                            | 90°           | 10.5                | 24                 | 22                | 13                |

The dimensions in the table apply to components in the delivery state (not adjusted).

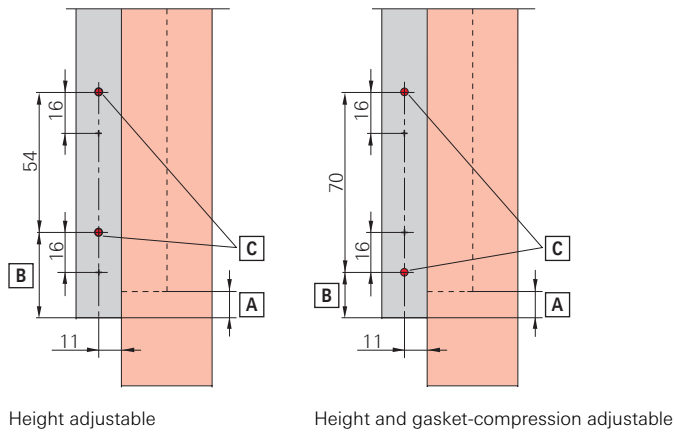


**8.2 Corner hinges**

**8.2.1 Hinge side P**

**Installation and description**

**P 6/150**

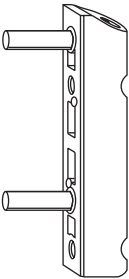


| Assignment | Meaning                                             | System            |
|------------|-----------------------------------------------------|-------------------|
| [A]        | Overlap width                                       | -                 |
| [B]        | Height adjustable: 40.5 mm                          | 12/18-9, 12/18-13 |
|            | Height and gasket-compression adjustable: 24.5 mm   |                   |
|            | Height adjustable: 42.5 mm                          | 12/20-9, 12/20-13 |
|            | Height and gasket-compression adjustable: 26.5 mm   |                   |
|            | Height adjustable: 43.5 mm                          | 12/21-13          |
|            | Height and gasket-compression adjustable: 27.5 mm   |                   |
|            | Height adjustable: 44.5 mm                          | 12/22-13          |
|            | Height and gasket-compression adjustable: 28.5 mm   |                   |
| [C]        | P 6/150 corner hinge, drill hole Ø 6 mm, 23 mm deep | -                 |





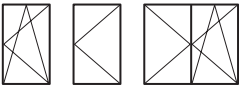
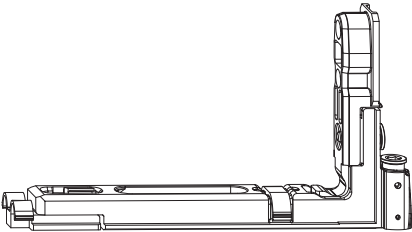
**8.2.1.1 P 6/150**



|                    |             |   |            |                                          |          | Nº     |
|--------------------|-------------|---|------------|------------------------------------------|----------|--------|
| K 6/130<br>P 6/150 | max. 150 kg | Y | 2 x Ø 6 mm | Height adjustable                        | Roto Sil | 263858 |
|                    |             |   |            |                                          | White    | 230342 |
|                    |             |   |            |                                          | Titanium | 795019 |
|                    |             |   |            | Height and gasket-compression adjustable | Roto Sil | 445171 |
|                    |             |   |            |                                          | White    | 639305 |
|                    |             |   |            |                                          | Titanium | 788327 |

For compatible pivot rests, see → *from page 437*.  
 For compatible cover caps, see → *from page 444*.

**8.2.2 Hinge side C (HA 13)**

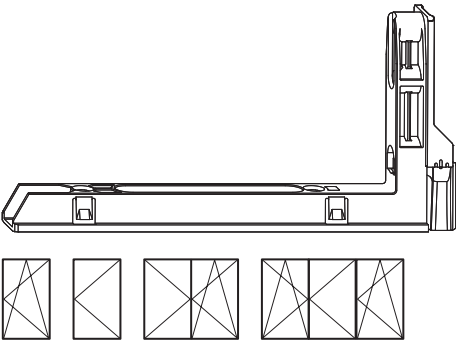


|                      |       |          |       | Nº      |
|----------------------|-------|----------|-------|---------|
| 12/18-13<br>12/20-13 | 12 mm | Roto Sil | Left  | 2005290 |
| 12/18-13<br>12/20-13 |       | Roto Sil | Right | 2005291 |

For compatible pivot rests, see → *from page 437*  
 For compatible load transfer components, see → *from page 443*



**8.2.3 Hinge side Designo (HA 13)**



|                                                                               |                                              |                                              |
|-------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------|
|                                                                               |                                              |                                              |
| <div> <div></div> <div>Corner hinge – Designo hinge side (HA 13)</div> </div> | <div> <div></div> <div>Roto Sil</div> </div> | <div> <div>Nº</div> <div>634705</div> </div> |

For compatible pivot rests, see → *from page 440*.  
 For compatible load transfer, see → *from page 443*.



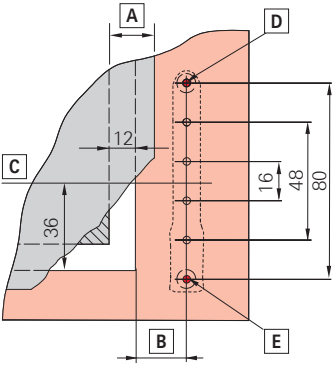


## 8.3 Pivot rests

### 8.3.1 Hinge side P

#### Installation and description

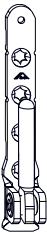
P 3/130 | P 6/130 | P6/150



| Assignment | Meaning                                                | System                |
|------------|--------------------------------------------------------|-----------------------|
| [A]        | Overlap width                                          | -                     |
| [B]        | 16.5 mm                                                | 12 / 18-9, 12 / 18-13 |
|            | 18.5 mm                                                | 12 / 20-9, 12 / 20-13 |
|            | 19.5 mm                                                | 12 / 21-13            |
|            | 20.5 mm                                                | 12 / 22-13            |
| [C]        | Pivot rest centre                                      | -                     |
| [D]        | P 3 / 130 pivot rest, drill hole Ø 3 mm, 3 mm deep     | -                     |
|            | P 6 / 130 pivot rest, drill hole Ø 6 mm, 3 mm deep     |                       |
|            | P 6 / 150 pivot rest, top drill hole Ø 6 mm, 3 mm deep |                       |
| [E]        | P 3 / 130 pivot rest, drill hole Ø 3 mm, 3 mm deep     | -                     |
|            | P 6 / 130 pivot rest, drill hole Ø 6 mm, 9 mm deep     |                       |
|            | P 6 / 150 pivot rest, drill hole Ø 6 mm, 19 mm deep    |                       |



#### 8.3.1.1 P 3/130 | P 6/130

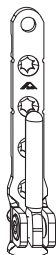


|         |             |                      |   |            |          | Nº     |
|---------|-------------|----------------------|---|------------|----------|--------|
| P 3/130 | max. 130 kg | Laterally adjustable | Y | 2 x Ø 3 mm | Roto Sil | 787207 |
|         |             |                      |   |            | White    | 787210 |
|         |             |                      |   |            | Titanium | 795013 |
| P 6/130 |             |                      |   | 2 x Ø 6 mm | Roto Sil | 787208 |
|         |             |                      |   |            | White    | 787211 |
|         |             |                      |   |            | Titanium | 795014 |

For compatible corner hinges, see → *from page 434*.

For compatible cover caps, see → *from page 445* and → *from page 445*.

### 8.3.1.2 P 6/150



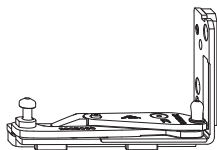
|  |  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| P 6/150                                                                           | max. 150 kg                                                                       | Laterally adjustable                                                              | Y                                                                                 | 2 x Ø 6 mm                                                                          | Roto Sil                                                                            | 787209 |
|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | White                                                                               | 787212 |
|                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | Titanium                                                                            | 788501 |

For compatible corner hinges, see → *from page 434*.

For compatible cover caps, see → *from page 445* and → *from page 445*.

## 8.3.2 Hinge side C

### 8.3.2.1 Standard



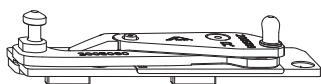
|  |  |  | Nº      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|
| Gealan S3000                                                                        | Roto Sil                                                                             | Left                                                                                  | 2008873 |
| Gealan S7000                                                                        | Roto Sil                                                                             | Right                                                                                 | 2008874 |
| Gealan S8000                                                                        |                                                                                      |                                                                                       |         |
| Gealan S9000                                                                        |                                                                                      |                                                                                       |         |
| Kömmerling 88 Plus                                                                  | Roto Sil                                                                             | Left                                                                                  | 2008875 |
| Kömmerling Eurodur 3S                                                               | Roto Sil                                                                             | Right                                                                                 | 2008876 |
| Kömmerling Eurofutur Classic                                                        |                                                                                      |                                                                                       |         |
| Kömmerling Eurofutur Elegance                                                       |                                                                                      |                                                                                       |         |
| Rehau S969 Synego                                                                   | Roto Sil                                                                             | Left                                                                                  | 2008877 |
| Rehau S980 Geneo                                                                    | Roto Sil                                                                             | Right                                                                                 | 2008878 |
| Rehau S986 EuroDesign 86                                                            |                                                                                      |                                                                                       |         |
| Rehau Total70R Reversible window                                                    |                                                                                      |                                                                                       |         |
| Rehau S735 MD                                                                       | Roto Sil                                                                             | Left                                                                                  | 2008879 |
| Rehau S799 Brillant Design                                                          | Roto Sil                                                                             | Right                                                                                 | 2008880 |
| KBE 70 AD                                                                           | Roto Sil                                                                             | Left                                                                                  | 2008881 |
| Kömmerling 76                                                                       | Roto Sil                                                                             | Right                                                                                 | 2008882 |
| Kömmerling C70 Gold                                                                 |                                                                                      |                                                                                       |         |
| Trocal 76                                                                           |                                                                                      |                                                                                       |         |
| Profine 76                                                                          |                                                                                      |                                                                                       |         |
| Profine 88                                                                          |                                                                                      |                                                                                       |         |
| Aluplast Ideal 2000                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008883 |
|                                                                                     | Roto Sil                                                                             | Right                                                                                 | 2008884 |
| Aluplast energeto 8000                                                              | Roto Sil                                                                             | Left                                                                                  | 2008885 |
| Aluplast Ideal 4000                                                                 | Roto Sil                                                                             | Right                                                                                 | 2008886 |
| Aluplast Ideal 5000                                                                 |                                                                                      |                                                                                       |         |
| Aluplast Ideal 7000                                                                 |                                                                                      |                                                                                       |         |
| Schüco Corona MD                                                                    |                                                                                      |                                                                                       |         |



|  |  |  | Nº      |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Brüggmann AD 13                                                                   | Roto Sil                                                                           | Left                                                                                | 2008887 |
| Brüggmann MD 13                                                                   | Roto Sil                                                                           | Right                                                                               | 2008888 |
| LB Profile Pad                                                                    |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 73                                                        |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 82                                                        |                                                                                    |                                                                                     |         |
| Salamander GreenEvolution 76                                                      |                                                                                    |                                                                                     |         |
| Veka Alphaline 90                                                                 |                                                                                    |                                                                                     |         |
| Veka Softline 70 MD                                                               |                                                                                    |                                                                                     |         |
| Veka Softline 76 AD                                                               |                                                                                    |                                                                                     |         |
| Veka Softline 76 MD                                                               |                                                                                    |                                                                                     |         |
| Veka Softline 82 AD                                                               |                                                                                    |                                                                                     |         |
| Veka Softline 82 MD                                                               |                                                                                    |                                                                                     |         |
| Veka Topline AD 13                                                                |                                                                                    |                                                                                     |         |
| Veka M70                                                                          |                                                                                    |                                                                                     |         |
| Veka Topline MD 13                                                                |                                                                                    |                                                                                     |         |
| Inoutic Prestige                                                                  | Roto Sil                                                                           | Left                                                                                | 2008891 |
| Inoutic Eforte                                                                    | Roto Sil                                                                           | Right                                                                               | 2008892 |
| Salamander 2D                                                                     | Roto Sil                                                                           | Left                                                                                | 2008893 |
| Salamander 3D                                                                     | Roto Sil                                                                           | Right                                                                               | 2008894 |
| Salamander Design Streamline 76                                                   |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 92                                                        | Roto Sil                                                                           | Left                                                                                | 2008895 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 2008896 |
| Gealan Linear                                                                     | Roto Sil                                                                           | Left                                                                                | 2008901 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 2008902 |
| Schüco CT70 AD                                                                    | Roto Sil                                                                           | Left                                                                                | 2008909 |
| Schüco CT70 MD                                                                    | Roto Sil                                                                           | Right                                                                               | 2008910 |
| Schüco SI82 MD                                                                    |                                                                                    |                                                                                     |         |
| Schüco Living 82 MD                                                               |                                                                                    |                                                                                     |         |
| Gealan Kubus                                                                      | Roto Sil                                                                           | Left                                                                                | 2008919 |
| Gealan Kontur                                                                     | Roto Sil                                                                           | Right                                                                               | 2008920 |
| Deceuninck Elegant                                                                | Roto Sil                                                                           | Left                                                                                | 2008923 |
| Deceuninck Zendow                                                                 | Roto Sil                                                                           | Right                                                                               | 2008924 |
| Rehau Artevo                                                                      | Roto Sil                                                                           | Left                                                                                | 2036895 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 2036896 |



### 8.3.2.2 Triple-sashed windows (centre sash)

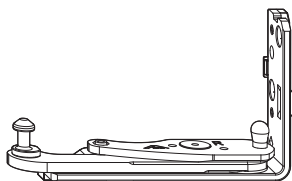


|  |  |  | Nº      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|
| Gealan S3000                                                                        | Roto Sil                                                                             | Left                                                                                  | 2008935 |
| Gealan S7000                                                                        | Roto Sil                                                                             | Right                                                                                 | 2008936 |
| Gealan S8000                                                                        |                                                                                      |                                                                                       |         |
| Gealan S9000                                                                        |                                                                                      |                                                                                       |         |
| Kömmerling 3S                                                                       | Roto Sil                                                                             | Left                                                                                  | 2008937 |
| Kömmerling 88 Plus                                                                  | Roto Sil                                                                             | Right                                                                                 | 2008938 |
| Kömmerling Eurofutur Classic                                                        |                                                                                      |                                                                                       |         |
| Kömmerling Eurofutur Elegance                                                       |                                                                                      |                                                                                       |         |
| Rehau S969 Synego                                                                   | Roto Sil                                                                             | Left                                                                                  | 2008939 |
| Rehau S980 Geneo                                                                    | Roto Sil                                                                             | Right                                                                                 | 2008940 |
| Rehau S986 EuroDesign 86                                                            |                                                                                      |                                                                                       |         |
| Rehau S735 MD                                                                       | Roto Sil                                                                             | Left                                                                                  | 2008941 |
| Rehau S799 Brillant Design                                                          | Roto Sil                                                                             | Right                                                                                 | 2008942 |
| KBE 70 AD                                                                           | Roto Sil                                                                             | Left                                                                                  | 2008943 |
| Kömmerling 76                                                                       | Roto Sil                                                                             | Right                                                                                 | 2008944 |
| Trocal 76                                                                           |                                                                                      |                                                                                       |         |
| Profine 76                                                                          |                                                                                      |                                                                                       |         |
| Profine 88                                                                          |                                                                                      |                                                                                       |         |
| Aluplast Ideal 2000                                                                 | Roto Sil                                                                             | Left                                                                                  | 2008945 |
|                                                                                     | Roto Sil                                                                             | Right                                                                                 | 2008946 |

|  |  |  | Nº      |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Aluplast energeto 8000                                                            | Roto Sil                                                                           | Left                                                                                | 2008949 |
| Aluplast Ideal 4000                                                               | Roto Sil                                                                           | Right                                                                               | 2008950 |
| Aluplast Ideal 5000                                                               |                                                                                    |                                                                                     |         |
| Aluplast Ideal 7000                                                               |                                                                                    |                                                                                     |         |
| Schüco Corona MD                                                                  |                                                                                    |                                                                                     |         |
| Salamander 2D                                                                     | Roto Sil                                                                           | Left                                                                                | 2008955 |
| Salamander 3D                                                                     | Roto Sil                                                                           | Right                                                                               | 2008956 |
| Salamander Design 3D                                                              |                                                                                    |                                                                                     |         |
| Salamander Design Streamline 76                                                   |                                                                                    |                                                                                     |         |
| Brüggmann AD 13                                                                   | Roto Sil                                                                           | Left                                                                                | 2008951 |
| Brüggmann MD 13                                                                   | Roto Sil                                                                           | Right                                                                               | 2008952 |
| LB Profile Pad                                                                    |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 73                                                        |                                                                                    |                                                                                     |         |
| Salamander BluEvolution 82                                                        |                                                                                    |                                                                                     |         |
| Salamander GreenEvolution 76                                                      |                                                                                    |                                                                                     |         |
| Veka Alphaline 90                                                                 |                                                                                    |                                                                                     |         |
| Veka Softline 70 MD                                                               |                                                                                    |                                                                                     |         |
| Veka Softline 76 AD                                                               |                                                                                    |                                                                                     |         |
| Veka Softline 76 MD                                                               |                                                                                    |                                                                                     |         |
| Veka Softline 82 AD                                                               |                                                                                    |                                                                                     |         |
| Veka Softline 82 MD                                                               |                                                                                    |                                                                                     |         |
| Veka Topline AD 13                                                                |                                                                                    |                                                                                     |         |
| Veka Topline MD 13                                                                |                                                                                    |                                                                                     |         |
| Rehau Artevo                                                                      | Roto Sil                                                                           | Left                                                                                | 2036897 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 2036898 |

### 8.3.3 Hinge side Designo (HA 13)

#### 8.3.3.1 Standard



|  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000                                                                 | Roto Sil                                                                            | Left                                                                                  | 623974 |
|                                                                                     | Roto Sil                                                                            | Right                                                                                 | 623973 |
| Aluplast Ideal 4000                                                                 | Roto Sil                                                                            | Left                                                                                  | 628950 |
| Aluplast Ideal 5000                                                                 | Roto Sil                                                                            | Right                                                                                 | 628949 |
| Aluplast Ideal 8000                                                                 |                                                                                     |                                                                                       |        |
| Schüco Corona MD                                                                    |                                                                                     |                                                                                       |        |
| Aluplast energeto 5000 view                                                         |                                                                                     |                                                                                       |        |
| Aluplast energeto 7000                                                              |                                                                                     |                                                                                       |        |
| Aluplast Ideal 7000                                                                 |                                                                                     |                                                                                       |        |
| Brüggmann AD 13                                                                     | Roto Sil                                                                            | Left                                                                                  | 635235 |
| Brüggmann MD 13                                                                     | Roto Sil                                                                            | Right                                                                                 | 635234 |
| Veka Alphaline 90                                                                   |                                                                                     |                                                                                       |        |
| Veka Softline 70 AD                                                                 |                                                                                     |                                                                                       |        |
| Veka Softline 70 MD                                                                 |                                                                                     |                                                                                       |        |
| Veka Softline 82 MD                                                                 |                                                                                     |                                                                                       |        |
| Veka Topline AD 13                                                                  |                                                                                     |                                                                                       |        |
| Veka Topline MD 13                                                                  |                                                                                     |                                                                                       |        |
| Salamander BluEvolution 73                                                          |                                                                                     |                                                                                       |        |
| Salamander BluEvolution 82                                                          |                                                                                     |                                                                                       |        |
| Salamander GreenEvolution 76                                                        |                                                                                     |                                                                                       |        |
| Veka Softline 76 AD                                                                 |                                                                                     |                                                                                       |        |
| Veka Softline 76 MD                                                                 |                                                                                     |                                                                                       |        |
| Deceuninck Eforte                                                                   | Roto Sil                                                                            | Left                                                                                  | 635402 |
| Deceuninck Prestige                                                                 | Roto Sil                                                                            | Right                                                                                 | 635401 |
| Inoutic AD 13                                                                       |                                                                                     |                                                                                       |        |
| Inoutic MD 100                                                                      |                                                                                     |                                                                                       |        |



|  |  |  | Nº     |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Deceuninck Elegant                                                                | Roto Sil                                                                           | Left                                                                                | 757736 |
| Deceuninck Legend                                                                 | Roto Sil                                                                           | Right                                                                               | 757735 |
| KBE 76                                                                            |                                                                                    |                                                                                     |        |
| KBE 88 MD                                                                         |                                                                                    |                                                                                     |        |
| Kömmerling 76                                                                     |                                                                                    |                                                                                     |        |
| Kömmerling 88 MD                                                                  |                                                                                    |                                                                                     |        |
| Trocal 76                                                                         |                                                                                    |                                                                                     |        |
| Trocal 88 MD                                                                      |                                                                                    |                                                                                     |        |
| Deceuninck Zendow                                                                 | Roto Sil                                                                           | Left                                                                                | 623953 |
| KBE 70 AD                                                                         | Roto Sil                                                                           | Right                                                                               | 623954 |
| Gealan Kubus                                                                      | Roto Sil                                                                           | Left                                                                                | 807528 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 807527 |
| Gealan S3000                                                                      | Roto Sil                                                                           | Left                                                                                | 606343 |
| Gealan S7000                                                                      | Roto Sil                                                                           | Right                                                                               | 606341 |
| Gealan S8000                                                                      |                                                                                    |                                                                                     |        |
| Kömmerling 88 Plus                                                                | Roto Sil                                                                           | Left                                                                                | 606355 |
| Kömmerling Eurodur 3S                                                             | Roto Sil                                                                           | Right                                                                               | 606354 |
| Kömmerling Eurofutur Classic                                                      |                                                                                    |                                                                                     |        |
| Kömmerling Eurofutur Elegance                                                     |                                                                                    |                                                                                     |        |
| Rehau S735 MD                                                                     | Roto Sil                                                                           | Left                                                                                | 610966 |
| Rehau S788                                                                        | Roto Sil                                                                           | Right                                                                               | 610965 |
| Rehau S799 Brillant Design                                                        |                                                                                    |                                                                                     |        |
| Rehau S980 Geneo                                                                  | Roto Sil                                                                           | Left                                                                                | 606371 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 606370 |
| Salamander 2D                                                                     | Roto Sil                                                                           | Left                                                                                | 635616 |
| Salamander 3D                                                                     | Roto Sil                                                                           | Right                                                                               | 635615 |
| Salamander BluEvolution 92                                                        | Roto Sil                                                                           | Left                                                                                | 635626 |
|                                                                                   | Roto Sil                                                                           | Right                                                                               | 635625 |
| Schüco CT70 AD                                                                    | Roto Sil                                                                           | Left                                                                                | 764823 |
| Schüco CT70 MD                                                                    | Roto Sil                                                                           | Right                                                                               | 764822 |
| Schüco SI82 MD                                                                    |                                                                                    |                                                                                     |        |
| Veka Softline 70 MD                                                               | Roto Sil                                                                           | Left                                                                                | 606397 |
| Salamander ProEvolution 72                                                        | Roto Sil                                                                           | Right                                                                               | 606396 |



For compatible corner hinges, see → *from page 436*.

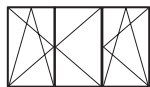
For compatible load transfer, see → *from page 443*.

### 8.3.3.2 Pivot rest cover



|  |  |  | Nº     |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Pivot rest cover – Designo hinge side                                               | Clampable                                                                            | Left                                                                                  | 799664 |
|                                                                                     |                                                                                      | Right                                                                                 | 799789 |

### 8.3.3.3 Triple-sashed windows (centre sash)



|                                                                                                                         |  |  | Nº     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>Schüco CT70 AD<br>Schüco CT70 MD<br>Schüco SI82 MD<br>Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD                                                                        | Roto Sil                                                                          | Left                                                                                | 741503 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 741502 |
| Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast Ideal 8000<br>Schüco Corona AD<br>Schüco Corona MD<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 7000                | Roto Sil                                                                          | Left                                                                                | 741517 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 741516 |
| Brüggmann AD 13<br>Brüggmann MD 13<br>Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander GreenEvolution 76 | Roto Sil                                                                          | Left                                                                                | 738596 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 738595 |
| Deceuninck Eforte<br>Deceuninck Prestige AD<br>Deceuninck Prestige MD<br>Inoutic AD 13<br>Inoutic MD 100                                                                                                 | Roto Sil                                                                          | Left                                                                                | 741499 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 741498 |
| Gealan S3000<br>Gealan S7000<br>Gealan S8000                                                                                                                                                             | Roto Sil                                                                          | Left                                                                                | 766736 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 766737 |
| KBE 76<br>KBE 88 MD<br>Kömmerling 76<br>Kömmerling 88 MD<br>Trocal 76<br>Trocal 88 MD                                                                                                                    | Roto Sil                                                                          | Left                                                                                | 766119 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 766120 |
| Rehau S730 AD<br>Rehau S735 MD<br>Rehau S799 Brillant Design                                                                                                                                             | Roto Sil                                                                          | Left                                                                                | 766740 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 766741 |
| Rehau S969 Synego<br>Rehau S980 Geneo<br>Salamander BluEvolution 92                                                                                                                                      | Roto Sil                                                                          | Left                                                                                | 766744 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 766765 |
| Salamander 2D<br>Salamander 3D<br>Salamander Design 3D                                                                                                                                                   | Roto Sil                                                                          | Left                                                                                | 766768 |
|                                                                                                                                                                                                          | Roto Sil                                                                          | Right                                                                               | 766769 |

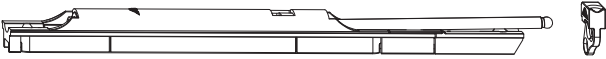
For compatible corner hinges, see → *from page 436*.





