

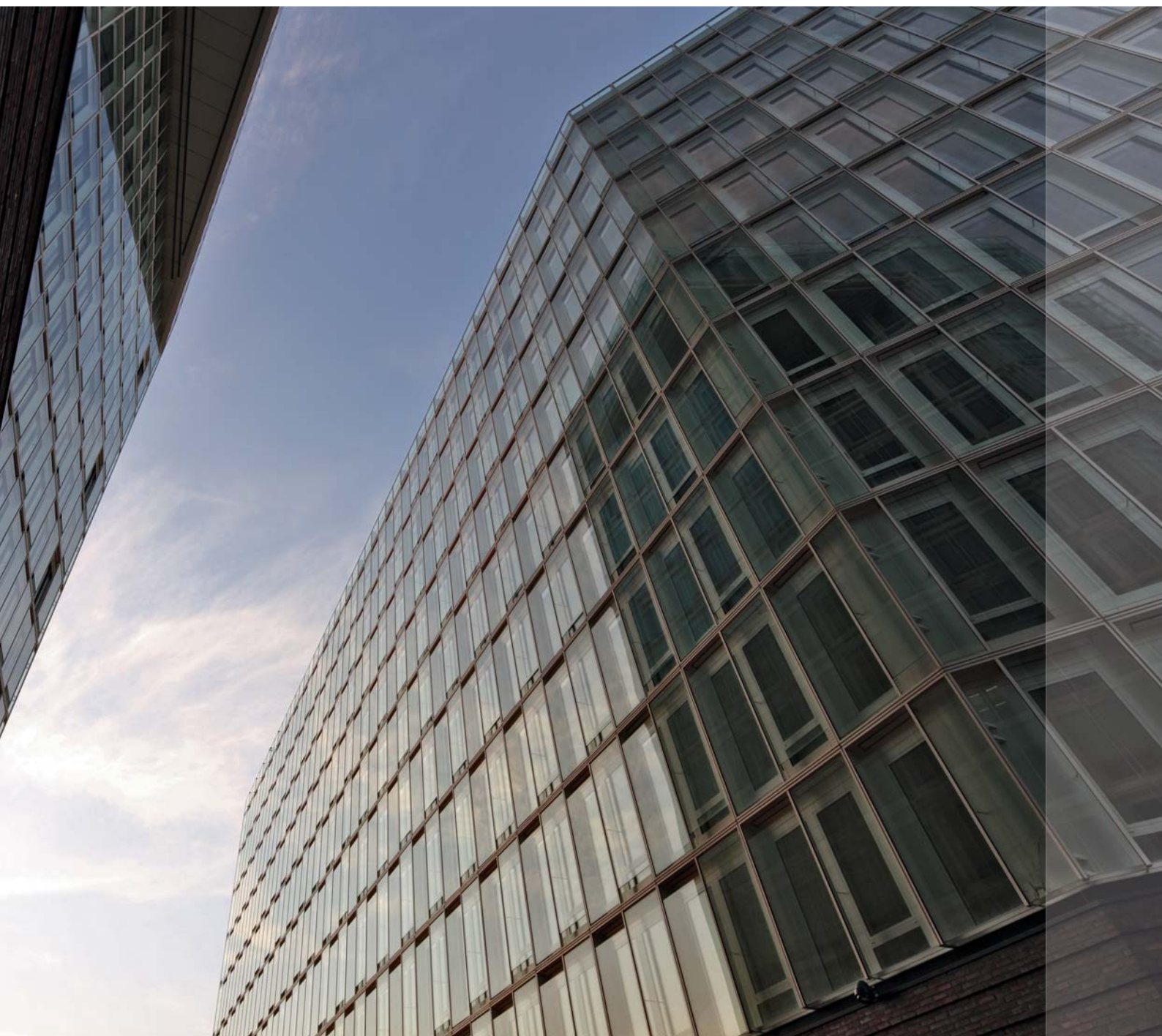
Window and door technology



Roto AluVision

Comprehensive hardware solutions
for aluminium windows and doors

Catalogue for
aluminium profiles



Liability exclusion

All specifications in this document were diligently compiled and validated. Changes due to technical progress, changes in legislation and the passage of time are unavoidable. We therefore hope you understand that we cannot be held liable for the accuracy or completeness of the contents.

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Roto Frank AG

Wilhelm-Frank-Platz 1

D-70771 Leinfelden-Echterdingen

Germany

Telephone: +49 711 7598 0

Telefax: +49 711 7598 253

info@roto-frank.com

www.roto-frank.com

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Production plant in Leinfelden-Echterdingen, Germany – Roto group headquarters.

Production companies



Roto Frank Austria GmbH
Kalsdorf (AUT)



Roto Fasco Canada Inc.
Mississauga, Ontario (CAN)



Roto Frank
Building Materials Co. Ltd.
Beijing (CHN)



Roto Frank AG
Leinfelden-Echterdingen (GER)



Roto Frank AG
Velbert production plant (GER)



Roto Elzett Certa Kft.
Lövö (HUN)



Elzett Sopron Kft.
Sopron (HUN)
(50 %)



OOO Roto Frank
Moscow (RUS)



Roto Frank of America Inc.
Chester, Ct. USA (USA)



Entrance area of the Leinfelden-Echterdingen production plant.

The Roto Group – leading the way for over 70 years

Only a few brands in the construction world can look back at a similar success story, and only a few are at the forefront over decades. Roto is one of the leading manufacturers of window and door technology worldwide and a major supplier of roof and solar technology.

Our history begins, as in the case of many successful companies, with the name of a personality: Wilhelm Frank. He became a pioneer with his ideas; the first industrially-produced Tilt&Turn hardware in 1935. Our company founder was a classic Swabian inventor. Under his direction and that of his immediate successors, Roto developed with its headquarters in Leinfelden-Echterdingen (Stuttgart), from being a one man operation to an international group of companies.

Over 4000 employees around the globe work on the task of recognising customers' needs early on and developing products to enhance the increased value of windows and doors for mankind.

Creating inner – and with it permanent – values is our utmost objective. A good example of this is our hardware systems for aluminium windows. Roto AluVision offers aesthetically attractive solutions for nearly all opening types in connection with maximum security as well as perfect fabrication. Even large and heavy windows and balcony doors with weights of up to 300 kg, that are almost common in current construction projects, are not a problem.

And even other trends are fulfilled by the Roto fenestration technology: there is a heavy emphasis on large sash elements and complex multiple glazings and at the same time a growing preference for aesthetic shapes and slimline profiles. The less one sees of the fenestration technology involved, the better. Roto AluVision Designo meets these demands – as a fully concealed hardware system for large aluminium windows with a sash weight of up to 150 kg. No hinges visible from the outside that need to be colour-matched. Nothing detracts from the window's aesthetics. Due to the use of tempered non-corrosive steel plus the innovative Roto-Sil Nano surface coating, the hardware lasts longer and offers high resistance against environmental influences.

A state of the art cross linked network of nine production plants worldwide warrants a high level of flexibility, productivity and supply security. With our international distribution network consisting of over 40 own subsidiaries, representations and trading partners, we ensure that we are always close to our customers. Both the customers and Roto benefit equally from the continuous close dialogue with planning engineers, dealers and window & door fabricators.

According to the defined manufacturer's liability described in paragraph 4 of the "product liability law", the following information regarding Turn-Only and Tilt&Turn hardware for window and balcony door sashes should be observed. Non-compliance exempts the manufacturer of his liability.

1. Product information and stipulated application

1.1 Turn-Only and Tilt&Turn hardware

Definition: Turn-Only and Tilt&Turn hardware as covered by this definition is one-hand-operation Turn-Only and Tilt&Turn hardware for windows and balcony doors in building construction. This is used to enable windows and balcony-door sashes into a turning position by operating a 'hand-lever' (handle) or into a limited tilting position in the case of the scissors (sash-stay) version.

Application: Turn-Only and Tilt&Turn hardware is used on vertically installed windows and balcony-doors made of timber, PVC, aluminium or steel and their corresponding material combinations. Conventional Turn-Only and Tilt&Turn hardware as covered by this definition, locks window and balcony door sashes or enables various ventilating positions. When closing, the gasket counter force must be overcome as a rule.

1.2 Sliding hardware

Definition: Sliding hardware as covered by this definition, is hardware for sliding sashes for balcony doors and windows that are mainly used as glazed exterior structures. In combination with the sliding sashes, fixed-glazing-units and/or further sashes i.e. Turn-Only sashes for cleaning purposes can be situated in a window element.

Application: Sliding hardware is used on vertically installed windows and balcony-door sashes made of timber, PVC, aluminium or steel, and their corresponding material combinations. Sliding hardware as covered by this definition is equipped with a locking mechanism that fastens the sliding sash as well as rollers located on the bottom horizontal plane of the sliding sash. In addition, scissor stay-arms for tilting and mechanisms to lift and/or parallel-retract the sashes can be specified. By means of the hardware, the sashes are locked, brought into the ventilation position and pushed to the side.

Depending on the outside temperature, relative air humidity of the ambient air, as well as the application location of the sliding element, a temporary formation of condensation water on the aluminium track on the inside may occur. This is particularly promoted when the air circulation is hindered; for example due to deep reveals, curtains as well as unfavourable radiator positioning and the like.

1.3 Differing application – Liability exclusion

All applications differing from § 1.1 and/or 1.2 are regarded as non-stipulated applications and excludes any liability on our part.

1.4 Advice concerning restrictions of use

Opened balcony doors and window sashes, as well as window and balcony door sashes not locked or in the tilted modus, provide only a shielding function and do not meet any demands on joint impermeability, water tightness, sound reduction, heat-insulation and burglary resistance.

In the case of wind and draught, the window and balcony door sashes must be closed and locked. Wind and draught is present, if a window or balcony door sash while in one of its opening positions, can open or close on its own, in an uncontrolled manner by means of either air pressure or air suction. A static opening position of window and balcony-door sashes can only be achieved by means of additional hardware.

1.5 Particular necessary agreements for extended requirements

Burglar-resistant windows and balcony doors, windows and balcony doors for damp rooms and those for use in environments with aggressive, corrosive air content, require hardware adapted for the respective application and individually agreed upon performance features.

The resistance against wind loads in a closed and locked state is dependent on the respective designs of windows & balcony doors. If wind loading tests need to be carried out (for example in accordance with EN 12210 – in particular pressure test p3), suitable hardware compilations are to be matched in relation to the respective window design and frame material, and each case individually agreed upon.

Generally speaking, the hardware defined in § 1.1 and/or § 1.2 fulfils the requirements for barrier-free dwellings (for example, in accordance with DIN 18025). However corresponding hardware compilations and installations for windows and balcony doors are necessary, which must be coordinated and each case individually agreed upon.

2. Misuse

Misuse – therefore not the stipulated product utilisation – occurs in particular with hardware for windows and balcony doors as described in § 1.1 and/or § 1.2 in particular:

- If obstacles are inserted in the opening vicinity between the frame and sash, thus impeding or preventing its proper specified use,
- if additional loads are put on window or balcony-door sashes (for example if children swing on the window or balcony-door sash),
- if window and balcony-door sashes are pressed adversatively or uncontrolled (for example by the wind) up against the window reveals, so that the hardware or the frame material or other individual window or balcony-door components are damaged or destroyed and/or if consequential damage can arise,
- if while closing (or sliding) someone reaches between the sash and frame, and/or a person (or parts thereof) are in the vicinity (risk to life and limb).

3. Liability

The respective entire hardware set may only consist of hardware components from Roto's NT system. In the case of non factory-approved combinations by Roto Frank AG and/or inappropriately assembled hardware, and/or the use of non-original and/or non factory-approved accessory components, no liability is accepted.

For professional fixing, the "Implementation regulations for the fixing of supporting hinged hardware components" is to be adhered.

When using PVC or light metal profiles, the profile manufacturers and/or system owners information is to be observed.

The window fabricator is essentially responsible for the compliance of the specified system-related dimensions (for example, the gasket gap dimensions). These specified system-related dimensions are to be checked regularly, in particular when using new hardware components for the first time, and also during production as well as during the window installation process. The hardware components are designed in such a manner, that the system-related dimensions can be adjusted, provided the hardware can have an effect on these. Should there be a deviation from these dimensions that leads to a fault that has not been noted before the window installation, no liability is accepted for the additional expenses incurred.

**4. Product performance –
Manufacturers application advice**

4.1 Maximum sash weights

The listed maximum sash weights for the individual hardware versions may not be exceeded. The building component with the least permissible load-carrying capacity determines the maximum sash weight. Application diagrams and component classification are to be adhered to. (refer to chapter Diagrams / Profile cross sections)

4.2 Sash sizes

The description of the application diagrams in the planning documentation, product catalogues or installation instructions depict the relationships between the permissible sash rebate widths and sash rebate heights, depending on various glass weights and/ or thickness. The resulting sash dimensions or sash formats (portrait and/or landscape format) – as well as the maximum sash weight – may not under any circumstance be exceeded.

4.3 Hardware combination

The manufacturer's regulations that deal with the combination of hardware are obligatory (for example: the application of additional stay arms, the hardware design for burglar-resistant window sashes and balcony-door leaves etc.).

5. Product maintenance

Security relevant hardware components are to be examined at least once a year for stability and wear and tear. Depending on the requirements, the fixing screws are to be tightened and/or parts to be replaced. In addition to this, the following maintenance work is to be carried out at least once a year:

- All movable parts and all locking points of the hardware are to be lubricated and tested.
- Only cleaning and maintenance agents, that do not damage the corrosion protection of the hardware components, are to be used.

The hardware adjustment work – particularly in the vicinity of the pivot rest, bogies and the scissor stays – as well as replacing parts and the unhinging & hinging of the active sash are to be carried out by a specialist company.

When coating – for example when painting or varnishing – the windows' and balcony doors hardware is to be excluded from this process and is also to be protected against any impurities (paint/varnish splashes).

5.1 Preservation of the surface finish

Electrolytically applied zinc coatings are not attacked in a normal room climate, if no condensation can form on the hardware or occasionally formed condensation can dry rapidly.

In order to permanently preserve the hardware's surface quality and to avoid deterioration by corrosion, it is imperative to observe the following points:

- The hardware and/or the rebate areas are to be ventilated sufficiently in particular during the building phase so that they are not exposed to either direct wetness or to condensation. In any case, necessary steps are to be taken to ensure that (permanent) moist ambient air cannot condense in the rebate areas.
- The hardware is to be kept free from deposits and soiling from building materials (building dust, plaster, cement etc.). Possible soiling from plaster, mortar or similar materials is to be removed with water before it cures.
- Aggressive vapours (e.g. by means of formic acid or acetic acid, ammonia, amine or ammonia compounds, aldehydes, phenols, chlorine, tannic acid etc.) in connection with even small formations of condensation can lead to fast corrosion of the hardware. For this reason, evaporation in the vicinity of the windows is to be absolutely avoided.
- On windows and balcony doors made of oak or other types of timber with a high concentration of (tannic-) acid, ensure that by means of a suitable window surface treatment, these content substances can not evaporate out of the timber. The hardware may not come in direct contact with untreated timber surfaces.
- Furthermore no acetic-acid or crosslinked acidic sealing compounds or those with the above mentioned contents may be used, since both the direct contact with the sealing compound and its vaporisation can attack the hardware's surface.
- The hardware may only be cleaned with mild, pH-neutral cleaning agent in diluted form. Under no circumstances may aggressive, acidiferous cleaners or abrasive cleaning agents whose contents are listed in the above paragraph be used.

6. Obligation to issue information and instructions

The following documentation in particular is available in order to fulfil the information and instruction duties, as well as implementing maintenance operations. This documentation is to be passed on to dealers, intermediaries, fabricators and end users.

- Planning documentation
- Product catalogues
- Installation instructions
- Maintenance and care instructions as well as operating instructions

This is described subsequently as 'product information' – whether in whole or in part.

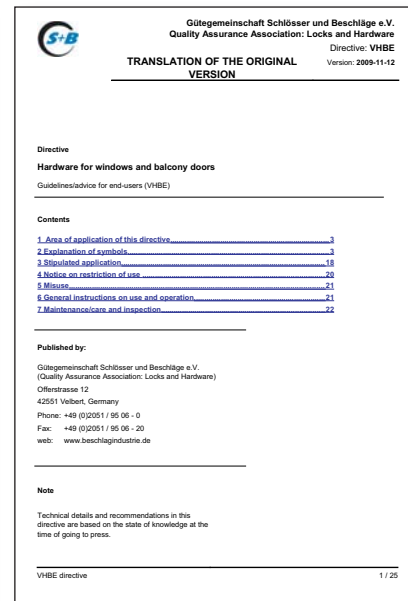
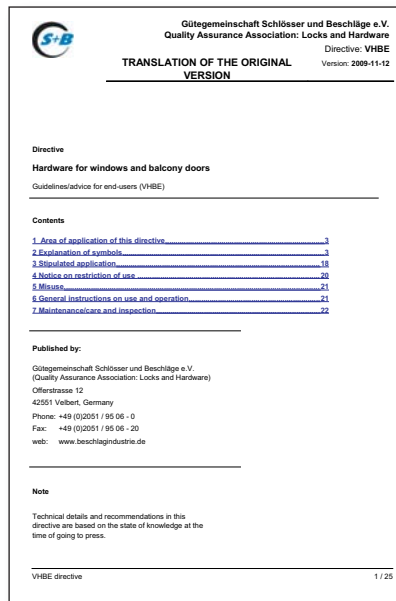
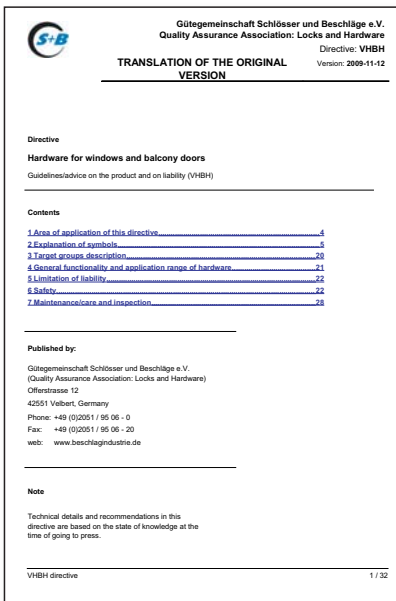
In order to safeguard the relevant function of windows and balcony doors:

- Planning engineers are obliged to request and comply with the manufacturer's or authorised dealer's 'product information'.
- Specialised dealers are obliged to observe the 'product information' from the manufacturer – particularly valid for advertising measures – and to pass this on to subsequent dealers and/or fabricators, and to point out to them that they are also obliged to pass this on to their customers.
- Fabricators are obliged to observe the 'product information' and in particular, to pass on service & maintenance instructions as well as operating manuals to the builders and end-users.

7. Use of related hardware

The variations possible within individual hardware systems (e.g. Tilt-Only and Top-Hung hardware, or hardware that provides a circumferential ventilation-gap by parallel-retracting the sash instead of, or in addition to the tilted position) are to be treated according to the corresponding valid features of product information, stipulated application, misuse, product performance, product maintenance, information & instruction obligations.

In the directives of the Quality Assurance Association: Locks and Hardware all information about the correct use and maintenance of the hardware for windows and balcony doors can be found.



■ **VHBH**

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

■ **VHBE**

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

■ **TBDK**

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

Certified environmental management system

Roto's ecology-minded action is certified in accordance with the international standard for environmental management systems DIN EN ISO 14001.

Roto considers the environmental compatibility of products and environmentally sound procedures right from the beginning, during development, design, planning, production, and logistics.

The certification underlines the environmental awareness in Roto:

Roto pursues occupational safety, accident prevention and plant safety as their fundamental goal within the guidelines of industrial safety,

Roto views environmental protection as an integral part of all entrepreneurial activities and decisions are shaped by Ecology-minded behaviour, environmental compatibility of its products and procedures, as well as preservation of existing resources.

In addition, the high durability of Roto products is a contribution to the preservation of existing resources.



Certified QMS

The certification in accordance with international standard DIN EN ISO 9001 incorporates the architectural hardware technology division.

The certificate certifies that our entire design, production and marketing processes have been systematically planned, documented and realised appropriately. Starting with quality planning to production testing, from development and design through to production and assembly, right up to marketing and customer services. All significant production locations and sales companies in the Roto company-group have been certified in accordance with DIN EN ISO 9001. The certification is an external indication of the high-quality philosophy practised in Roto:

Roto's objective is the continuous product and service improvement for its customers' benefit.

Roto offers its customers innovative and technically pretentious architectural hardware technology.

Roto products are supplied punctually worldwide with constant guaranteed quality.

Roto views holistic quality containing all company processes and activities, as the key for long-term company success.

Roto employees are supported in their personal development and challenging work; practising high-quality philosophy in their daily performance and goal-oriented work.

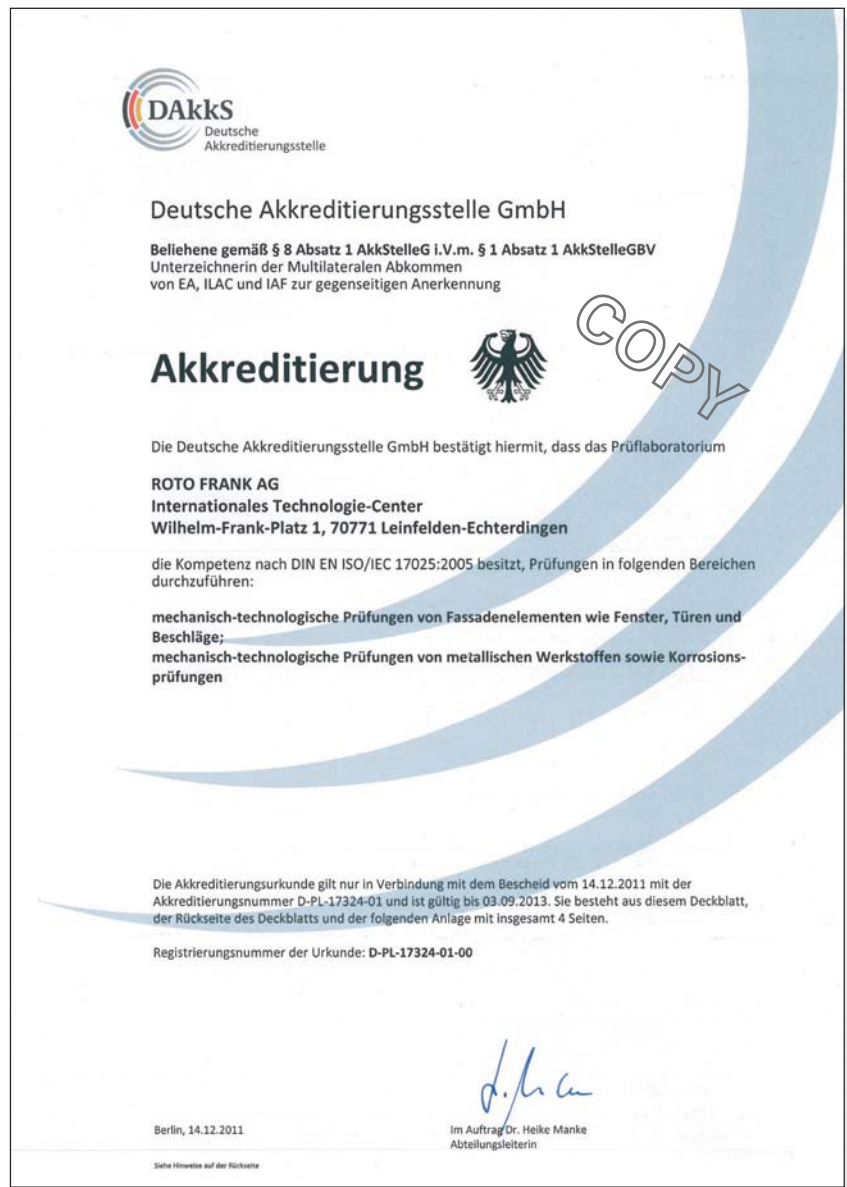


Accredited test centre

The Roto Group has had a modern test centre at their disposal at the Leinfelden headquarters since October 1996. This is at disposal for both our own material and product testing, as well as for finished window tests from Roto market partners.