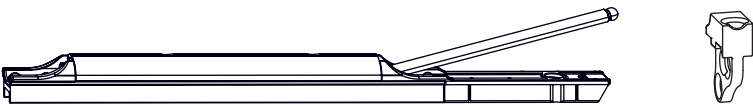
**8.4 Load transfer**

**8.4.1 Hinge side C**



|                 |  |      |          | Nº      |
|-----------------|--|------|----------|---------|
|                 |  |      |          |         |
| Frame component |  | - kg | Roto Sil | 2005292 |
| Sash component  |  | - kg | Roto Sil | 2005293 |

**8.4.2 Hinge side Designo (HA 13)**



|                 |  |      |          | Nº     |
|-----------------|--|------|----------|--------|
|                 |  |      |          |        |
| Sash component  |  | - kg | Roto Sil | 567972 |
| Frame component |  | - kg | Roto Sil | 565254 |

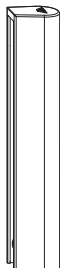


## 8.5 Cover caps

### 8.5.1 Hinge side P

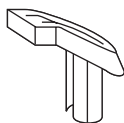
#### 8.5.1.1 Corner hinge – standard

##### Cover caps



|  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| P 6/150                                                                           | R01.1                                                                             | Natural silver                                                                      | 788427  |
|                                                                                   | R01.2                                                                             | Nickel silver                                                                       | 795971  |
|                                                                                   | R01.3                                                                             | Titanium                                                                            | 788428  |
|                                                                                   | R03.1                                                                             | Brass matt                                                                          | 788429  |
|                                                                                   | R03.2                                                                             | Brass, polished                                                                     | 795976  |
|                                                                                   | R04.1                                                                             | Grey brown                                                                          | 788430  |
|                                                                                   | R04.3                                                                             | Olive brown                                                                         | 795981  |
|                                                                                   | R04.4                                                                             | Black brown                                                                         | 788431  |
|                                                                                   | R05.3                                                                             | Medium bronze                                                                       | 788432  |
|                                                                                   | R05.5                                                                             | Bronze                                                                              | 788433  |
|                                                                                   | R06.2                                                                             | Jet black                                                                           | 821923  |
|                                                                                   | R06.2M                                                                            | Jet black, matt                                                                     | 2032814 |
|                                                                                   | R07.2                                                                             | Traffic white                                                                       | 788434  |
|                                                                                   | R07.3                                                                             | Cream                                                                               | 795986  |
|                                                                                   | SF                                                                                | Special colour                                                                      | 840749  |

##### Plug



|  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| K 3/100<br>K 6/130<br>P 6/150                                                       | R01.1                                                                               | Natural silver                                                                        | 642266 |
|                                                                                     | R01.3                                                                               | Titanium                                                                              | 799287 |
|                                                                                     | R07.2                                                                               | Traffic white                                                                         | 642267 |



### 8.5.1.2 Pivot rest – standard

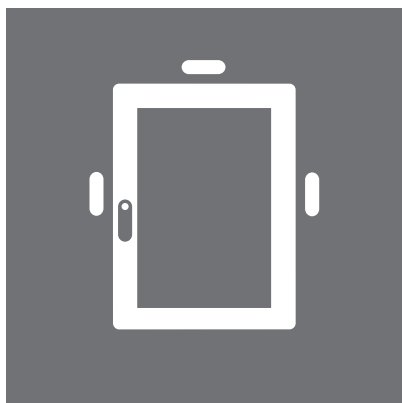


|  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| P 3/130<br>P 6/130<br>P 6/150                                                     | R01.1                                                                             | Natural silver                                                                      | 788419  |
|                                                                                   | R01.2                                                                             | Nickel silver                                                                       | 795973  |
|                                                                                   | R01.3                                                                             | Titanium                                                                            | 788420  |
|                                                                                   | R03.1                                                                             | Brass matt                                                                          | 788421  |
|                                                                                   | R03.2                                                                             | Brass, polished                                                                     | 795978  |
|                                                                                   | R04.1                                                                             | Grey brown                                                                          | 788422  |
|                                                                                   | R04.3                                                                             | Olive brown                                                                         | 795983  |
|                                                                                   | R04.4                                                                             | Black brown                                                                         | 788423  |
|                                                                                   | R05.3                                                                             | Medium bronze                                                                       | 788424  |
|                                                                                   | R05.5                                                                             | Bronze                                                                              | 788425  |
|                                                                                   | R06.2                                                                             | Jet black                                                                           | 821924  |
|                                                                                   | R06.2M                                                                            | Jet black, matt                                                                     | 2032812 |
|                                                                                   | R07.2                                                                             | Traffic white                                                                       | 788426  |
|                                                                                   | R07.2M                                                                            | Traffic white, matt                                                                 | 2046016 |
|                                                                                   | R07.3                                                                             | Cream                                                                               | 795988  |
|                                                                                   | SF                                                                                | Special colour                                                                      | 840750  |

### 8.5.1.3 Pivot rest – tab



|  |  |  | Nº      |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|
| P 3/130<br>P 6/130<br>P 6/150                                                       | R01.1                                                                               | Natural silver                                                                        | 788411  |
|                                                                                     | R01.2                                                                               | Nickel silver                                                                         | 795972  |
|                                                                                     | R01.3                                                                               | Titanium                                                                              | 788412  |
|                                                                                     | R03.1                                                                               | Brass matt                                                                            | 788413  |
|                                                                                     | R03.2                                                                               | Brass, polished                                                                       | 795977  |
|                                                                                     | R04.1                                                                               | Grey brown                                                                            | 788414  |
|                                                                                     | R04.3                                                                               | Olive brown                                                                           | 795982  |
|                                                                                     | R04.4                                                                               | Black brown                                                                           | 788415  |
|                                                                                     | R05.3                                                                               | Medium bronze                                                                         | 788416  |
|                                                                                     | R05.5                                                                               | Bronze                                                                                | 788417  |
|                                                                                     | R06.2                                                                               | Jet black                                                                             | 821925  |
|                                                                                     | R06.2M                                                                              | Jet black, matt                                                                       | 2032813 |
|                                                                                     | R07.2                                                                               | Traffic white                                                                         | 788418  |
|                                                                                     | R07.3                                                                               | Cream                                                                                 | 795987  |
|                                                                                     | SF                                                                                  | Special colour                                                                        | 840751  |









### Tilt strikers

|                   |     |
|-------------------|-----|
| Standard          | 450 |
| TiltFirst (TF)    | 453 |
| Thresholds        | 454 |
| Lateral Tilt&Turn | 455 |

### Strikers

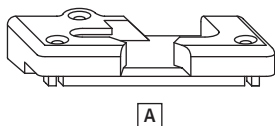
|                      |     |
|----------------------|-----|
| Standard             | 456 |
| Security             | 457 |
| Double-sashed window | 462 |
| Floating mullion     | 463 |
| Hook                 | 464 |

## 9 Locking components

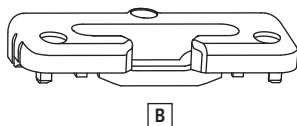
### 9.1 Tilt strikers

#### 9.1.1 Standard

##### 9.1.1.1 Zinc



A



B

| Assignment | Meaning      | Security              |
|------------|--------------|-----------------------|
| [A]        | With base    | RC 1 N, RC 2 / RC 2 N |
| [B]        | Without base | Basic security        |

|  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000                                                               | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 331487 |
| Schüco CT70 MD                                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 260501 |
| Schüco SI82 MD                                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 260502 |
| LB Profile Pad                                                                    |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Schüco LivIng 82                                                                  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Aluplast Ideal 4000                                                               | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 350190 |
| Aluplast Ideal 5000                                                               | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 257364 |
| Schüco Corona AD                                                                  | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 257365 |
| Aluplast energeto 5000                                                            |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Aluplast energeto 5000 view                                                       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Aluplast energeto 7000                                                            |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Aluplast energeto 8000                                                            |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Aluplast Ideal 8000                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Aluplast Ideal 7000                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Brüggmann AD 13                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 292195 |
| Brüggmann MD 13                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 292196 |
| Deceuninck Eforte                                                                 | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 260499 |
| Deceuninck Prestige AD                                                            | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 260500 |
| Inoutic AD 13                                                                     |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Inoutic MD 100                                                                    |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Deceuninck Zendow                                                                 | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 370073 |
| Deceuninck Elegant                                                                | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 370074 |
| Deceuninck Legend                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Deceuninck Klassiek                                                               | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 281599 |
| Deceuninck Mondial VK                                                             | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 281600 |
| Deceuninck Prestige MD                                                            | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 729039 |
| Inoutic AD 13                                                                     |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Deceuninck Prestige MD                                                            | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 288117 |
|                                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 288118 |
| Gealan Kubus                                                                      | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 807518 |
|                                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 807515 |
|                                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 807516 |
| Gealan S3000                                                                      | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 367200 |
| Gealan S7000                                                                      | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 260497 |
| Gealan S8000                                                                      | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 260498 |
| Gealan S9000                                                                      |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Gealan Linear                                                                     |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| KBE 70 AD                                                                         | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 338071 |
| KBE 70 MD                                                                         | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 289973 |
|                                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 289974 |
| KBE 76                                                                            | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 738472 |
| Kömmerling 76                                                                     | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 780787 |
| Panorama 3000                                                                     |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Trocal 76                                                                         | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 780788 |
| KBE 88 MD                                                                         |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Kömmerling 88 MD                                                                  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Trocal 88 MD                                                                      |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |





|                                                                                                                                                                   |  |  |  |  | Nº     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| KBE AD                                                                                                                                                                                                                                             | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 260493 |
|                                                                                                                                                                                                                                                    | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 260494 |
| KBE MD<br>Trocal S900                                                                                                                                                                                                                              | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 260505 |
|                                                                                                                                                                                                                                                    | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 260506 |
| Kömmerling 88 Plus<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                                                                                                                                                                | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 334954 |
| Kömmerling Eurodur 3S                                                                                                                                                                                                                              | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 260489 |
|                                                                                                                                                                                                                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 260490 |
| Panorama 2000                                                                                                                                                                                                                                      | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 261794 |
|                                                                                                                                                                                                                                                    | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 281710 |
| Plus Plan Plus Tec                                                                                                                                                                                                                                 | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 264420 |
|                                                                                                                                                                                                                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 264421 |
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Rehau S986 EuroDesign 86                                                                                                                                         | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 338021 |
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S986 EuroDesign 86                                                                                                                                                              | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 316939 |
|                                                                                                                                                                                                                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 316940 |
| Rehau S980 Geneo                                                                                                                                                                                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 496018 |
|                                                                                                                                                                                                                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 496017 |
| Roplasto 4K                                                                                                                                                                                                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 260507 |
| Roplasto 7001 AD<br>Roplasto 7001 MD                                                                                                                                                                                                               | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 260508 |
| Salamander 2D                                                                                                                                                                                                                                      | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 561212 |
| Salamander 3D                                                                                                                                                                                                                                      | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 261724 |
| Salamander Streamline 76                                                                                                                                                                                                                           | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 261725 |
| Schüco CT70 AD<br>Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76<br>Veka Softline 82 MD<br>Veka Softline 76 AD<br>Veka Softline 76 MD | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 338019 |
| Schüco CT70 AD<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76<br>Veka Softline 76 AD<br>Veka Softline 76 MD                                             | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 256783 |
|                                                                                                                                                                                                                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 256784 |
| Salamander BluEvolution 92                                                                                                                                                                                                                         | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 604887 |
|                                                                                                                                                                                                                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 599778 |
|                                                                                                                                                                                                                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 599779 |
| Trocal 88+<br>Trocal InnoNova 2000                                                                                                                                                                                                                 | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 290131 |
|                                                                                                                                                                                                                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 290152 |
| Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD                                                                                                                                                                                               | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 336808 |
| Veka Softline AD 9                                                                                                                                                                                                                                 | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 260495 |
|                                                                                                                                                                                                                                                    | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 260496 |
| Wymar 2500                                                                                                                                                                                                                                         | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 254468 |
|                                                                                                                                                                                                                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 294893 |
| Wymar 3000                                                                                                                                                                                                                                         | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 373964 |
|                                                                                                                                                                                                                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 373963 |



## INFO

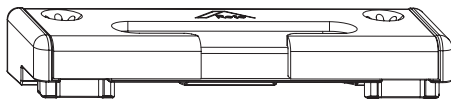
Other versions are available upon request.

## Locking components

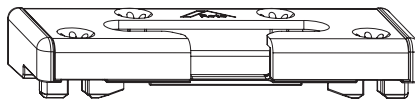
### Tilt strikers

Standard

#### 9.1.1.2 Steel



A



B

| Assignment | Meaning             |
|------------|---------------------|
| [A]        | Hardware axis 9 mm  |
| [B]        | Hardware axis 13 mm |

|                                                                                                                                          |  |  |  |  | Nº     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>Schüco CT70 MD<br>Schüco SI82 MD<br>Schüco LivIng 82<br>Veka Softline 82 MD                                                                                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856773 |
| Aluplast energeto 5000<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 4000<br>Aluplast energeto 8000<br>Aluplast Ideal 5000<br>Aluplast Ideal 7000<br>Aluplast Ideal 8000<br>Schüco Corona AD | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856789 |
| Brüggmann AD 13<br>Brüggmann MD 13                                                                                                                                                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856786 |
| Inoutic AD 13<br>Deceuninck Eforte<br>Inoutic MD 100<br>Deceuninck Prestige AD                                                                                                                                            | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856797 |
| Deceuninck Elegant<br>Deceuninck Legend<br>Deceuninck Zendow                                                                                                                                                              | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856783 |
| Gealan Linear<br>Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>Gealan S9000                                                                                                                                             | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856781 |
| KBE AD                                                                                                                                                                                                                    | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856800 |
| KBE 70 AD                                                                                                                                                                                                                 | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856787 |
| KBE 76<br>KBE 88 MD<br>Kömmerling 76<br>Kömmerling 88 MD<br>Trocal 76<br>Trocal 88 MD                                                                                                                                     | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856799 |
| Kömmerling 88 Plus<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                                                                                                                                       | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 857009 |
| Kömmerling Eurodur 3S<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance<br>Wymar 3000                                                                                                                      | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 857008 |
| Plus Plan Plus Tec<br>Roplasto 4K<br>Roplasto 7001 AD<br>Roplasto 7001 MD                                                                                                                                                 | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856788 |
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86                                                                                            | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856785 |

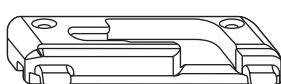


|                                                                                                                                                                                                                    |    |   |          |   | Nº     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|----------|---|--------|
| Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Schüco CT70 AD<br>Veka Softline 70 AD<br>Veka Softline 76 AD<br>Veka Softline 76 MD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka Topline MD 13 | 13 | Y | Roto Sil | – | 856782 |
| Salamander Design 2D<br>Salamander Design 3D<br>Salamander Streamline 76                                                                                                                                           | 13 | Y | Roto Sil | – | 857131 |
| Salamander GreenEvolution 76                                                                                                                                                                                       | 13 | Y | Roto Sil | – | 897733 |
| Schüco CT70 MD                                                                                                                                                                                                     | 13 | Y | Roto Sil | – | 856774 |
| Trocal 88+<br>Trocal InnoNova 2000<br>Trocal S900                                                                                                                                                                  | 13 | Y | Roto Sil | – | 856796 |
| Veka Softline AD 9                                                                                                                                                                                                 | 9  | Y | Roto Sil | – | 856801 |

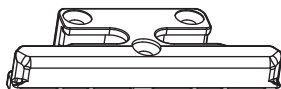

**INFO**

Other versions are available upon request.

### 9.1.2 TiltFirst (TF)



A



B

| Assignment | Meaning                   |
|------------|---------------------------|
| [A]        | Right / left tilt striker |
| [B]        | Symmetrical tilt striker  |



|                             |    |   |          |       | Nº     |
|-----------------------------|----|---|----------|-------|--------|
| Aluplast Ideal 2000         | 13 | Y | Roto Sil | Left  | 891744 |
| Schüco CT70 AD              | 13 | Y | Roto Sil | Right | 891743 |
| Schüco CT70 MD              |    |   |          |       |        |
| Schüco SI82 MD              |    |   |          |       |        |
| Aluplast energeto 5000      | 13 | Y | Roto Sil | Left  | 891747 |
| Aluplast energeto 5000 view | 13 | Y | Roto Sil | Right | 891748 |
| Aluplast energeto 7000      |    |   |          |       |        |
| Aluplast energeto 8000      |    |   |          |       |        |
| Aluplast Ideal 4000         |    |   |          |       |        |
| Aluplast Ideal 5000         |    |   |          |       |        |
| Aluplast Ideal 7000         |    |   |          |       |        |
| Aluplast Ideal 8000         |    |   |          |       |        |
| Schüco Corona AD            |    |   |          |       |        |
| Brüggmann AD 13             | 13 | Y | Roto Sil | Left  | 320608 |
| Brüggmann MD 13             | 13 | Y | Roto Sil | Right | 320609 |
| Deceuninck Eforte           | 13 | Y | Roto Sil | Left  | 493840 |
| Deceuninck Prestige AD      | 13 | Y | Roto Sil | Right | 493839 |
| Deceuninck Prestige MD      |    |   |          |       |        |
| Inoutic AD 13               |    |   |          |       |        |
| Deceuninck Zendow           | 13 | Y | Roto Sil | Left  | 493547 |
| Deceuninck Elegant          | 13 | Y | Roto Sil | Right | 493426 |
| Deceuninck Legend           |    |   |          |       |        |
| Gealan Kubus                | 13 | Y | Roto Sil | Left  | 807519 |
|                             | 13 | Y | Roto Sil | Right | 807520 |
| Gealan S3000                | 13 | Y | Roto Sil | Left  | 280122 |
| Gealan S7000                | 13 | Y | Roto Sil | Right | 280123 |
| Gealan S8000                |    |   |          |       |        |

## Locking components

### Tilt strikers

#### Thresholds

|  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| KBE 70 AD                                                                         | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 891745 |
| KBE 76                                                                            | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 891746 |
| KBE 88 MD                                                                         |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Kömmerling 76                                                                     |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Kömmerling 88 MD                                                                  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Trocal 76                                                                         |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Trocal 88 MD                                                                      |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| KBE AD                                                                            | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 317004 |
|                                                                                   | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 317005 |
| Kömmerling 88 Plus                                                                | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 309132 |
| Kömmerling Eurodur 3S                                                             | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 309133 |
| Kömmerling Eurofutur Classic                                                      |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Kömmerling Eurofutur Elegance                                                     |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Rehau S735 MD                                                                     | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 891718 |
| Rehau S788                                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 891719 |
| Rehau S799 Brillant Design                                                        |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Rehau S969 Synego                                                                 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Rehau S980 Geneo                                                                  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Salamander 2D                                                                     | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 316977 |
| Salamander 3D                                                                     | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 316978 |
| Salamander Streamline 76                                                          |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Salamander BluEvolution 73                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 891741 |
| Salamander BluEvolution 82                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 891742 |
| Salamander GreenEvolution 76                                                      |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Veka Softline 76 AD                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Veka Softline 76 MD                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Veka Topline AD 13                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Veka Topline MD 13                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Trocal 88+                                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 606635 |
| Trocal InnoNova 2000                                                              | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 606636 |
| Trocal S900                                                                       | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 309136 |
|                                                                                   | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 309137 |
| Trocal InnoNova 70.A5 AD                                                          | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 336107 |
| Trocal InnoNova 70.M5 MD                                                          | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 336108 |
| Veka Softline 70 AD                                                               | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 617391 |
| Veka Topline AD 13                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Veka Softline 76 AD                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Veka Softline 76 MD                                                               |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Veka Softline AD 9                                                                | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 328015 |
|                                                                                   | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 328016 |



#### INFO

Other versions are available upon request.

### 9.1.3 Thresholds



#### INFO

##### Connecting thresholds

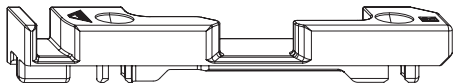
The following document provides a detailed description of how to connect thresholds to the Roto NX hardware system.



**IMO 347**



**9.1.4 Lateral Tilt&Turn**

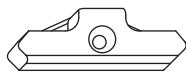


|  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000                                                               | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 363626 |
|                                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 363627 |
| KBE AD                                                                            | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 764504 |
|                                                                                   | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 764676 |
| KBE 70 AD                                                                         | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 772925 |
|                                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 772926 |
| Rehau S799 Brillant Design                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 772927 |
|                                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 772928 |
| Salamander 2D<br>Salamander 3D                                                    | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 363632 |
|                                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 363634 |
| Veka Softline 70 AD                                                               | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 772913 |
|                                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 772914 |



## 9.2 Strikers

### 9.2.1 Standard



|                                                                                                                                                              |  |  |  | Nº     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>LB Profile Pad<br>Schüco CT70 AD<br>Schüco CT70 MD<br>Schüco SI82 MD<br>Schüco Living 82                                                                                                                               | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 331489 |
| Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast Ideal 8000<br>Schüco Corona AD<br>Schüco Corona MD<br>Aluplast energeto 5000<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast energeto 8000<br>Aluplast Ideal 7000 | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 350192 |
| Brüggmann AD 13                                                                                                                                                                                                                               | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 341485 |
| Brüggmann MD 13                                                                                                                                                                                                                               | 13                                                                                | Y                                                                                   | Roto Sil                                                                            | 292193 |
| Deceuninck Eforte<br>Deceuninck Prestige AD<br>Deceuninck Prestige MD<br>Inoutic AD 13<br>Inoutic MD 100                                                                                                                                      | 13                                                                                | Y                                                                                   | Roto Sil                                                                            | 260370 |
| Deceuninck Zendow<br>Deceuninck Elegant<br>Deceuninck Legend                                                                                                                                                                                  | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 370071 |
| Deceuninck Klassiek<br>Deceuninck Mondial VK                                                                                                                                                                                                  | 13                                                                                | Y                                                                                   | Roto Sil                                                                            | 281601 |
| Gealan Kubus                                                                                                                                                                                                                                  | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 796675 |
| Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>Gealan S9000<br>Gealan Linear                                                                                                                                                                 | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 319744 |
| KBE AD                                                                                                                                                                                                                                        | 9                                                                                 | Y                                                                                   | Roto Sil                                                                            | 260367 |
| KBE MD<br>Trocal S900                                                                                                                                                                                                                         | 9                                                                                 | Y                                                                                   | Roto Sil                                                                            | 260373 |
| KBE 70 AD<br>KBE 70 MD                                                                                                                                                                                                                        | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 338070 |
| KBE 76<br>Kömmerling 76<br>Trocal 76<br>KBE 88 MD<br>Kömmerling 88 MD<br>Panorama 3000<br>Kömmerling C70 Gold<br>Trocal 88 MD                                                                                                                 | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 738470 |
| Kömmerling Eurodur 3S                                                                                                                                                                                                                         | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 457090 |
|                                                                                                                                                                                                                                               | 13                                                                                | Y                                                                                   | Roto Sil                                                                            | 260365 |
| Kömmerling 88 Plus<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                                                                                                                                                           | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 334957 |
| Panorama 2000                                                                                                                                                                                                                                 | 9                                                                                 | Y                                                                                   | Roto Sil                                                                            | 281723 |
| Plus Plan Plus Tec                                                                                                                                                                                                                            | 13                                                                                | Y                                                                                   | Roto Sil                                                                            | 264316 |
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86<br>Rehau Total70R Reversible window                                                                            | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 332439 |



|                                                                                                                                                                                           |  |  |  | Nº     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Roplasto 4K<br>Roplasto 7001 AD<br>Roplasto 7001 MD                                                                                                                                                                                                                        | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 482541 |
| Salamander 2D<br>Salamander 3D<br>Salamander BluEvolution 92<br>Salamander Streamline 76                                                                                                                                                                                   | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 486195 |
| Salamander BluEvolution 82<br>Schüco CT70 AD<br>Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Veka Softline 82 MD<br>Veka Softline 76 AD<br>Veka Softline 76 MD<br>Veka M70 | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 332438 |
| Salamander GreenEvolution 76                                                                                                                                                                                                                                               | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 897004 |
| Trocal 88+<br>Trocal InnoNova 2000                                                                                                                                                                                                                                         | 13                                                                                | Y                                                                                   | Roto Sil                                                                            | 290127 |
| Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD                                                                                                                                                                                                                       | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 336797 |
| Veka Softline AD 9                                                                                                                                                                                                                                                         | 9                                                                                 | N                                                                                   | Roto Sil                                                                            | 260368 |
| Wymar 2500                                                                                                                                                                                                                                                                 | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 380088 |
| Wymar 3000                                                                                                                                                                                                                                                                 | 13                                                                                | N                                                                                   | Roto Sil                                                                            | 374157 |

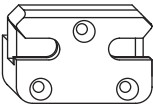


**INFO**

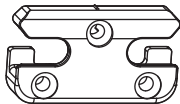
Other versions are available upon request.