The Roto test centre is accredited in accordance with DIN EN ISO/IEC 17025 by the German Accreditation Body ('DAkkS'=Deutsche Akkreditierungsstelle). It was confirmed by means of the accreditation that the Roto test centre ITC (International Technology Centre) has the competence to carry out tests in areas such as mechanical-technological tests of facade elements such as windows, doors and hardware, as well as metallic material tests.

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



Environmental compatibility classification of Roto hardware

■ **Hardware component environmental compatibility:**

We endeavour to manage with the lowest possible energy and water consumption levels in the manufacturing of our hardware components and strive to produce hardware components which have great durability. In this case care is taken of our natural resources, minimising energy consumption and using raw materials in an ecology-minded manner.

■ **Environmental impacts resulting from the hardware:**

The surface finish composition of treated surfaces is abrasion-resistant. No environmental pollution is caused by hardware components upon stipulated application. The grease used is environmentally friendly.

■ **Environmental compatibility of the packaging:**

We use disposable packaging material made of reinforced cardboard, steel, PVC packaging tape, cable straps, elastomer cord as well as returnable packaging, reusable 'Schäfer' boxes, crate pallets and 'EURO'-pallets.

■ **Returning the packaging material:**

Packaging with the INTERSEROH logo is accepted free of charge by every INTERSEROH disposal partner. The directory of your local disposal partners can be requested nation-wide at the telephone exchange of ISD INTERSEROH GmbH in Cologne under the following telephone number: +49 2203 9147 322. The Roto INTERSEROH registered number is 25582.

Storage conditions

■ **Component protection against dirt and dust**

Always keep the hardware bundles closed, and always cover up hardware bundles or opened goods (i.e. with a layer of cardboard).

■ **Component protection against mechanical damage**

Transport and handling of the hardware bundles only to be carried out with suitable transport or conveying means (forklift trucks, hoisting devices / cranes and elevators, roller belts, etc.). Maximum pallet and cardboard-box stack-heights (during transport) in accordance with the printed instructions on the packaging are to be strictly adhered.

■ **Component protection against direct humidity and wetness**

The components may not get wet. The packaging must remain dry. 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 when raining (i.e. on-site transport). Storage may only be carried out in suitable, closed rooms and not outdoors. Condensation is to be absolutely avoided during the entire transport and storage duration.

■ **Should hardware bundles nevertheless get wet ...**

Immediately unpack the components from the wet bundles, dry the components and check for signs of corrosion. In any case repack the usable components when dry with new packing material.

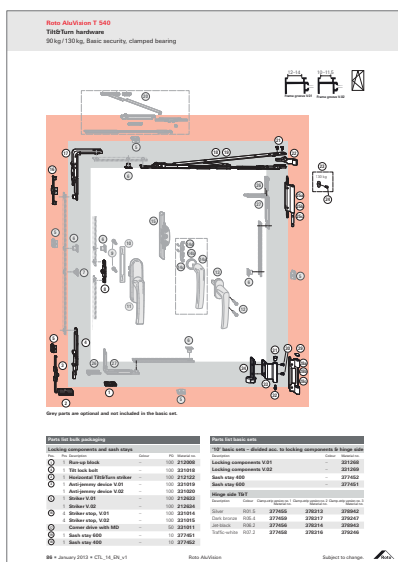
■ **Protection against chemicals**

Protect the components against substances which promote the corrosion (such as varnishes, solvents, acids and alkalis).

Explanation on the hardware overview chapter

The hardware overviews on the following pages are recommendations of Roto Frank AG.

The hardware overview chapter shows on the left page the single hardware components of the opening type in the overview and on the right page the respective parts list. Position numbers allow the allocation between overview and parts list.



Roto AluVision T 540
 TiltTurn hardware
 20kg/120kg, Basic security, clamped bearing

Application range
 Sash width **SW** 405 - 1600mm
 Sash height **SH** 220 - 2400mm
 Sash weight **S** max. 50/130kg

Clearance **CL** 11.5 - 12 mm
Chamber width **CH** 21.5 - 22 mm
Hinge passage 3.5 - 5 mm

Basic set

Part No.	Description	Part No.	Description
1	Window blank	100	212000
2	Top track blank	100	212010
3	Bottom track blank	100	212020
4	Adjustment device V-01	100	212030
5	Adjustment device V-02	100	212040
6	Sticker V-01	100	212050
7	Sticker V-02	100	212060
8	Sticker V-03	100	212070
9	Sticker V-04	100	212080
10	Sticker V-05	100	212090
11	Sticker V-06	100	212100
12	Sticker V-07	100	212110
13	Sticker V-08	100	212120
14	Sticker V-09	100	212130
15	Sticker V-10	100	212140
16	Sticker V-11	100	212150
17	Sticker V-12	100	212160
18	Sticker V-13	100	212170
19	Sticker V-14	100	212180
20	Sticker V-15	100	212190

Optional parts

Part No.	Description	Part No.	Description
21	Window blank	100	212000
22	Top track blank	100	212010
23	Bottom track blank	100	212020
24	Adjustment device V-01	100	212030
25	Adjustment device V-02	100	212040
26	Sticker V-01	100	212050
27	Sticker V-02	100	212060
28	Sticker V-03	100	212070
29	Sticker V-04	100	212080
30	Sticker V-05	100	212090
31	Sticker V-06	100	212100
32	Sticker V-07	100	212110
33	Sticker V-08	100	212120
34	Sticker V-09	100	212130
35	Sticker V-10	100	212140
36	Sticker V-11	100	212150
37	Sticker V-12	100	212160
38	Sticker V-13	100	212170
39	Sticker V-14	100	212180
40	Sticker V-15	100	212190

The parts list includes all profile related versions of the AluVision hardware system. Technical details, special groove and clearance version information available upon request.

The actual scope of delivery depends on the ordered hardware configuration (height and width of the window). Handles have to be ordered separately.

Colour descriptions		Surface-finish	
R01.1	Silver		anodised or coated
R01.2	Nickel silver		anodised or coated
R01.3	Titanium matt		anodised or coated
R01.5	Silver		anodised or coated
R01.6	Silver		coated
R03.1	Brass matt		anodised or coated
R04.1	Grey-brown	(RAL 8019)	coated
R05.3	Medium bronze		anodised or coated
R05.5	Bronze		anodised or coated
R06.2	Jet-black	(RAL 9005)	coated
R07.2	Traffic white	(RAL 9016)	coated

All visible hardware components are coated, painted or rather powder-coated, or anodised. The bronze tone R05.4 corresponds to the same colour tone in coating or anodising. The black tone R06.2 corresponds to the same colour tone in coating or anodising.

All RAL colour tones are available as coating in special colours upon request (catalogue description: "SP COL" = special colour, price upon request).

Abbreviation	Explanation
III.	Illustration
TU-ON	Turn-Only hardware
TU-ON C	Turn-Only hardware, Comfort
TU-ON-adj	Turn-Only hardware, adjustable
TU-ONc	Turn-Only hardware with coupleable rebate hinge
T&T	Tilt&Turn hardware
SW	Sash width
S.kg-max	Maximum sash weight
SH	Sash height
S.kg	Sash weight
CL	Clearance
HH	Handle height
TI-ONt	Tilt-Only hardware / handle on top
TI-ONs	Tilt-Only hardware / handle on side
L	DIN left
w.	with
Mat. no.	Material number
MG	Material group
CL	Centre lock
w/o.	without
Pos.	Position number
R	DIN right
FWi	Frame width, inside
RC1	Resistance Class 1
RC2	Resistance Class 2
RC3	Resistance Class 3

Special anodisations / special colours

1. Provided that AL 2, AL 3 & AL 4 are requested according to the Roto colour chart or the RAL colour chart, the following arrangement applies (with the exception of R01.1, R01.5, R05.4, R06.2 and R07.2 standard colours):

The visible AluVision hardware components are dispatched in processed unpainted condition to an anodising plant named by the customer. After the colouring is completed, the components are to be returned to us for assembly. Arising freight costs are payable by the buyer. The costs for the anodisation or colouring, as well as the risk for colour matching are assumed by the buyer.

2. For the special anodisation or special colouring costs arising in Roto, net surcharges will be invoiced.

Abbreviation	Explanation
raw	Unpainted, uncoated
FHi	Frame height, inside
SP COL	Special colour
SEC	Security
MD	Mishandling device
DM	Dummy-mullion hardware (concealed lever-operated espagnolette)
DM-SM	Dummy-mullion hardware (surface-mounted geared-handle)
DM-SB	Dummy-mullion hardware (with shootbolt)
DM-SL	Dummy-mullion hardware (with slider)
Pcs	Pieces
TF	Tilt-First hardware
OW	Overlap width
OH	Overlap height
V.01	Frame groove version 01
V.02	Frame groove version 02
VdS	German association of property insurers
PQ	Packaging quantity

The figures show DIN right-hand versions. All dimensions stated in mm. Otherwise the values are indicated.

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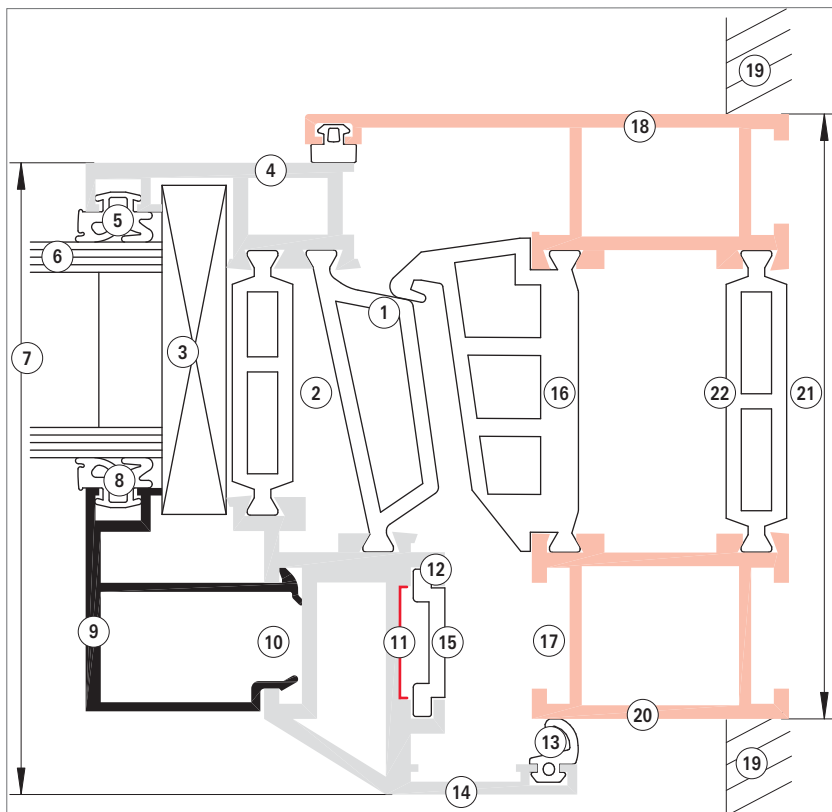
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Sash profile

- ① Contact lip for central gasket
- ② Thermal break
- ③ Spacer blocking
- ④ Exterior profile shell (sash)
- ⑤ Glazing gasket, outside
- ⑥ Glazing (laminated glass)
- ⑦ Sash profile thickness
- ⑧ Glazing gasket, inside
- ⑨ Glazing-bead
- ⑩ Sash glazing-bead groove
- ⑪ Extended connecting-rod C-groove (ECC groove)
- ⑫ Connecting-rod C-groove
- ⑬ Overlap gasket
- ⑭ Interior profile shell (sash)
- ⑮ Connecting-rod

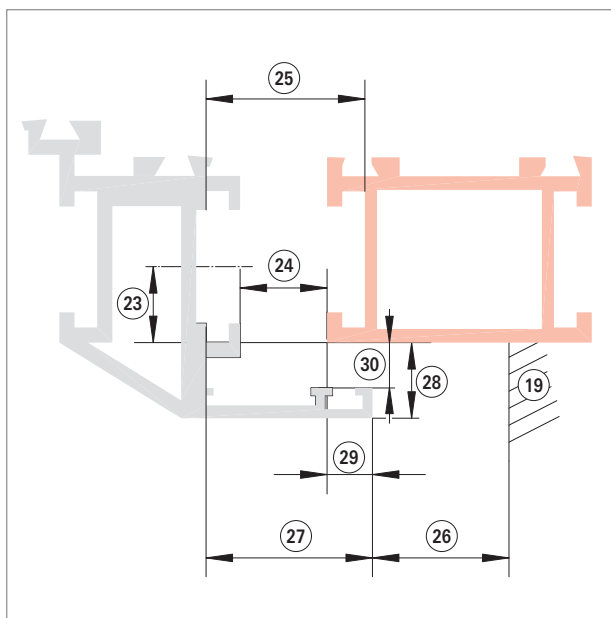
Frame profile

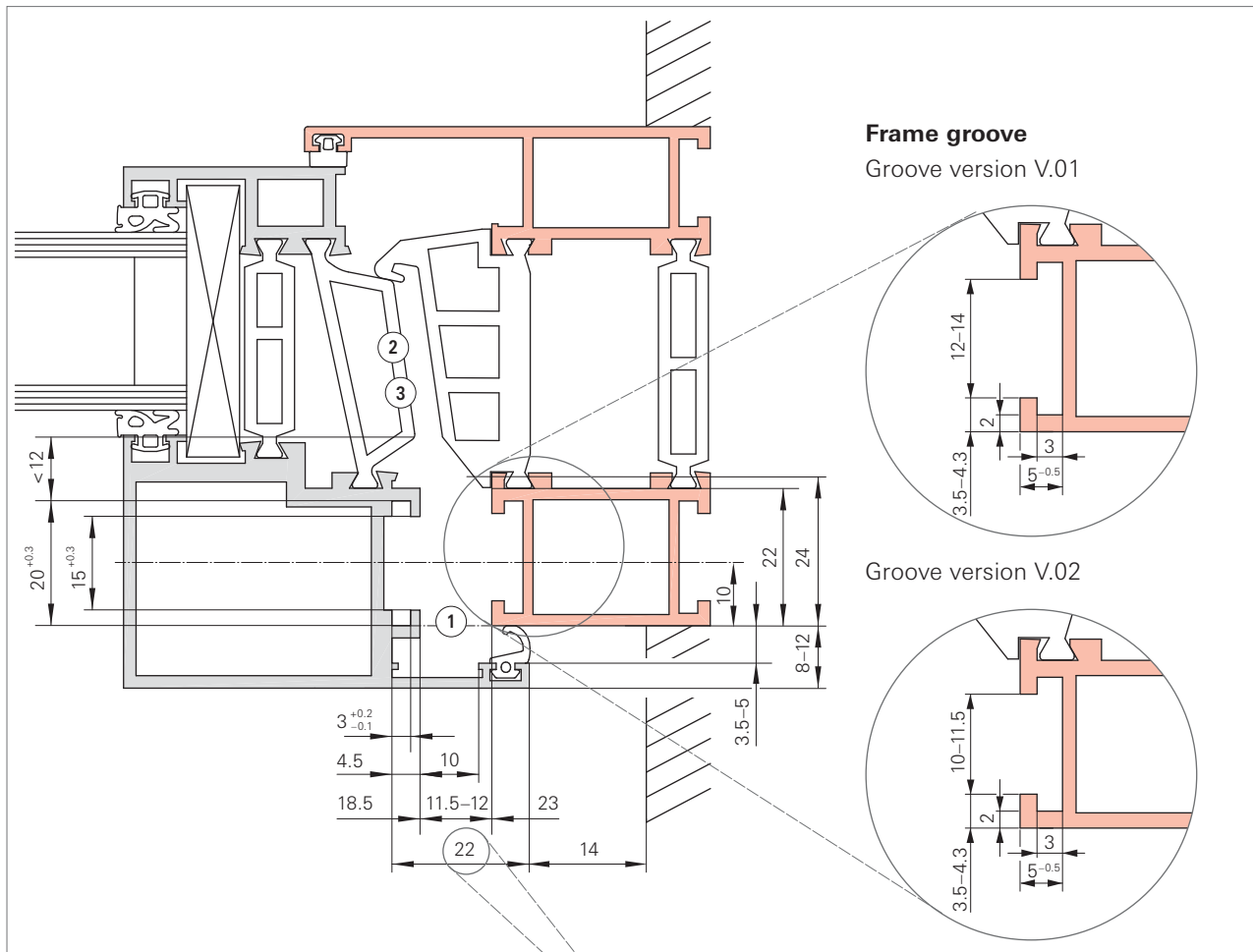
- ⑯ Central gasket
- ⑰ Frame clamping groove for hardware components (frame glazing-bead groove)
- ⑱ Exterior profile shell (frame)
- ⑲ Interior reveal
- ⑳ Interior profile shell frame
- ㉑ Frame profile thickness
- ㉒ Thermal break



Dimensions

- ㉓ Hardware axis
- ㉔ Clearance
- ㉕ Chamber dimension (for hardware)
- ㉖ Frame clearance
- ㉗ Overlap width
- ㉘ Overlap height (including gasket)
- ㉙ Overlap coverage
- ㉚ Hinge passage





NOTE!

All connecting-rod dimensions with respect to an overlap width of 22 mm. Upon deviating overlap widths, the connecting-rod dimensions have to be adjusted accordingly.

Required space and profile machining AluVision

Frame / sash

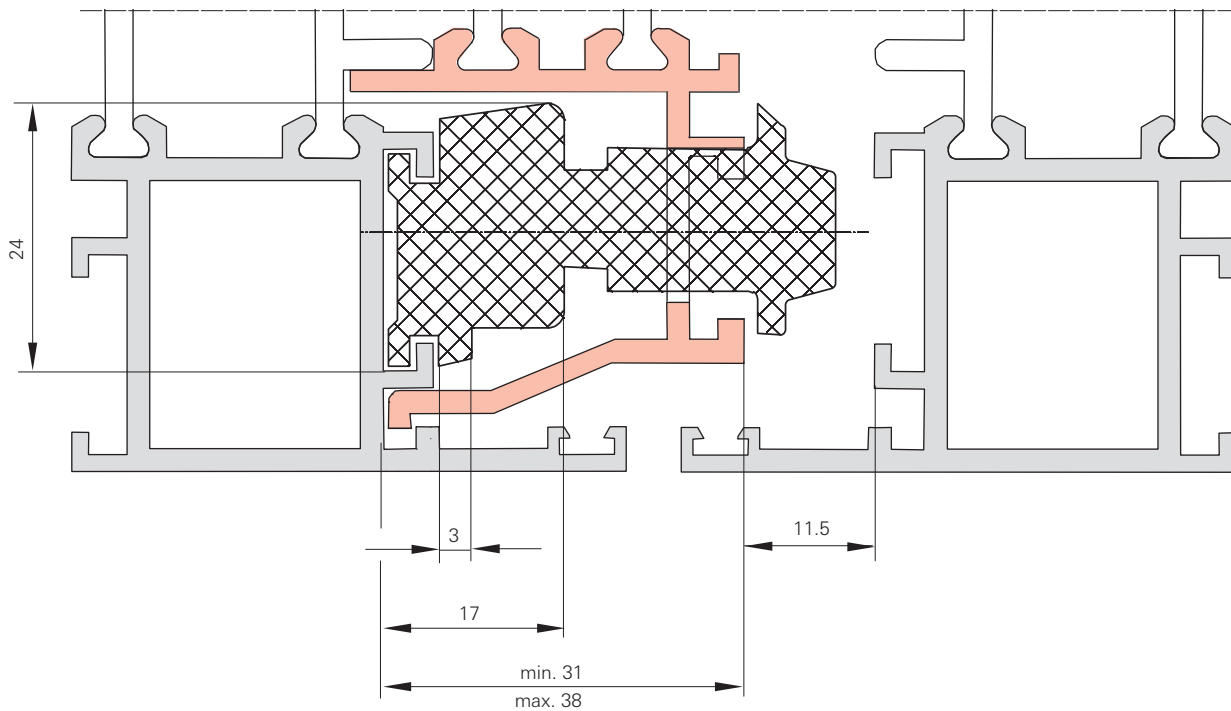
- ① It is imperative to adhere to the sash-frame alignment!
- ② 12° for a sash width of 370 mm, 9° for a sash width of 500 mm with a profile thickness of maximum 100 mm.
- ③ No contact lip from the central gasket etc. may extend beyond the connecting-rod C-groove plane.

Upon deviating dimensions, please consult with Roto! All dimensions in mm.