**9.2.2 Security**

**9.2.2.1 Zinc**



**A**



**B**

| Assignment | Meaning      | Security              |
|------------|--------------|-----------------------|
| [A]        | With base    | RC 1 N, RC 2 / RC 2 N |
| [B]        | Without base | Basic security        |



|                                                                        |  |  |  |  | Nº     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>Schüco CT70 MD<br>Schüco SI82 MD<br>Schüco LivIng 82                                                                             | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 331490 |
| Aluplast Ideal 2000<br>LB Profile Pad<br>Schüco CT70 MD<br>Schüco SI82 MD<br>Schüco LivIng 82                                                           | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 260395 |
| Aluplast Ideal 4000                                                                                                                                     | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 350191 |
| Aluplast Ideal 5000<br>Schüco Corona AD                                                                                                                 | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 257357 |
| Aluplast energeto 5000<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast energeto 8000<br>Aluplast Ideal 7000<br>Aluplast Ideal 8000 |                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
| Brüggmann AD 13<br>Brüggmann MD 13                                                                                                                      | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 292194 |
| Deceuninck Eforte<br>Deceuninck Prestige AD<br>Deceuninck Prestige MD<br>Inoutic AD 13<br>Inoutic MD 100                                                | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 260394 |
| Deceuninck Zendow<br>Deceuninck Elegant<br>Deceuninck Legend                                                                                            | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 370072 |
| Deceuninck Klassiek<br>Deceuninck Mondial VK                                                                                                            | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 281632 |
| Gealan Kubus                                                                                                                                            | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 807521 |
| Gealan S3000                                                                                                                                            | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 367201 |
| Gealan S7000<br>Gealan S8000<br>Gealan Linear<br>Gealan S9000                                                                                           | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 260393 |
| KBE 70 AD                                                                                                                                               | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 289941 |
| KBE 76<br>Kömmerling 76<br>Trocal 76<br>KBE 88 MD<br>Kömmerling 88 MD<br>Kömmerling C70 Gold<br>Trocal 88 MD                                            | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 738471 |
| KBE AD                                                                                                                                                  | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 260391 |
| KBE MD                                                                                                                                                  | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 260398 |
| Trocal S900                                                                                                                                             | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 260397 |
| Kömmerling Eurodur 3S                                                                                                                                   | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 258303 |
| Kömmerling 88 Plus<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                                                                     | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 334958 |
| Panorama 3000                                                                                                                                           | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 281768 |
| Plus Plan Plus Tec                                                                                                                                      | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 264327 |
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Rehau S986 EuroDesign 86<br>Rehau Total70R Reversible window          | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 316942 |
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Rehau S986 EuroDesign 86                                              | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 348407 |
| Rehau S980 Geneo                                                                                                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 496019 |
| Roplasto 4K<br>Roplasto 7001 AD<br>Roplasto 7001 MD                                                                                                     | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 260399 |
| Salamander 2D<br>Salamander 3D<br>Salamander Streamline 76                                                                                              | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 365385 |





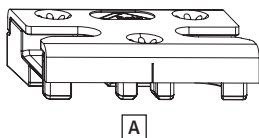
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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Salamander BluEvolution 82<br>Schüco CT70 AD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Veka Softline 82 MD<br>Veka Softline 76 AD<br>Veka Softline 76 MD                                                         | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 260396 |
| Salamander BluEvolution 82<br>Schüco CT70 AD<br>Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Veka Softline 76 AD<br>Veka Softline 76 MD<br>Veka M70 | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 348410 |
| Salamander BluEvolution 92                                                                                                                                                                                                                          | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 601574 |
| Salamander GreenEvolution 76                                                                                                                                                                                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 897080 |
| Trocal 88+<br>Trocal InnoNova 2000                                                                                                                                                                                                                  | 13                                                                                | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 290128 |
| Veka Softline AD 9                                                                                                                                                                                                                                  | 9                                                                                 | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 260392 |
| Wymar 3000                                                                                                                                                                                                                                          | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 374194 |



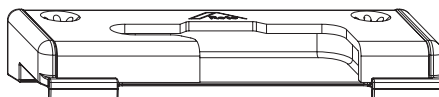
## INFO

Other versions are available upon request.

### 9.2.2.2 Steel



A



B

| Assignment | Meaning               |
|------------|-----------------------|
| [A]        | Striker, symmetrical  |
| [B]        | Striker, right / left |

|                                                                                                                                        |  |  |  |  | Nº     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>LB Profile Pad<br>Schüco CT70 MD<br>Schüco SI82 MD<br>Schüco LivIng 82                                                                                                                             | 13                                                                                  | Y                                                                                   | Roto Sil                                                                              | –                                                                                     | 856737 |
| Aluplast energeto 5000<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 4000<br>Aluplast energeto 8000<br>Aluplast Ideal 5000<br>Aluplast Ideal 7000<br>Aluplast Ideal 8000<br>Schüco Corona AD | 13                                                                                  | Y                                                                                   | Roto Sil                                                                              | –                                                                                     | 856753 |
| Brüggmann AD 13                                                                                                                                                                                                           | 13                                                                                  | Y                                                                                   | Roto Sil                                                                              | Left                                                                                  | 856757 |
| Brüggmann MD 13                                                                                                                                                                                                           | 13                                                                                  | Y                                                                                   | Roto Sil                                                                              | Right                                                                                 | 856756 |
| Inoutic AD 13<br>Deceuninck Eforte<br>Inoutic Favorite AD 13<br>Inoutic MD 100<br>Deceuninck Prestige AD<br>Deceuninck Prestige MD                                                                                        | 13                                                                                  | Y                                                                                   | Roto Sil                                                                              | –                                                                                     | 856752 |



|                                                                                                                                                                    |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Deceuninck Elegant<br>Deceuninck Legend<br>Deceuninck Zendow                                                                                                                                                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856751 |
| Gealan Linear<br>Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>Gealan S9000                                                                                                                                                                       | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856749 |
| KBE AD                                                                                                                                                                                                                                              | 9                                                                                 | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 857007 |
| KBE 70 AD                                                                                                                                                                                                                                           | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 857004 |
|                                                                                                                                                                                                                                                     | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 857005 |
| KBE 76<br>KBE 88 MD<br>Kömmerling 76<br>Kömmerling 88 MD<br>Kömmerling C70 Gold<br>Trocal 76<br>Trocal 88 MD                                                                                                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856754 |
| Kömmerling 88 Plus<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                                                                                                                                                                 | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 857003 |
| Kömmerling Eurodur 3S<br>Wymar 3000                                                                                                                                                                                                                 | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 857006 |
| Plus Plan Plus Tec<br>Roplasto 4K<br>Roplasto 7001 AD<br>Roplasto 7001 MD                                                                                                                                                                           | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856750 |
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86<br>Rehau Total70R Reversible window                                                                                  | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856748 |
| Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Schüco CT70 AD<br>Veka Alphasine 90<br>Veka Softline 70 AD<br>Veka Softline 76 AD<br>Veka Softline 76 MD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka M70<br>Veka Topline MD 13 | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 856738 |
| Salamander Design 2D<br>Salamander Design 3D<br>Salamander Streamline 76                                                                                                                                                                            | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 858209 |
|                                                                                                                                                                                                                                                     | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 858210 |
| Salamander GreenEvolution 76                                                                                                                                                                                                                        | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 897003 |
| Trocal 88+                                                                                                                                                                                                                                          | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Left                                                                                | 856763 |
| Trocal InnoNova 2000<br>Trocal S900                                                                                                                                                                                                                 | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | Right                                                                               | 856762 |
| Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD                                                                                                                                                                                                | 13                                                                                | Y                                                                                 | Roto Sil                                                                            | –                                                                                   | 858211 |
| Veka Softline AD 9                                                                                                                                                                                                                                  | 9                                                                                 | N                                                                                 | Roto Sil                                                                            | –                                                                                   | 856761 |

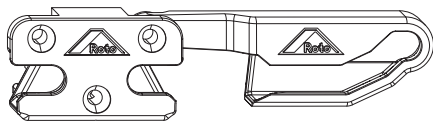


## INFO

Other versions are available upon request.



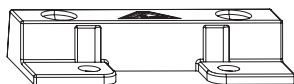
### 9.2.2.3 Tilt ventilation (TiltSafe)



|  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000                                                               | 13                                                                                | Roto Sil                                                                           | Left                                                                                | 816132 |
| Schüco CT70 AD                                                                    | 13                                                                                | Roto Sil                                                                           | Right                                                                               | 816131 |
| Schüco CT70 MD                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Schüco SI82 MD                                                                    |                                                                                   |                                                                                    |                                                                                     |        |
| Schüco Living 82                                                                  |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast energeto 5000                                                            | 13                                                                                | Roto Sil                                                                           | Left                                                                                | 795447 |
| Aluplast energeto 5000 view                                                       | 13                                                                                | Roto Sil                                                                           | Right                                                                               | 795448 |
| Aluplast energeto 7000                                                            |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast Ideal 4000                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast Ideal 5000                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast energeto 8000                                                            |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast Ideal 8000                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Aluplast Ideal 7000                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Gealan S8000                                                                      | 13                                                                                | Roto Sil                                                                           | Left                                                                                | 795450 |
| Gealan Linear                                                                     | 13                                                                                | Roto Sil                                                                           | Right                                                                               | 795451 |
| Deceuninck Eforte                                                                 | 13                                                                                | Roto Sil                                                                           | Left                                                                                | 839325 |
| Deceuninck Prestige AD                                                            | 13                                                                                | Roto Sil                                                                           | Right                                                                               | 839327 |
| Deceuninck Prestige MD                                                            |                                                                                   |                                                                                    |                                                                                     |        |
| Deceuninck Elegant                                                                | 13                                                                                | Roto Sil                                                                           | Left                                                                                | 795445 |
| Deceuninck Legend                                                                 | 13                                                                                | Roto Sil                                                                           | Right                                                                               | 795446 |
| KBE 76                                                                            |                                                                                   |                                                                                    |                                                                                     |        |
| KBE 88 MD                                                                         |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 76                                                                     |                                                                                   |                                                                                    |                                                                                     |        |
| Kömmerling 88 MD                                                                  |                                                                                   |                                                                                    |                                                                                     |        |
| Trocal 76                                                                         |                                                                                   |                                                                                    |                                                                                     |        |
| Trocal 88 MD                                                                      |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S730 AD                                                                     | 13                                                                                | Roto Sil                                                                           | Left                                                                                | 794922 |
| Rehau S735 MD                                                                     | 13                                                                                | Roto Sil                                                                           | Right                                                                               | 795449 |
| Rehau S788                                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S799 Brillant Design                                                        |                                                                                   |                                                                                    |                                                                                     |        |
| Rehau S986 EuroDesign 86                                                          |                                                                                   |                                                                                    |                                                                                     |        |
| Salamander Streamline 76                                                          | 13                                                                                | Roto Sil                                                                           | Left                                                                                | 828260 |
|                                                                                   | 13                                                                                | Roto Sil                                                                           | Right                                                                               | 828261 |
| Veka Topline AD 13                                                                | 13                                                                                | Roto Sil                                                                           | Left                                                                                | 795443 |
| Veka Softline 82 MD                                                               | 13                                                                                | Roto Sil                                                                           | Right                                                                               | 795444 |
| Veka Softline 76 AD                                                               |                                                                                   |                                                                                    |                                                                                     |        |
| Veka Softline 76 MD                                                               |                                                                                   |                                                                                    |                                                                                     |        |



**Locking components**  
**Strikers**  
Double-sashed window



|  |                                                                                                                                                                                                                                                                                                                                                                                     |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Tilt ventilation protective support (TiltSafe)                                    | Aluplast Ideal 2000<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast Ideal 8000<br>Aluplast Ideal 7000<br>Gealan S8000<br>KBE 76<br>KBE 88 MD<br>Kömmerling 76<br>Kömmerling 88 MD<br>Rehau S730 AD<br>Rehau S799 Brillant Design<br>Rehau S986 EuroDesign 86<br>Schüco CT70 AD<br>Schüco SI82 MD<br>Schüco LivIng 82<br>Tropical 76<br>Tropical 88 MD<br>Veka Softline 82 MD<br>Veka Topline AD 13 | 13                                                                                  | RC 2<br>RC 2 N                                                                      | 816934 |

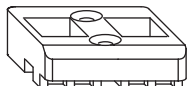


## INFO

### Recommended component for system testing (RC 2 / RC 2 N)

The tilt ventilation protective support (TiltSafe) reduces the area of attack on the tilt ventilation security strikers (TiltSafe) to a minimum.

## 9.2.3 Double-sashed window



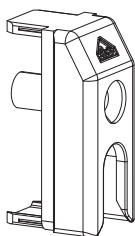
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| Aluplast Ideal 2000<br>Schüco CT70 MD<br>Schüco SI82 MD                                                                                                                                                                                                                                | 13                                                                                  | Roto Sil                                                                              | 260439 |
| Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Schüco Corona AD<br>Aluplast energeto 5000<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast energeto 8000<br>Aluplast Ideal 7000<br>Aluplast Ideal 8000                                                              | 13                                                                                  | Roto Sil                                                                              | 257360 |
| Brügmann AD 13<br>Brügmann MD 13<br>Salamander BluEvolution 82<br>Schüco CT70 AD<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Salamander GreenEvolution 76<br>Veka Softline 76 AD<br>Veka Softline 76 MD | 13                                                                                  | Roto Sil                                                                              | 263783 |



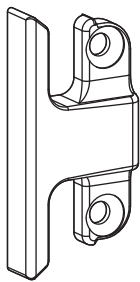
|                                                   |  |  | Nº     |
|------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Deceuninck Eforte<br>Deceuninck Prestige AD<br>Deceuninck Prestige MD<br>Inoutic AD 13<br>Inoutic Favorite AD 13<br>Inoutic MD 100 | 13                                                                                 | Roto Sil                                                                            | 260438 |
| Deceuninck Zendow<br>Deceuninck Elegant<br>Deceuninck Legend                                                                       | 13                                                                                 | Roto Sil                                                                            | 370177 |
| Gealan S3000<br>Gealan S7000<br>Gealan S8000                                                                                       | 13                                                                                 | Roto Sil                                                                            | 260437 |
| KBE MD<br>Trocal S900                                                                                                              | 13                                                                                 | Roto Sil                                                                            | 260442 |
| KBE 70 AD<br>KBE 76<br>Kömmerling 76<br>Trocal 76<br>KBE 88 MD<br>Kömmerling 88 MD<br>Trocal 88 MD                                 | 13                                                                                 | Roto Sil                                                                            | 286640 |
| KBE AD                                                                                                                             | 13                                                                                 | Roto Sil                                                                            | 485436 |
| Kömmerling 88 Plus<br>Kömmerling Eurodur 3S<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                       | 13                                                                                 | Roto Sil                                                                            | 260433 |
| Panorama 2000                                                                                                                      | 9                                                                                  | Roto Sil                                                                            | 281730 |
| Plus Plan Plus Tec                                                                                                                 | 13                                                                                 | Roto Sil                                                                            | 264369 |
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86     | 13                                                                                 | Roto Sil                                                                            | 260434 |
| Roplasto 4K<br>Roplasto 7001 AD<br>Roplasto 7001 MD                                                                                | 13                                                                                 | Roto Sil                                                                            | 260443 |
| Salamander 2D<br>Salamander 3D<br>Salamander Streamline 76                                                                         | 13                                                                                 | Roto Sil                                                                            | 260446 |
| Salamander BluEvolution 92                                                                                                         | 13                                                                                 | Roto Sil                                                                            | 604886 |
| Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD                                                                               | 13                                                                                 | Roto Sil                                                                            | 263035 |
| Trocal 88+<br>Trocal InnoNova 2000                                                                                                 | 13                                                                                 | Roto Sil                                                                            | 290213 |
| Wymar 3000                                                                                                                         | 13                                                                                 | Roto Sil                                                                            | 374161 |



## 9.2.4 Floating mullion

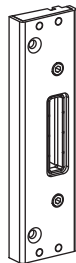


|  |  | Nº     |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------|
| V cam                                                                               | Roto Sil                                                                             | 260359 |



|                                                                           |  |          |        |
|---------------------------------------------------------------------------|--|----------|--------|
|                                                                           |  |          | Nº     |
| Screw-on striker for lever-operated espagnolette (variable handle height) |  | Roto Sil | 339395 |

**9.2.5 Hook**



|                                                                                        |                               |          |        |
|----------------------------------------------------------------------------------------|-------------------------------|----------|--------|
|                                                                                        |                               |          | Nº     |
| Aluplast Ideal 2000<br>Schüco CT70 AD<br>Schüco CT70 MD                                | Gasket compression adjustable | Roto Sil | 349261 |
| Aluplast Ideal 4000<br>Aluplast Ideal 5000                                             | Gasket compression adjustable | Roto Sil | 349290 |
| Deceuninck Prestige<br>Inoutic AD 13<br>Inoutic MD 100                                 | Gasket compression adjustable | Roto Sil | 350507 |
| Deceuninck Zendow                                                                      | Gasket compression adjustable | Roto Sil | 382703 |
| Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>KBE 70 AD                              | Gasket compression adjustable | Roto Sil | 349237 |
| Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S986 EuroDesign 86                   | Gasket compression adjustable | Roto Sil | 349214 |
| Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Topline AD 13<br>Veka Topline MD 13 | Gasket compression adjustable | Roto Sil | 355675 |













### Additional stay arms

|                |     |
|----------------|-----|
| Standard       | 470 |
| TiltFirst (TF) | 471 |
| Arched window  | 471 |

### Tilt stays

|                  |     |
|------------------|-----|
| Frame components | 472 |
| Sash components  | 472 |
| Sets             | 472 |
| Mounting screw   | 473 |

### Arrestable brake stays

|                  |     |
|------------------|-----|
| Frame components | 475 |
| Sash components  | 476 |

### Sash lifter

|          |     |
|----------|-----|
| See page | 477 |
|----------|-----|

### Restrictor and cleaning stays

|                  |     |
|------------------|-----|
| Frame components | 478 |
| Sash components  | 478 |
| Packers          | 478 |

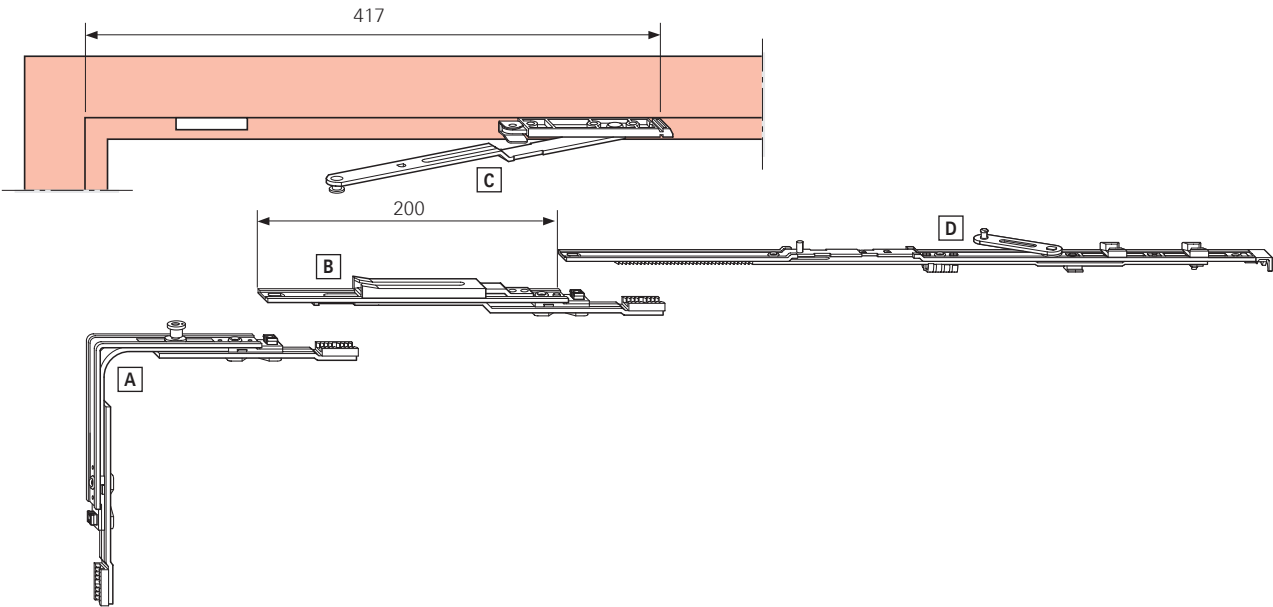
### Arrestable ventilation stays

|                  |     |
|------------------|-----|
| Frame components | 480 |
| Sash components  | 481 |

10 Scissor stays

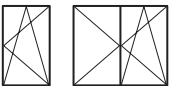
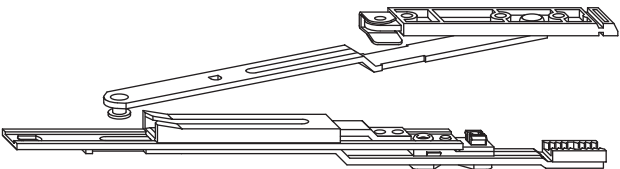
10.1 Additional stay arms

Installation and description



| Assignment | Meaning                              |
|------------|--------------------------------------|
| [A]        | Corner drive                         |
| [B]        | Additional stay arm, sash component  |
| [C]        | Additional stay arm, frame component |
| [D]        | Stay guide                           |

10.1.1 Standard

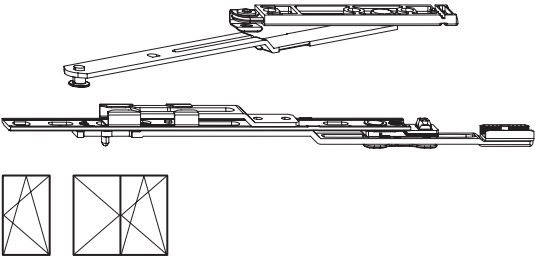


|                          |     |          |        |
|--------------------------|-----|----------|--------|
|                          |     |          |        |
| Frame and sash component | 200 | Roto Sil | 255237 |

For the compatible packer, see → from page 516.



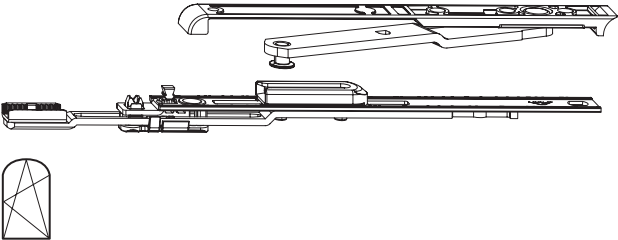
10.1.2 TiltFirst (TF)



|                          |     |          |        |
|--------------------------|-----|----------|--------|
|                          |     |          | Nº     |
| Frame and sash component | 200 | Roto Sil | 292022 |

For the compatible support plate, see → *from page 516*.

10.1.3 Arched window



|                          |          |        |
|--------------------------|----------|--------|
|                          |          | Nº     |
| Frame and sash component | Roto Sil | 245764 |



## 10.2 Tilt stays

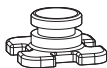
### 10.2.1 Frame components



|                                                                                   |                                                                                     |        |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  | Nº     |
| Frame component                                                                   | Roto Sil                                                                            | 451477 |

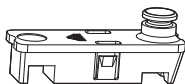
For the compatible packer, see → *from page 516*→ *from page 472*.

### 10.2.2 Sash components



|                                                                                      |                                                                                       |        |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  | Nº     |
| Sash component for floating-mullion installation                                     | Roto Sil                                                                              | 451432 |

For the mounting screw required for floating-mullion installation, see → *from page 473*.



|                                                                                     |                                                                                       |        |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  | Nº     |
| Sash component for hardware groove                                                  | Roto Sil                                                                              | 451431 |

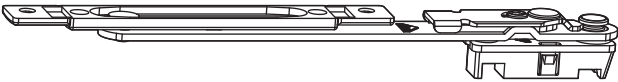
### 10.2.3 Sets



|                                                                                     |                                                                                       |        |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  | Nº     |
| Floating-mullion installation                                                       | Roto Sil                                                                              | 482823 |

For the mounting screw required for floating-mullion installation, see → *from page 473*.

For the compatible packer, see → *from page 516*.



|                                                                                   |                                                                                     |        |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  | Nº     |
| Hardware groove                                                                   | Roto Sil                                                                            | 494389 |

10.2.4 Mounting screw

|                                                                                     |        |
|-------------------------------------------------------------------------------------|--------|
|  | Nº     |
| Screw for installation on corner drive                                              | 567995 |



## 10.3 Arrestable brake stays

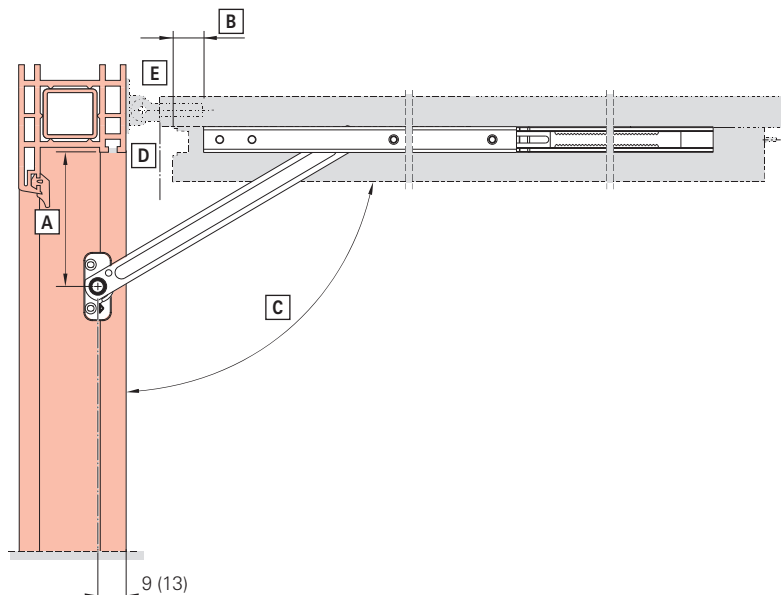


### INFO

#### Comfort component

Not a security component in accordance with DIN EN 13126-5

### Installation and description



| Assignment | Meaning           |
|------------|-------------------|
| [A]        | Frame dimension   |
| [B]        | Sash dimension    |
| [C]        | 90° opening angle |
| [D]        | Overlap edge      |
| [E]        | Sash rebate edge  |

### Hinge side P / T / A16

| Frame dimension [A] | Sash dimension [B] | Sash components    |           |
|---------------------|--------------------|--------------------|-----------|
| 115 mm              | 10 mm              | Scissor stay no. 1 | Arm no. 1 |
| 130 mm              | 125 mm             | Scissor stay no. 1 | Arm no. 2 |
| 245 mm              | 240 mm             | Scissor stay no. 2 | Arm no. 3 |
| 245 mm              | 240 mm             | Scissor stay no. 3 | Arm no. 3 |

For compatible sash components, see → *from page 476*.

### Hinge side Designo (HA 13), hinge side A16 Designo

| Frame dimension [A] | Sash dimension [B] | Sash components    |           |
|---------------------|--------------------|--------------------|-----------|
| 135 mm              | 130 mm             | Scissor stay no. 1 | Arm no. 2 |

For compatible sash components, see → *from page 476*.



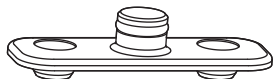
### INFO

Only the sash lifter and not the lifting mishandling device can be used in conjunction with the arrestable brake stay.





### 10.3.1 Frame components



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Nº     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>Brüggmann AD 13<br>Brüggmann MD 13<br>Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>KBE 70 AD<br>KBE 70 MD<br>KBE AD<br>Kömmerling 3S<br>Kömmerling Eurodur 3S<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance<br>Plus Plan Plus Tec<br>Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86<br>Salamander 2D<br>Salamander 3D<br>Salamander Design 2D<br>Salamander Design 3D<br>Salamander Streamline 76<br>Schüco Corona AD<br>Schüco CT70 AD<br>Schüco CT70 MD<br>Trocal InnoNova 2000<br>Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD<br>Veka Softline AD 9<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Brüggmann AD 73<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>KBE 76<br>KBE 88 MD<br>Kömmerling 76<br>Kömmerling 88 MD<br>Trocal 76<br>Trocal 88 MD<br>Salamander GreenEvolution 76 | Roto Sil                                                                            | 477848 |
| Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 7000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Roto Sil                                                                            | 490128 |
| Deceuninck Eforte<br>Deceuninck Prestige AD<br>Deceuninck Prestige MD<br>Inoutic AD 13<br>Inoutic Favorite AD 13<br>Inoutic MD 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Roto Sil                                                                            | 490133 |
| Gealan Kubus                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Roto Sil                                                                            | 807522 |
| KBE MD<br>Trocal S900                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Roto Sil                                                                            | 477849 |
| Trocal 88+<br>Trocal InnoNova 2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Roto Sil                                                                            | 490159 |



10.3.2 Sash components



|  |  # |  |  | Nº     |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Scissor stay no. 1                                                                | –                                                                                   | –                                                                                 | Roto Sil                                                                            | 486820 |
| Scissor stay no. 2                                                                | –                                                                                   | –                                                                                 | Roto Sil                                                                            | 632993 |
| Scissor stay no. 3                                                                | 1                                                                                   | V                                                                                 | Roto Sil                                                                            | 633026 |
| Arm no. 1                                                                         | –                                                                                   | –                                                                                 | Roto Sil                                                                            | 486821 |
| Arm no. 2                                                                         | –                                                                                   | –                                                                                 | Roto Sil                                                                            | 492757 |
| Arm no. 3                                                                         | –                                                                                   | –                                                                                 | Roto Sil                                                                            | 632994 |
| Spring stop                                                                       | –                                                                                   | –                                                                                 | Roto Sil                                                                            | 491797 |





10.4 Sash lifter

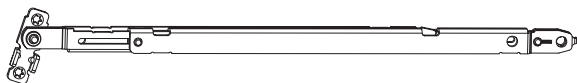


|                                                                                                 |  |                                                                                     |        |
|-------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--------|
|              |  |  | Nº     |
| To be used in combination with arrestable ventilation stay, arrestable brake stay or brake stay |  | Roto Sil                                                                            | 795925 |



## 10.5 Restrictor and cleaning stays

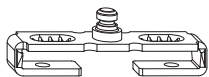
### 10.5.1 Frame components



|  |  |  |  | Nº      |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Frame component                                                                   | Type 1                                                                            | 361 – 630                                                                         | Roto Sil                                                                            | 2026063 |
|                                                                                   | Type 2                                                                            | 631 – 1200                                                                        | Roto Sil                                                                            | 2026069 |

For the compatible support plate, see → *from page 478*.

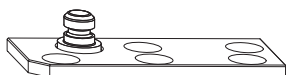
### 10.5.2 Sash components



|  |  |  | Nº      |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Sash bearing for hardware groove                                                  | Roto Sil                                                                           | –                                                                                   | 2026070 |



|  |  |  | Nº      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|
| Sash bearing for floating-mullion installation                                      | Roto Sil                                                                             | –                                                                                     | 2026077 |



|  |  |  | Nº      |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|
| Sash bearing for floating-mullion installation                                      | Zinc-nickel                                                                          | Left                                                                                  | 2026073 |
| Sash bearing for floating-mullion installation                                      | Zinc-nickel                                                                          | Right                                                                                 | 2026074 |

### 10.5.3 Packers



|  |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Frame                                                                               | Height 3.5 mm                                                                       | R07.2                                                                               | Traffic white                                                                         | 347133 |
|                                                                                     |                                                                                     | R04.1                                                                               | Grey brown                                                                            | 347134 |
|                                                                                     | Height 3.5 mm (at an angle)                                                         | R07.2                                                                               | Traffic white                                                                         | 347240 |
|                                                                                     |                                                                                     | R04.1                                                                               | Grey brown                                                                            | 347241 |
|                                                                                     | Height 5.5 mm                                                                       | R07.2                                                                               | Traffic white                                                                         | 347236 |
|                                                                                     |                                                                                     | R04.1                                                                               | Grey brown                                                                            | 347237 |
|                                                                                     | Height 8.0 mm                                                                       | R07.2                                                                               | Traffic white                                                                         | 347238 |



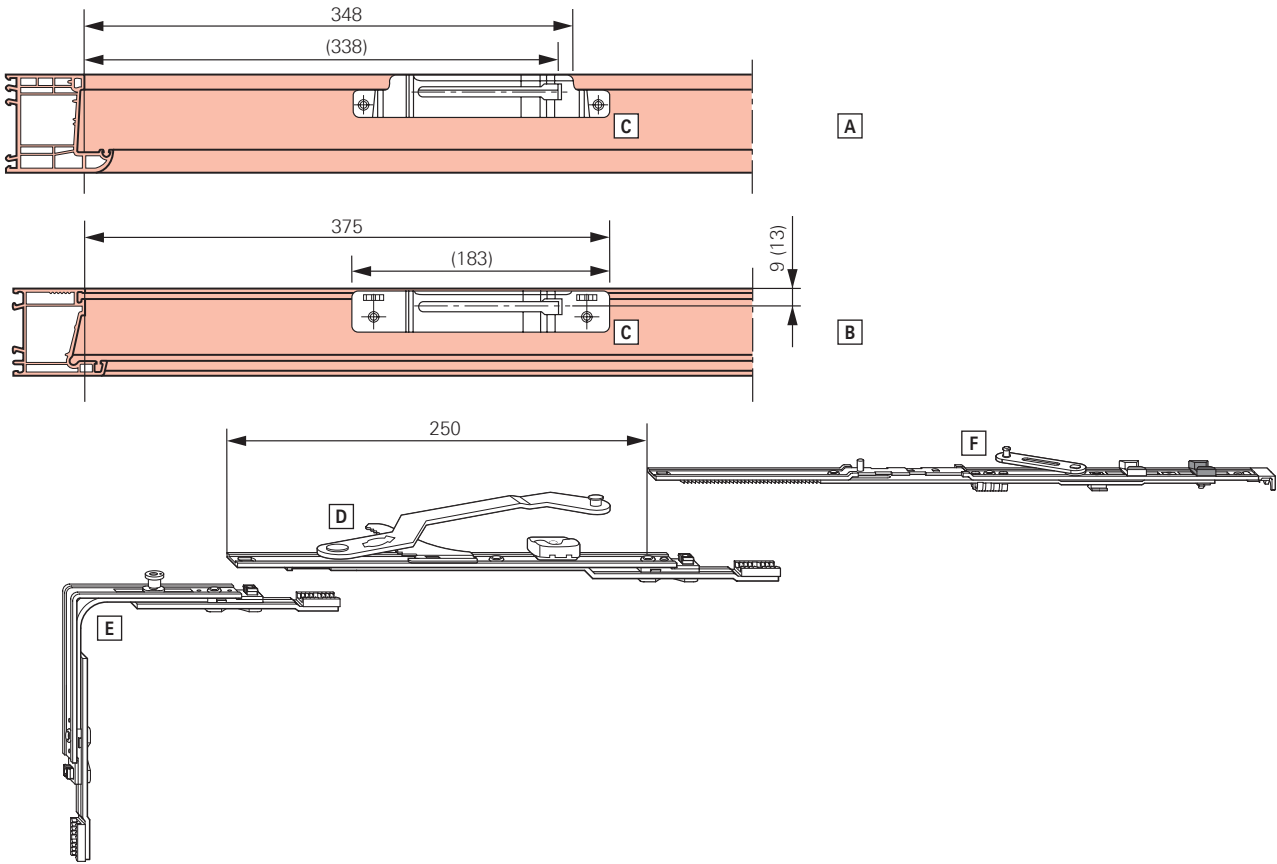
## 10.6 Arrestable ventilation stays



### INFO

Components cannot be used in conjunction with hinge side P and hinge side T.

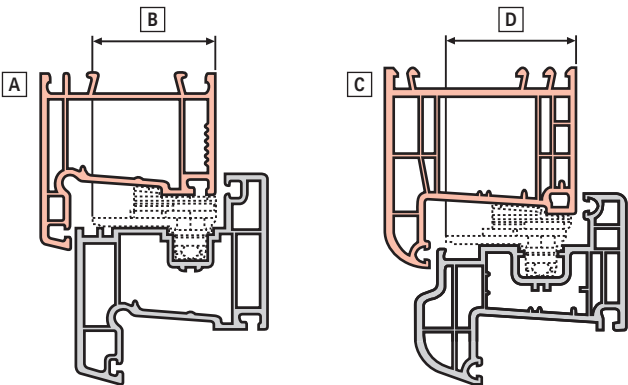
### Installation and description



| Assignment | Meaning                                      |
|------------|----------------------------------------------|
| [A]        | Installation of profile stop                 |
| [B]        | Installation of profile groove               |
| [C]        | Arrestable ventilation stay, frame component |
| [D]        | Arrestable ventilation stay, sash component  |
| [E]        | Corner drive                                 |
| [F]        | Stay guide without blocking device           |



**Scissor stays**  
**Arrestable ventilation stays**  
 Frame components



| Assignment | Meaning             | Locking element |
|------------|---------------------|-----------------|
| [A]        | Hardware axis 9 mm  | -               |
| [B]        | 44 mm               | No. 1           |
|            | 39 mm               | No. 2           |
|            | 35 mm               | No. 3           |
|            | 30 mm               | No. 4           |
| [C]        | Hardware axis 13 mm | -               |
| [D]        | 48 mm               | No. 1           |
|            | 43 mm               | No. 2           |
|            | 39 mm               | No. 3           |
|            | 34 mm               | No. 4           |



**INFO**  
 Only the stay guide without blocking device and the sash lifter, but not the lifting mishandling device, can be used in conjunction with the arrestable ventilation stay.

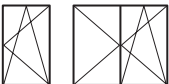
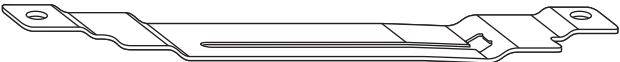


**INFO**  
 It is not possible to install the arrestable ventilation stay in profile systems with central lip gasket.

Use of an arrestable ventilation stay depends on the sash rebate height (SRH)

| Tilt depth | SRH            | Locking element               |
|------------|----------------|-------------------------------|
| 80         | < 500 mm       | No. 3 + no. 4                 |
| 140        | > 500 – 600 mm | No. 3 + no. 4                 |
|            | > 600 – 800 mm | No. 2 + no. 3 + no. 4         |
|            | > 800 mm       | No. 1 + no. 2 + no. 3 + no. 4 |

**10.6.1 Frame components**

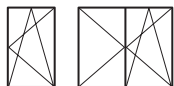
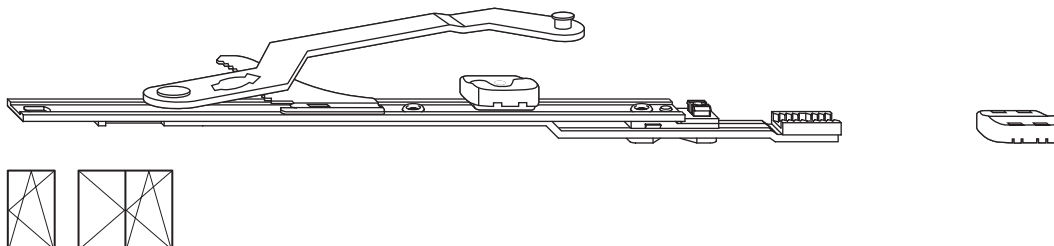


|                                                                               |    |    |          |       | Nº     |
|-------------------------------------------------------------------------------|----|----|----------|-------|--------|
| Aluplast Ideal 2000<br>Schüco CT70 AD<br>Schüco SI82 MD                       | 13 | 13 | Roto Sil | Left  | 316887 |
|                                                                               |    |    | Roto Sil | Right | 316888 |
| Brüggmann AD 13<br>Brüggmann MD 13<br>Veka Alphaline 90<br>Veka Topline AD 13 | 13 | 13 | Roto Sil | Left  | 316903 |
|                                                                               |    |    | Roto Sil | Right | 316904 |



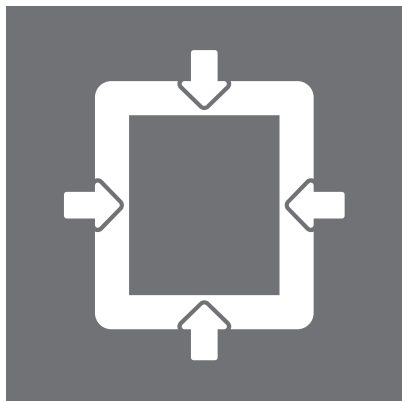
|                               |    |          |       | Nº     |
|-------------------------------|----|----------|-------|--------|
| Deceuninck Eforte             | 13 | Roto Sil | Left  | 316937 |
| Inoutic AD 13                 | 13 | Roto Sil | Right | 316938 |
| Inoutic Favorite AD 13        |    |          |       |        |
| Deceuninck Zendow             | 13 | Roto Sil | Left  | 316917 |
| Gealan S3000                  | 13 | Roto Sil | Right | 316918 |
| Gealan S7000                  |    |          |       |        |
| Gealan S8000                  |    |          |       |        |
| KBE 70 AD                     |    |          |       |        |
| KBE 76                        |    |          |       |        |
| Kömmerling 76                 |    |          |       |        |
| Roplasto 4K                   |    |          |       |        |
| Roplasto 7001 AD              |    |          |       |        |
| Roplasto 7001 MD              |    |          |       |        |
| Trocal 76                     |    |          |       |        |
| KBE 88 MD                     |    |          |       |        |
| Kömmerling 88 MD              |    |          |       |        |
| Trocal 88 MD                  |    |          |       |        |
| Kömmerling 88 Plus            | 13 | Roto Sil | Left  | 316895 |
| Kömmerling Eurodur 3S         | 13 | Roto Sil | Right | 316896 |
| Kömmerling Eurofutur Classic  |    |          |       |        |
| Kömmerling Eurofutur Elegance |    |          |       |        |
| Wymar 3000                    |    |          |       |        |
| Rehau S799 Brillant Design    | 13 | Roto Sil | Left  | 288033 |
|                               | 13 | Roto Sil | Right | 288034 |
| Salamander 2D                 | 13 | Roto Sil | Left  | 316899 |
| Salamander 3D                 | 13 | Roto Sil | Right | 316900 |
| Salamander Streamline 76      |    |          |       |        |

## 10.6.2 Sash components



|                                              |     |          |       | Nº     |
|----------------------------------------------|-----|----------|-------|--------|
| Locking element no. 1 (12 lock-in positions) | 250 | Roto Sil | Left  | 288001 |
|                                              |     | Roto Sil | Right | 288032 |
| Locking element no. 2 (9 lock-in positions)  |     | Roto Sil | Left  | 307605 |
|                                              |     | Roto Sil | Right | 307606 |
| Locking element no. 3 (7 lock-in positions)  |     | Roto Sil | Left  | 315996 |
|                                              |     | Roto Sil | Right | 315997 |
| Locking element no. 4 (5 lock-in positions)  |     | Roto Sil | Left  | 315998 |
|                                              |     | Roto Sil | Right | 315999 |
| Spacer cap (rebate clearance 13.5 – 15 mm)   | –   | –        | –     | 281635 |











**Bullet catches**

|          |     |
|----------|-----|
| Standard | 486 |
| Magnet   | 488 |
| ATM      | 491 |

**Night vents**

|              |     |
|--------------|-----|
| Single-stage | 493 |
| Multi-stage  | 494 |

**Lifting mishandling devices**

|                  |     |
|------------------|-----|
| Frame components | 496 |
| Floating mullion | 497 |
| Sash components  | 498 |

**Mishandling devices**

|          |     |
|----------|-----|
| See page | 499 |
|----------|-----|

**Turn restrictors**

|                                  |     |
|----------------------------------|-----|
| Turn restrictor 191              | 500 |
| Turn restrictor 335 / 355 / 355C | 502 |
| Turn restrictor A                | 504 |
| Turn restrictor 195              | 506 |
| Turn restrictor 198              | 508 |

**Security components**

|                                           |     |
|-------------------------------------------|-----|
| Drilling protection – backset 8 and 15 mm | 509 |
| Drilling protection – backset 25 to 50 mm | 509 |
| Floating mullion                          | 509 |
| Sash components                           | 510 |
| Anti-jemmy device                         | 510 |

**Connection elements**

|                  |     |
|------------------|-----|
| Couplings        | 511 |
| Fastening plates | 511 |
| Connecting links | 511 |

**Turn locks**

|          |     |
|----------|-----|
| Standard | 512 |
| Cylinder | 512 |
| Packers  | 512 |

**Run-up blocks**

|          |     |
|----------|-----|
| See page | 514 |
|----------|-----|

**Packers**

|          |     |
|----------|-----|
| See page | 516 |
|----------|-----|

**Centre closers**

|                            |     |
|----------------------------|-----|
| Hinge side P               | 517 |
| Hinge side Designo (HA 13) | 521 |

**Other**

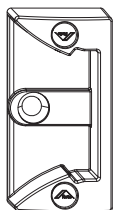
|                                     |     |
|-------------------------------------|-----|
| Travel restrictor                   | 523 |
| Cover faceplate                     | 523 |
| End piece for pitched stay guide    | 523 |
| Anti-slam device                    | 523 |
| Cover cap sets – hinge side P       | 524 |
| Cover caps – colour sample          | 524 |
| Info clips                          | 524 |
| Turn opening restrictor – TurnPlus  | 526 |
| Water slot caps                     | 526 |
| Duo-Drill – corner welded connector | 528 |

## 11 Accessories

### 11.1 Bullet catches

#### 11.1.1 Standard

##### 11.1.1.1 Frame components

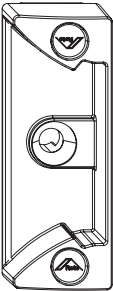


|                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  | Nº      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Aluplast Ideal 2000<br>Aluplast energeto 5000<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast energeto 8000<br>Aluplast Ideal 7000<br>Aluplast Ideal 8000<br>Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86<br>Salamander 2D<br>Salamander 3D<br>Salamander Streamline 76<br>Schüco Corona AD<br>Schüco CT70 AD<br>Schüco LivIng 82<br>Rehau Total70R Reversible window | 13                                                                                 | Roto Sil                                                                            | 788572  |
| Deceuninck Arcade<br>Deceuninck Eforte<br>Deceuninck Prestige                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 13                                                                                 | Roto Sil                                                                            | 788616  |
| Deceuninck Elegant<br>Deceuninck Legend                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 13                                                                                 | Roto Sil                                                                            | 2025385 |
| Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>Gealan Linear<br>Gealan S9000<br>Wymar 2500                                                                                                                                                                                                                                                                                                                                                                                                                                | 13                                                                                 | Roto Sil                                                                            | 788574  |
| Gealan Kubus                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 13                                                                                 | Roto Sil                                                                            | 812365  |

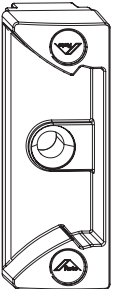


|                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  | Nº     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>KBE 70 AD<br>KBE 76<br>KBE 88 MD<br>Kömmerling 76<br>Kömmerling 88 Plus<br>Kömmerling 88 MD<br>Kömmerling Eurodur 3S<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance<br>Plus Plan Plus Tec<br>Roplasto 4K<br>Roplasto 7001 AD<br>Roplasto 7001 MD<br>Trocacal 76<br>Trocacal 88 MD<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Salamander GreenEvolution 76<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Veka Softline 76 AD<br>Veka Softline 76 MD<br>Veka M70 | 13                                                                                 | Roto Sil                                                                            | 788615 |
| KBE AD<br>Veka Softline AD 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 9                                                                                  | Roto Sil                                                                            | 788573 |

**11.1.1.2 Floating mullion**

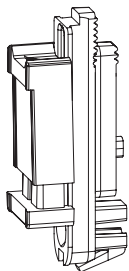


|  |  |  | Nº     |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Bullet catch for lever-operated espagnolette                                        | Screw-on                                                                             | Roto Sil                                                                              | 788378 |



|  |  | Nº     |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Bullet catch for opposite hardware groove                                           | Roto Sil                                                                              | 788507 |

### 11.1.1.3 Sash components



|                                                                                   |                                                                                     |        |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  | Nº     |
| Bullet catch sash component                                                       | Roto Sil                                                                            | 788363 |



|                                                                                     |        |
|-------------------------------------------------------------------------------------|--------|
|  | Nº     |
| Bullet-catch sash component support (upper / lower horizontal hardware groove)      | 794997 |

## 11.1.2 Magnet

### 11.1.2.1 Frame components



|                                                                                                                                                                                                       |                                                                                       |        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|                                                                                                                    |  | Nº     |
| Aluplast Ideal 2000<br>Schüco CT70 AD<br>Schüco CT70 MD<br>Schüco SI82 MD                                                                                                                             | 13                                                                                    | 331765 |
| Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast energeto 5000<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast energeto 8000<br>Aluplast Ideal 7000<br>Aluplast Ideal 8000 | 13                                                                                    | 331774 |
| Deceuninck Eforte<br>Deceuninck Prestige MD<br>Inoutic AD 13<br>Inoutic Favorite AD 13<br>Inoutic MD 100                                                                                              | 13                                                                                    | 258515 |



|                                                                                                                                                                                    |  | Nº     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Deceuninck Zendow<br>KBE 70 AD<br>KBE 76<br>KBE AD<br>Kömmerling 76<br>Kömmerling 88 Plus<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance<br>Trocal 76<br>Deceuninck Elegant<br>Deceuninck Legend<br>KBE 88 MD<br>Kömmerling 88 MD<br>Trocal 88 MD | 9<br>13                                                                             | 328836 |
| Gealan S3000<br>Gealan S7000<br>Gealan Linear                                                                                                                                                                                                                       | 13                                                                                  | 331764 |
| Gealan Kubus                                                                                                                                                                                                                                                        | 13                                                                                  | 807524 |
| KBE MD                                                                                                                                                                                                                                                              | 9                                                                                   | 328837 |
| Kömmerling Eurodur 3S                                                                                                                                                                                                                                               | 13                                                                                  | 245320 |
| Panorama 3000                                                                                                                                                                                                                                                       | 13                                                                                  | 331778 |
| Plus Plan Plus Tec                                                                                                                                                                                                                                                  | 13                                                                                  | 331768 |
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S986 EuroDesign 86                                                                                                                                                                               | 13                                                                                  | 245321 |
| Roplasto 4K<br>Roplasto 7001 AD<br>Roplasto 7001 MD                                                                                                                                                                                                                 | 13                                                                                  | 331767 |
| Salamander 2D<br>Salamander 3D<br>Salamander BluEvolution 92                                                                                                                                                                                                        | 13                                                                                  | 331769 |
| Trocal 88+<br>Trocal InnoNova 2000                                                                                                                                                                                                                                  | 13                                                                                  | 377363 |
| Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD                                                                                                                                                                                                                | 13                                                                                  | 329214 |
| Veka Softline AD 9<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander GreenEvolution 76<br>Veka Softline 76 AD<br>Veka Softline 76 MD                                                                                                                        | 9<br>13                                                                             | 245323 |
| Wymar 3000                                                                                                                                                                                                                                                          | 13                                                                                  | 374158 |



#### INFO

Can only be used in conjunction with magnetic bullet catch sash component.



### 11.1.2.2 Floating mullion



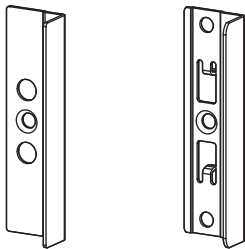
|  |  | Nº               |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------|
| Magnetic bullet catch for lever-operated espagnolette                                | 9<br>13                                                                               | 330081<br>482418 |



INFO

Can only be used in conjunction with magnetic bullet catch sash component.

11.1.2.3 Sash components



|                                      |           |    |          | Nº     |
|--------------------------------------|-----------|----|----------|--------|
| Magnetic bullet catch sash component | –         | 9  | Roto Sil | 244516 |
|                                      | –         | 13 | Roto Sil | 244517 |
|                                      | Clampable | 13 | Roto Sil | 535468 |



|                                                 |  |         |          | Nº     |
|-------------------------------------------------|--|---------|----------|--------|
| Packer for magnetic bullet catch sash component |  | 9<br>13 | Roto Sil | 897128 |



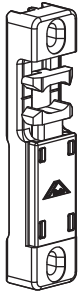
|                                                   |  |          | Nº     |
|---------------------------------------------------|--|----------|--------|
| Support for magnetic bullet catch hardware groove |  | Roto Sil | 330080 |





## 11.1.3 ATM

### 11.1.3.1 Frame components



|                                                                                                                                                                                                                                                                                                                           |  |  |  | Nº     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Brügmann AD 13<br>Brügmann MD 13<br>Kömmerling 88 Plus<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance<br>Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 7000 | 13                                                                                | Roto Sil                                                                           | –                                                                                   | 483496 |
| Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>KBE 76<br>Kömmerling 76<br>Trocal 76<br>KBE 88 MD<br>Kömmerling 88 MD<br>Trocal 88 MD                                                                                                                                                                                                                                                                      | 13                                                                                | Roto Sil                                                                           | –                                                                                   | 449920 |
| Trocal 88+                                                                                                                                                                                                                                                                                                                                                                                                 | 13                                                                                | Roto Sil                                                                           | Left                                                                                | 595155 |
| Trocal InnoNova 70.A5 AD                                                                                                                                                                                                                                                                                                                                                                                   | 13                                                                                | Roto Sil                                                                           | Right                                                                               | 595156 |
| Trocal InnoNova 70.M5 MD                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                   |                                                                                    |                                                                                     |        |

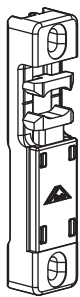


#### INFO

Component must be installed turned 180 degrees (Roto logo is positioned on the head).