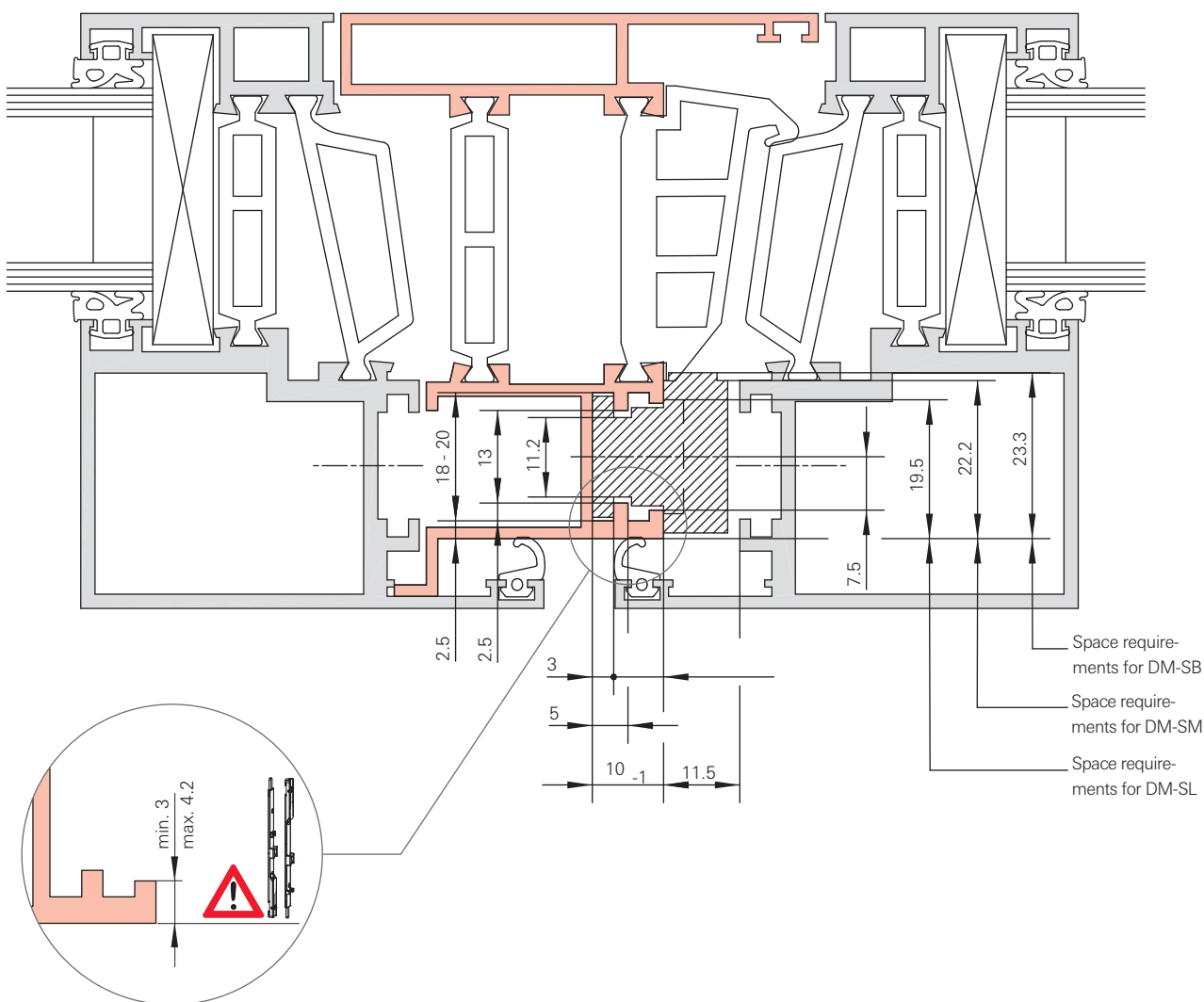
Roto information

Advice on the profile

Required space for 2-sashed (dummy mullion profile without fixed centre post)



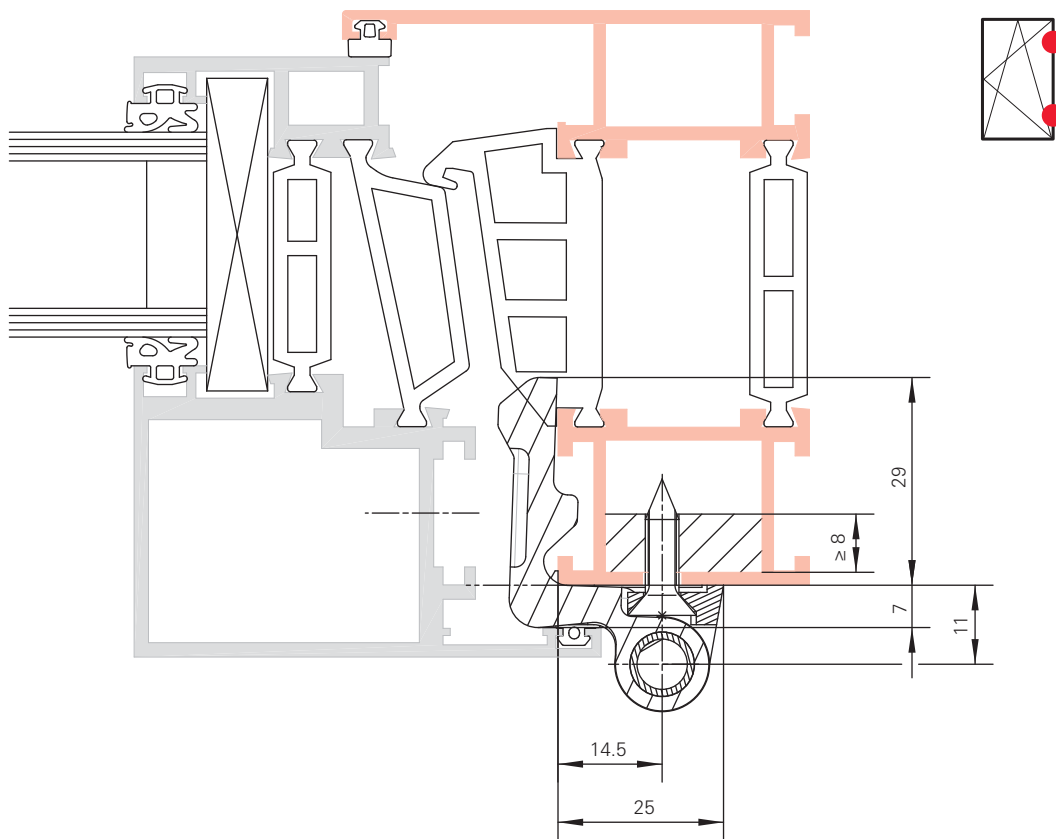
Espagnolette version DM-SM, DM-SL, DM-SB



Roto information

Advice on the profile

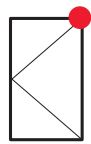
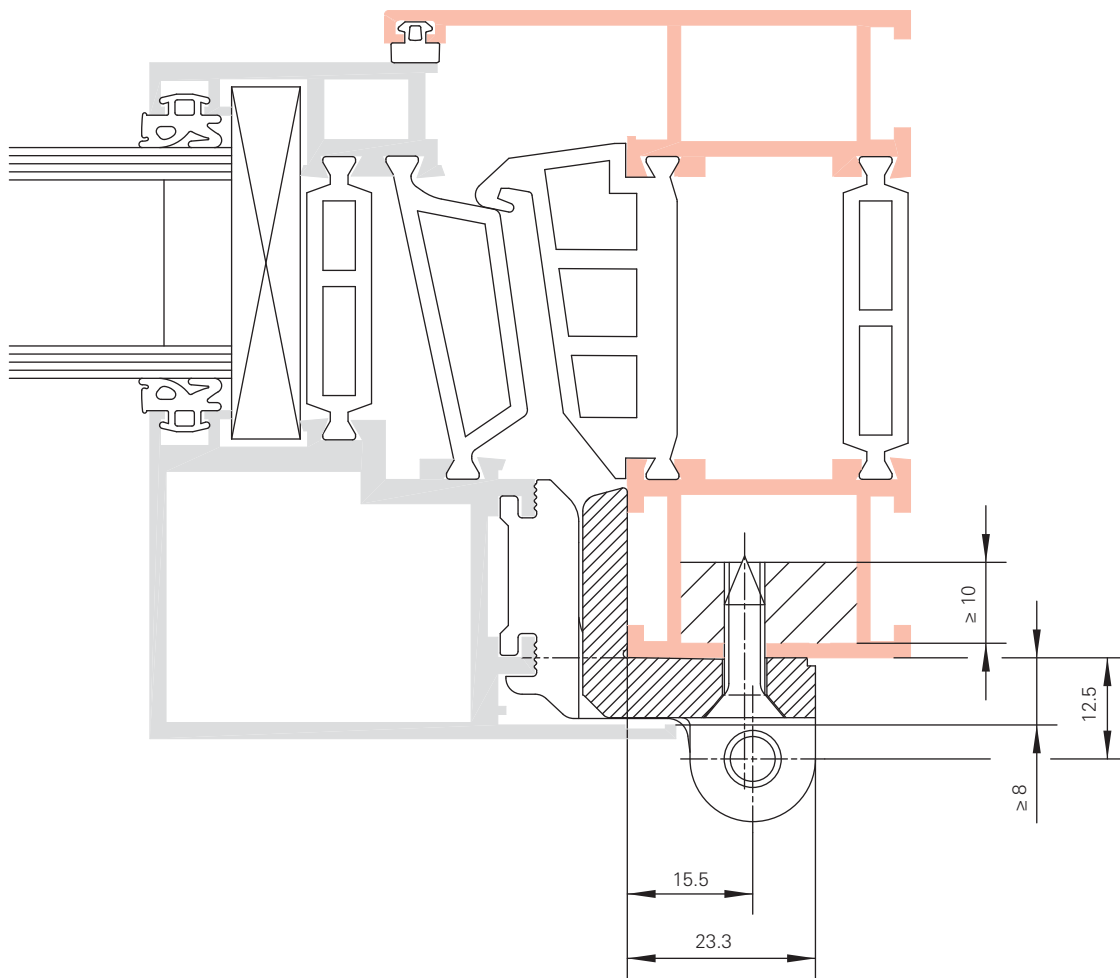
200 kg Tilt&Turn and Turn-Only sashes

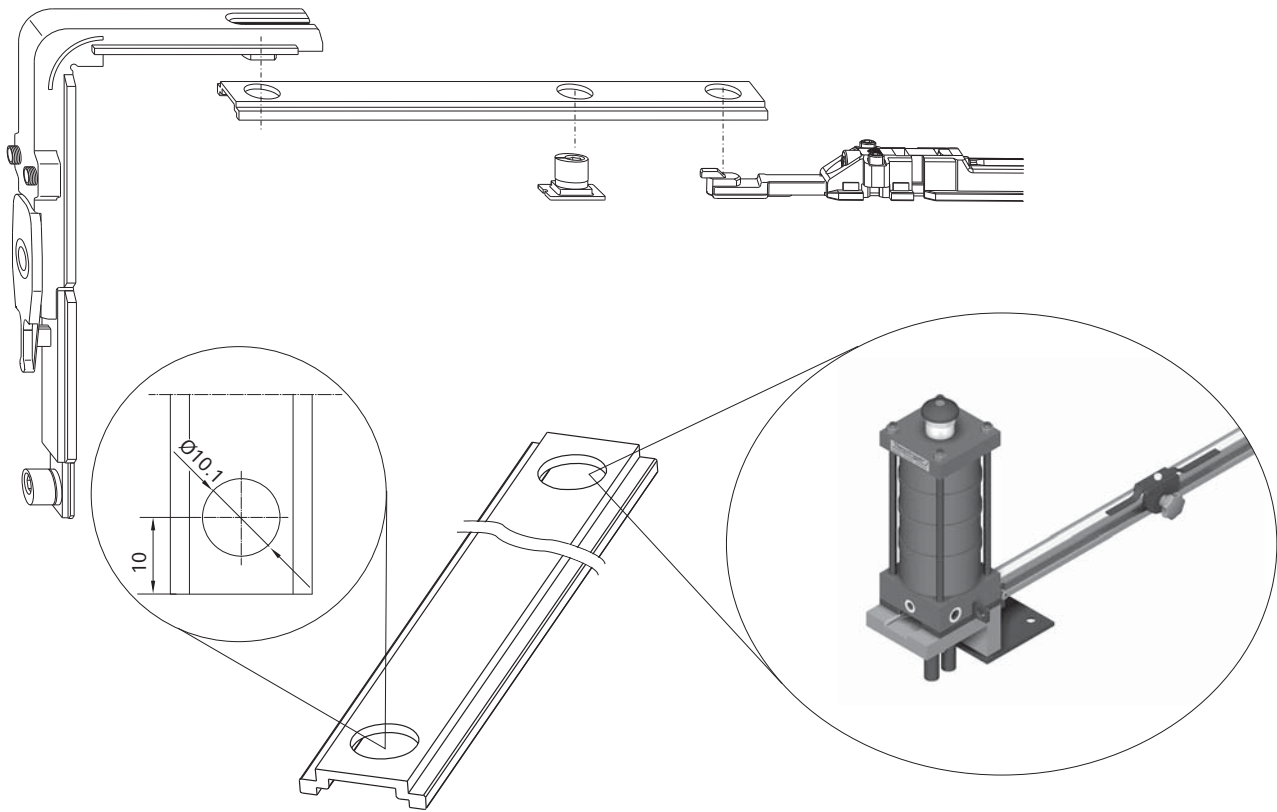


Roto information

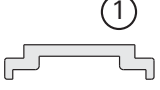
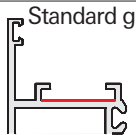

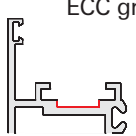

Advice on the profile

300 kg Turn-Only sashes





Connecting-rod application

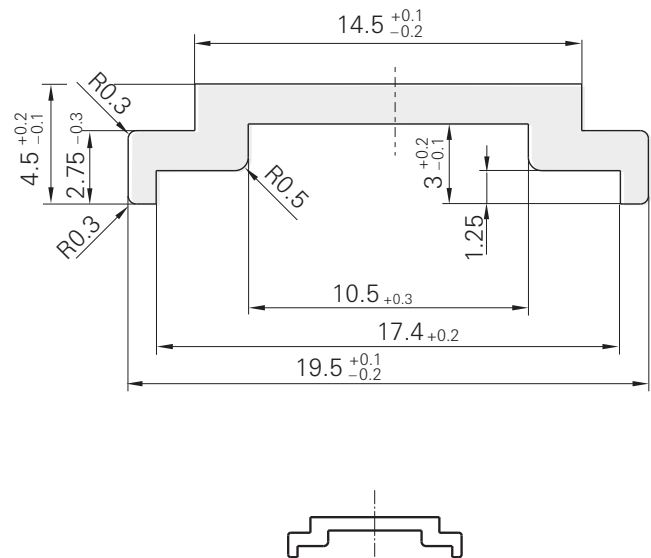
	 (made of ALU)
Standard groove 	
ECC groove 	

① Connecting-rod geometry applicable for sash profiles with and without extended connecting-rod C-groove (ECC groove).

Ideal pre-conditions

With the 10 mm coupling point AluVision offers even more security against destruction and enables easier fabrication.

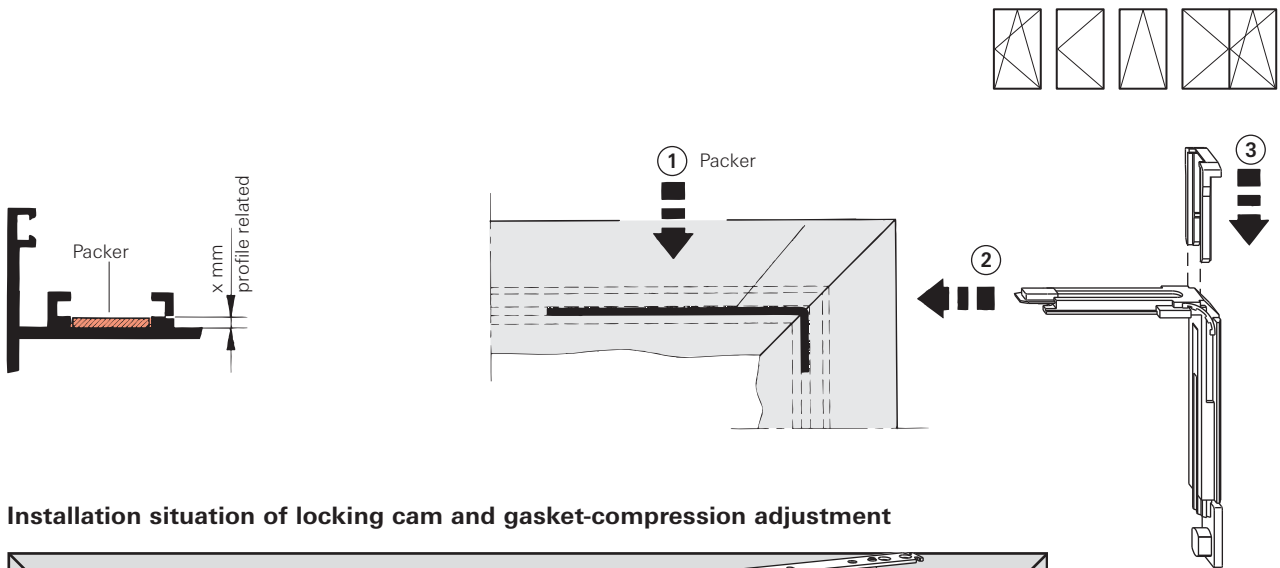
The product lines AluVision T 300, AluVision T 540 and AluVision Designo are compatible with almost all conventional profile systems.



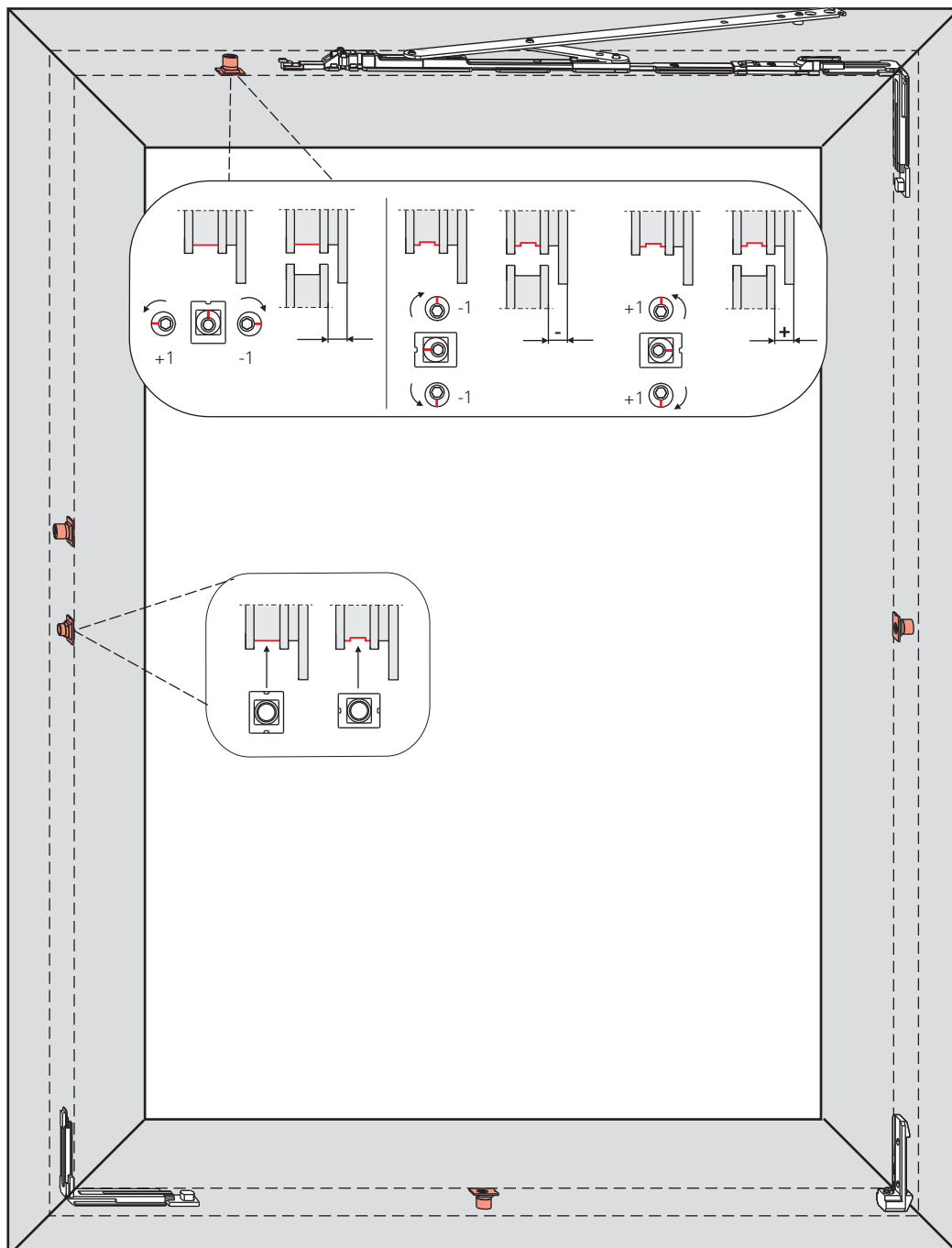
- The locking cams can be inserted into the connecting-rod from underneath in an anti-jemmy manner
- Budget-priced locking components
- Gasket-compression adjustment via eccentric cams (± 1 mm)
- The centre lock can be randomly located along the connecting-rod
- Continuous connecting-rod can be implemented on the handle side
- Material saving due to the connecting-rod's smaller cross section

Roto information

Components for extended connecting-rod C-groove (ECC groove)
Installation situation of locking cam and gasket-compression adjustment



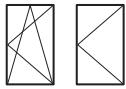
Installation situation of locking cam and gasket-compression adjustment



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Tilt&Turn and Turn-Only hardware 80 kg

T&T, TU-ON-adj



Limitation of sash formats depending on the glass thickness

Application range T&T

Sash width **SW** 390 – 1600 mm

Sash height **SH** 580 – 2400 mm

Sash weight **S.kg** max. 80 kg

Application range TU-ON-adj

Sash width **SW** 370 – 1600 mm

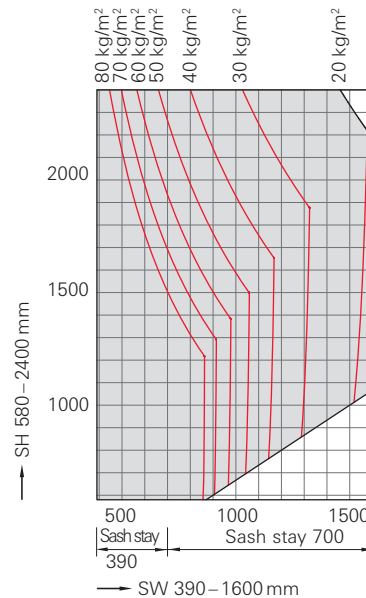
Sash height **SH** 500 – 2400 mm

Sash weight **S.kg** max. 80 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm / m² glass thickness = 2.5 kg

 = Impermissible application range



Turn-Only hardware – 50 kg

TU-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 370–1400 mm

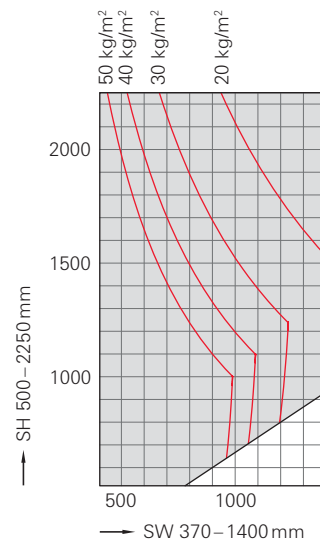
Sash height **SH** 500–2250 mm

Sash weight **S.kg** max. 50 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm / m² glass thickness = 2.5 kg

 = Impermissible application range



Application diagrams

Application diagrams

Roto AluVision T 300

Tilt-Only hardware, handle on top, 70 kg

Tilt-Only hardware 70 kg

TI-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 500–1600 mm

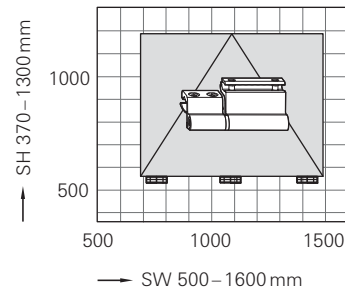
Sash height **SH** 370–1300 mm

Sash weight **S.kg** max. 70 kg

The information in the application diagram refers to the glass weight in kg/m².