11.1.3.2 Floating mullion

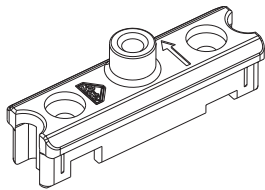


|                                                                                   |                                                                                     |                                                                                     |        |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  | Nº     |
| ATM bullet catch for lever-operated espagnolette                                  | Screw-on                                                                            | Roto Sil                                                                            | 600642 |

11.1.3.3 Sash components



|                                                                                    |                                                                                     |        |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  | Nº     |
| Cam for ATM bullet catch (espagnolette installation)                               | Roto Sil                                                                            | 534670 |



|                                                                                       |        |
|---------------------------------------------------------------------------------------|--------|
|  | Nº     |
| Cam for NTi bullet catch (groove mounting)                                            | 482255 |

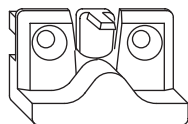




## 11.2 Night vents

### 11.2.1 Single-stage

#### 11.2.1.1 Frame components



|                                                                                                                                                                                                                                                                                                                                                                                                |  |  | Nº     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>Deceuninck Zendow<br>Roplasto 4K<br>Roplasto 7001 AD<br>Roplasto 7001 MD<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Deceuninck Elegant<br>Deceuninck Legend<br>Salamander GreenEvolution 76<br>Veka Softline 76 AD<br>Veka Softline 76 MD                                                                                                  | 13                                                                                | Roto Sil                                                                            | 260532 |
| Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Deceuninck Klassiek<br>Deceuninck Mondial VK<br>Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86<br>Salamander 2D<br>Salamander 3D<br>Salamander BluEvolution 92<br>Salamander Streamline 76<br>Schüco Corona AD<br>Schüco CT70 AD<br>Schüco CT70 MD<br>Schüco SI82 MD<br>Aluplast energeto 5000<br>Aluplast energeto 8000<br>Aluplast Ideal 6000<br>Aluplast Ideal 8000 | 13                                                                                | Roto Sil                                                                            | 260534 |
| Brüggmann AD 13<br>Brüggmann MD 13                                                                                                                                                                                                                                                                                                                                                                                                                                              | 13                                                                                | Roto Sil                                                                            | 292198 |
| Deceuninck Eforte<br>Deceuninck Prestige AD<br>Deceuninck Prestige MD<br>Inoutic AD 13<br>Inoutic MD 100                                                                                                                                                                                                                                                                                                                                                                        | 13                                                                                | Roto Sil                                                                            | 260531 |
| Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>Gealan Linear                                                                                                                                                                                                                                                                                                                                                                                                                   | 13                                                                                | Roto Sil                                                                            | 260530 |
| KBE AD<br>Veka Softline AD 9                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 9                                                                                 | Roto Sil                                                                            | 260529 |
| KBE MD                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 9                                                                                 | Roto Sil                                                                            | 260533 |
| KBE 70 AD<br>KBE 76<br>Kömmerling 76<br>Plus Plan Plus Tec<br>Trocal 76<br>KBE 88 MD<br>Kömmerling 88 MD<br>Trocal 88 MD                                                                                                                                                                                                                                                                                                                                                        | 13                                                                                | Roto Sil                                                                            | 263232 |



|  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Kömmerling 88 Plus<br>Kömmerling Eurodur 3S                                       | 13                                                                                | Roto Sil                                                                            | 260528 |
| Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD                              | 13                                                                                | Roto Sil                                                                            | 336815 |
| Trocal 88+<br>Trocal InnoNova 2000<br>Trocal S900                                 | 9<br>13                                                                           | Roto Sil                                                                            | 451418 |
| Wymar 2500                                                                        | 13                                                                                | Roto Sil                                                                            | 284627 |
| Wymar 3000                                                                        | 13                                                                                | Roto Sil                                                                            | 374159 |



### INFO

The component can only be used in conjunction with a corner drive (P or V cam).

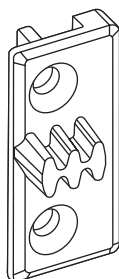
## 11.2.2 Multi-stage



### INFO

Components cannot be used in conjunction with hinge side P and hinge side T.

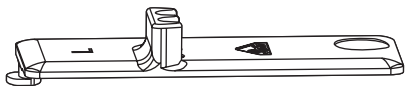
### 11.2.2.1 Frame components



|                                                                                                                                              |  |  | Nº     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>KBE 76<br>KBE AD<br>Kömmerling 76<br>Schüco CT70 AD<br>Trocal 76<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76 | 13                                                                                  | Roto Sil                                                                              | 623064 |
| Deceuninck Arcade<br>Deceuninck Eforte<br>Inoutic AD 13<br>Inoutic Favorite AD 13                                                                                                                                               | 13                                                                                  | Roto Sil                                                                              | 319467 |
| Gealan S3000<br>Gealan S9000                                                                                                                                                                                                    | 13                                                                                  | Roto Sil                                                                              | 319473 |



11.2.2.2 Floating mullion



|  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Floating mullion                                                                  | Left                                                                              | Roto Sil                                                                            | 449982 |
|                                                                                   | Right                                                                             | Roto Sil                                                                            | 446060 |

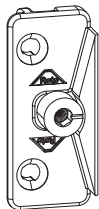
11.2.2.3 Sash components

For compatible sash components, see → *from page 358*.



## 11.3 Lifting mishandling devices

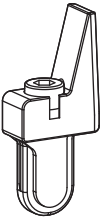
### 11.3.1 Frame components



|                                                                                                                                                                                                                                      |  |  | Nº     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>Schüco CT70 AD<br>Schüco CT70 MD<br>Schüco SI82 MD                                                                                                                                                                                                                                             | 13                                                                                 | Roto Sil                                                                            | 260551 |
| Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Salamander 2D<br>Salamander 3D<br>Salamander BluEvolution 92<br>Salamander Streamline 76<br>Schüco Corona AD<br>Aluplast energeto 5000<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast energeto 8000<br>Aluplast Ideal 7000<br>Aluplast Ideal 8000 | 13                                                                                 | Roto Sil                                                                            | 260557 |
| Brüggmann AD 13<br>Brüggmann MD 13                                                                                                                                                                                                                                                                                    | 13                                                                                 | Roto Sil                                                                            | 483117 |
| Deceuninck Arcade<br>Deceuninck Eforte<br>Deceuninck Prestige AD<br>Deceuninck Prestige MD<br>Inoutic AD 13<br>Inoutic Favorite AD 13<br>Inoutic MD 100                                                                                                                                                               | 13                                                                                 | Roto Sil                                                                            | 260550 |
| Deceuninck Zendow<br>Deceuninck Elegant<br>Deceuninck Legend<br>Deceuninck Prestige                                                                                                                                                                                                                                   | 13                                                                                 | Roto Sil                                                                            | 370175 |
| Deceuninck Klassiek<br>Deceuninck Mondial VK                                                                                                                                                                                                                                                                          | 13                                                                                 | Roto Sil                                                                            | 281636 |
| Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>Gealan S9000                                                                                                                                                                                                                                                          | 13                                                                                 | Roto Sil                                                                            | 380118 |
| Gealan Kubus                                                                                                                                                                                                                                                                                                          | 13                                                                                 | Roto Sil                                                                            | 807517 |
| KBE 70 AD<br>KBE 76<br>Kömmerling 76<br>Roplasto 4K<br>Roplasto 7001 AD<br>Roplasto 7001 MD<br>Trocal 76<br>KBE 88 MD<br>Kömmerling 88 MD<br>Trocal 88 MD                                                                                                                                                             | 13                                                                                 | Roto Sil                                                                            | 260554 |
| KBE AD                                                                                                                                                                                                                                                                                                                | 9                                                                                  | Roto Sil                                                                            | 260547 |
| KBE MD<br>Trocal S900                                                                                                                                                                                                                                                                                                 | 9                                                                                  | Roto Sil                                                                            | 260553 |
| Kömmerling Eurodur 3S                                                                                                                                                                                                                                                                                                 | 13                                                                                 | Roto Sil                                                                            | 260545 |
| Kömmerling 88 Plus<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance<br>Plus Plan Plus Tec                                                                                                                                                                                                             | 13                                                                                 | Roto Sil                                                                            | 264523 |
| Panorama 2000                                                                                                                                                                                                                                                                                                         | 9                                                                                  | Roto Sil                                                                            | 281728 |



|                                                                                                                                                                                    |  |  | Nº     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86                                                                                                                                      | 13                                                                                 | Roto Sil                                                                            | 260546 |
| Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Wymar 3000<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76<br>Veka Softline 76 AD<br>Veka Softline 76 MD | 13                                                                                 | Roto Sil                                                                            | 260552 |
| Trocal 88+<br>Trocal InnoNova 2000                                                                                                                                                                                                                                  | 13                                                                                 | Roto Sil                                                                            | 290155 |
| Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD                                                                                                                                                                                                                | 13                                                                                 | Roto Sil                                                                            | 336813 |
| Veka Softline AD 9                                                                                                                                                                                                                                                  | 9                                                                                  | Roto Sil                                                                            | 260548 |

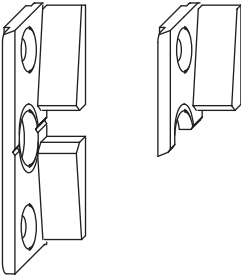


|  | Nº     |
|-------------------------------------------------------------------------------------|--------|
| Insert part                                                                         | 534908 |

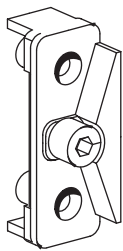


**INFO**  
 Only in conjunction with SEC striker with base (hardware axis 13).

### 11.3.2 Floating mullion

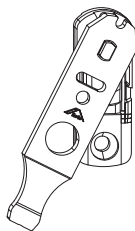


|  |  |  | Nº     |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Lifting mishandling device for lever-operated espagnolette                          | –                                                                                     | Screw-on                                                                              | 257600 |



|                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  | Nº     |
| Lifting mishandling device for opposite hardware groove                           | –                                                                                 | Screw-on                                                                            | Roto Sil                                                                            | 260539 |

11.3.3 Sash components



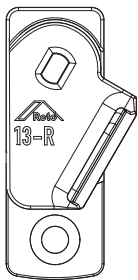
|                                                                                    |                                                                                      |        |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------|
|  |  | Nº     |
| Lifting mishandling device sash component                                          | Roto Sil                                                                             | 795927 |







11.4 Mishandling devices



|      |    |       | Nº      |
|------|----|-------|---------|
| Sash | 9  | Left  | 2030447 |
|      |    | Right | 2030407 |
|      | 13 | Left  | 2030454 |
|      |    | Right | 2030448 |



# 11.5 Turn restrictors

## 11.5.1 Turn restrictor 191

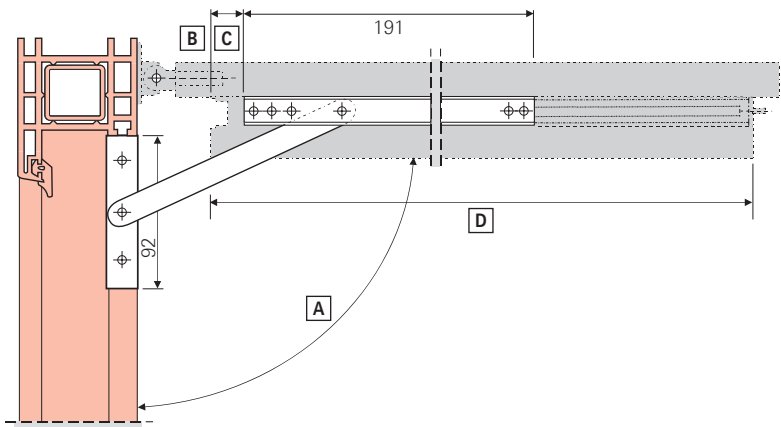
i

INFO

Comfort component

Not a security component in accordance with DIN EN 13126-5

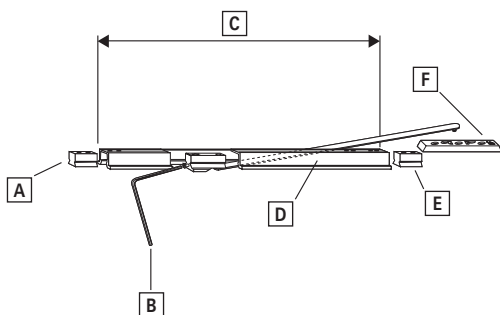
Installation and description



| Assignment | Meaning                                                |
|------------|--------------------------------------------------------|
| [A]        | Opening angle<br>90° ± 3°                              |
| [B]        | Sash rebate edge                                       |
| [C]        | Installation dimensions<br>Sash: 37 mm                 |
| [D]        | Sash rebate width (SRW)<br>240 <sup>[8]</sup> – 660 mm |



[8] Minimum dimension when using the T&T corner drive: 430 mm



| Assignment | Meaning                                       |
|------------|-----------------------------------------------|
| [A]        | Stop                                          |
| [B]        | Brake which can be adjusted with 4 mm hex key |
| [C]        | 191 mm                                        |
| [D]        | Aluminium operator track on the sash          |
| [E]        | Stop                                          |
| [F]        | Bearing which can be screwed onto the frame   |



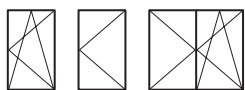
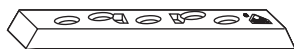
**INFO**

Turn restrictor can only be used with surface-mounted hinge sides.

For compatible corner hinges, see → *from page 434*.

For compatible pivot rests, see → *from page 437*.

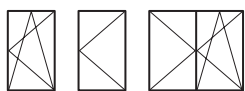
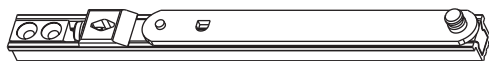
**11.5.1.1 Frame components**



|         |          |          |        |
|---------|----------|----------|--------|
|         |          |          | Nº     |
| Bearing | Screw-on | Roto Sil | 264625 |

For the compatible packer, see → *from page 516*.

**11.5.1.2 Sash components**



|                                              |          |        |
|----------------------------------------------|----------|--------|
|                                              |          | Nº     |
| Turn restrictor 191 (12 mm rebate clearance) | Roto Sil | 260564 |



**INFO**

Selectable final position and continuously adjustable brake.



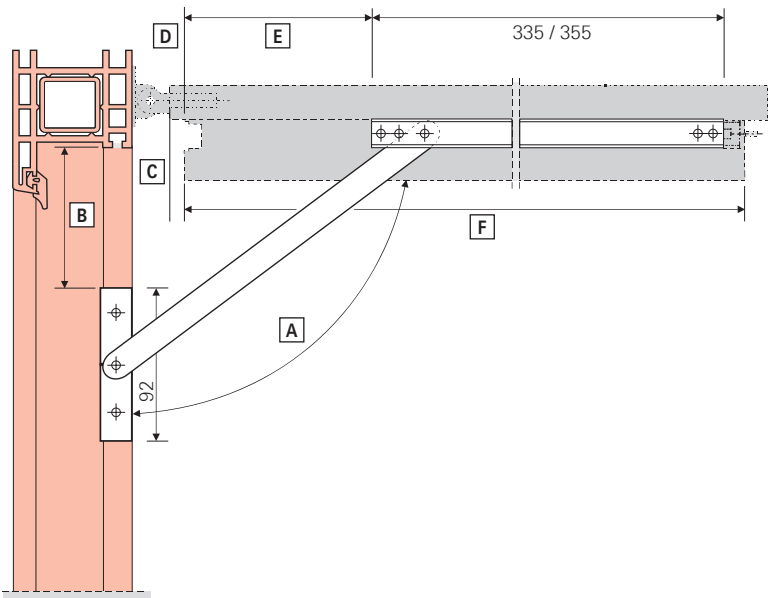
### 11.5.2 Turn restrictor 335 / 355 / 355C



**INFO**  
**Comfort component**

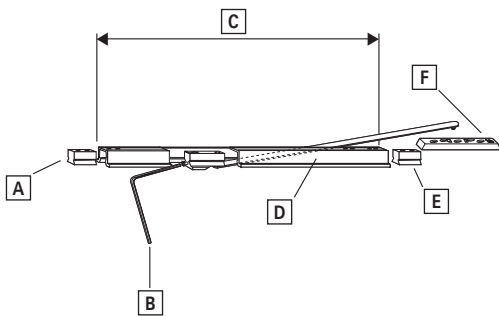
Not a security component in accordance with DIN EN 13126-5

#### Installation and description



| Assignment | Meaning                                                                                                                    |
|------------|----------------------------------------------------------------------------------------------------------------------------|
| [A]        | Opening angle<br>$90^\circ \pm 3^\circ$ (80° or 65° if the stop is installed offset)                                       |
| [B]        | Frame installation dimension<br>Turn restrictor 335: 100 mm<br>Turn restrictor 355: 100 mm<br>Turn restrictor 335C: 105 mm |
| [C]        | Overlap edge                                                                                                               |
| [D]        | Sash rebate edge                                                                                                           |
| [E]        | Sash installation dimension<br>Turn restrictor 335: 125 mm<br>Turn restrictor 355: 105 mm<br>Turn restrictor 335C: 120 mm  |
| [F]        | Sash rebate width (SRW)<br>Min. 475 mm <sup>[9]</sup>                                                                      |

[9] Minimum dimension when using the T&T corner drive: 661 mm

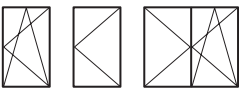
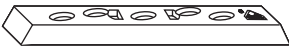


| Assignment | Meaning                                                             |
|------------|---------------------------------------------------------------------|
| [A]        | Stop                                                                |
| [B]        | Brake which can be adjusted with 4 mm hex key                       |
| [C]        | 335 mm (turn restrictor 335)<br>355 mm (turn restrictor 355 / 355C) |
| [D]        | Aluminium guide track on the sash                                   |
| [E]        | Stop                                                                |
| [F]        | Bearing which can be screwed onto the frame                         |

For compatible corner hinges, see → *from page 434* → *from page 435*.

For compatible pivot rests, see → *from page 437* → *from page 438*.

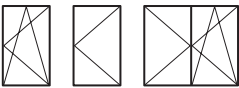
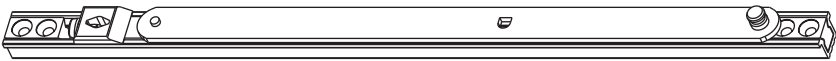
11.5.2.1 Frame components



|         |          |          |        |
|---------|----------|----------|--------|
|         |          |          | Nº     |
| Bearing | Screw-on | Roto Sil | 264625 |

For the compatible packer, see → *from page 516*.

11.5.2.2 Sash components



|                      |                          |                                                             |          |         |
|----------------------|--------------------------|-------------------------------------------------------------|----------|---------|
|                      |                          |                                                             |          | Nº      |
| Turn restrictor 335  | Selectable opening angle | Continuously adjustable brake                               | Roto Sil | 260565  |
| Turn restrictor 355  | Selectable opening angle | Continuously adjustable brake, spring-loaded final position | Roto Sil | 772326  |
| Turn restrictor 355C | Selectable opening angle | Spring-loaded final position                                | Roto Sil | 2037236 |



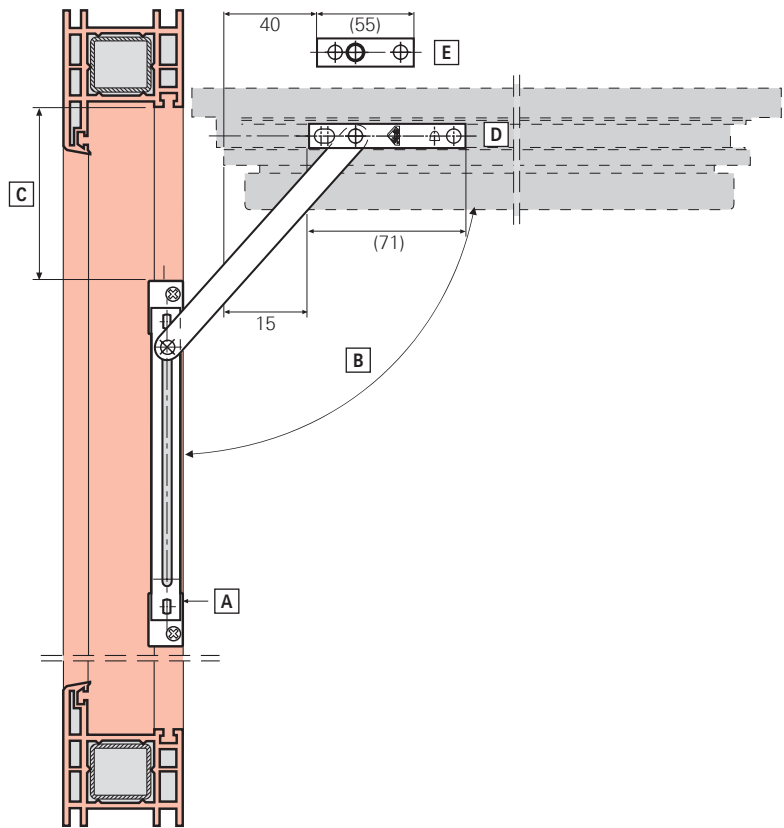
### 11.5.3 Turn restrictor A



**INFO**  
**Comfort component**

Not a security component in accordance with DIN EN 13126-5

**Installation and description**



| Assignment | Meaning                                                                           | System   |
|------------|-----------------------------------------------------------------------------------|----------|
| [A]        | Frame track                                                                       | –        |
| [B]        | Opening angle<br>90° ± 5°                                                         | –        |
| [C]        | Distance                                                                          | –        |
|            | 82 mm                                                                             | 12/18-9  |
|            | 80 mm                                                                             | 12/20-9  |
|            | 86 mm                                                                             | 12/18-13 |
|            | 82 mm                                                                             | 12/20-13 |
| [D]        | Sash component for rebate corner hinge A / E5 with groove guidance (dimension 15) | –        |
| [E]        | Sash component for hardware groove (dimension 40)                                 | –        |



**INFO**  
Turn restrictor can only be used with surface-mounted hinge sides.

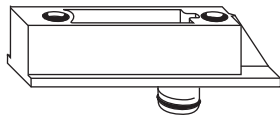


### 11.5.3.1 Frame components



|                                                                                                                                                                                                                      |  |  | Nº     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>Brüggmann AD 13<br>Brüggmann MD 13<br>Schüco CT70 AD<br>Schüco CT70 MD<br>Schüco SI82 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76<br>Veka Softline 76 AD<br>Veka Softline 76 MD | 13                                                                                 | Roto Sil                                                                            | 260570 |
| Deceuninck Eforte<br>Deceuninck Prestige AD<br>Deceuninck Prestige MD<br>Inoutic AD 13<br>Inoutic MD 100                                                                                                                                                                                              | 13                                                                                 | Roto Sil                                                                            | 259633 |
| Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>Gealan Linear<br>KBE 76<br>Kömmerling 76<br>Trocal 76                                                                                                                                                                                                 | 13                                                                                 | Roto Sil                                                                            | 259638 |
| Kömmerling 88 Plus<br>Kömmerling Eurodur 3S<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                                                                                                                                                                                          | 13                                                                                 | Roto Sil                                                                            | 260567 |
| Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86                                                                                                                                                                                             | 13                                                                                 | Roto Sil                                                                            | 260568 |
| Salamander 2D<br>Salamander 3D<br>Salamander Streamline 76                                                                                                                                                                                                                                            | 13                                                                                 | Roto Sil                                                                            | 259637 |
| Trocal 88+<br>Trocal InnoNova 2000                                                                                                                                                                                                                                                                    | 13                                                                                 | Roto Sil                                                                            | 483505 |

### 11.5.3.2 Sash components



|  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Hardware groove                                                                     | –                                                                                   | Roto Sil                                                                              | 260562 |



## 11.5.4 Turn restrictor 195



### INFO

Turn restrictor can only be used with hinge side C.



### INFO

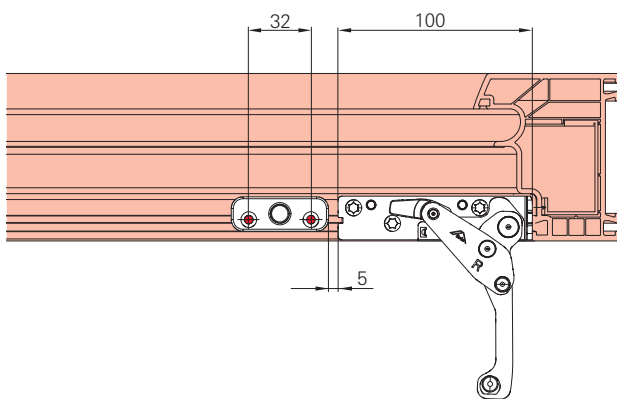
#### Comfort component

Not a security component in accordance with DIN EN 13126-5

### Installation and description

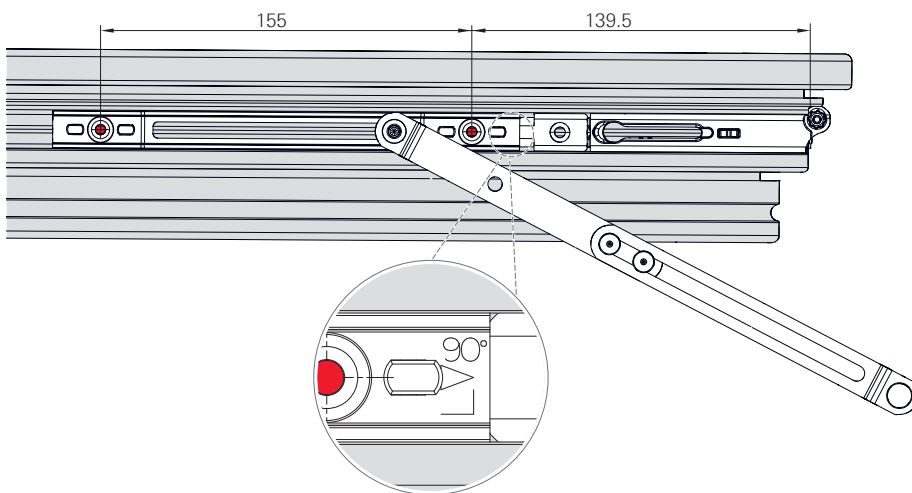
#### Frame component

Positioning the turn restrictor



#### Sash component

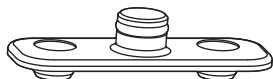
It is possible to install sash components with an angle of 90° or 95°. If load transfer is fitted, the sash component with an angle of 90° must be installed. For an opening width of 95°, fit the sash component the other way around.







#### 11.5.4.1 Frame components



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Nº     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Aluplast Ideal 2000<br>Brüggmann AD 13<br>Brüggmann MD 13<br>Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>KBE 70 AD<br>KBE 70 MD<br>KBE AD<br>Kömmerling 3S<br>Kömmerling Eurodur 3S<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance<br>Plus Plan Plus Tec<br>Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86<br>Salamander 2D<br>Salamander 3D<br>Salamander Design 2D<br>Salamander Design 3D<br>Salamander Streamline 76<br>Schüco Corona AD<br>Schüco CT70 AD<br>Schüco CT70 MD<br>Trocal InnoNova 2000<br>Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD<br>Veka Softline AD 9<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Brüggmann AD 73<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>KBE 76<br>KBE 88 MD<br>Kömmerling 76<br>Kömmerling 88 MD<br>Trocal 76<br>Trocal 88 MD<br>Salamander GreenEvolution 76 | Roto Sil                                                                            | 477848 |
| Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 7000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Roto Sil                                                                            | 490128 |
| Deceuninck Eforte<br>Deceuninck Prestige AD<br>Deceuninck Prestige MD<br>Inoutic AD 13<br>Inoutic Favorite AD 13<br>Inoutic MD 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Roto Sil                                                                            | 490133 |
| Gealan Kubus                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Roto Sil                                                                            | 807522 |
| KBE MD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Roto Sil                                                                            | 477849 |
| Trocal S900                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     |        |
| Trocal 88+<br>Trocal InnoNova 2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Roto Sil                                                                            | 490159 |



#### 11.5.4.2 Sash components



|                     |              |         |
|---------------------|--------------|---------|
|                     |              | Nº      |
| Turn restrictor 195 | Hinge side C | 2005294 |

### 11.5.5 Turn restrictor 198

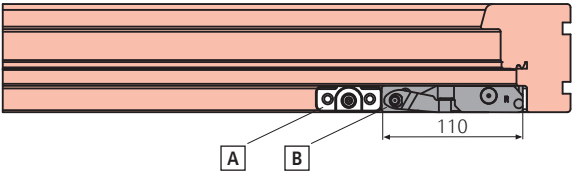


**INFO**  
Turn restrictor can only be used with hinge side Designo.

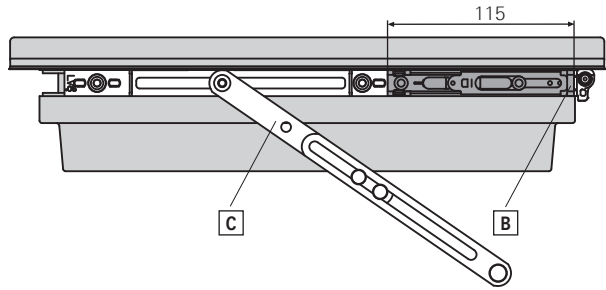
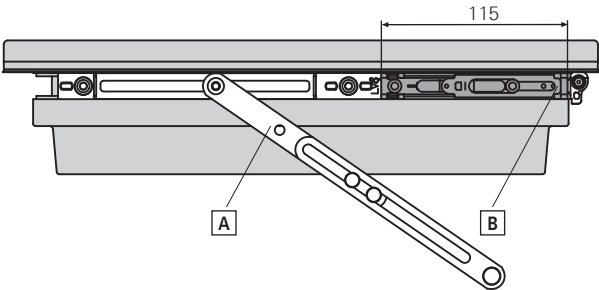


**INFO**  
**Comfort component**  
Not a security component in accordance with DIN EN 13126-5

#### Installation and description



| Assignment | Meaning                                      |
|------------|----------------------------------------------|
| [A]        | Turn restrictor frame component              |
| [B]        | Pivot rest Designo (HA 9) or Designo (HA 13) |



| Assignment | Meaning                                                                                                      |
|------------|--------------------------------------------------------------------------------------------------------------|
| [A]        | Turn restrictor sash component – 90° opening (HA 9)                                                          |
| [B]        | Corner hinge Designo (HA 9) or Designo (HA 13)                                                               |
| [C]        | Turn restrictor sash component – 100° opening (HA 9)<br>Turn restrictor sash component – 90° opening (HA 13) |

#### 11.5.5.1 Frame components

For compatible frame components, see → from page 475.

#### 11.5.5.2 Sash components

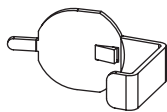


|                    |          |        |
|--------------------|----------|--------|
|                    |          | Nº     |
| Designo hinge side | Roto Sil | 485591 |



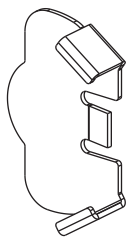
## 11.6 Security components

### 11.6.1 Drilling protection – backset 8 and 15 mm



|                                                                                   |        |
|-----------------------------------------------------------------------------------|--------|
|  | Nº     |
| Drilling protection                                                               | 797819 |

### 11.6.2 Drilling protection – backset 25 to 50 mm

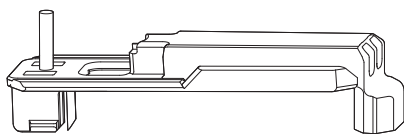


|                                                                                    |        |
|------------------------------------------------------------------------------------|--------|
|  | Nº     |
| Drilling protection                                                                | 788334 |

### 11.6.3 Floating mullion



|                                                                                      |                                                                                       |        |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  | Nº     |
| Retainer clasp for lever-operated espagnolette, standard                             | Roto Sil                                                                              | 314203 |



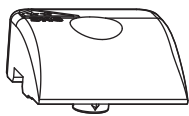
|                                                                                       |        |
|---------------------------------------------------------------------------------------|--------|
|  | Nº     |
| Retaining element for floating-mullion sash                                           | 552392 |



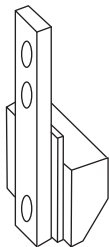
#### INFO

Can only be used in combination with lever-operated espagnolette, standard and a rebate depth of 30.

11.6.4 Sash components



|                                                                                     |                                                                                     |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|                                                                                     |  | Nº     |
| Security component for filling the rebate clearance (floating-mullion installation) |                                                                                     | 601500 |



|                                             |                                                                                     |        |
|---------------------------------------------|-------------------------------------------------------------------------------------|--------|
|                                             |  | Nº     |
| Additional security component (centre lock) |                                                                                     | 609838 |

11.6.5 Anti-jemmy device



|                                                                                     |                                                                                     |                                                                                       |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  | Nº     |
| Anti-jemmy device                                                                   | 9<br>13                                                                             | RC 1 N<br>RC 2<br>RC 2 N<br>RC 3                                                      | 811715 |





## 11.7 Connection elements

### 11.7.1 Couplings



|              |     |           |   |   |          |        |
|--------------|-----|-----------|---|---|----------|--------|
|              |     |           |   |   |          | Nº     |
| Coupling 344 | 344 | 100 / 100 | 1 | V | Roto Sil | 572665 |

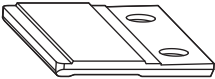


|              |     |     |   |   |          |        |
|--------------|-----|-----|---|---|----------|--------|
|              |     |     |   |   |          | Nº     |
| Coupling 450 | 450 | 200 | 1 | V | Roto Sil | 787089 |



|                            |          |        |
|----------------------------|----------|--------|
|                            |          | Nº     |
| Triangular window coupling | Roto Sil | 264606 |

### 11.7.2 Fastening plates



|                             |          |        |
|-----------------------------|----------|--------|
|                             |          | Nº     |
| Fastening plate without cam | Roto Sil | 487264 |



|                          |          |        |
|--------------------------|----------|--------|
|                          |          | Nº     |
| Fastening plate with cam | Roto Sil | 255211 |



#### INFO

Can only be used in combination with lever-operated espagnolette, VT 2003815 and T&T espagnolette with centred / variable handle height 259717.

### 11.7.3 Connecting links

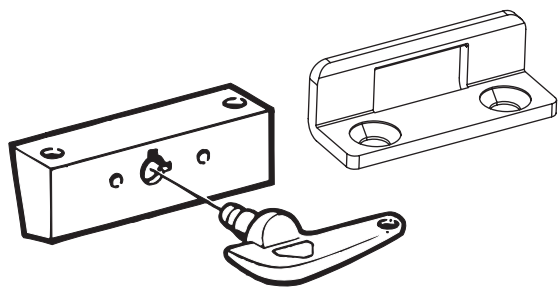


|                 |          |        |
|-----------------|----------|--------|
|                 |          | Nº     |
| Connecting link | Roto Sil | 350401 |



# 11.8 Turn locks

## 11.8.1 Standard



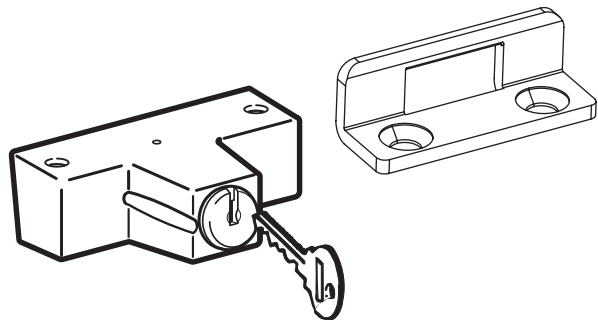
|  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Housing and angular bracket                                                       | Screw-on                                                                          | Roto Sil                                                                            | 287575 |
|                                                                                   |                                                                                   | White                                                                               | 230157 |
|                                                                                   |                                                                                   | Brown                                                                               | 230160 |
| Key                                                                               | –                                                                                 | Roto Sil                                                                            | 287577 |
|                                                                                   |                                                                                   | White                                                                               | 230149 |
|                                                                                   |                                                                                   | Brown                                                                               | 230150 |



### INFO

The maximum overlap height is 20 mm.

## 11.8.2 Cylinder

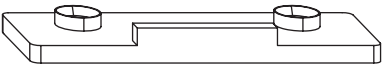


|  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Housing, angular bracket and key                                                    | Screw-on                                                                            | Roto Sil                                                                              | 257070 |
|                                                                                     |                                                                                     | White                                                                                 | 230153 |
|                                                                                     |                                                                                     | Brown                                                                                 | 230152 |
| Replacement key                                                                     | –                                                                                   | Nickel-plated                                                                         | 208248 |

## 11.8.3 Packers



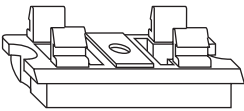
|  |  | Nº     |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Housing (5° inclination)                                                            | Roto Sil                                                                              | 287578 |
|                                                                                     | White                                                                                 | 230155 |
|                                                                                     | Brown                                                                                 | 230158 |



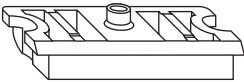
|  |  | Nº     |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Angular bracket (2 mm)                                                            | Roto Sil                                                                            | 287579 |
|                                                                                   | White                                                                               | 230156 |
|                                                                                   | Brown                                                                               | 230159 |
| Angular bracket (4 mm)                                                            | Roto Sil                                                                            | 475594 |



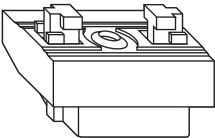
11.9 Run-up blocks



|                                                                                   |                                                                                    |                                                                                     |        |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  | Nº     |
| Run-up block for groove mounting                                                  | Sash                                                                               | 12                                                                                  | 770686 |



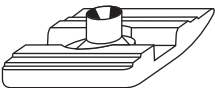
|                                                                                   |                                                                                    |                                                                                     |        |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  | Nº     |
| Run-up block for floating-mullion installation                                    | Sash                                                                               | 12                                                                                  | 770685 |



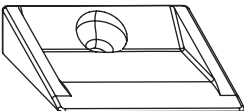
|                                                                                     |                                                                                       |        |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  | Nº     |
| Run-up block with mishandling device                                                | Sash                                                                                  | 307050 |



**INFO**  
Only use the run-up block in conjunction with the T&T espagnolette – comfort.



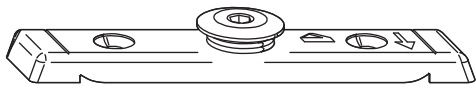
|                                                                                     |                                                                                     |                                                                                     |                                                                                       |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  |  | Nº     |
| Rebate run-up block                                                                 | Sash                                                                                | 12                                                                                  | 18                                                                                    | 563829 |
|                                                                                     |                                                                                     | 12                                                                                  | 21                                                                                    | 350402 |
|                                                                                     |                                                                                     | 13                                                                                  | 21                                                                                    | 350403 |



|                                                                                      |                                                                                       |        |
|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  | Nº     |
| Run-up plate for adjustable rebate run-up block                                      | Sash                                                                                  | 771035 |

For compatible frame components, see below.

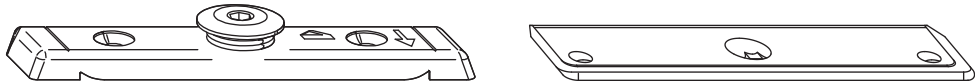




|                                                                                   |                                                                                   |                                                                                    |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  | Nº     |
| Rebate run-up block (rebate clearance 12 mm)                                      | Frame                                                                             | Screw-on                                                                           | Height adjustable                                                                   | 771036 |

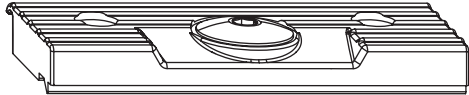
For the compatible sash component, see “Run-up plate for adjustable rebate run-up block” → *from page 514*.

For the compatible packer, see → *from page 516*.



|                                                                                   |                                                                                   |                                                                                     |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  | Nº     |
| Rebate run-up block with run-up plate (rebate clearance 4 / 12 mm)                | Frame<br>Sash                                                                     | Screw-on<br>Can be routed in                                                        | Height adjustable                                                                   | 245765 |

For the compatible packer, see → *from page 516*.

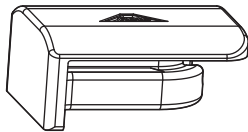


|                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  |  |  | Nº     |
| Rebate run-up block for threshold (functional clearance 4 / 10 / 12 mm)             | Frame                                                                               | Screw-on                                                                             | Height adjustable                                                                     | Grey                                                                                  | 772947 |
|                                                                                     |                                                                                     |                                                                                      |                                                                                       | Black                                                                                 | 800136 |

Rebate clearance **4 mm**: for the compatible sash component, see “Run-up plate for adjustable rebate run-up block” → *from page 514*.

Rebate clearance **10 mm**: for the compatible sash component, see “Security component for filling the rebate clearance” → *from page 510*.

Rebate clearance **12 mm**: for the compatible sash component, see “Run-up block for groove mounting” or “Run-up block for floating-mullion installation” → *from page 514*.



|                                                                                     |                                                                                     |                                                                                       |        |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|  |  |  | Nº     |
| Rebate run-up block                                                                 | Frame                                                                               | Insertable                                                                            | 609211 |



**INFO**

Only in conjunction with symmetrical SEC striker (13 mm hardware axis).



## 11.10 Packers



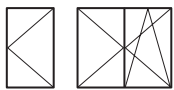
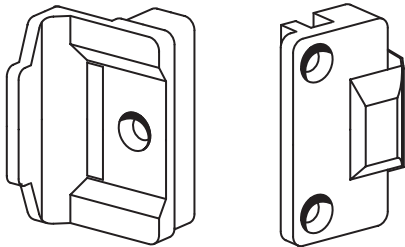
| <br>Frame |                                                                                                                                                                                                                      | Nº     |
|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
|          | Alphacan Master AD 13<br>Deceuninck Klassiek<br>Salamander 2D<br>Salamander 3D<br>Salamander Streamline 76<br>Schüco Corona AD<br>Aluplast energeto 5000<br>Aluplast energeto 8000<br>Aluplast Ideal 8000<br>Gealan Kubus                                                                               | 294365 |
|                                                                                            | Aluplast Ideal 2000<br>Brügmann AD 13<br>Salamander BluEvolution 82<br>Schüco CT70 AD<br>Schüco CT70 MD<br>Schüco SI82 MD<br>Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Salamander GreenEvolution 76<br>Veka M70 | 294364 |
|                                                                                            | Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast Ideal 7000                                                                                                                                                                              | 773527 |
|                                                                                            | Brügmann MD 13<br>Wymar 2500                                                                                                                                                                                                                                                                            | 287070 |
|                                                                                            | Deceuninck Eforte<br>Deceuninck Prestige<br>Inoutic AD 13<br>Inoutic Favorite AD 13<br>Inoutic MD 100                                                                                                                                                                                                   | 294369 |
|                                                                                            | Deceuninck Zendow<br>Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S980 Geneo<br>Roplasto 4K<br>Roplasto 7001 AD<br>Roplasto 7001 MD<br>Deceuninck Elegant<br>Deceuninck Legend<br>Rehau Total70R Reversible window                                                                | 294469 |
|                                                                                            | Deceuninck Mondial VK                                                                                                                                                                                                                                                                                   | 477327 |
|                                                                                            | Gealan S3000<br>Gealan S7000<br>Gealan S8000<br>KBE 76<br>Kömmerling 76<br>Trocal 76<br>KBE 88 MD<br>Kömmerling 88 MD<br>Kömmerling C70 Gold<br>Trocal 88 MD                                                                                                                                            | 294370 |
|                                                                                            | KBE AD                                                                                                                                                                                                                                                                                                  | 294439 |
|                                                                                            | KBE MD<br>Trocal 88+<br>Trocal InnoNova 2000<br>Trocal S900                                                                                                                                                                                                                                             | 294463 |
|                                                                                            | KBE 70 AD<br>Kömmerling 88 Plus<br>Kömmerling Eurodur 3S<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                                                                                                                                                                               | 294464 |



## 11.11 Centre closers

### 11.11.1 Hinge side P

#### 11.11.1.1 Concealed



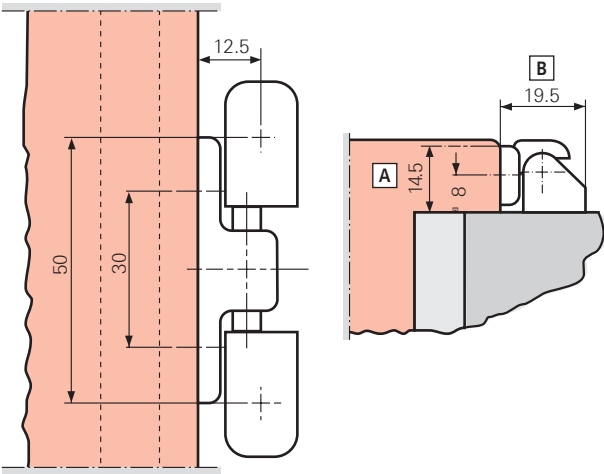
|       |                                                                                                                                                                                                                           |         |   |        | Nº     |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---|--------|--------|
| Sash  | –                                                                                                                                                                                                                         | –       | – | No. 7  | 313087 |
| Frame | Gealan Kubus                                                                                                                                                                                                              | 13      | – |        | 807525 |
| Sash  | –                                                                                                                                                                                                                         | –       | – | No. 11 | 264212 |
| Frame | Trocal 88+<br>Trocal InnoNova 2000                                                                                                                                                                                        | 13      | – |        | 290158 |
| Sash  | –                                                                                                                                                                                                                         | 9<br>13 | – | No. 12 | 331483 |
| Frame | Deceuninck Eforte<br>Deceuninck Prestige AD<br>Deceuninck Prestige MD<br>Inoutic AD 13<br>Inoutic Favorite AD 13<br>Inoutic MD 100                                                                                        | 13      | – |        | 264234 |
|       | Kömmerling 88 Plus                                                                                                                                                                                                        | 13      | – |        | 292027 |
| Sash  | –                                                                                                                                                                                                                         | –       | – | No. 13 | 331484 |
| Frame | Schüco CT70 MD<br>Aluplast Ideal 2000                                                                                                                                                                                     | 13      | – |        | 264238 |
|       | Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Schüco Corona AD<br>Aluplast energeto 5000<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast energeto 8000<br>Aluplast Ideal 7000<br>Aluplast Ideal 8000 | 13      | – |        | 257351 |
|       | Brüggmann AD 13<br>Brüggmann MD 13                                                                                                                                                                                        | 13      | – |        | 280394 |
|       | Brüggmann MD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76                                                                                         | 13      | – |        | 284093 |
|       | Deceuninck Zendow<br>Deceuninck Elegant<br>Deceuninck Legend                                                                                                                                                              | 13      | – |        | 370176 |
|       | KBE 70 MD                                                                                                                                                                                                                 | 13      | – |        | 348512 |
|       | Rehau S735 MD<br>Rehau S788                                                                                                                                                                                               | 13      | – |        | 264227 |
|       | Salamander 2D<br>Salamander 3D<br>Salamander BluEvolution 92<br>Salamander Streamline 76                                                                                                                                  | 13      | – |        | 262159 |
|       | Wymar 3000                                                                                                                                                                                                                | 13      | – |        | 374162 |



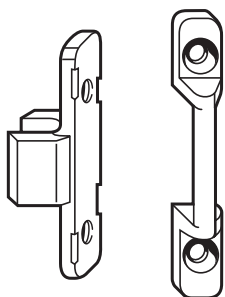
|  |                                    |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Sash                                                                              | –                                                                                                                   | –                                                                                 | –                                                                                   | No. 14                                                                              | 331485 |
| Frame                                                                             | Aluplast Ideal 2000<br>Schüco SI82 MD                                                                               | 13                                                                                | –                                                                                   |                                                                                     | 264236 |
|                                                                                   | Deceuninck Klassiek<br>Deceuninck Mondial VK                                                                        | 13                                                                                | –                                                                                   |                                                                                     | 295042 |
|                                                                                   | Gealan S3000<br>Gealan S8000<br>Gealan Linear                                                                       | 13                                                                                | –                                                                                   |                                                                                     | 264230 |
|                                                                                   | KBE 70 AD<br>Plus Plan Plus Tec<br>KBE 88 MD<br>Kömmerling 88 MD<br>Trocal 88 MD                                    | 13                                                                                | –                                                                                   |                                                                                     | 264254 |
|                                                                                   | KBE AD                                                                                                              | 9                                                                                 | –                                                                                   |                                                                                     | 250727 |
|                                                                                   | Kömmerling Eurodur 3S                                                                                               | 13                                                                                | –                                                                                   |                                                                                     | 250726 |
|                                                                                   | Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                                                       | 13                                                                                | –                                                                                   |                                                                                     | 334961 |
|                                                                                   | Rehau S799 Brillant Design<br>Rehau S980 Geneo<br>Rehau S986 EuroDesign 86<br>Rehau Total70R Reversible window      | 13                                                                                | –                                                                                   |                                                                                     | 250725 |
|                                                                                   | KBE 76<br>Kömmerling 76<br>Roplasto 4K<br>Roplasto 7001 AD<br>Roplasto 7001 MD<br>Trocal 76<br>Kömmerling C70 Gold  | 13                                                                                | –                                                                                   |                                                                                     | 264249 |
|                                                                                   | Schüco CT70 AD<br>Veka Alphaline 90<br>Veka Topline AD 13<br>Veka Softline 76 AD<br>Veka Softline 76 MD<br>Veka M70 | 13                                                                                | –                                                                                   |                                                                                     | 250728 |
|                                                                                   | Veka Softline AD 9                                                                                                  | 9                                                                                 | –                                                                                   |                                                                                     | 250729 |
| Sash                                                                              | –                                                                                                                   | –                                                                                 | –                                                                                   | No. 15                                                                              | 264218 |
| Frame                                                                             | Brüggmann MD 13                                                                                                     | 13                                                                                | –                                                                                   |                                                                                     | 482754 |
|                                                                                   | Trocal InnoNova 70.A5 AD<br>Trocal InnoNova 70.M5 MD                                                                | 13                                                                                | –                                                                                   |                                                                                     | 565260 |

11.11.1.2 Screw-on

Installation and description



| Assignment | Meaning                |
|------------|------------------------|
| [A]        | Minimum overlap height |
| [B]        | Side clearance         |



|  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Sash                                                                              | –                                                                                 | Roto Sil                                                                            | 281639 |
|                                                                                   | Overlap gasket                                                                    | Roto Sil                                                                            | 449785 |
| Frame                                                                             | –                                                                                 | Roto Sil                                                                            | 281638 |

For compatible cover caps, see → *from page 519* and → *from page 520*.