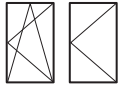
1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range



Tilt&Turn / Turn-Only hardware – 90 kg

T&T, TU-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW**405–1600 mm

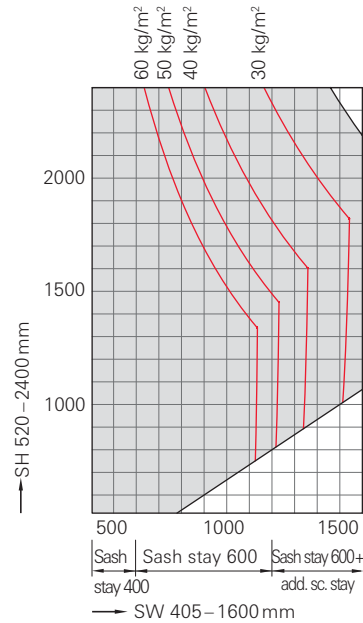
Sash height **SH**520–2400 mm

Sash weight **S.kg** max. 90 kg

The information in the application diagram refers to the glass weight in kg/m².

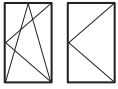
1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range



Tilt&Turn / Turn-Only hardware 130 kg

T&T, TU-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW**405 – 1600 mm

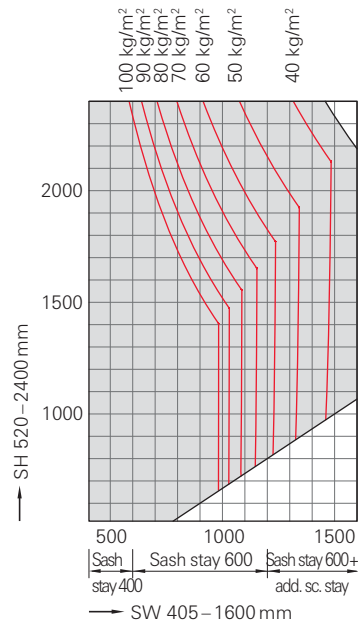
Sash height **SH**520 – 2400 mm

Sash weight **S.kg** max. 130 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm / m² glass thickness = 2.5 kg

 = Impermissible application range



Tilt&Turn hardware – 200 kg
 T&T



Limitation of sash formats depending on the glass thickness

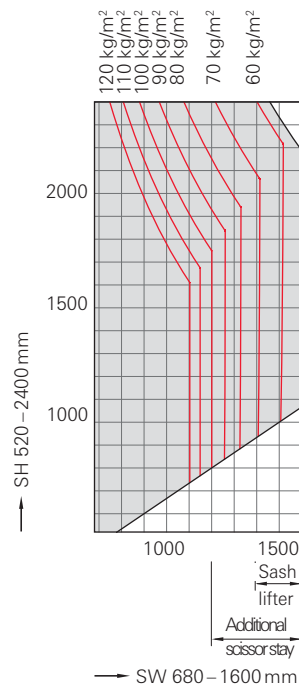
Application range

Sash width **SW** 680 – 1600 mm
 Sash height **SH** 520 – 2400 mm
 Sash weight **S.kg** max. 200 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm / m² glass thickness = 2.5 kg

 = Impermissible application range



Turn-Only hardware (EU hinge) – 50 kg

TU-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 405 – 1400 mm

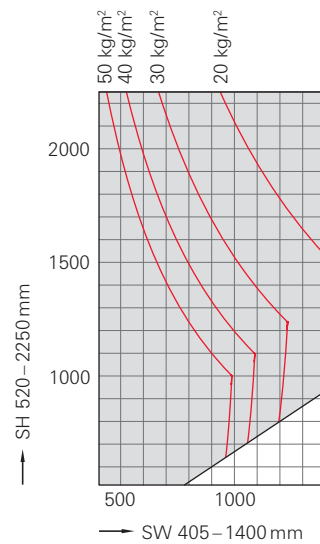
Sash height **SH** 520 – 2250 mm

Sash weight **S.kg** max. 50 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm / m² glass thickness = 2.5 kg

 = Impermissible application range



Application diagrams

Turn-Only hardware 70 kg

TU-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 405 – 1400 mm

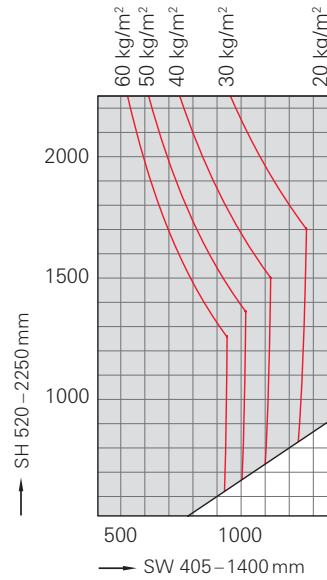
Sash height **SH** 520 – 2250 mm

Sash weight **S.kg** max. 70 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm / m² glass thickness = 2.5 kg

 = Impermissible application range



Turn-Only hardware 200 kg

TU-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 600 – 1600 mm

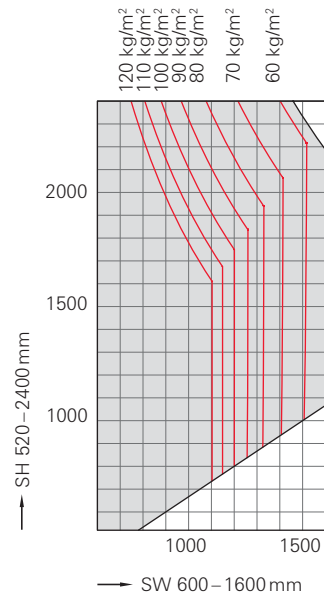
Sash height **SH** 520 – 2400 mm

Sash weight **S.kg** max. 200 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm / m² glass thickness = 2.5 kg

 = Impermissible application range



Turn-Only hardware – 300 kg

TU-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 690 – 1600 mm

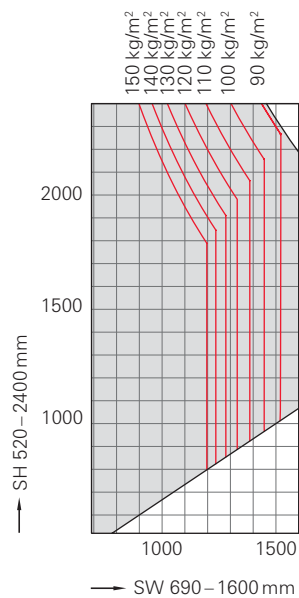
Sash height **SH** 520 – 2400 mm

Sash weight **S.kg** max. 300 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm / m² glass thickness = 2.5 kg

 = Impermissible application range



Tilt-Only hardware, handle on top (EU hinge) – 70 kg

TI-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 520 – 1600 mm

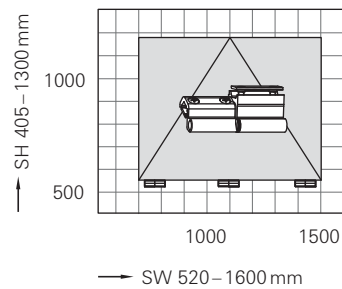
Sash height **SH** 405 – 1300 mm

Sash weight **S.kg** max. 70 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range



Application diagrams

Application diagrams

Roto AluVision T 540

Tilt-Only hardware, handle on top, 130 kg

Tilt-Only hardware, handle on top, 130 kg

TI-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 520 – 1600 mm

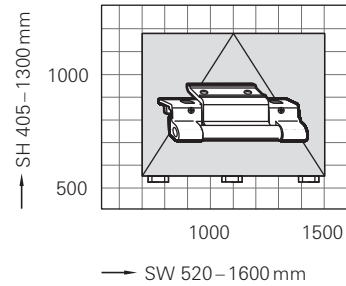
Sash height **SH** 405 – 1300 mm

Sash weight **S.kg** max. 130 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range



Tilt-Only hardware, handle on side, 130 kg

TI-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 520 – 1600 mm

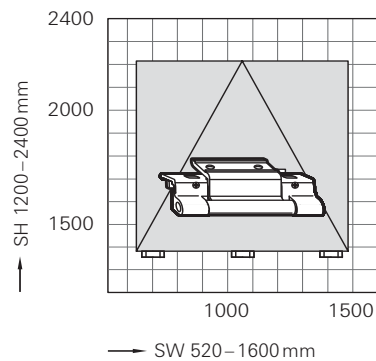
Sash height **SH** 1200 – 2400 mm

Sash weight **S.kg** max. 130 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range



Application diagrams

Application diagrams

Roto AluVision T 540

Tilt-Only hardware, handle on top, 200 kg

Tilt-Only hardware, handle on top, 200 kg

TI-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 520 – 1600 mm

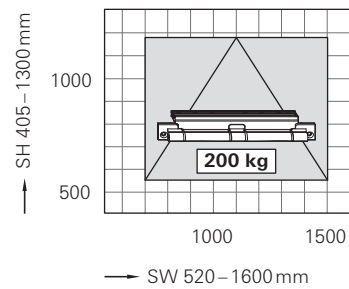
Sash height **SH** 405 – 1300 mm

Sash weight **S.kg** max. 200 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range



Tilt-Only hardware, handle on side – 200 kg

TI-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 650 – 1600 mm

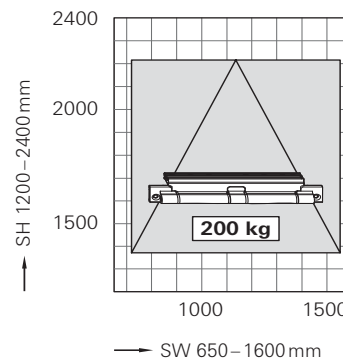
Sash height **SH** 1200 – 2400 mm

Sash weight **S.kg** max. 200 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range



Application diagrams

Tilt-First hardware 90 kg
 TF



Limitation of sash formats depending on the glass thickness

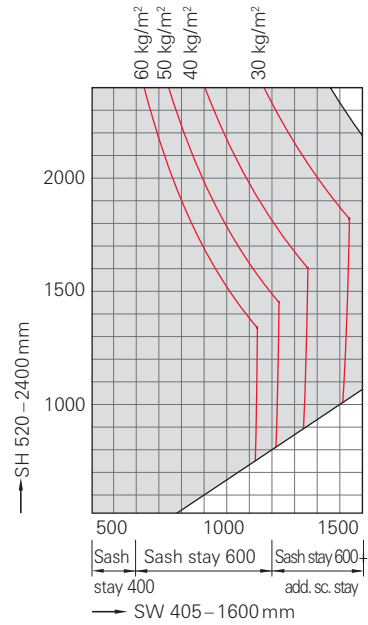
Application range

Sash width **SW** 390 – 1600 mm
 Sash height **SH** 520 – 2400 mm
 Sash weight **S.kg** max. 90 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm / m² glass thickness = 2.5 kg

= Impermissible application range



Tilt-First hardware 130 kg
 TF



Limitation of sash formats depending on the glass thickness

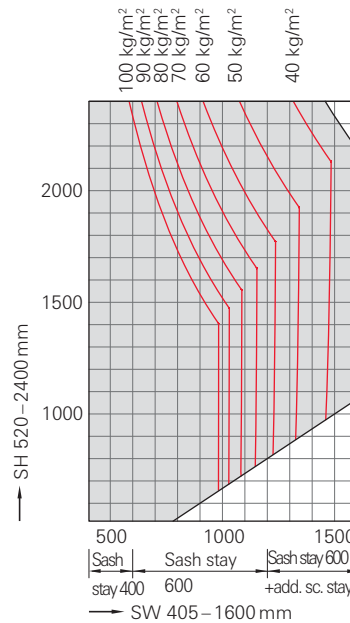
Application range

Sash width **SW** 390 – 1600 mm
 Sash height **SH** 520 – 2400 mm
 Sash weight **S.kg** max. 130 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm / m² glass thickness = 2.5 kg

= Impermissible application range



Application diagrams

Tilt-First hardware 200 kg
 TF



Limitation of sash formats depending on the glass thickness

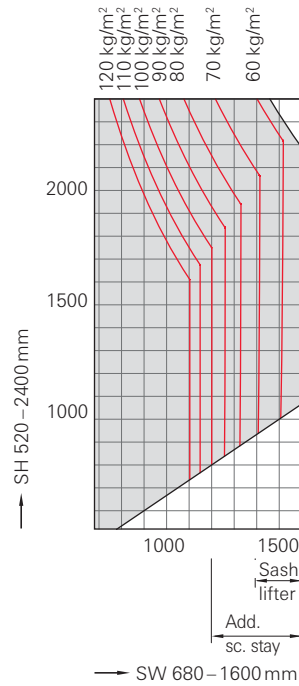
Application range

Sash width **SW** 680 – 1600 mm
 Sash height **SH** 520 – 2400 mm
 Sash weight **S.kg** max. 200 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm / m² glass thickness = 2.5 kg

 = Impermissible application range



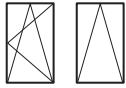
Application diagrams

Roto AluVision Designo

Tilt&Turn, Tilt-First, Tilt-Only hardware, handle on side, 100 kg

Tilt&Turn hardware, Tilt-First hardware, Tilt-Only hardware, handle on side up to 100 kg without load transfer device

T&T, TF, TI-ONs



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 500 – 1600 mm

Sash height **SH** 555 – 2400 mm

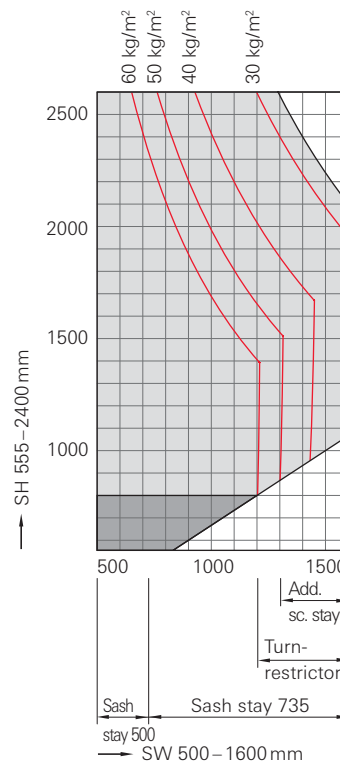
Sash weight **S.kg** max. 100 kg

The information in the application diagram refers to the glass weight in kg / m².

1 mm / m² glass thickness = 2.5 kg

 = Impermissible application range

 = Tilt-depth regulator



Application diagrams

Roto AluVision Designo

Tilt&Turn, Tilt-First, Turn-Only, Tilt-Only hardware, handle on side, 80 up to 150 kg

Tilt&Turn hardware, Tilt-First hardware, Turn-Only hardware, Tilt-Only hardware, handle on side 80 up to 150 kg with load transfer device

T&T, TF, TI-ONS, TU-ON



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 735–1600 mm

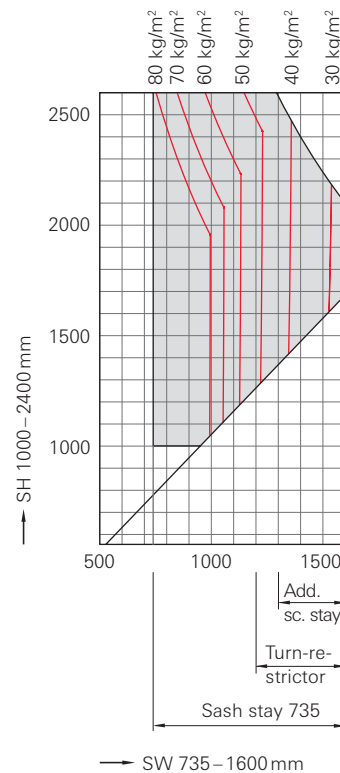
Sash height **SH** 1000–2400 mm

Sash weight **S.kg** 80 – 150 kg
(with load transfer device set 150 kg)

The information in the application diagram refers to the glass weight in kg / m².

1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range



Turn-Only hardware up to 80 kg without load transfer device
 TU-ON



Limitation of sash formats depending on the glass thickness

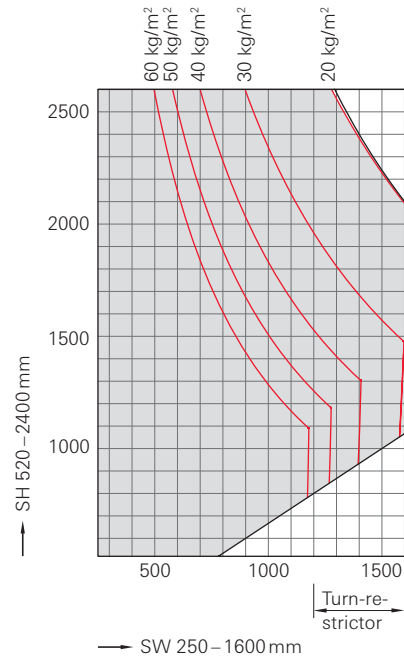
Application range

Sash width **SW** 250 – 1600 mm
 Sash height **SH** 520 – 2400 mm
 Sash weight **S.kg** max. 80 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm / m² glass thickness = 2.5 kg

 = Impermissible application range



Tilt-Only hardware, handle on top – 100 kg

TI-ONt



Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 520–1600 mm

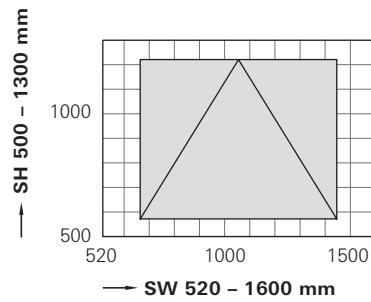
Sash height **SH** 500–1300 mm

Sash weight **S.kg** max. 100 kg

The information in the application diagram refers to the glass weight in kg/m².

1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range



Application diagrams

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Lever-operated espagnolette, concealed, coupleable	74

Simply well made: Roto AluVision T 300

Often an economical, universally applicable hardware solution for all Turn-Only and Tilt-Only applications is demanded. But without compromising the quality. And Roto has developed the AluVision T 300 exactly for this reason. The economically priced hardware system extends the product range for light and medium-weight window sashes, in particular for the southern European and Asian markets. Thanks to preassembled, clampable components, the installation time and expense is considerably reduced. Roto AluVision T 300 is the entry-level solution for many applications.

Never was adjustment easier.

The proof for the innovative Roto technology is the corner drive: The tool-free fastening is carried out by an insertable retaining fork. The mishandling device is already integrated. In addition, AluVision T 300 offers various adjusting possibilities. The sash can be laterally adjusted while still hinged and due to the new rebate hinge solution, the adjustment of Turn-Only sashes is particularly easy.

Rebate hinge solution



Stay-arm hinge with stay bearing



Corner hinge with pivot rest



Corner drive with retaining fork



Just one preassembled clamp-strips for all profiles.

For AluVision T 300 we have developed a standardised, aesthetically attractive hinge side for Turn-Only and Tilt&Turn sashes. All components are preassembled as standard and can be mounted using just one clamp-strip. This increases the installation security and reduces your fabrication time. Stay-arm hinge and corner hinge, as well as the stay bearings and pivot rests are non-handed. Due to the fact that fewer components are used, AluVision T 300 also reduces stockkeeping.

Well-proven espagnolette with new handle design.

The handle gives a window its character. This central element is visible and tangible for customers displaying the quality and ease of operation of the fenestration technology. Roto offers you a proven geared-handle for AluVision T 300. It fulfils the RAL criteria and is presented with a new and extremely attractive handle design. Make use of this highlight for your sales success.

Ideal for Turn-Only and Tilt&Turn solutions.

A common requirement is to implement standard openings. Roto developed a uniform, aesthetically attractive hinge-side for all Tilt&Turn, Turn-Only and Tilt-Only windows with sash weights up to 80 kg. Left or right handed sashes? As you wish. Economical and practically universally applicable.

The system advantages at a glance:

- Economically priced product in Roto quality
- Opening types: Tilt&Turn, Turn-Only and dummy mullion sashes
- For sashes up to 80 kg
- Time-saving installation due to clampable hardware
- To be used in all frame grooves from 10 up to 14 mm
- Multiple adjusting capabilities
- Straightforward corner drive retention
- Use of jigs kept to a minimum
- New, elegant handle design
- Aesthetically pleasing hinges



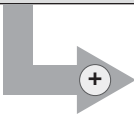
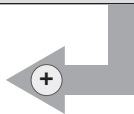
- Applicable with aluminium profiles with:
 - Overlap width: 21.5 mm / 22 mm,
 - clearance: 11.5 mm,
 - hardware axis 9.5 / 10 mm
- Hinge passage: 3 – 5 mm
- Hardware certified according to QM 328

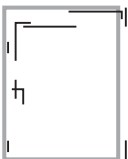
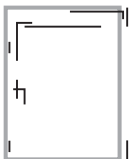
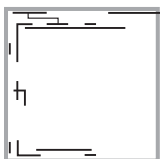

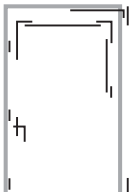
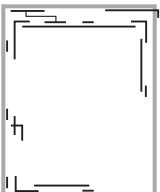
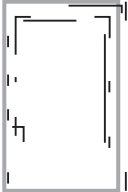
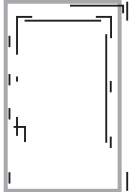

- Clampable hinge side in the frame groove with preassembled clamp-strips
- Gasket-compression adjustable via eccentric cams
- Same hinge-side aesthetics for Tilt&Turn and Turn-Only sashes, components non-handed, no visible screws, all RAL colour tones and other surface-finishes possible
- Corrosion resistance grade 5 (sash-stay rod made of stainless steel)
- T&T sash stay with integrated lateral adjustment while still hinged
- Turn-Only sash optionally with rebate hinge and integrated lateral adjustment while still hinged

- Lateral adjustment in the pivot rest via spacing fork, straightforward vertical adjustment in the clamping corner bracket
- Centre locks can be randomly located due to insertable locking cams
- Corner drive with integrated mishandling device
- T 300 geared-handle upon request with mishandling device against incorrect operation

- Concealed dummy-mullion hardware (sash with floating mullion) in the versions:
 - Alu DM (concealed lever-operated espagnolette for dummy mullion)
 - Alu DM-SB (shootbolt)
 - Alu DM-SM (surface-mounted lever-operated espagnolette)
 - Alu DM-SL (slider)

Example: T 300 in silver (V.01)									
SW	390 – 700 mm		701 – 1300 mm		1301 – 1600 mm				
SH	Pcs	Description	Material no.	Pcs	Description	Material no.	Pcs	Description	Material no.
580 – 1200 mm	1	Locking components V.01	486495	1	Locking components V.01	486495	1	Locking components V.01	486493
	1	Sash stay 390	490172	1	Sash stay 700	490171	1	Sash stay 700	490171
	1	Hinge-side set T&T	488297	1	Hinge-side set T&T	488297	1	Hinge-side set T&T	488297
1201 – 1800 mm				The above-mentioned components, combined with: Pcs Description Material no. 1 Corner drive CL set V.01 334668					
				The above-mentioned components, combined with: Pcs Description Material no. 2 Locking cam, insertable 334671 2 Striker V.01 490182					
1801 – 2400 mm									

Espagnolette			
		Geared-handle Pcs Description Material no. 1 T 300 espagnolette 486161 1 T connector set 335184 1 or: Connector set 486273	

SW	390 – 700 mm		701 – 1300 mm		1301 – 1600 mm		
SH							
580 – 1200 mm							
1201 – 1800 mm							
1801 – 2400 mm							

Note: The number of centre locks depends on the profile stability (profile system) and is to be adapted in accordance with the requirements resp. the stress test groups.

Example: T 300 in silver (V.01)																					
SW	370 – 1300 mm*		1301 – 1400 mm*																		
SH																					
500 – 1200 mm	<table border="1"> <thead> <tr> <th>Pcs</th> <th>Description</th> <th>Material no.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Locking components V.01</td> <td>486533</td> </tr> <tr> <td>1</td> <td>Turn-Only hinge</td> <td>486480</td> </tr> </tbody> </table>	Pcs	Description	Material no.	1	Locking components V.01	486533	1	Turn-Only hinge	486480		<table border="1"> <thead> <tr> <th>Pcs</th> <th>Description</th> <th>Material no.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>TU-ON C locking components V.01</td> <td>486535</td> </tr> <tr> <td>1</td> <td>Turn-Only hinge</td> <td>486480</td> </tr> </tbody> </table>	Pcs	Description	Material no.	1	TU-ON C locking components V.01	486535	1	Turn-Only hinge	486480
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1	Striker V.01	490182																			
1	Locking cam, insertable	334671																			
1801 – 2250 mm		Above-mentioned components, combined with: <table border="1"> <thead> <tr> <th>Pcs</th> <th>Description</th> <th>Material no.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CL frame striker V.01</td> <td>212768</td> </tr> <tr> <td>1</td> <td>CL sash striker</td> <td>212770</td> </tr> <tr> <td>1</td> <td>Striker V.01</td> <td>490182</td> </tr> <tr> <td>1</td> <td>Locking cam, insertable</td> <td>334671</td> </tr> </tbody> </table>	Pcs	Description	Material no.	1	CL frame striker V.01	212768	1	CL sash striker	212770	1	Striker V.01	490182	1	Locking cam, insertable	334671				
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1	Locking cam, insertable	334671																			

* Note the different application diagrams for the different hinge sides.

Espagnolettes														
		Geared-handle <table border="1"> <thead> <tr> <th>Pcs</th> <th>Description</th> <th>Material no.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>T 300 espagnolette</td> <td>486161</td> </tr> <tr> <td>1</td> <td>T connector set</td> <td>335184</td> </tr> <tr> <td>1</td> <td>or: Connector set</td> <td>486273</td> </tr> </tbody> </table>	Pcs	Description	Material no.	1	T 300 espagnolette	486161	1	T connector set	335184	1	or: Connector set	486273
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1	T 300 espagnolette	486161												
1	T connector set	335184												
1	or: Connector set	486273												

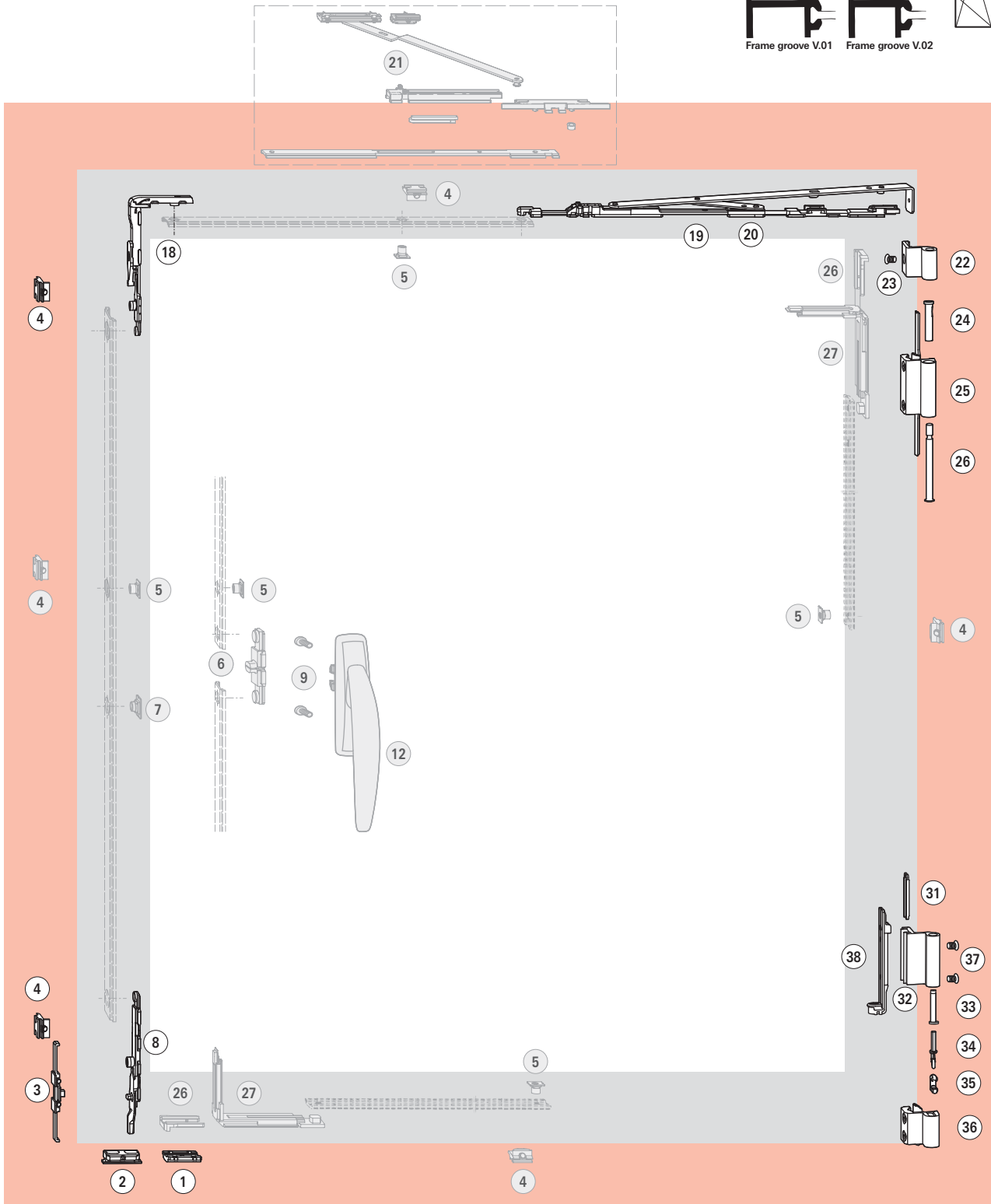
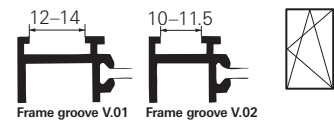
SW	370 – 1300 mm		1301 – 1400 mm
SH			
500 – 1200 mm			
1201 – 1800 mm			
1801 – 2250 mm			

Note: The number of centre locks depends on the profile stability (profile system) and is to be adapted in accordance with the requirements resp. the stress test groups.

Roto AluVision T300

Tilt&Turn hardware

80 kg, hinge passage 3–3.5 mm



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 390–1600 mm
 Sash height **SH** 580–2400 mm
 Sash weight **S.kg** max. 80 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3–3.5 mm:

Basic sets					
'10' basic sets locking components and sash stays					
Pos.	Pcs	Description	Colour	PQ	Material no.
–	1	Locking components V.01	–	10	486495
–	1	Locking components V.02	–	10	486496
19	1	Sash stay 700	–	10	490171
20	1	Sash stay 390	–	10	490172

Hinge-side set T&T (axis dimension 9.5 mm)					
Pos.	Pcs	Description	Colour	PQ	Material no.
–	1	Hinge-side set	Silver R01.5	10	488297
			Jet-black R06.2	10	488298
			Traffic-white R07.2	10	488299
			Special colour SP COL	10	488301

Hinge-side set T&T unpainted (axis dimension 9.5 mm)					
Pos.	Pcs	Description	Colour	PQ	Material no.
–	1	Hinge-side set	raw	50	488300
		incl. small hardware items			

Bulk packaging					
Locking components and sash stays					
Pos.	Pcs	Description	Colour	PQ	Material no.
18	1	Corner drive with MD	–	50	490173
8	1	Tilt lock bolt	–	100	490179
1	1	Run-up block	–	100	212008
4	2	Striker V.01	–	100	490182
		Striker V.02	–	100	490183
5	4	Locking cam, insertable	–	100	334671
2	1	Horizontal Tilt&Turn striker	–	100	488269
3	1	Anti-jemmy device V.01	–	100	490180
		Anti-jemmy device V.02	–	100	490181
19	1	Sash stay 700	–	10	490171
20	1	Sash stay 390	–	10	490172

Bulk packaging espagnolettes and connectors → S. 204

Optional					
Espagnolettes and connectors					
Pos.	Pcs	Description	Colour	PQ	Material no.
12	1	T 300 espagnolette	Silver R01.5	10	486161
			Jet-black R06.2	10	486162
			Traffic-white R07.2	10	486163
			Unpainted, raw uncoated	50	486165
			Special colour SP COL	10	486164
7	1	Connector set	–	10	486273
9					

Alternatively: connector, size-related					
Pos.	Pcs	Description	Colour	PQ	Material no.
6	1	T connector set	–	10	335184
9					

Additional components, size-related					
Pos.	Pcs	Description	Colour	PQ	Material no.
5	4	Locking cam, insertable	–	100	334671
4	4	Striker V.01	–	100	490182
		Striker V.02	–	100	490183
27	2	Corner drive CL	–	20	331013
26	2	Alignment fork	–	100	221772
21	1	Additional scissor stay V.01	–	10	331024
		Additional scissor stay V.02	–	10	331025

Hinge-side T&T (axis dimension 9.5 mm)					
Pos.	Pcs	Description	Colour	PQ	Material no.
32	1	Corner hinge	Silver R01.5	50	488302
			Jet-black R06.2	50	488303
			Traffic-white R07.2	50	488304
			Special colour SP COL	50	488336
36	1	Pivot rest	Silver R01.5	50	486467
			Jet-black R06.2	50	486468
			Traffic-white R07.2	50	486469
			Special colour SP COL	50	488266
22	1	Stay-arm hinge	Silver R01.5	50	486471
			Jet-black R06.2	50	486472
			Traffic-white R07.2	50	486473
			Special colour SP COL	50	488267
25	1	Stay bearing	Silver R01.5	50	486475
			Jet-black R06.2	50	486476
			Traffic-white R07.2	50	486477
			Special colour SP COL	50	488268

	1	Misc. small components pack:		50	486454
38	1	Clamping corner bracket	–	100	486485
34	1	Pivot-rest pin	–	100	486489
31	1	Spacing fork	–	100	486486
37	2	Countersunk screw M5 x 12	–	100	486487
35	1	Pivot-rest insert	–	100	486488
33	1	Corner hinge sleeve	–	100	486490
26	1	Stay-bearing pin	–	100	486491
24	1	Stay-bearing bush	–	100	486492
23	1	Countersunk screw M5 x 8	–	100	212752

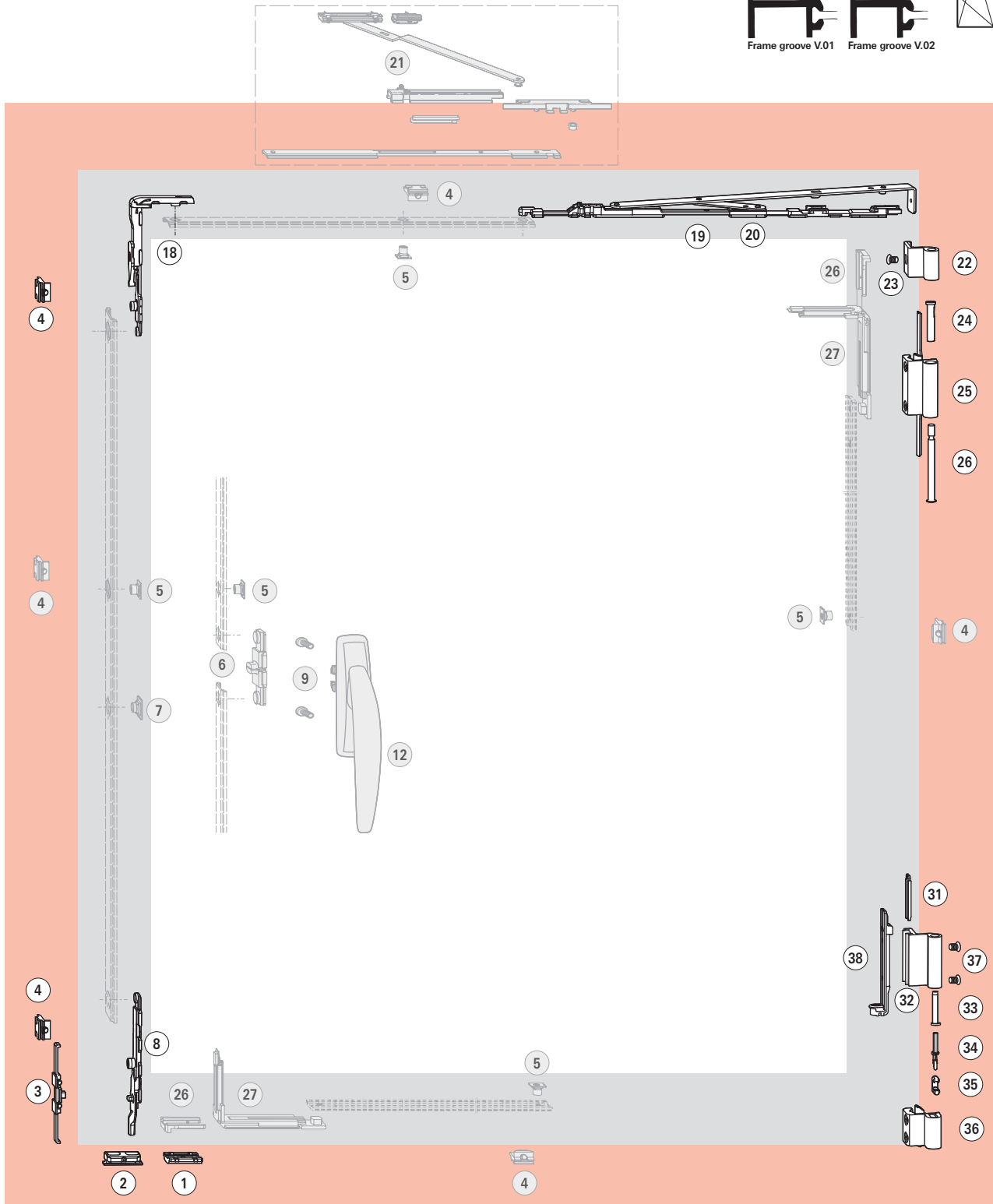
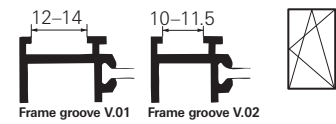
Hinge side, unpainted T&T (axis dimension 9.5 mm)					
Pos.	Pcs	Description	Colour	PQ	Material no.
36	1	Pivot rest	raw	50	486470
22	1	Stay-arm hinge	raw	50	486474
25	1	Stay bearing	raw	50	486478
–	1	Installation bag	raw	50	488338
32	1	Corner hinge	raw	50	488335
–	1	Misc. small components pack	raw	50	486454

Roto AluVision T300

Roto AluVision T300

Tilt&Turn hardware

80 kg, hinge passage 3.5–3.5 mm



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 390–1600 mm
 Sash height **SH** 580–2400 mm
 Sash weight **S.kg** max. 80 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Basic sets					
'10' basic sets locking components and sash stays					
Pos.	Pcs	Description	Colour	PQ	Material no.
–	1	Locking components V.01	–	10	486495
–	1	Locking components V.02	–	10	486496
19	1	Sash stay 700	–	10	490171
20	1	Sash stay 390	–	10	490172

Hinge-side set T&T (axis dimension 10 mm)					
Pos.	Pcs	Description	Colour	PQ	Material no.
–	1		Silver R01.5	10	486497
			Jet-black R06.2	10	486498
			Traffic-white R07.2	10	486499
			Special colour SP COL	10	486456

Hinge-side set T&T unpainted (axis dimension 10 mm)					
Pos.	Pcs	Description	Colour	PQ	Material no.
–	1	Hinge-side set	raw	50	486500
		incl. small hardware items			

Bulk packaging					
Locking components and sash stays					
Pos.	Pcs	Description	Colour	PQ	Material no.
18	1	Corner drive with MD	–	50	490173
8	1	Tilt lock bolt	–	100	490179
1	1	Run-up block	–	100	212008
4	2	Striker V.01	–	100	490182
		Striker V.02	–	100	490183
5	4	Locking cam, insertable	–	100	334671
2	1	Horizontal Tilt&Turn striker	–	100	488269
3	1	Anti-jemmy device V.01	–	100	490180
		Anti-jemmy device V.02	–	100	490181
19	1	Sash stay 700	–	10	490171
20	1	Sash stay 390	–	10	490172

Bulk packaging espagnolettes and connectors → S. 204

Optional					
Espagnolettes and connectors					
Pos.	Pcs	Description	Colour	PQ	Material no.
12	1	T 300 espagnolette	Silver R01.5	10	486161
			Jet-black R06.2	10	486162
			Traffic-white R07.2	10	486163
			Unpainted, raw uncoated	50	486165
			Special colour SP COL	10	486164
7	1	Connector set	–	10	486273
9					

Alternatively: connector, size-related					
Pos.	Pcs	Description	Colour	PQ	Material no.
6	1	T connector set	–	10	335184
9					

Additional components, size-related					
Pos.	Pcs	Description	Colour	PQ	Material no.
5	4	Locking cam, insertable	–	100	334671
4	4	Striker V.01	–	100	490182
		Striker V.02	–	100	490183
27	2	Corner drive CL	–	20	331013
26	2	Alignment fork	–	100	221772
21	1	Additional scissor stay V.01	–	10	331024
		Additional scissor stay V.02	–	10	331025

Hinge-side T&T (axis dimension 10 mm)					
Pos.	Pcs	Description	Colour	PQ	Material no.
32	1	Corner hinge	Silver R01.5	50	486463
			Jet-black R06.2	50	486464
			Traffic-white R07.2	50	486465
			Special colour SP COL	50	488265
36	1	Pivot rest	Silver R01.5	50	486467
			Jet-black R06.2	50	486468
			Traffic-white R07.2	50	486469
			Special colour SP COL	50	488266
22	1	Stay-arm hinge	Silver R01.5	50	486471
			Jet-black R06.2	50	486472
			Traffic-white R07.2	50	486473
			Special colour SP COL	50	488267
25	1	Stay bearing	Silver R01.5	50	486475
			Jet-black R06.2	50	486476
			Traffic-white R07.2	50	486477
			Special colour SP COL	50	488268

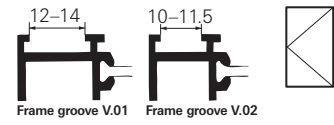
	1	Misc. small components pack:		50	486454
38	1	Clamping corner bracket	–	100	486485
34	1	Pivot-rest pin	–	100	486489
31	1	Spacing fork	–	100	486486
37	2	Countersunk screw M5 x 12	–	100	486487
35	1	Pivot-rest insert	–	100	486488
33	1	Corner hinge sleeve	–	100	486490
26	1	Stay-bearing pin	–	100	486491
24	1	Stay-bearing bush	–	100	486492
23	1	Countersunk screw M5 x 8	–	100	212752

Hinge side, unpainted T&T (axis dimension 10 mm)					
Pos.	Pcs	Description	Colour	PQ	Material no.
36	1	Pivot rest	raw	50	486470
22	1	Stay-arm hinge	raw	50	486474
25	1	Stay bearing	raw	50	486478
–	1	Installation bag	raw	50	488338
32	1	Corner hinge	raw	50	486466
–	1	Misc. small components pack	raw	50	486454