### 11.11.1.3 Cover caps – sash



|  |  | Nº     |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------|
| R01.1                                                                               | Natural silver                                                                       | 229863 |
| R01.2                                                                               | Nickel silver                                                                        | 229864 |
| R01.3                                                                               | Titanium                                                                             | 329891 |
| R03.1                                                                               | Brass matt                                                                           | 642348 |
| R03.2                                                                               | Brass, polished                                                                      | 229888 |
| R04.1                                                                               | Grey brown                                                                           | 213797 |
| R04.3                                                                               | Olive brown                                                                          | 229857 |
| R04.4                                                                               | Black brown                                                                          | 208604 |
| R05.3                                                                               | Medium bronze                                                                        | 811478 |
| R05.5                                                                               | Bronze                                                                               | 637875 |
| R07.2                                                                               | Traffic white                                                                        | 208600 |



11.11.1.4 Cover caps – frame



|  |  | Nº     |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| R01.1                                                                             | Natural silver                                                                      | 229858 |
| R01.2                                                                             | Nickel silver                                                                       | 229859 |
| R01.3                                                                             | Titanium                                                                            | 329890 |
| R03.1                                                                             | Brass matt                                                                          | 642347 |
| R03.2                                                                             | Brass, polished                                                                     | 229890 |
| R04.1                                                                             | Grey brown                                                                          | 213798 |
| R04.3                                                                             | Olive brown                                                                         | 229856 |
| R04.4                                                                             | Black brown                                                                         | 208602 |
| R05.3                                                                             | Medium bronze                                                                       | 811477 |
| R05.5                                                                             | Bronze                                                                              | 637874 |
| R07.2                                                                             | Traffic white                                                                       | 208598 |

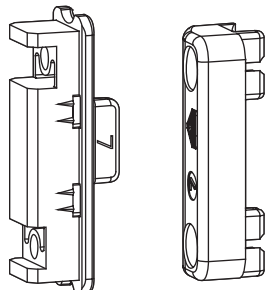




## 11.11.2 Hinge side Designo (HA 13)

### 11.11.2.1 Concealed

#### Adjustable



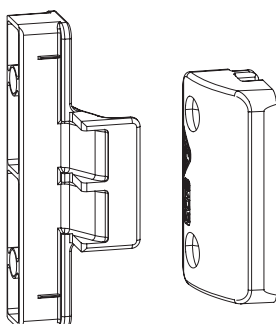
|       |                                                                                                                                                                                                                                                                                                                    |         |                   | Nº     |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------|--------|
| Sash  | –                                                                                                                                                                                                                                                                                                                  | 9<br>13 | Height adjustable | 450984 |
| Frame | Aluplast Ideal 2000<br>Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast Ideal 8000<br>Schüco Corona AD<br>Schüco CT70 AD<br>Schüco CT70 MD<br>Schüco SI82 MD<br>Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 7000                                                                 | 13      | –                 | 630577 |
|       | Brüggmann AD 13<br>Brüggmann MD 13<br>Veka Alphaline 90<br>Veka Softline 70 AD<br>Veka Softline 70 MD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka Topline MD 13<br>Salamander BluEvolution 73<br>Salamander BluEvolution 82<br>Salamander GreenEvolution 76<br>Veka Softline 76 AD<br>Veka Softline 76 MD | 13      | –                 | 606607 |
|       | Deceuninck Eforte<br>Deceuninck Prestige AD<br>Deceuninck Prestige MD<br>Inoutic AD 13<br>Inoutic MD 100                                                                                                                                                                                                           | 13      | –                 | 741080 |
|       | Gealan Kubus                                                                                                                                                                                                                                                                                                       | 13      | –                 | 807526 |
|       | Gealan S3000<br>Gealan S7000<br>Gealan S8000                                                                                                                                                                                                                                                                       | 13      | –                 | 606608 |
|       | KBE 76<br>Kömmerling 76<br>Trocal 76<br>Deceuninck Elegant<br>Deceuninck Legend<br>KBE 88 MD<br>Kömmerling 88 MD<br>Trocal 88 MD                                                                                                                                                                                   | 13      | –                 | 741078 |
|       |                                                                                                                                                                                                                                                                                                                    |         |                   |        |



**Accessories**  
**Centre closers**  
Hinge side Designo (HA 13)

|  |                   |  |  | Nº     |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Frame                                                                             | Kömmerling 88 Plus<br>Kömmerling Eurofutur Classic<br>Kömmerling Eurofutur Elegance                | 13                                                                                 | –                                                                                   | 606605 |
|                                                                                   | Rehau Nordic Design                                                                                | 13                                                                                 | –                                                                                   | 606609 |
|                                                                                   | Rehau S735 MD<br>Rehau S788<br>Rehau S799 Brillant Design<br>Rehau S969 Synego<br>Rehau S980 Geneo | 13                                                                                 | –                                                                                   | 606606 |
|                                                                                   | Salamander 2D<br>Salamander 3D<br>Salamander Streamline 76                                         | 13                                                                                 | –                                                                                   | 765363 |
|                                                                                   | Trocal 88+<br>Trocal InnoNova 2000                                                                 | 13                                                                                 | –                                                                                   | 741079 |

**Not adjustable**



|  |                                         |  |  | Nº     |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Sash                                                                                | –                                                                                                                          | –                                                                                    | –                                                                                     | 640436 |
| Frame                                                                               | Aluplast energeto 5000 view<br>Aluplast energeto 7000<br>Aluplast Ideal 4000<br>Aluplast Ideal 5000<br>Aluplast Ideal 7000 | 13                                                                                   | –                                                                                     | 640438 |
|                                                                                     | Veka Softline 70 AD<br>Veka Softline 82 MD<br>Veka Topline AD 13<br>Veka Topline MD 13                                     | 13                                                                                   | –                                                                                     | 640437 |

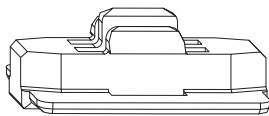






# 11.12 Other

## 11.12.1 Travel restrictor



|  |                                                             |        |
|--|-------------------------------------------------------------|--------|
|  |                                                             | Nº     |
|  | Travel restrictor                                           | 264603 |
|  | Turn-Only / Tilt-Only espagnolette limited to 90° (not sh.) | 565965 |
|  | Can be deactivated for sash stay corner drive (not sh.)     | 640820 |

## 11.12.2 Cover faceplate



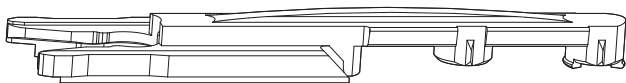
|      |                   |          |        |
|------|-------------------|----------|--------|
|      |                   |          | Nº     |
| 2015 | 10 mounting holes | Roto Sil | 287483 |
| 105  | 1 mounting hole   | Roto Sil | 296064 |

## 11.12.3 End piece for pitched stay guide



|  |                                  |          |        |
|--|----------------------------------|----------|--------|
|  |                                  |          | Nº     |
|  | End piece for pitched stay guide | Roto Sil | 246734 |

## 11.12.4 Anti-slam device



|  |                                                              |          |        |
|--|--------------------------------------------------------------|----------|--------|
|  |                                                              |          | Nº     |
|  | To reduce the tilt depth from 140 to 80 mm on stay guide 250 | Roto Sil | 487206 |

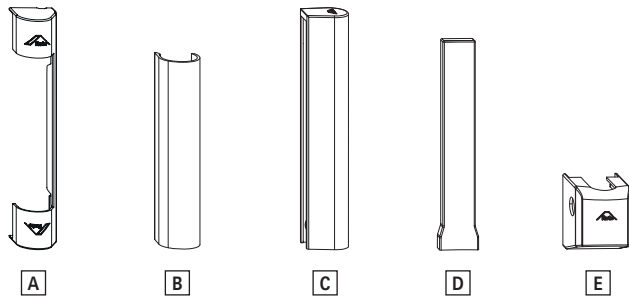


**INFO**  
Can only be used with stay guide Designo (HA 9 / HA 13) – basic security. See → *from page 370.*



## 11.12.5 Cover cap sets – hinge side P

### Stay arm without link



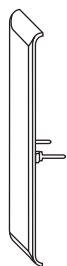
| Assignment | Meaning                                                                                                     |
|------------|-------------------------------------------------------------------------------------------------------------|
| [A]        | Stay bearing – standard (P 3/130 and P 6/130)                                                               |
| [B]        | Stay arm – standard / TiltFirst (TF) / pitched window (SF) without link, Turn-Only / Tilt-Only rebate hinge |
| [C]        | Corner hinge – standard                                                                                     |
| [D]        | Pivot rest – link                                                                                           |
| [E]        | Pivot rest – standard                                                                                       |

|  |  | Nº     |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| R01.1                                                                             | Natural silver                                                                      | 861439 |
| R01.2                                                                             | Nickel silver                                                                       | 861445 |
| R01.3                                                                             | Titanium                                                                            | 861446 |
| R03.1                                                                             | Brass matt                                                                          | 861447 |
| R03.2                                                                             | Brass, polished                                                                     | 861448 |
| R04.1                                                                             | Grey brown                                                                          | 861449 |
| R04.3                                                                             | Olive brown                                                                         | 861450 |
| R04.4                                                                             | Black brown                                                                         | 861451 |
| R05.3                                                                             | Medium bronze                                                                       | 861452 |
| R05.5                                                                             | Bronze                                                                              | 861453 |
| R07.2                                                                             | Traffic white                                                                       | 861454 |
| R07.3                                                                             | Cream                                                                               | 861456 |

## 11.12.6 Cover caps – colour sample

|  |  | Nº      |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------|
|                                                                                    | Cover caps – colour sample                                                            | 2006486 |

## 11.12.7 Info clips





|  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Without print                                                                     | R06.2                                                                             | Jet black                                                                           | 230694 |
|                                                                                   | R07.2                                                                             | Traffic white                                                                       | 230696 |
| Single-colour print                                                               | R06.2                                                                             | Jet black                                                                           | 230692 |
|                                                                                   | R07.2                                                                             | Traffic white                                                                       | 230695 |
|                                                                                   | SF                                                                                | Special colour                                                                      | 230691 |
| Two-colour print                                                                  | R07.2                                                                             | Traffic white                                                                       | 230697 |
|                                                                                   | SF                                                                                | Special colour                                                                      | 264629 |
| SKG** info clip                                                                   | R07.2                                                                             | Traffic white                                                                       | 331459 |

For attaching information (e.g. company logo and similar) to the lock casing.



**INFO**

The info clip is compatible with all espagnolettes with 8 and 15 mm backset.

The following special colours are available:

| Colour | RAL colour code |
|--------|-----------------|
| Green  | 6018            |
| Yellow | 1003            |
| Red    | 2002            |
| Blue   | 5015            |



**INFO**

Additional special colours are available upon request.



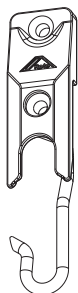
**INFO**

If an info clip with a single-colour or two-colour print is ordered, please attach the print template in a format of approximately 15 x 40 mm.



### 11.12.8 Turn opening restrictor – TurnPlus

#### Frame components



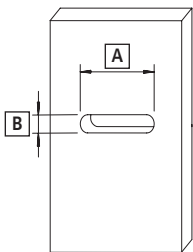
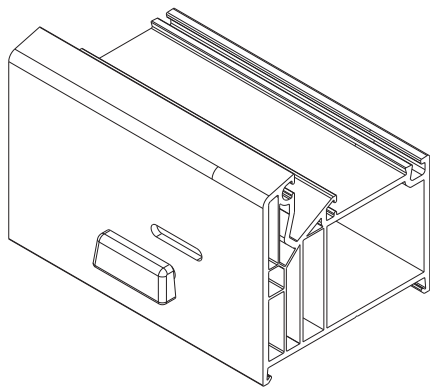
|  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Lever                                                                             | Roto Sil                                                                          | Left                                                                                | 630502 |
|                                                                                   | Roto Sil                                                                          | Right                                                                               | 630501 |

For the compatible support plate, see → *from page 516*.



**INFO**  
No additional sash component is required. A V cam of a component is used as the sash component.

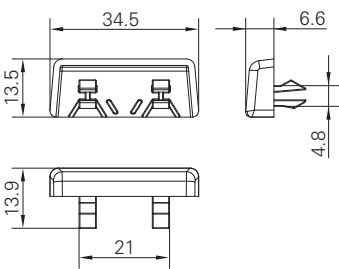
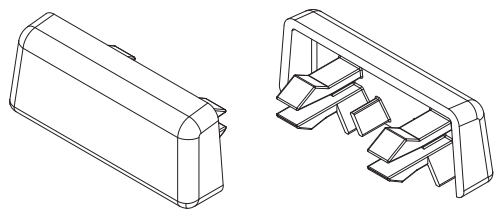
### 11.12.9 Water slot caps



| Assignment | Meaning        | Symbol                                                                                |
|------------|----------------|---------------------------------------------------------------------------------------|
| [A]        | Width of slot  |  |
| [B]        | Height of slot |  |

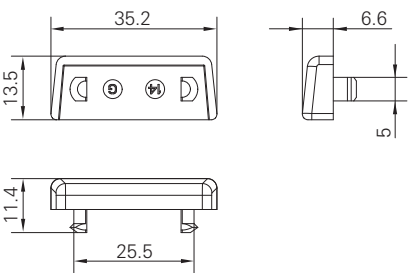
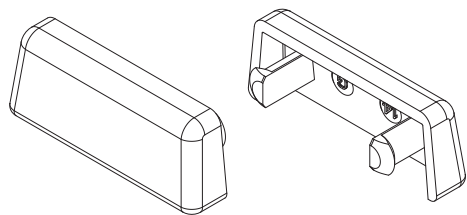


Can be clipped on horizontally, 25 mm



|  |  | Nº     |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| RAL 1019                                                                          | Grey beige                                                                          | 820840 |
| RAL 7001                                                                          | Silver grey                                                                         | 811436 |
| RAL 7012                                                                          | Basalt grey                                                                         | 811439 |
| RAL 7015                                                                          | Slate grey                                                                          | 811441 |
| RAL 7016                                                                          | Anthracite grey                                                                     | 811429 |
| RAL 7021                                                                          | Black grey                                                                          | 811427 |
| RAL 7038                                                                          | Achat grey                                                                          | 811428 |
| RAL 7039                                                                          | Quartz grey                                                                         | 811440 |
| RAL 8001                                                                          | Ochre brown                                                                         | 811431 |
| RAL 8003                                                                          | Clay brown                                                                          | 811438 |
| RAL 8008                                                                          | Olive brown                                                                         | 811434 |
| RAL 8014                                                                          | Sepia brown                                                                         | 811437 |
| RAL 8016                                                                          | Mahogany brown                                                                      | 811430 |
| RAL 8017                                                                          | Chocolate brown                                                                     | 811432 |
| RAL 8019                                                                          | Grey brown                                                                          | 811425 |
| RAL 8022                                                                          | Black brown                                                                         | 811433 |
| RAL 9001                                                                          | Cream                                                                               | 811435 |
| RAL 9005                                                                          | Jet black                                                                           | 811426 |
| RAL 9016                                                                          | Traffic white                                                                       | 811234 |

Can be clipped on at the side, 25 mm



|  |  | Nº     |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------|
| RAL 9016                                                                            | Traffic white                                                                        | 538748 |
| RAL 8019                                                                            | Grey brown                                                                           | 538751 |
| RAL 9005                                                                            | Jet black                                                                            | 538753 |

### 11.12.10 Duo-Drill – corner welded connector

#### 11.12.10.1 Corner welded connector



##### Product description

- Four-sided tensing in the corner area of the reinforcement
- Effective absorption of torsional forces thanks to force-fit connection between reinforcement and welded connector
- Eccentric insert installed such that it can be tightened
- High strength thanks to large welded surfaces
- Alignment and tensing using assembly handle

##### Scope of delivery

- Set: 8 corner welded connectors (PVC)

| <br>Duo-Drill corner welded connector |  |  |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                                                                                                                          | External dimensions of reinforcement: 40 x 40 x 2                                   | RAL 9016                                                                              | Traffic white                                                                         | 10 Set(s)                                                                             | 539159                                                                                |
|                                                                                                                          | External dimensions of reinforcement: 41 x 36 x 2                                   | RAL 9016                                                                              | Traffic white                                                                         | 10 Set(s)                                                                             | 539316                                                                                |
|                                                                                                                          | External dimensions of reinforcement: 45 x 45 x 2                                   | RAL 9016                                                                              | Traffic white                                                                         | 10 Set(s)                                                                             | 539543                                                                                |
|                                                                                                                          | External dimensions of reinforcement: 50 x 40 x 2                                   | RAL 9016                                                                              | Traffic white                                                                         | 10 Set(s)                                                                             | 539145                                                                                |
|                                                                                                                          | External dimensions of reinforcement: 50 x 45 x 2                                   | RAL 9016                                                                              | Traffic white                                                                         | 10 Set(s)                                                                             | 539288                                                                                |
|                                                                                                                          | External dimensions of reinforcement: 58 x 42 x 2                                   | RAL 9016                                                                              | Traffic white                                                                         | 10 Set(s)                                                                             | 539289                                                                                |
|                                                                                                                          | External dimensions of reinforcement: 60 x 40 x 2                                   | RAL 9016                                                                              | Traffic white                                                                         | 10 Set(s)                                                                             | 539146                                                                                |
|                                                                                                                          | External dimensions of reinforcement: 60 x 40 x 3                                   | RAL 9016                                                                              | Traffic white                                                                         | 10 Set(s)                                                                             | 539309                                                                                |
|                                                                                                                          | External dimensions of reinforcement: 60 x 46 x 2                                   | RAL 9016                                                                              | Traffic white                                                                         | 10 Set(s)                                                                             | 539621                                                                                |
|                                                                                                                          | External dimensions of reinforcement: 60 x 46 x 3                                   | RAL 9016                                                                              | Traffic white                                                                         | 10 Set(s)                                                                             | 540196                                                                                |
|                                                                                                                          | External dimensions of reinforcement: 65 x 45 x 2                                   | RAL 9016                                                                              | Traffic white                                                                         | 10 Set(s)                                                                             | 539236                                                                                |
|                                                                                                                          | External dimensions of reinforcement: 65 x 45 x 3                                   | RAL 9016                                                                              | Traffic white                                                                         | 10 Set(s)                                                                             | 539620                                                                                |

#### 11.12.10.2 Assembly tool



|  |  |  |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Duo-Drill assembly tool                                                             | 1 Piece(s)                                                                            | 539224                                                                                |

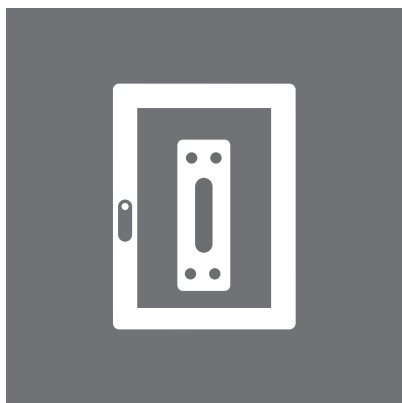


Not assembled



Assembled













### Drilling jigs

|                                        |     |
|----------------------------------------|-----|
| Stay bearing, standard, and pivot rest | 534 |
| Stay bearing, adjustable               | 535 |
| Corner hinges                          | 535 |
| Turn-Only / Tilt-Only overlap hinge    | 536 |
| Threshold pivot rest                   | 536 |

### Positioning jigs

|                                                          |     |
|----------------------------------------------------------|-----|
| T&T espagnolette – fixed handle height                   | 537 |
| T&T espagnolette – centred / variable handle height      | 540 |
| Turn-Only / Tilt-Only espagnolette – fixed handle height | 543 |

### Marking jig

|          |     |
|----------|-----|
| See page | 544 |
|----------|-----|

### Punches

|                            |     |
|----------------------------|-----|
| Hydropneumatic punch – DUO | 545 |
| Pneumatic punch – PS 100   | 546 |
| Hand lever punch – HS      | 546 |

### Tools

|                           |     |
|---------------------------|-----|
| Adjustment tools          | 547 |
| Hex keys                  | 547 |
| Extractor handle          | 547 |
| Double open-ended spanner | 548 |

### Roto NX grease

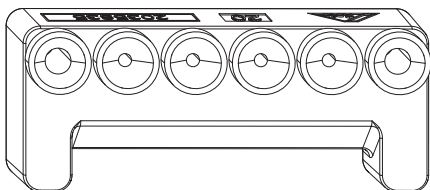
|          |     |
|----------|-----|
| See page | 549 |
|----------|-----|

## 12 Jigs / tools

### 12.1 Drilling jigs

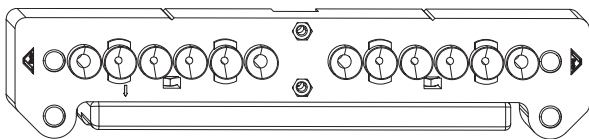
#### 12.1.1 Stay bearing, standard, and pivot rest

Single version



|                             |                  |                     |  | Nº      |
|-----------------------------|------------------|---------------------|--|---------|
|                             |                  |                     |  |         |
| Stay bearing and pivot rest | P 3/130          | 12/18-9<br>12/18-13 |  | 2035807 |
|                             | P 3/130          | 12/20-9<br>12/20-13 |  | 2035834 |
|                             | P 6/130; P 6/150 | 12/18-9<br>12/18-13 |  | 2035808 |
|                             | P 6/130; P 6/150 | 12/20-9<br>12/20-13 |  | 2035835 |

Double version

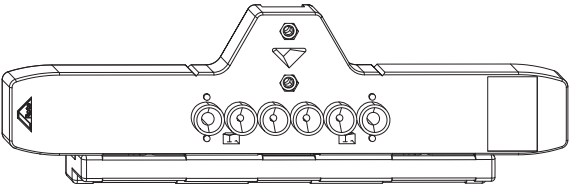


|                                        |                    |  |  | Nº     |
|----------------------------------------|--------------------|--|--|--------|
|                                        |                    |  |  |        |
| Stay bearing, standard, and pivot rest | P 3/130            |  |  | 230727 |
|                                        | P 6/130<br>P 6/150 |  |  | 788436 |





12.1.2 Stay bearing, adjustable



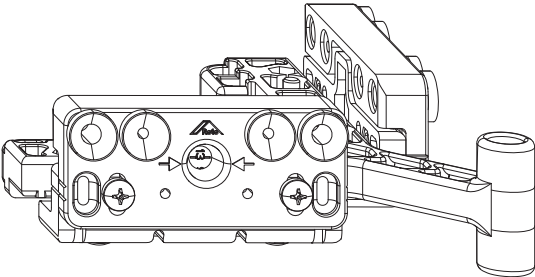
**INFO**  
Drilling jig for systems 12-20/9 and 12-20/13.  
Conversion to systems 12-18/9 and 12-18/13 possible.

|                                           |         |  | Nº      |
|-------------------------------------------|---------|--|---------|
|                                           |         |  |         |
| Stay bearing, adjustable – arched window  | P 3/100 |  | 2002405 |
|                                           | P 6/100 |  | 2002406 |
| Stay bearing, adjustable – Tilt-Only sash | P 3/100 |  | 2002103 |
|                                           | P 6/100 |  | 2002404 |

Installation (change of system)

|                           |                     |  | Nº      |
|---------------------------|---------------------|--|---------|
|                           |                     |  |         |
| Stop for arched windows   | 12/18-9<br>12/18-13 |  | 2032487 |
| Stop for Tilt-Only sashes | 12/18-9<br>12/18-13 |  | 2032488 |

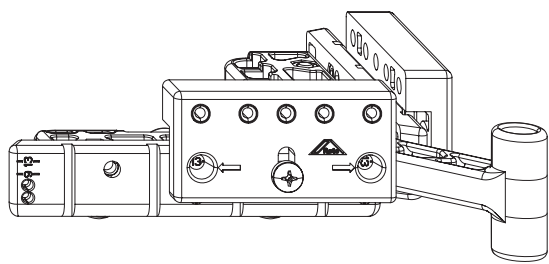
12.1.3 Corner hinges



|                                                        |         |  | Nº     |
|--------------------------------------------------------|---------|--|--------|
|                                                        |         |  |        |
| Corner hinge, height adjustable                        | P 6/150 |  | 788438 |
| Corner hinge, height and gasket-compression adjustable | P 6/150 |  | 788503 |

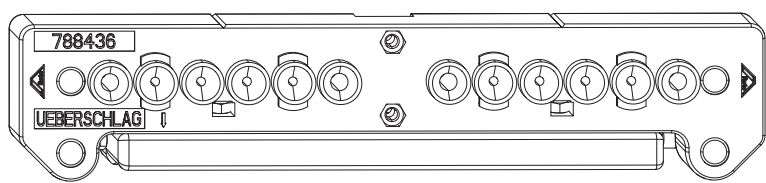


12.1.4 Turn-Only / Tilt-Only overlap hinge



|                                     |  |        |
|-------------------------------------|--|--------|
|                                     |  | Nº     |
| Turn-Only / Tilt-Only overlap hinge |  | 795268 |

12.1.5 Threshold pivot rest



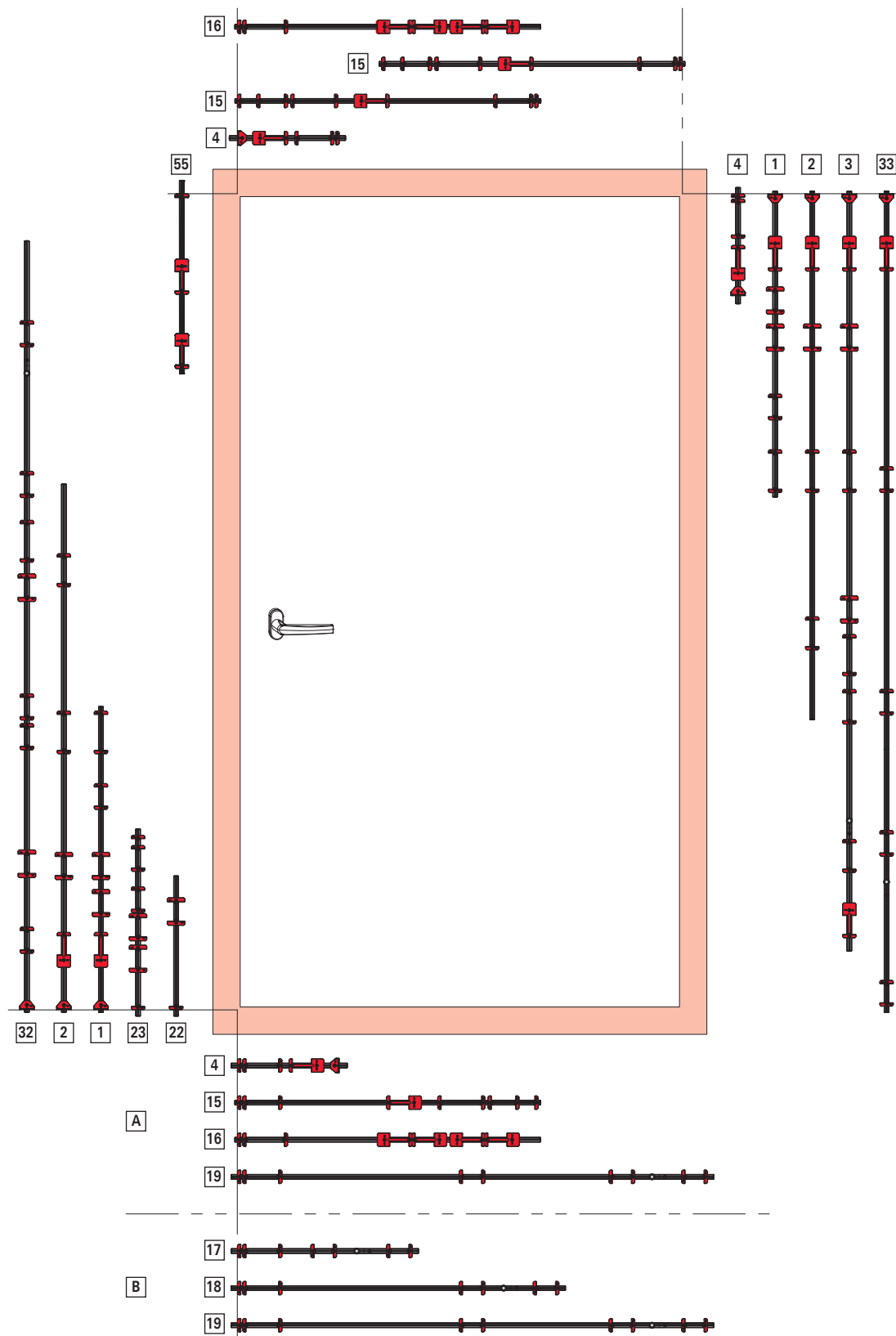
|                                                   |                    |         |
|---------------------------------------------------|--------------------|---------|
|                                                   |                    | Nº      |
| Drilling jig for setting the functional clearance | P 6/130<br>P 6/150 | 2033355 |