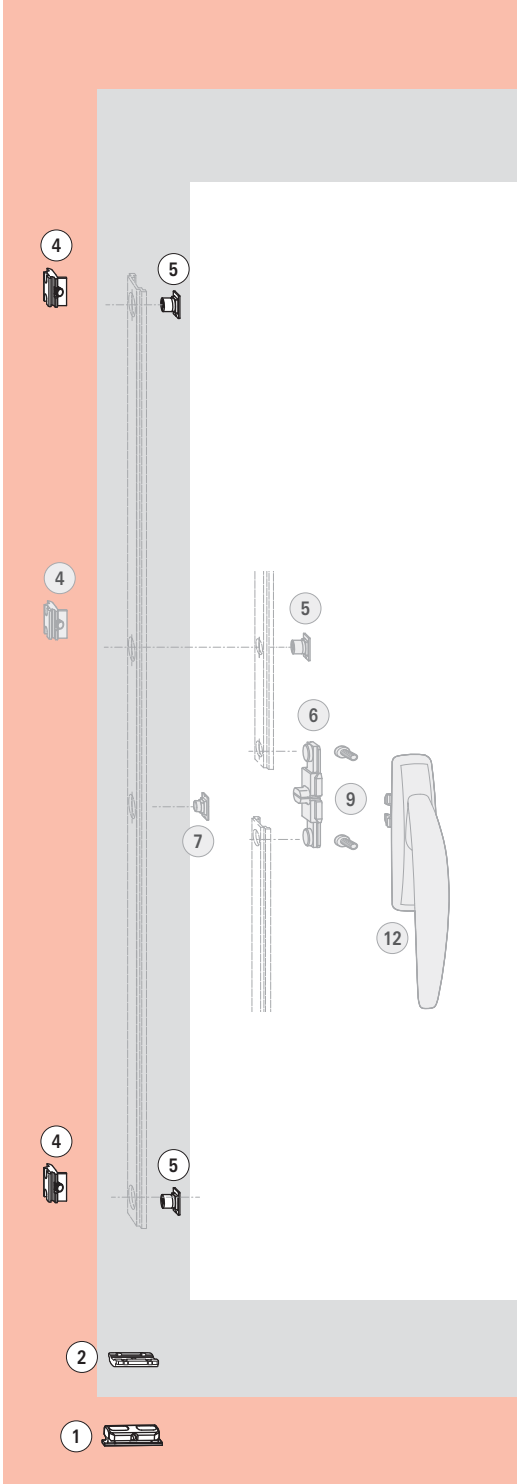
Roto AluVision T300

Turn-Only hardware

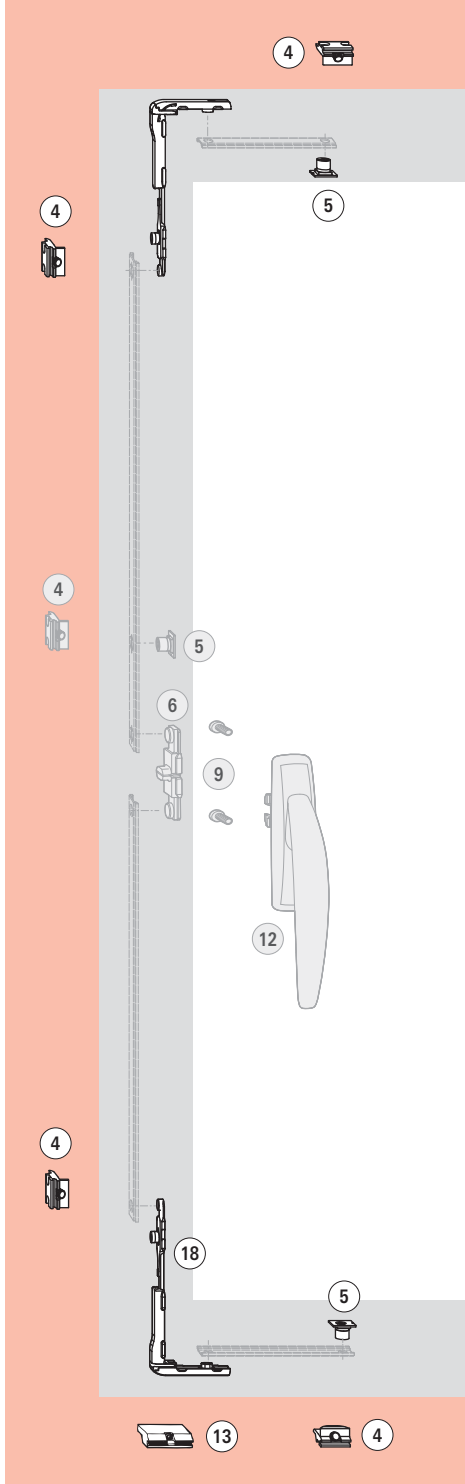
50 kg, with central locking system (TU-ON C), hinge passage 3.5–5 mm



TU-ON



TU-ON C



TU-ON & TU-ON C



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 370–1400 mm
 Sash height **SH** 500–2250 mm
 Sash weight **S.kg** max. 50 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Basic sets

'10' basic set V.01/V.02 (without hinge side)				
Pos.	Pcs	Frame-groove version	Colour	PQ Material no.
		TU-ON basic set V.01	–	486533
		TU-ON basic set V.02	–	486534

Hinge side TU-ON (preassembled R/L)

Pos.	Pcs	Description	Colour	PQ	Material no.
23	1	Turn-Only hinge side (2 hinges)		10	486480
			Silver R01.5	10	486481
			Jet-black R06.2	10	486482
			Traffic-white R07.2	25	486483
			Unpainted, raw uncoated	25	486484
			Special colourSP COL	25	486484

Bulk packaging

Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
2	1	Run-up block	–	100	212008
5	2	Insertable locking cam	–	100	334671
1	1	Horizontal Tilt&Turn striker	–	100	488269
4	2	Striker V.01	–	100	490182
		Striker V.02	–	100	490183

Bulk packaging espagnolettes and connectors → S. 204

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
12	1	T 300 espagnolette		10	486161
			Silver R01.5	10	486162
			Jet-black R06.2	10	486163
			Traffic-white R07.2	50	486165
			Unpainted, raw uncoated	10	486164
			Special colourSP COL	10	486273
7	1	Connector set	–	10	486273

Alternatively: connector, size-related

Pos.	Pcs	Description	Colour	PQ	Material no.
6	1	T connector set	–	10	335184

Additional components (height-related)

Pos.	Pcs	Description	Colour	PQ	Material no.
14	1-2	CL frame striker V.01	–	100	212768
		CL frame striker V.02	–	100	208361
15	1-2	CL sash striker	–	100	212770
4	2	Striker V.01	–	100	490182
		Striker V.02	–	100	490183
5	2	Insertable locking cam	–	100	334671

Alu TU-ON C with central locking

'10' basic set (without hinge side)				
Pos.	Pcs	Frame-groove version	Colour	PQ Material no.
		TU-ON C basic set V.01	–	486535
		TU-ON C basic set V.02	–	486536

Hinge side TU-ON (preassembled R/L)

Pos.	Pcs	Description	Colour	PQ	Material no.
23	1	Turn-Only hinge side (2 hinges)		10	486480
			Silver R01.5	10	486481
			Jet-black R06.2	10	486482
			Traffic-white R07.2	10	486483
			Unpainted, raw uncoated	25	486484
			Special colourSP COL	25	486484

Bulk packaging

Locking parts of the central locking system

Pos.	Pcs	Description	Colour	PQ	Material no.
13	1	Run-up wedge V.01	–	100	490184
		Run-up wedge V.02	–	20	490185
5	2	Locking cam, insertable	–	100	334671
4	4	Striker V.01	–	100	490182
		Striker V.02	–	100	490183
18	2	Corner drive w/o MD	–	50	490175

Bulk packaging espagnolettes and connectors → S. 204

Optional

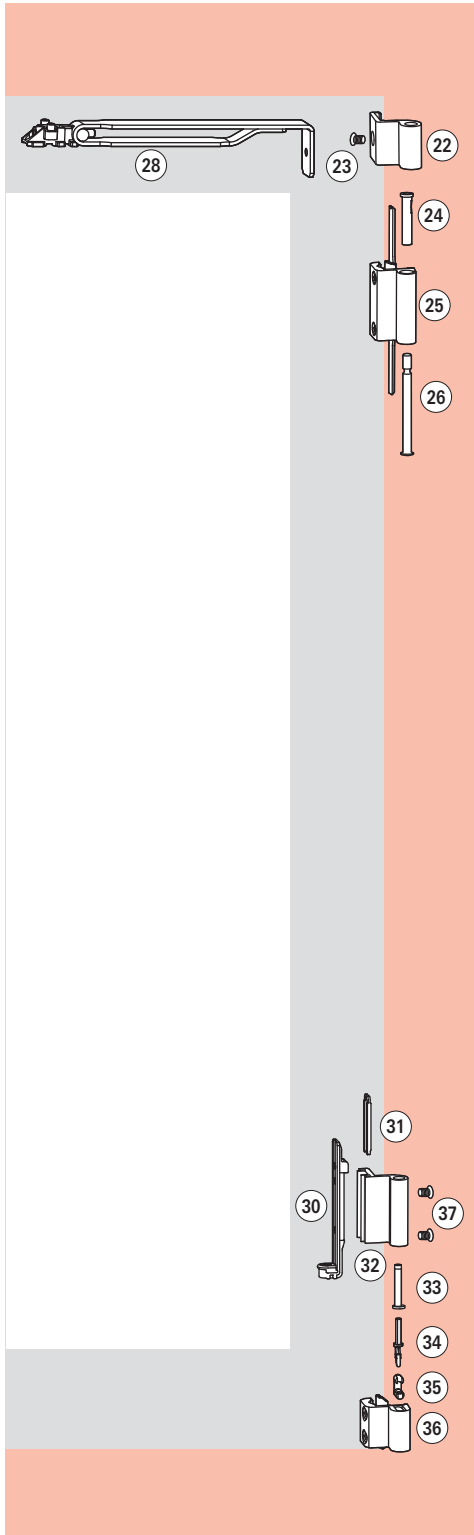
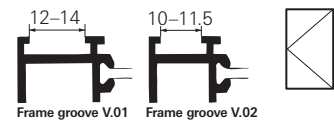
Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
12	1	T 300 espagnolette		10	486161
			Silver R01.5	10	486162
			Jet-black R06.2	10	486163
			Traffic-white R07.2	10	486165
			Unpainted, raw uncoated	50	486164
			Special colourSP COL	10	486164
6	1	T connector set	–	10	335184

Roto AluVision T300

Turn-Only hardware

80 kg, with rebate hinge (TU-ON-adj), hinge passage 3.5–5 mm



Roto AluVision T300

Turn-Only hardware

80 kg, with rebate hinge, hinge passage 3.5–5 mm

Application range

Sash width **SW** 370–1600 mm
 Sash height **SH** 500–2400 mm
 Sash weight **S.kg** max. 80 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Basic sets

Hinge-side set T&T (axis dimension 10 mm)

Pos.	Pcs	Description	Colour	PQ	Material no.
–	1		Silver R01.5	10	486497
			Jet-black R06.2	10	486498
			Traffic-white R07.2	10	486499
			Special colour SP COL	10	486456
1		Rebate hinge	–	10	486537

Hinge-side set T&T unpainted (axis dimension 10 mm)

Pos.	Pcs	Description	Colour	PQ	Material no.
–	1	Hinge-side set	raw	50	486500
		incl. small hardware items			
–	1	Rebate hinge	raw	10	486537

Bulk packaging

Hinge side T&T (axis dimension 10 mm)

Pos.	Pcs	Description	Colour	PQ	Material no.
32	1	Corner hinge	Silver R01.5	50	486463
			Jet-black R06.2	50	486464
			Traffic-white R07.2	50	486465
			Special colour SP COL	50	488265
36	1	Pivot rest	Silver R01.5	50	486467
			Jet-black R06.2	50	486468
			Traffic-white R07.2	50	486469
			Special colour SP COL	50	488266
22	1	Stay-arm hinge	Silver R01.5	50	486471
			Jet-black R06.2	50	486472
			Traffic-white R07.2	50	486473
			Special colour SP COL	50	488267
25	1	Stay bearing	Silver R01.5	50	486475
			Jet-black R06.2	50	486476
			Traffic-white R07.2	50	486477
			Special colour SP COL	50	488268
	1	Misc. small components pack:		50	486454
38	1	Clamping corner bracket	–	100	486485
34	1	Pivot-rest pin	–	100	486489
31	1	Spacing fork	–	100	486486
37	2	Countersunk screw M5 x 12	–	100	486487
35	1	Pivot-rest insert	–	100	486488
33	1	Corner hinge sleeve	–	100	486490
26	1	Stay-bearing pin	–	100	486491
24	1	Stay-bearing bush	–	100	486492
23	1	Countersunk screw M5 x 8	–	100	212752

Hinge side, unpainted T&T (axis dimension 10 mm)

Pos.	Pcs	Description	Colour	PQ	Material no.
36	1	Pivot rest	raw	50	486470
22	1	Stay-arm hinge	raw	50	486474
25	1	Stay bearing	raw	50	486478
–	1	Installation bag	raw	50	488338
32	1	Corner hinge	raw	50	486466
–	1	Misc. small components pack	raw	50	486454

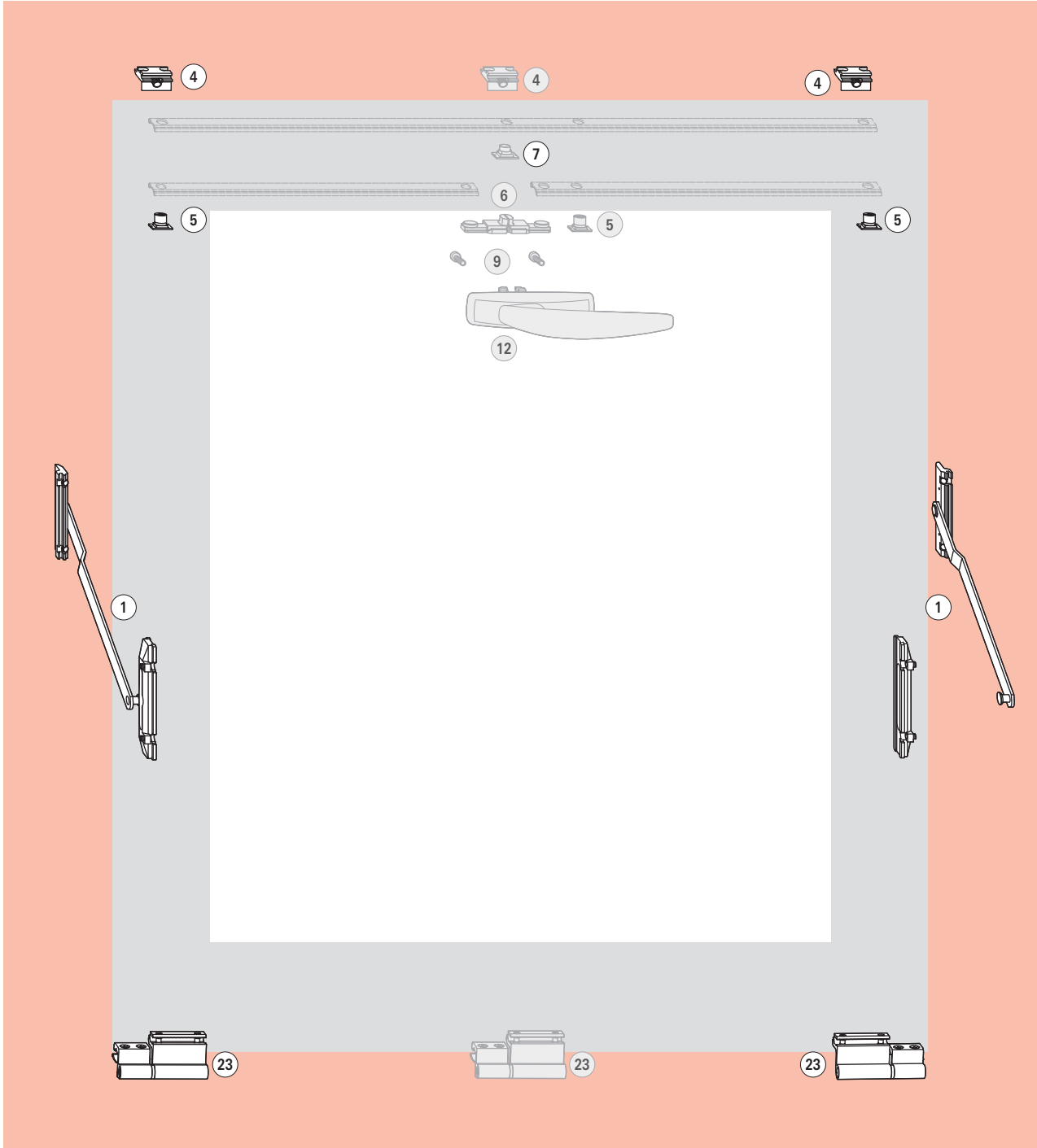
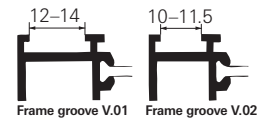
Rebate hinge

Pos.	Pcs	Description	Colour	PQ	Material no.
28	1	Rebate hinge	–	10	486537

Roto AluVision T300

Tilt-Only hardware

70 kg, hinge passage 3.5–3.5 mm



Grey parts are optional and not included in the basic set.

Roto AluVision T300

Tilt-Only hardware

70 kg, hinge passage 3.5–3.5 mm

Application range

Sash width **SW** 500–1600 mm
 Sash height **SH** 370–1300 mm
 Sash weight **S.kg** max. 70 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

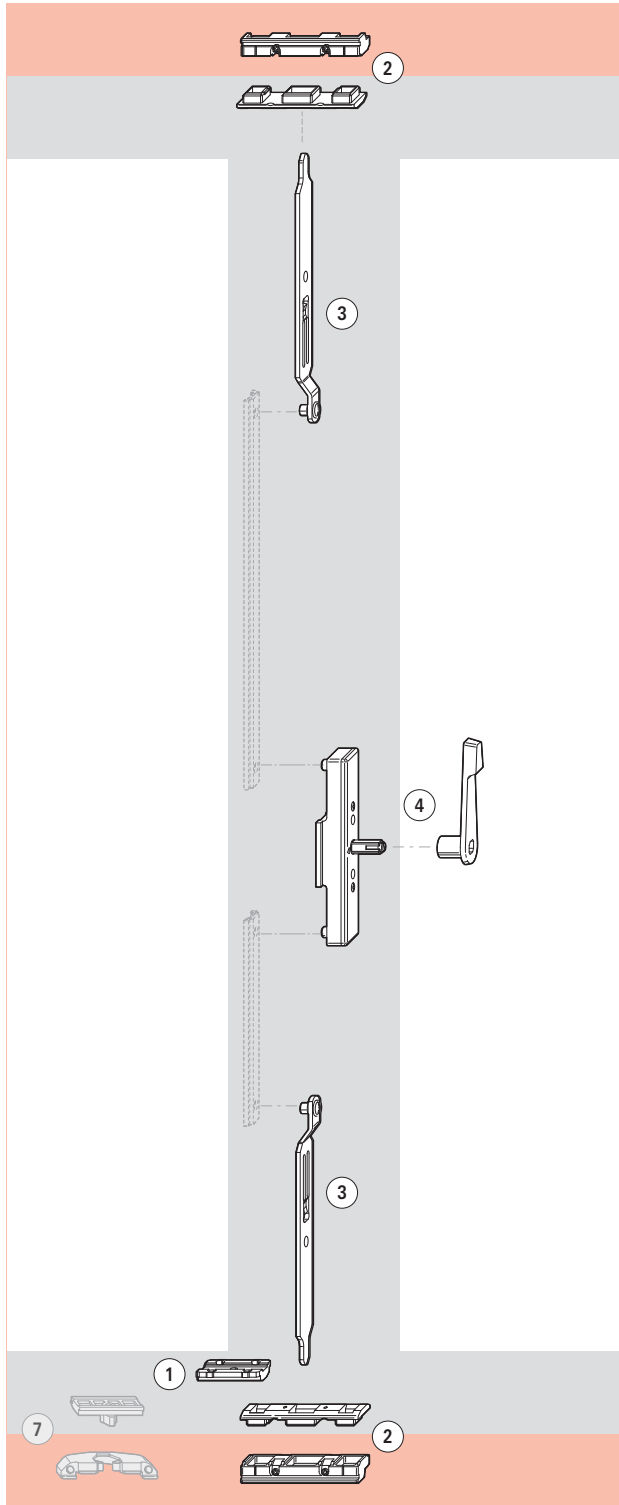
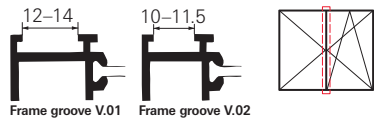
Basic sets					
'10' basic set (without hinge side)					
Pos.	Pcs	Frame-groove version	Colour	PQ	Material no.
		TI-ON basic set V.01	–		490540
		TI-ON basic set V.02	–		490541
Hinge side TU-ON (preassembled R/L)					
Pos.	Pcs	Description	Colour	PQ	Material no.
(23)	1	Turn-Only hinge side (2 hinges)			
			Silver R01.5	10	486480
			Jet-black R06.2	10	486481
			Traffic-white R07.2	10	486482
			Unpainted, raw uncoated	25	486483
			Special colourSP COL	25	486484

Bulk packaging					
Locking components					
Pos.	Pcs	Description	Colour	PQ	Material no.
(4)	2	Striker V.01	–	100	490182
		Striker V.02	–	100	490183
(5)	2	Locking cam, insertable	–	100	334671
(1)	2	Tilt-Only stay-arm V.01	–	20	331022
		Tilt-Only stay-arm V.02	–	20	331023
Bulk packaging espagnolettes and connectors				→ S. 204	

Optional					
Espagnolettes and connectors					
Pos.	Pcs	Description	Colour	PQ	Material no.
(12)	1	T 300 espagnolette			
			Silver R01.5	10	486161
			Jet-black R06.2	10	486162
			Traffic-white R07.2	10	486163
			Unpainted, raw uncoated	50	486165
			Special colourSP COL	10	486164
(7)	1	Connector set	–	10	486273
(9)					

Alternatively: connector, size-related					
Pos.	Pcs	Description	Colour	PQ	Material no.
(6)	1	T connector set	–	10	335184
(9)					