## 12.2 Positioning jigs

### 12.2.1 T&T espagnolette – fixed handle height

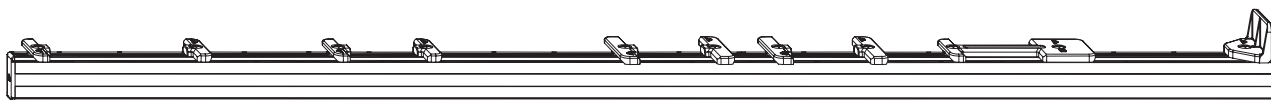


[A] BSec  
[B] RC 1 N



| Assignment | Position                 | Application range  | T&T  |        | T-O  | Single jig                                         |
|------------|--------------------------|--------------------|------|--------|------|----------------------------------------------------|
|            |                          |                    | BSec | RC 1 N | BSec |                                                    |
| [22]       | Espagnolette side        | SRH 511 – 710 mm   | ■    | ■      | ■    | Standard → <i>from page 538</i>                    |
| [23]       |                          | SRH 601 – 800 mm   | ■    | ■      | ■    |                                                    |
| [1]        |                          | SRH 801 – 1400 mm  | ■    | ■      | ■    |                                                    |
| [2]        |                          | SRH 1401 – 1600 mm | ■    | ■      | ■    |                                                    |
| [32]       |                          | SRH 1601 – 2800 mm | ■    | ■      | ■    |                                                    |
| [55]       |                          | SRH 2401 – 2800 mm | ■    | ■      | ■    |                                                    |
| [4]        | Hinge side               | SRH 280 – 800 mm   | ■    | ■      | –    | Tilt striker / corner drive → <i>from page 538</i> |
| [1]        |                          | SRH 801 – 1400 mm  | ■    | ■      | ■    | Standard → <i>from page 538</i>                    |
| [2]        |                          | SRH 1401 – 1800 mm | ■    | ■      | ■    |                                                    |
| [3]        |                          | SRH 1801 – 2800 mm | ■    | ■      | ■    |                                                    |
| [33]       |                          | SRH 2601 – 2800 mm | ■    | ■      | ■    |                                                    |
| [4]        | Horizontal at the top    | SRW 290 – 800      | ■    | ■      | ■    | Tilt striker / corner drive → <i>from page 538</i> |
| [15]       |                          | SRW 801 – 1600 mm  | ■    | ■      | –    | Centre lock → <i>from page 539</i>                 |
| [16]       |                          | SRW 801 – 1400 mm  | –    | –      | ■    | Turn-Only sash → <i>from page 539</i>              |
| [4]        | Horizontal at the bottom | SRW 290 – 800 mm   | ■    | –      | –    | Tilt striker / corner drive → <i>from page 538</i> |
| [15]       |                          | SRW 801 – 1200 mm  | ■    | –      | –    | Centre lock → <i>from page 539</i>                 |
| [19]       |                          | SRW 1131 – 1600 mm | ■    | ■      | –    | Turn-Only sash → <i>from page 539</i>              |
| [16]       |                          | SRW 801 – 1400 mm  | –    | –      | ■    |                                                    |
| [17]       |                          | SRW 320 – 730 mm   | –    | ■      | –    | Centre lock RC 1 N → <i>from page 538</i>          |
| [18]       |                          | SRW 731 – 1130 mm  | –    | ■      | –    |                                                    |

### 12.2.1.1 Standard



#### Espagnolette side and hinge side

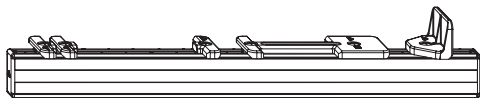
|          |   |   |   |     | Nº |
|----------|---|---|---|-----|----|
| Standard | ↕ | □ | i | No. |    |
|          |   |   |   |     |    |
|          |   |   |   |     |    |
|          |   |   |   |     |    |
|          |   |   |   |     |    |
|          |   |   |   |     |    |
|          |   |   |   |     |    |
|          |   |   |   |     |    |
| Standard | ↕ | □ | i | No. |    |
|          |   |   |   |     |    |
|          |   |   |   |     |    |
|          |   |   |   |     |    |
|          |   |   |   |     |    |
|          |   |   |   |     |    |
|          |   |   |   |     |    |
|          |   |   |   |     |    |



#### INFO

Use jig no. 3 with T&T espagnolette – fixed handle height on the hinge side only.

### 12.2.1.2 Tilt striker / corner drive

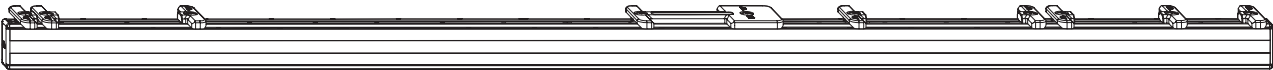


|                             |           |           |                             |       | Nº     |
|-----------------------------|-----------|-----------|-----------------------------|-------|--------|
| Tilt striker / corner drive | ↕         | ↔         | □                           | i     |        |
|                             |           |           |                             |       |        |
| Tilt striker / corner drive | 280 – 800 | 290 – 800 | Top<br>Bottom<br>Hinge side | No. 4 | 290051 |
|                             |           |           |                             |       |        |



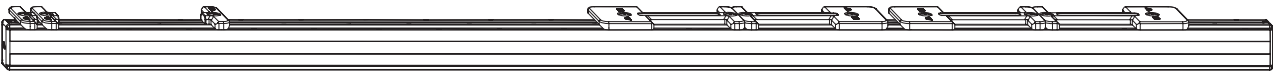


12.2.1.3 Centre lock



|  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Centre lock                                                                       | Basic security<br>RC 1 N                                                          | 801 – 1600                                                                        | Top<br>Bottom                                                                      | No. 15                                                                              | 311892 |
|                                                                                   |                                                                                   | 1201 – 1600                                                                       | Bottom                                                                             | No. 19                                                                              | 263337 |
|                                                                                   | RC 1 N                                                                            | 320 – 730                                                                         | Bottom                                                                             | No. 17                                                                              | 263335 |
|                                                                                   |                                                                                   | 731 – 1130                                                                        | Bottom                                                                             | No. 18                                                                              | 263336 |

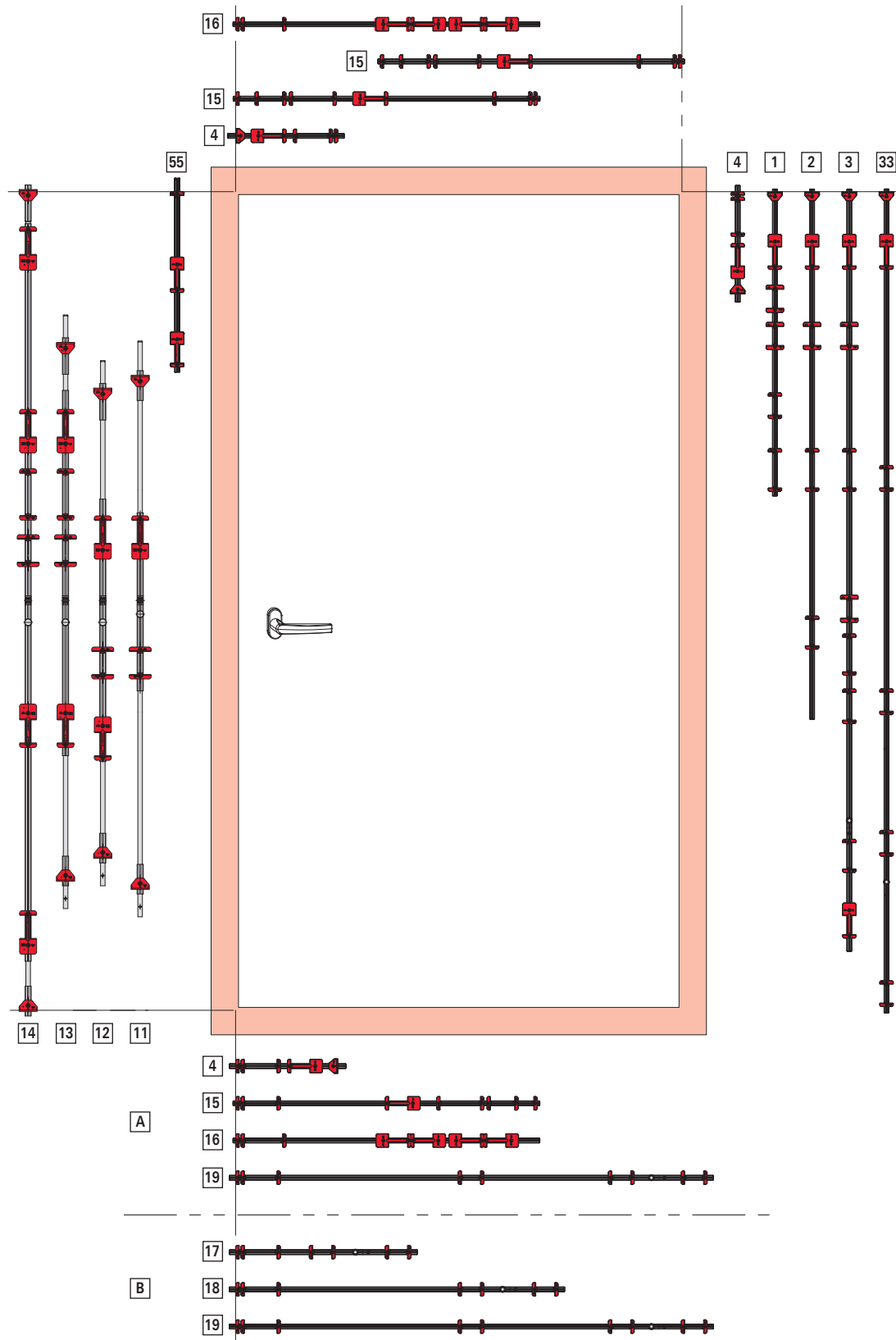
12.2.1.4 Turn-Only sash



|  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Turn-Only sash                                                                    | 801 – 1400                                                                        | Top<br>Bottom                                                                     | No. 16                                                                              | 311893 |



## 12.2.2 T&T espagnolette – centred / variable handle height



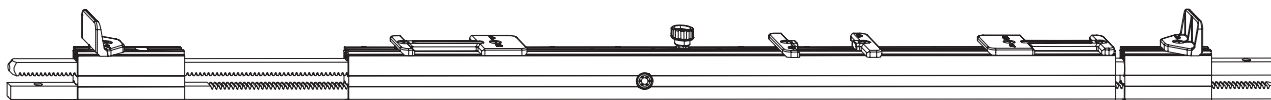
[A] BSec

[B] RC 1 N



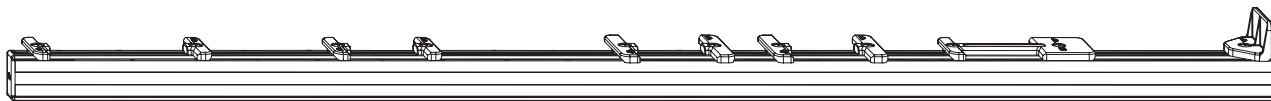
| Assignment | Position                 | Application range  | T&T  |        | T-O  | Single jig                                         |
|------------|--------------------------|--------------------|------|--------|------|----------------------------------------------------|
|            |                          |                    | BSec | RC 1 N | BSec |                                                    |
| [11]       | Espagnolette side        | SRH 621 – 1200 mm  | ■    | ■      | ■    | Standard → <i>from page 541</i>                    |
| [12]       |                          | SRH 1201 – 1600 mm | ■    | ■      | ■    |                                                    |
| [13]       |                          | SRH 1601 – 2000 mm | ■    | ■      | ■    |                                                    |
| [14]       |                          | SRH 2001 – 2400 mm | ■    | ■      | ■    |                                                    |
| [55]       |                          | SRH 2401 – 2800 mm | ■    | ■      | ■    |                                                    |
| [4]        | Hinge side               | SRH 280 – 800 mm   | ■    | ■      | –    | Tilt striker / corner drive → <i>from page 542</i> |
| [1]        |                          | SRH 801 – 1400 mm  | ■    | ■      | ■    | Standard → <i>from page 541</i>                    |
| [2]        |                          | SRH 1401 – 1800 mm | ■    | ■      | ■    |                                                    |
| [3]        |                          | SRH 1801 – 2800 mm | ■    | ■      | ■    |                                                    |
| [33]       |                          | SRH 2601 – 2800 mm | ■    | ■      | ■    |                                                    |
| [4]        | Horizontal at the top    | SRW 290 – 800      | ■    | ■      | ■    | Tilt striker / corner drive → <i>from page 542</i> |
| [15]       |                          | SRW 801 – 1600 mm  | ■    | ■      | –    | Centre lock → <i>from page 542</i>                 |
| [16]       |                          | SRW 801 – 1400 mm  | –    | –      | ■    | Turn-Only sash → <i>from page 542</i>              |
| [4]        | Horizontal at the bottom | SRW 290 – 800 mm   | ■    | –      | –    | Tilt striker / corner drive → <i>from page 542</i> |
| [15]       |                          | SRW 801 – 1200 mm  | ■    | –      | –    | Centre lock → <i>from page 542</i>                 |
| [19]       |                          | SRW 1131 – 1600 mm | ■    | ■      | –    | Turn-Only sash → <i>from page 542</i>              |
| [16]       |                          | SRW 801 – 1400 mm  | –    | –      | ■    |                                                    |
| [17]       |                          | SRW 320 – 730 mm   | –    | ■      | –    | Centre lock RC 1 N → <i>from page 542</i>          |
| [18]       |                          | SRW 731 – 1130 mm  | –    | ■      | –    |                                                    |

### 12.2.2.1 Standard



#### Espagnolette side

|  |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Standard                                                                            | 621 – 1200                                                                          | Espagnolette side                                                                   | No. 11                                                                                | 268943 |
|                                                                                     | 1201 – 1600                                                                         | Espagnolette side                                                                   | No. 12                                                                                | 798480 |
|                                                                                     | 1601 – 2000                                                                         | Espagnolette side                                                                   | No. 13                                                                                | 787401 |
|                                                                                     | 2001 – 2400                                                                         | Espagnolette side                                                                   | No. 14                                                                                | 787402 |
|                                                                                     | 2401 – 2800                                                                         | Espagnolette side                                                                   | No. 55                                                                                | 808454 |



#### Hinge side

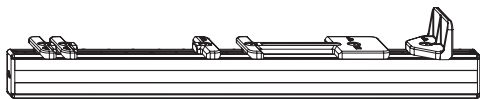
|  |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Standard                                                                            | 801 – 1400                                                                          | Espagnolette side<br>Hinge side                                                     | No. 1                                                                                 | 290048 |
| Standard                                                                            | 1401 – 1600                                                                         | Espagnolette side<br>Hinge side                                                     | No. 2                                                                                 | 290049 |
| Standard                                                                            | 1601 – 2600                                                                         | Espagnolette side<br>Hinge side                                                     | No. 3                                                                                 | 290050 |
| Standard                                                                            | 2601 – 2800                                                                         | Hinge side                                                                          | No. 33                                                                                | 808678 |



#### INFO

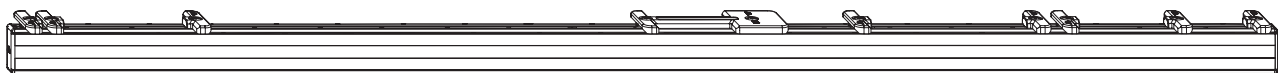
With T&T espagnolettes – centred / variable handle height, use jigs on the hinge side only.

12.2.2.2 Tilt striker / corner drive



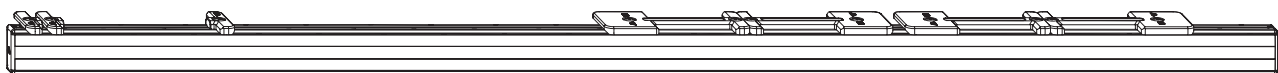
|  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Tilt striker / corner drive                                                       | 280 – 800                                                                         | 290 – 800                                                                         | Top<br>Bottom<br>Hinge side                                                         | No. 4                                                                               | 290051 |

12.2.2.3 Centre lock



|  |  |  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Centre lock                                                                       | Basic security<br>RC 1 N                                                          | 801 – 1600                                                                        | Top<br>Bottom                                                                      | No. 15                                                                              | 311892 |
|                                                                                   |                                                                                   | 1201 – 1600                                                                       | Bottom                                                                             | No. 19                                                                              | 263337 |
|                                                                                   | RC 1 N                                                                            | 320 – 730                                                                         | Bottom                                                                             | No. 17                                                                              | 263335 |
|                                                                                   |                                                                                   | 731 – 1130                                                                        | Bottom                                                                             | No. 18                                                                              | 263336 |

12.2.2.4 Turn-Only sash

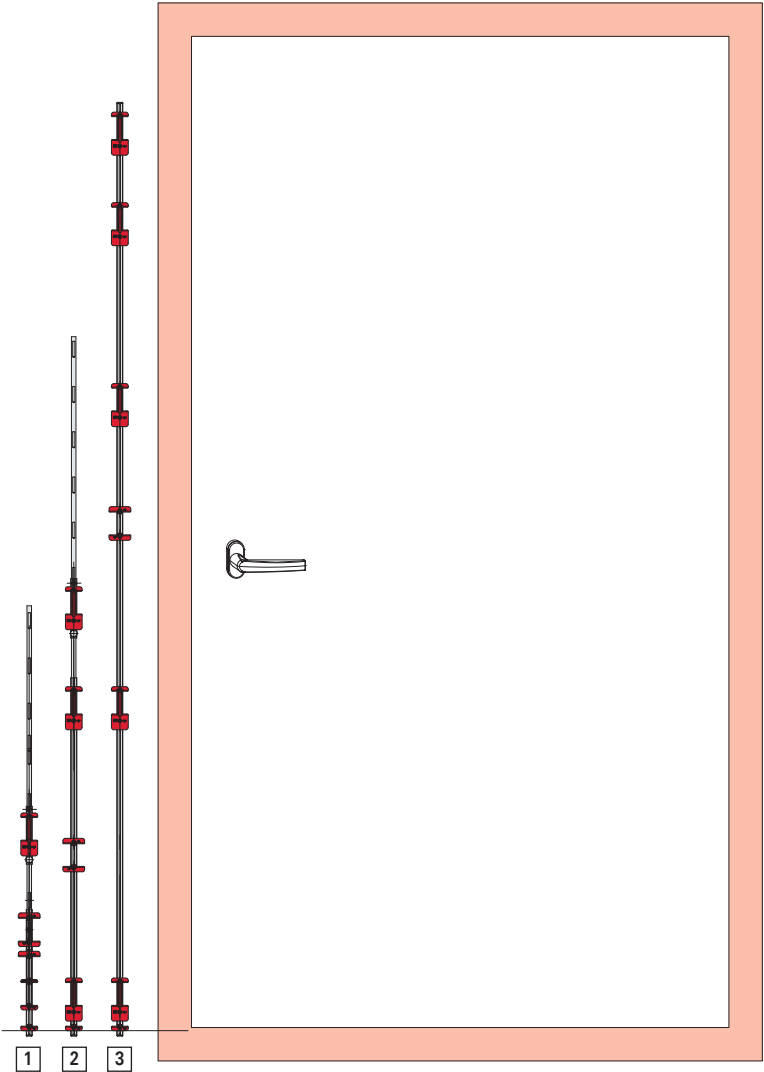


|  |  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Turn-Only sash                                                                      | 801 – 1400                                                                          | Top<br>Bottom                                                                       | No. 16                                                                                | 311893 |





12.2.3 Turn-Only / Tilt-Only espagnolette – fixed handle height



| Assignment | Position          | Application range  | T-O  | Single jig                      |
|------------|-------------------|--------------------|------|---------------------------------|
|            |                   |                    | BSec |                                 |
| [1]        | Espagnolette side | SRH 400 – 1000 mm  | ■    | Standard → <i>from page 543</i> |
| [2]        |                   | SRH 1001 – 1600 mm | ■    |                                 |
| [3]        |                   | SRH 1601 – 2250 mm | ■    |                                 |

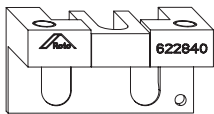
12.2.3.1 Standard



Espagnolette side

|          |             |                   |       | Nº     |
|----------|-------------|-------------------|-------|--------|
|          |             |                   |       |        |
|          |             |                   |       |        |
|          |             |                   |       |        |
| Standard | 400 – 1000  | Espagnolette side | No. 1 | 296148 |
|          | 1001 – 1600 | Espagnolette side | No. 2 | 296149 |
|          | 1601 – 2250 | Espagnolette side | No. 3 | 806978 |

### 12.3 Marking jig



|                              |                                                                                     |        |
|------------------------------|-------------------------------------------------------------------------------------|--------|
|                              |  | Nº     |
| Marking jig for locking cams |                                                                                     | 622840 |



**INFO**

Position the marking jig on the P, E or V cam. Determine the position of the locking component with the marking jig and mark it.





## 12.4 Punches

### 12.4.1 Hydropneumatic punch – DUO



|  |  |  | Nº      |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Hydropneumatic punch – DUO                                                        | For offset cuts                                                                    | Left                                                                                | 2045449 |
|                                                                                   |                                                                                    | Right                                                                               | 2045450 |

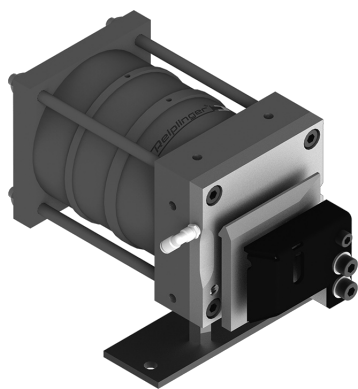
#### Accessories

|  |  | Nº     |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Foot control for hydropneumatic punch                                               | –                                                                                     | 230760 |
| Hand control for hydropneumatic punch                                               | –                                                                                     | 230761 |

|  |  | Nº     |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------|
| Ruler                                                                               | Left                                                                                 | 230758 |
|                                                                                     | Right                                                                                | 230759 |
| VT calliper                                                                         | Left                                                                                 | 632972 |
|                                                                                     | Right                                                                                | 632973 |



12.4.2 Pneumatic punch – PS 100



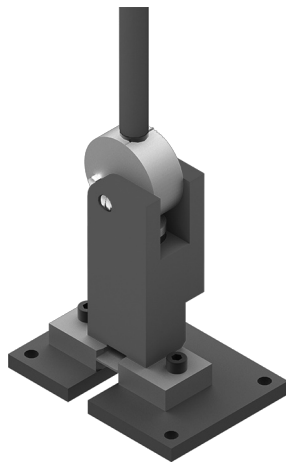
|  |  |  | Nº     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Pneumatic punch – PS 100                                                          | For offset cuts                                                                   | Left                                                                                | 553992 |
|                                                                                   |                                                                                   | Right                                                                               | 553993 |

Accessories

|  |  | Nº     |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
| Foot control for pneumatic punch                                                  | –                                                                                   | 554096 |
| Hand control for pneumatic punch                                                  | –                                                                                   | 554097 |

|  |  | Nº     |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------|
| Ruler                                                                               | Left                                                                                 | 230758 |
|                                                                                     | Right                                                                                | 230759 |
| VT calliper                                                                         | Left                                                                                 | 632972 |
|                                                                                     | Right                                                                                | 632973 |

12.4.3 Hand lever punch – HS



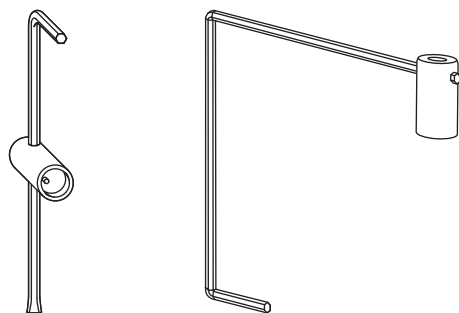
|  |  |  | Nº     |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
| Hand lever punch – HS                                                               | For offset cuts                                                                     | –                                                                                     | 637627 |





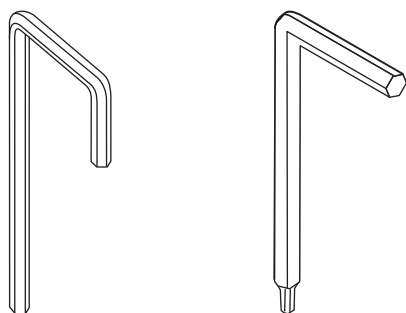
## 12.5 Tools

### 12.5.1 Adjustment tools



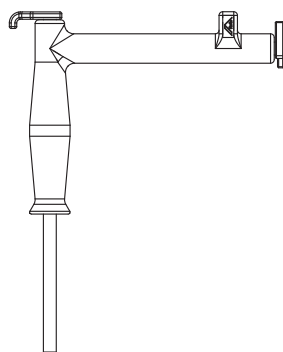
|  |                                | Nº     |
|--|--------------------------------|--------|
|  |                                |        |
|  | Adjustment tool: V locking cam | 258191 |
|  |                                | 381574 |

### 12.5.2 Hex keys



|  |                      | Nº     |
|--|----------------------|--------|
|  |                      |        |
|  | Hex key size 4       | 208609 |
|  | Hex key size 2.5 / 4 | 230764 |

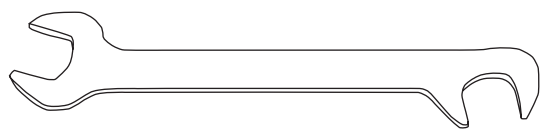
### 12.5.3 Extractor handle



|  |                                       | Nº     |
|--|---------------------------------------|--------|
|  |                                       |        |
|  | Extractor handle for stay-bearing pin | 899630 |
|  | Replacement blade                     | 230765 |



12.5.4 Double open-ended spanner



|                                                                                   |                                                                                   |                                                                                    |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  |  | Nº     |
| Double open-ended spanner: extended V locking cam                                 | 132                                                                               | 3                                                                                  | Key width 13 mm                                                                     | 230766 |





12.6 Roto NX grease

|                                                                                   |                                                                                   |                                                                                     |        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|  |  |  | Nº     |
| Roto NX grease                                                                    | 20 ml tube, white                                                                 | 1 Piece(s)                                                                          | 782881 |





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