Additional components, size-related (not dep.)					
Pos.	Pcs	Description	Colour	PQ	Material no.
(7)	1	Connector-bolt, insertable	–	100	254601
(5)	1	Locking cam, insertable	–	100	334671
(4)	1	Striker V.01	–	100	490182
		Striker V.02	–	100	490183



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** (passive sash: TU-ON)....370– 1600 mm

Sash height **SH**.....max. 2400 mm

Clearance **CL** 11.5– 12 mm

Overlap width **OW**21.5– 22 mm

Basic sets DM

'10' basic set Lever-operated espagnolette, concealed (DM)

Pos.	Pcs	Description	Colour	PQ	Material no.
		DM basic set VS.1/VB.5/6	–		212200

Bulk packaging DM

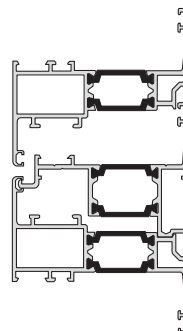
Locking components

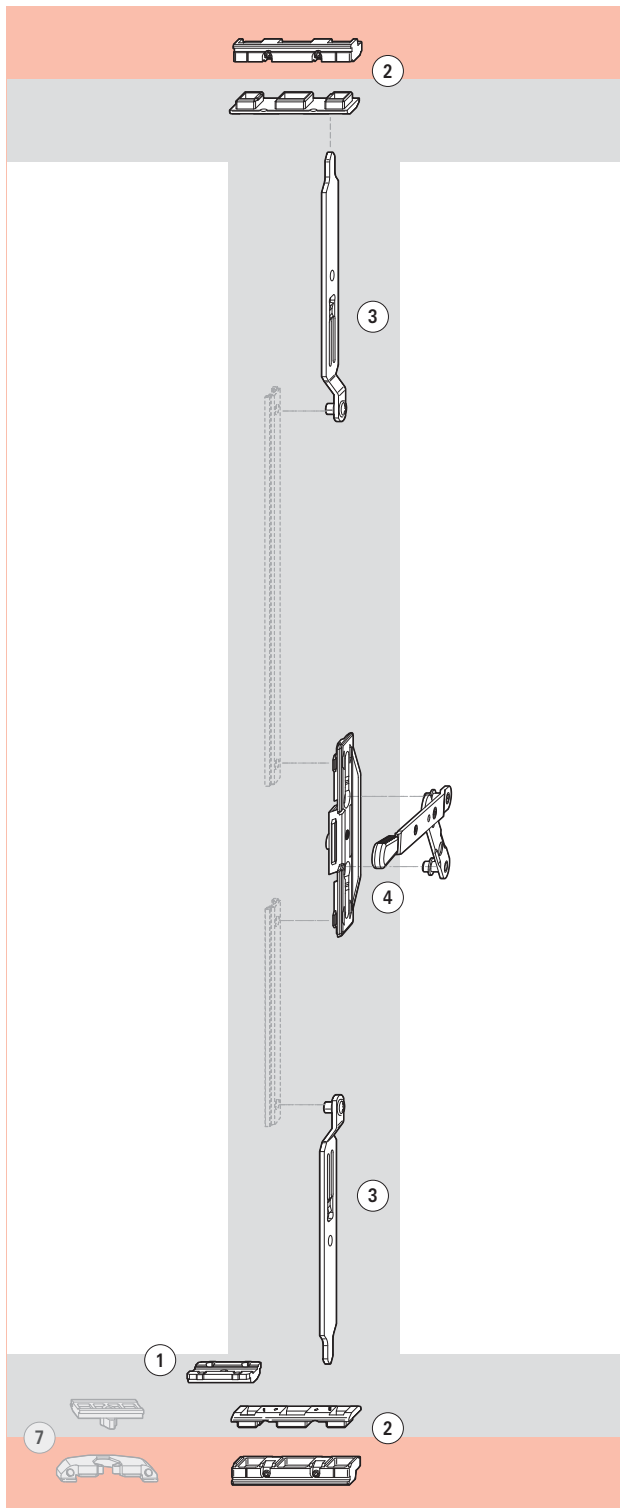
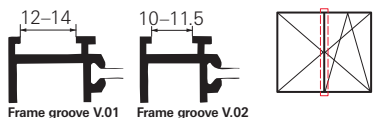
Pos.	Pcs	Description	Colour	PQ	Material no.
④	1	DM lever-operated espagnolette, concealed	–	20	212264
③	2	Shootbolt-rod	VS1 –	100	212144
②	2	Multi-ported striker	VB 5/6 –	20	212120
①	1	Run-up block	–	100	212008

Optional:

Bullet catch

Pos.	Description	Material no.
⑦	Bullet catch set	334667





Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** (passive sash: TU-ON)....370 – 1600 mm
 Sash height **SH**.....max. 2400 mm
 Clearance **CL** 11.5 – 12 mm
 Overlap width **OW**21.5 – 22 mm

Basic sets DM-SM

'10' basic set Lever-operated espagnolette, surface-mounted (DM-SM)

Pos.	Description		Material no.
	Basic set DM-SM	VS.1 – VB.1/2	212201
		VS.1 – VB.3/4	212202
		VS.1 – VB.5/6	212203
		VS.2 – VB.1/2	212204
		VS.2 – VB.3/4	212205
		VS.2 – VB.5/6	212206
		VS.3 – VB.1/2	212207
		VS.3 – VB.3/4	212208
		VS.3 – VB.5/6	212209

Bulk packaging DM-SM

Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
③	2	Shootbolt-rod	VS1 –	100	212144
		Shootbolt-rod	VS2 –		212145
		Shootbolt-rod	VS3 –		212146
②	2	Multi-ported striker	VB 1/2 –	20	212118
		Multi-ported striker	VB 3/4 –		212119
		Multi-ported striker	VB 5/6 –		212120
④	1	DM-SM espagnolette, surface-mounted	–	20	256474
①	1	Run-up block	–	100	212008

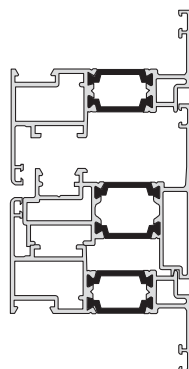
Optional:

Bullet catch

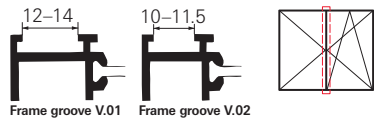
Pos.	Description	Material no.
⑦	Bullet catch set	334667

NOTE

Floating-mullion hardware DM-SM can only be used for profiles with double-C-groove.



Roto AluVision T300



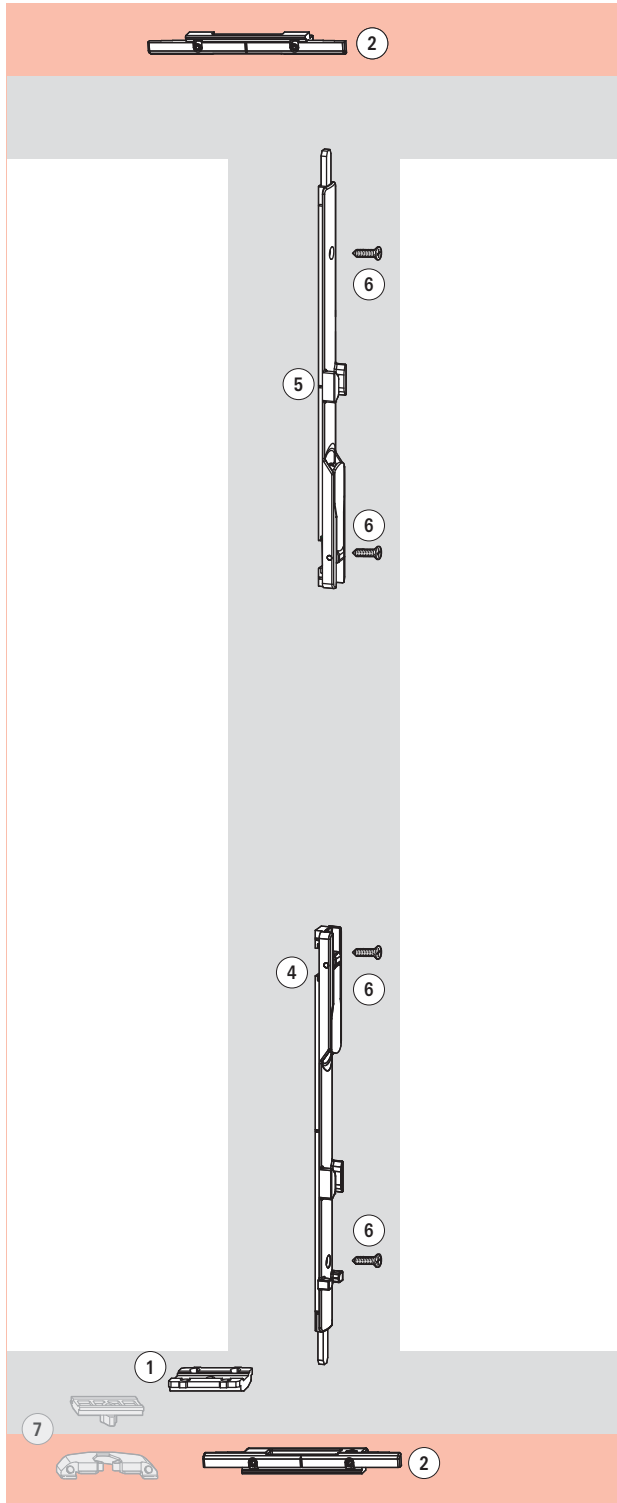
Application range

Sash width **SW** (passive sash: TU-ON)....370 – 1600 mm

Sash height **SH**.....max. 2400 mm

Clearance **CL** 11.5 – 12 mm

Overlap width **OW**21.5 – 22 mm



Basic sets DM-SB

'10' basic set Dummy mullion – shootbolt (DM-SB)

Pos.	Pcs	Description	Colour	PQ	Material no.
DM-SB basic set			–		301544

Bulk packaging DM-SB

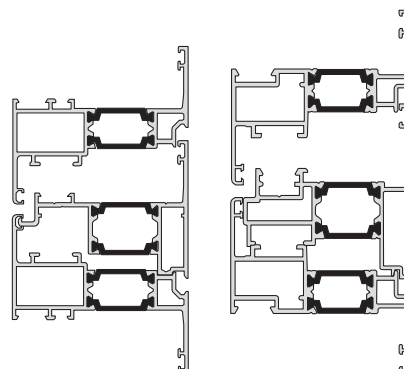
Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
5	1	DM shootbolt, top	–	50	355560
4	1	DM shootbolt, bottom	–	50	355561
2	2	DM-SB Multi-ported striker	–	100	355559
6	4	Countersunk screw 3.9 x 25	–	100	213006
1	1	Run-up block	–	100	212008

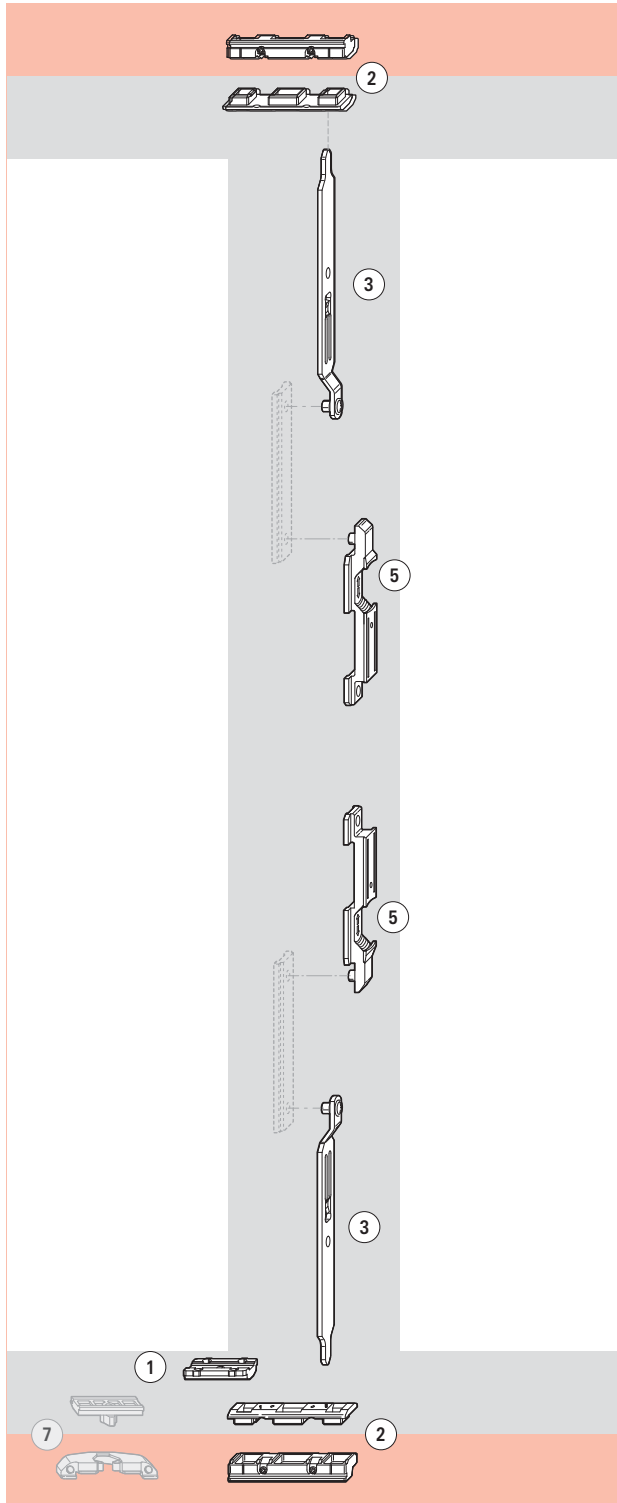
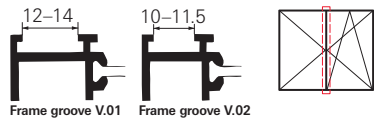
Optional:

Bullet catch

Pos.	Description	Material no.
7	Bullet catch set	334667



Grey parts are optional and not included in the basic set.



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** (passive sash: TU-ON)....370– 1600 mm

Sash height **SH**.....max. 2400 mm

Clearance **CL** 11.5– 12 mm

Overlap width **OW**21.5– 22 mm

Basic sets DM-SL

'10' basic set Slider (DM-SL)

Pos. . .	Description	Material no.
	DM-SL basic set VS.1 –VB.1/2	212210
	VS.1 –VB.3/4	212211
	VS.1 –VB.5/6	212212
	VS.2 –VB.1/2	212213
	VS.2 –VB.3/4	212214
	VS.2 –VB.5/6	212215
	VS.3 –VB.1/2	212216
	VS.3 –VB.3/4	212217
	VS.3 –VB.5/6	212218

Bulk packaging DM-SL

Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
③	2	Shootbolt-rod	VS1 –	100	212144
		Shootbolt-rod	VS2 –		212145
		Shootbolt-rod	VS3 –		212146
②	2	Multi-ported striker	VB 1/2 –	20	212118
		Multi-ported striker	VB 3/4 –		212119
		Multi-ported striker	VB 5/6 –		212120
⑤	2	Slider	VS1 –		212141
		Slider	VS2 –		212142
		Slider	VS3 –		212143
①	1	Run-up block	–	100	212008

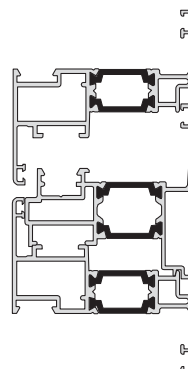
Optional:

Bullet catch

Pos.	Description	Material no.
⑦	Bullet catch set	334667

NOTE

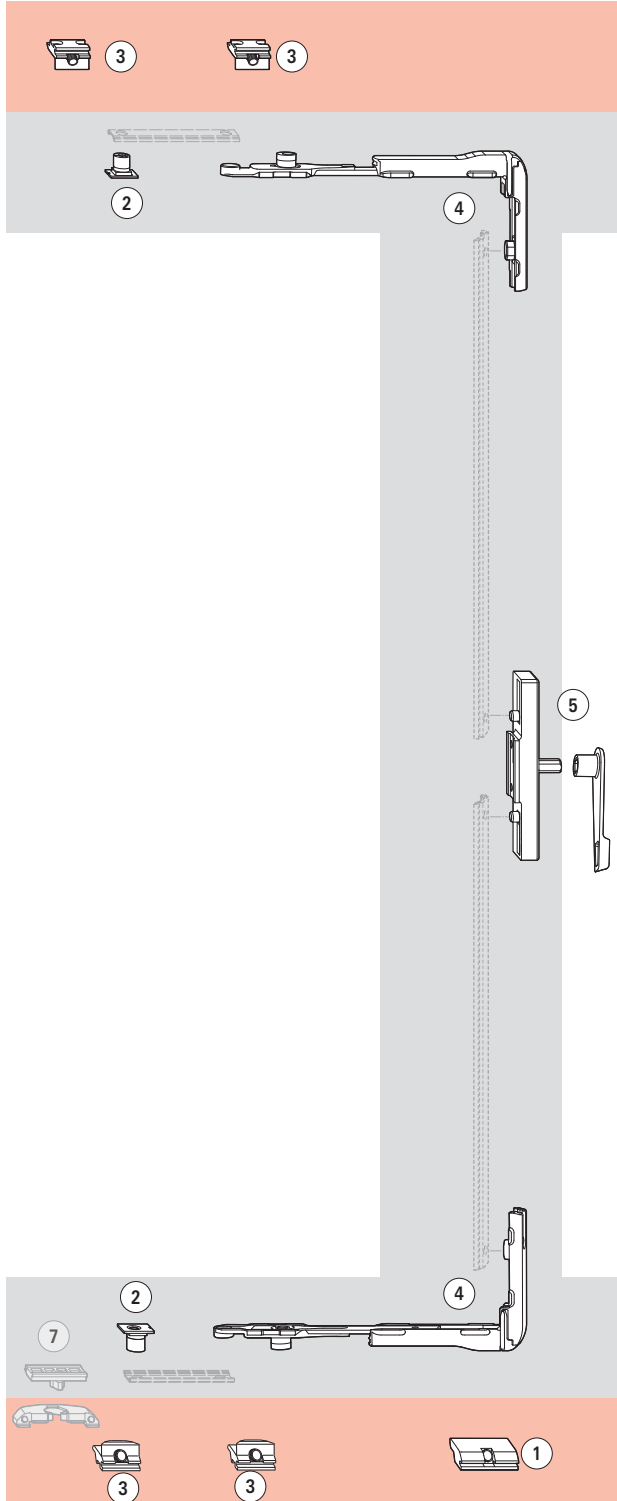
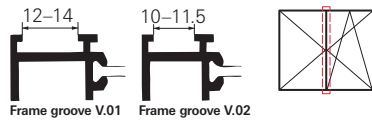
Floating-mullion hardware DM-SL can only be used for profiles with double-C-groove.



Roto AluVision T300

Floating-mullion hardware

Lever-operated espagnolette, concealed, coupleable



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** (passive sash: TU-ON)....370–1600 mm

Sash height **SH**.....max. 2400 mm

Clearance **CL** 11.5–12 mm

Overlap width **OW**21.5–22 mm

Basic sets

Dummy mullion with central locking, TU-ON/TU-ON w/o hinge side

Pos. . .	Description	Colour	PQ	Material no.
	TU-ON C basic set V.01	–		486535
	TU-ON C basic set V.02	–		486536

Bulk packaging

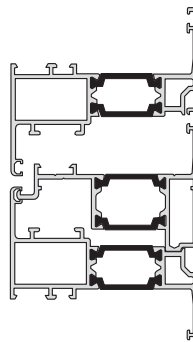
Locking parts of the central locking system

Pos.	Pcs	Description	Colour	PQ	Material no.
①	1	Run-up wedge V.01	–	100	490184
		Run-up wedge V.02	–	20	490185
②	2	Locking cam, insertable	–	100	334671
③	4	Striker V.01	–	100	490182
		Striker V.02	–	100	490183
④	2	Corner drive w/o MD	–	50	490175
⑤	1	DM lever-operated espagnolette, concealed	–	20	212264

Optional:

Bullet catch

Pos.	Description	Material no.
⑦	Bullet catch set	334667



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Tilt&Turn stay bearing and hinge with clamping support-strip
The hinge side equipped with preassembled clamp-strips clearly reduces installation time.



The pacesetter for innovative fenestration technologies

A system with high demands: First-class technology, highest flexibility as well as economic and time-saving installation.

A single standardised hinge side is used up to a sash weight of 130 kg. Advantages for the fabricator: fewer components to be mounted, less logistical costs and storage space. Preassembled assemblies make installation easy, efficient and timesaving.

Standardised hinge side

The preassembled clamp-strips offer a clear fabrication advantage. In addition to that, there are convenient adjustment possibilities. With just one screw-turn, the sash can be laterally adjusted while still hinged.

Perfect for all standard opening-types.

All hardware versions are possible with the AluVision T 540 system: Tilt&Turn, Turn-Only, Tilt-Only or dummy mullion sashes and Tilt-First with sash weights of up to max. 130 kg. Furthermore, we offer an upgrade possibility with hinge sides for heavy sashes (200 kg Tilt&Turn, Tilt-Only and Tilt-First sashes, 200 kg and 300 kg Turn-Only sashes).

The advantages of the AluVision T 540 hinge side

- Optimal screwing axis position on the hinges and bearings, thus convenient and easy installation
- Sash stays and corner hinges, as well as the stay bearings and pivot rests are non-handed
- Time saving due to the preassembled aluminium clamping support-strip
- Fewer components due to preassembled stay-bearing pin and pin retention
- Lateral and vertical adjustments possible while the sash is still hinged to the frame
- Appealing aesthetics: bearings flush with the sash, no visible screws



Roto AluVision
T 540





RotoLine geared-handle



Flush-encased gearbox with escutcheonless handle



RotoSwing handle with flush-encased gearbox

The finest handle technology

Apart from the flush-encased gearbox and the well-proven RotoLine geared-handle (lockable or Tilt-First), Roto also offers you handle versions for every shape and function requirement. For example the unmistakable escutcheonless RotoLine handle or the new RotoSwing. They represent a completely new window aesthetics.



AluVision 200 kg system:

- Hardware concept in accordance with modular design principles
- Available for all conventional opening types (T&T, TU-ON, TI-ON, TF & DM)
- T&T and TU-ON have the same aesthetics
- For standard 'Euro-chamber' profiles
- Application range SW 680 – 1600 mm (larger sash formats upon request)
- Non-handed hinge side
- Hinge passage 7 mm
- Height adjustment in the pivot rest
- Pivot rest made of stainless-steel
- Clampable hinge side on the sash, surface-mounted on the frame
- Problem-free realisation of resistance classes up to RC3
- Particularly suitable for explosion, avalanche and burglary security
- Tested according to QM 328

Turn-Only sash AluVision 300 kg:

- For special project solutions
- Sash and frame screw fixing
- Hinge passage 8 mm
- Non-handed hinge side

And upon request ...

Regardless of what demands your customers have on the AluVision T 540 hardware system; thanks to the extensive accessories product range, hardly any wishes remain unfulfilled.

Whether special security strikers or enhanced convenience – for example turn-restrictors or night-vents – you can put your customers' wishes into practice; simply and fast. Also retro-fitted.



Additional security components for RC2 windows



In RC3 windows all corners are secured twice

The current security standard

The “burglar-inhibiting windows and doors” standard (DIN EN 1627–1630) differentiates between different resistance classes, depending on the burglary method. The test method always covers the entire window. On the hardware side, Roto AluVision T 540 passes the test with flying colours. The key factors for passing the test (apart from the glazing prescribed in accordance with the standard) are suitable window profiles and – very important – the proper window fabrication and installation.

Retrofitting is conceivably simple

Windows and balcony doors can easily be retrofitted with Roto AluVision hardware for higher security requirements. Additional components and strikers can be mounted particularly easily and rapidly: reducing time and costs.

The ease of operation remains the same

The complete security technology lies concealed in the Roto AluVision hardware. This means that the window aesthetics are not affected by rugged, surface-mounted locks or other additional components. You operate the new built-in security in your windows by means of a conventional window handle with key-locking cylinder.

The burglary resistance grades – RC1 to RC3

By means of specific security components, a high-quality security level is achieved with RC1: Security strikers and corner drives with mushroom cams provide the window with more anti-jemmy protection in all four corners. The geared-handle protection and the lockable window handle increase the burglary inhibition. For RC2, additional security components made of steel increase security all around the sash with rear catching mushroom cams between the sash and frame. RC3: The hardware, window frame, and glass resist the heaviest of loads. Even heavy burglary tools such as crow bars do not represent any problem for the particularly robust Roto AluVision security components.

- ① Corner drive
- ② Corner drive CL
- ③ Corner drive CL
- ④ Centre lock
- ⑤ Security striker
- ⑥ Security cam
- ⑦ Rebate clearance reduction
- ⑧ Drilling-protection/geared-handle protection
- ⑨ Lockable handle

- Applicable with aluminium profiles with:
Overlap width: 21.5 mm / 22 mm,
clearance: 11.5 mm,
hardware axis 10 mm
- Hinge passage 3.5–5 mm
- Hardware certified according to QM 328

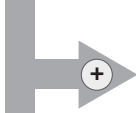
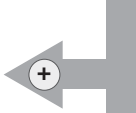
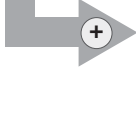
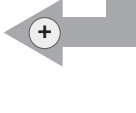
- Clampable hinge side in the frame groove with preassembled clamp-strips
- Bearings flush with sash, components non-handed, no visible screws, all RAL colour tones and other surface-finishes possible
- Straightforward lateral adjustment in the pivot rest while still hinged
- Straightforward vertical adjustment in the clamping corner bracket while still hinged
- T&T sash stay with integrated lateral adjustment while still hinged
- Preassembled sash stay with integrated anti-slam device
- Turn-Only sash optionally with rebate hinge and integrated lateral adjustment while still hinged
- Gasket-compression adjustable via eccentric cams
- Insertable locking cams can be randomly located
- Upgrading or retrofitting up to RC3 (DIN EN 1627-1630)

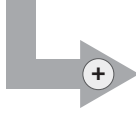
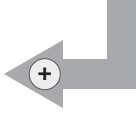
- Centre locks can be randomly located due to insertable locking cams
- Geared-handle / flush-encased gearbox; optionally with mishandling device, handles lockable
- Corner drive with integrated mishandling device

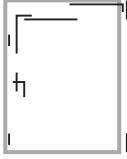
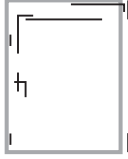
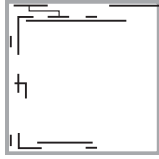

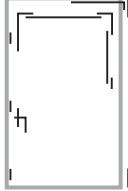
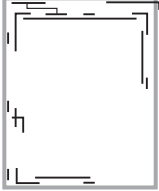
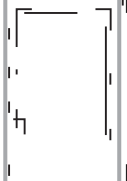
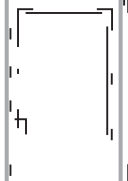

- Concealed dummy-mullion hardware (sash with floating mullion) in the versions:
Lever-operated espagnolette (dummy mullion), concealed (DM)
Dummy mullion with shootbolts (DM-SB)
Lever-operated espagnolette (dummy mullion), surface-mounted (DM-SM)
Dummy mullion with slider (DM-SL)

- Application of the turn-restrictor $SW \geq 1200$ mm
- Application of the turn-restrictor (damped/arrestable) $SW \geq 1200$ mm
- Child safety lock with cylinder locking, lockable
- Night-vent
- Bullet catch

- High sash weights, with special components up to 200 kg for Turn-Only / Tilt&Turn windows (hinge passage 7 mm) and up to 300 kg for Turn-Only windows (hinge passage 8 mm)

SW SH	405 – 600 mm	601 – 1300 mm	1301 – 1600 mm																														
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SW SH	405 – 600 mm	601 – 1300 mm	1301 – 1600 mm
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Note: The number of centre locks depends on the profile stability (profile system) and is to be adapted in accordance with the requirements resp. the stress test groups.

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* Note the different application diagrams for the different hinge sides.

Espagnolette versions																				
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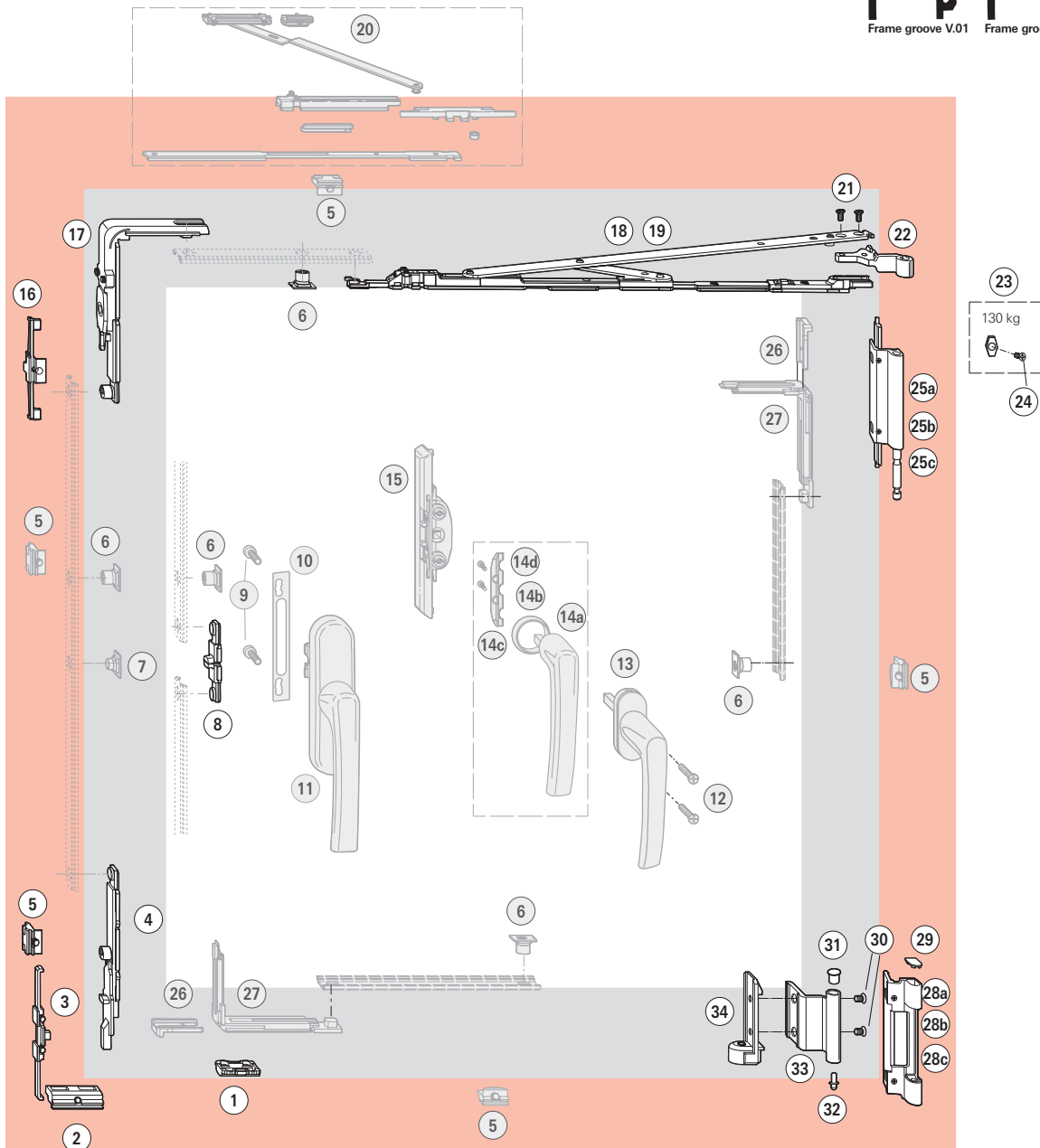
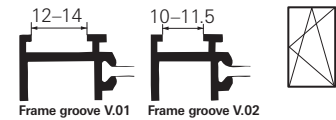
SW SH	405 – 1300 mm		1301 – 1600 mm
500 – 1200 mm			
1201 – 1800 mm			
1801 – 2250 mm			

Note: The number of centre locks depends on the profile stability (profile system) and is to be adapted in accordance with the requirements resp. the stress test groups.

Roto AluVision T 540

Tilt&Turn hardware

90 kg / 130 kg, Basic security, clamped bearing



Grey parts are optional and not included in the basic set.

Parts list bulk packaging					
Locking components and sash stays					
Pos.	Pcs	Description	Colour	PQ	Material no.
1	1	Run-up block	-	100	212008
4	1	Tilt lock bolt	-	100	331018
2	1	Horizontal Tilt&Turn striker	-	100	212122
3	1	Anti-jemmy device V.01	-	100	331019
	1	Anti-jemmy device V.02	-	100	331020
5	1	Striker V.01	-	100	212633
	1	Striker V.02	-	100	212634
16	4	Striker stop, V.01	-	100	331014
	4	Striker stop, V.02	-	100	331015
17		Corner drive with MD	-	50	331011
19	1	Sash stay 600	-	10	377451
18	1	Sash stay 400	-	10	377452

Parts list basic sets				
'10' basic sets – divided acc. to locking components & hinge side				
Description	Colour	Material no.	Material no.	Material no.
Locking components V.01	-	331268		
Locking components V.02	-	331269		
Sash stay 400	-	377452		
Sash stay 600	-	377451		
Hinge side T&T				
Description	Colour	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.
Silver	R01.5	377455	378313	378942
Dark bronze	R05.4	377459	378317	379247
Jet-black	R06.2	377456	378314	378943
Traffic-white	R07.2	377458	378316	379246
Special colour	SP COL	377460	378318	379248

Application range

Sash width **SW**405–1600 mm
 Sash height **SH**520–2400 mm
 Sash weight **S.kg** max. 90/130 kg¹⁾

Clearance **CL**11.5–12 mm
 Overlap width **OW**21.5–22 mm
 Hinge passage3.5–5 mm

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
11	1	RotoLine geared-handle 26	–		(→ p. 205)
8	1	T connector	–	100	334754
10	1	Geared-handle support	–	100	331937
9	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

15	1	Flush-encased gearbox w/o mishandling device	–	10	378338
13	1	RotoLine window handle for flush-encased gearbox	–		(→ p. 208)
12	2	Countersunk screw (stainless steel) M5x30	–	100	212501
14a	1	Escutcheonless handle	–	10	(→ p. 207)
14b	1	Ring for escutcheonless handle	–		(→ p. 207)
14d	1	Mounting plate	–	10	378134
14c	2	Screws for escutcheonless handle	–	50	334360

Additional components, size-related

Pos.	Pcs	Description	Colour	PQ	Material no.
6	4	Locking cam, insertable	–	100	334671
7	1	Connector-bolt, insertable²⁾	–	100	254601
5	4	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
27	2	Corner drive CL	–	20	331013
26	2	Alignment fork	–	100	221772
20	1	Additional scissor stay V.01	–	10	331024
		Additional scissor stay V.02	–	10	331025

1) ≥ 90 kg with upgrade-kit 130 kg
 2) Applicable for SW ≤ 1000 mm & basic security

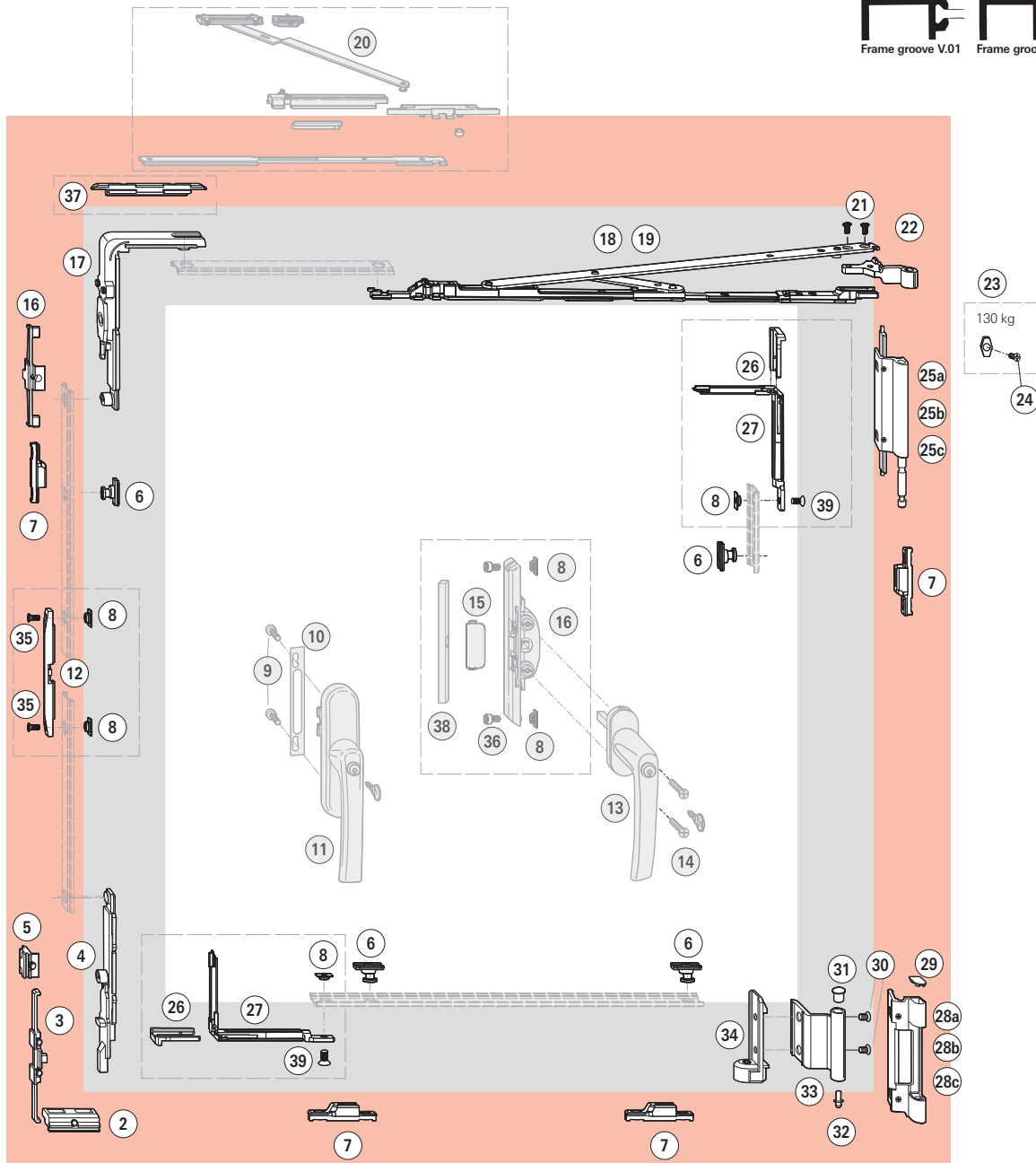
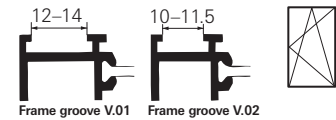
Hinge side

Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
33	1	Corner hinge	Silver	R01.5	50	377498	377498	377498
			Dark bronze	R05.4	50	377502	377502	377502
			Jet-black	R06.2	50	377499	377499	377499
			Traffic-white	R07.2	50	377501	377501	377501
			Special colour	SP COL	50	377503	377503	377503
28a – 28c	1	Pivot rest	Silver	R01.5	50	377504	378295	379279
			Dark bronze	R05.4	50	377508	378299	379283
			Jet-black	R06.2	50	377505	378296	379280
			Traffic-white	R07.2	50	377507	378298	379282
			Special colour	SP COL	50	377509	378300	379284
22	1	Stay-arm hinge	Silver	R01.5	50	377486	377486	377486
			Dark bronze	R05.4	50	377490	377490	377490
			Jet-black	R06.2	50	377487	377487	377487
			Traffic-white	R07.2	50	377489	377489	377489
			Special colour	SP COL	50	377491	377491	377491
25a – 25c	1	Stay bearing 90 kg	Silver	R01.5	50	377492	378289	379267
			Dark bronze	R05.4	50	377496	378293	379271
			Jet-black	R06.2	50	377493	378290	379268
			Traffic-white	R07.2	50	377495	378292	379270
			Special colour	SP COL	50	377497	378294	379272
	1	Misc. small components pack:		100	382881	382881	382881	
34	1	Clamping corner bracket	–	100	377444	377444	377444	
32	1	Pivot-rest pin	–	100	377443	377443	377443	
31	1	End cap corner hinge, black	–	100	377885	377885	377885	
30	2	Countersunk screw M5 x 9, blue	–	100	212751	212751	212751	
21	2	Countersunk screw M5 x 8, red	–	100	212752	212752	212752	
29	1	End cap pivot rest, black	–	100	377887	377887	377887	
	1	130 kg upgrade-kit, consisting of:		10	377461	377461	377461	
23	1	Fixing connecting-link	–	100	377889	377889	377889	
24	1	Countersunk tapping-screw 4.8 x 16	–	100	378067	378067	378067	

Roto AluVision T 540

Tilt&Turn hardware

90kg/130kg, RC1, clamped bearing



Grey parts are optional and not included in the basic set.

Locking components and sash stays				
Pos.	Pcs	Description	Colour	PQ Material no.
4	1	Tilt lock bolt	-	100 331018
2	1	Horizontal Tilt&Turn striker	-	100 212122
3	1	Anti-jemmy device V.01	-	100 331019
	1	Anti-jemmy device V.02	-	100 331020
5	1	Striker V.01	-	100 212633
	1	Striker V.02	-	100 212634
6	4	SEC cam, insertable	-	100 447245
7	4	SEC striker V.01	-	100 212637
		SEC striker V.02	-	100 212638
16	1	Striker stop, V.01	-	100 331014
	1	Striker stop, V.02	-	100 331015
17	1	Corner drive with MD	-	50 331011
19	1	Sash stay 600	-	10 377451
18	1	Sash stay 400	-	10 377452

Locking components and sash stays				
Pos.	Pcs	Description	Colour	PQ Material no.
37	1	SEC rebate clearance reduction	-	50 447112
	1	Screw M4.8 x 16 not dep.	-	100 212754
27	2	SEC corner drive CL	-	10 334359
8	2	SEC connector	-	100 447113
39	2	Countersunk screw M5 x 7	-	100 335250
26	2	Alignment fork, zinc	-	100 212636

NOTE
Additional components (size-related), see Basic security, page 87.

Application range

Sash width **SW** 525 – 1600 mm
 Sash height **SH** 700 – 2400 mm
 Sash weight **S.kg** max. 90/130 kg¹⁾

Clearance **CL** 11.5 – 12 mm
 Overlap width **OW** 21.5 – 22 mm
 Hinge passage 3.5 – 5 mm

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
11	1	RotoLine geared-handle 26, lockable	–		(→ p. 205)
8	2	SEC connector	–	100	447113
12	1	SEC geared-handle protection	–	10	487407
35	2	Countersunk screw M5 x 10	–	100	210970
10	1	Geared-handle support	–	100	331937
9	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

16	1	SEC flush-enc. gearbox w/o MD	–	10	457210
13	1	RotoLine window handle for flush-enc. gearbox, lockable	–		(→ p. 209)
14	2	Countersunk screw “niro” (stainless-steel) M5 x 30	–	100	212501
15	1	SEC drilling protection	–	10	487406
8	2	SEC connector	–	100	447113
36	2	Cylinder head screw M5 x 8	–	100	335249
38	1	SEC rebate clearance reduction	–	50	334360

Additional components, size-related

Pos.	Pcs	Description	Colour	PQ	Material no.
20	1	Additional scissor stay V.01	–	10	331024
		Additional scissor stay V.02	–	10	331025

1) ≥ 90 kg with upgrade-kit 130 kg

Parts list basic sets

‘10’ basic sets – divided according to locking components & hinge side

Description	Colour	Material no.
Locking components V.01	–	331268
Locking components V.02	–	331269
SEC rebate clearance reduction set	–	335247
Rebate clearance reduction, countersunk tapping-screw		
SEC geared-handle protection set	–	485768
Geared-handle protection, 2 SEC connectors, 2 screws		
SEC corner drive CL set	–	335187
Corner drive, alignment fork, SEC connector, screw		
SEC flush-encased gearbox set	–	457209
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection		
Sash stay 400	–	377452
Sash stay 600	–	377451

Hinge side T&T

Description	Colour	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.
Silver	R01.5	377455	378313	378942
Dark bronze	R05.4	377459	378317	379247
Jet-black	R06.2	377456	378314	378943
Traffic-white	R07.2	377458	378316	379246
Special colour	SP COL	377460	378318	379248

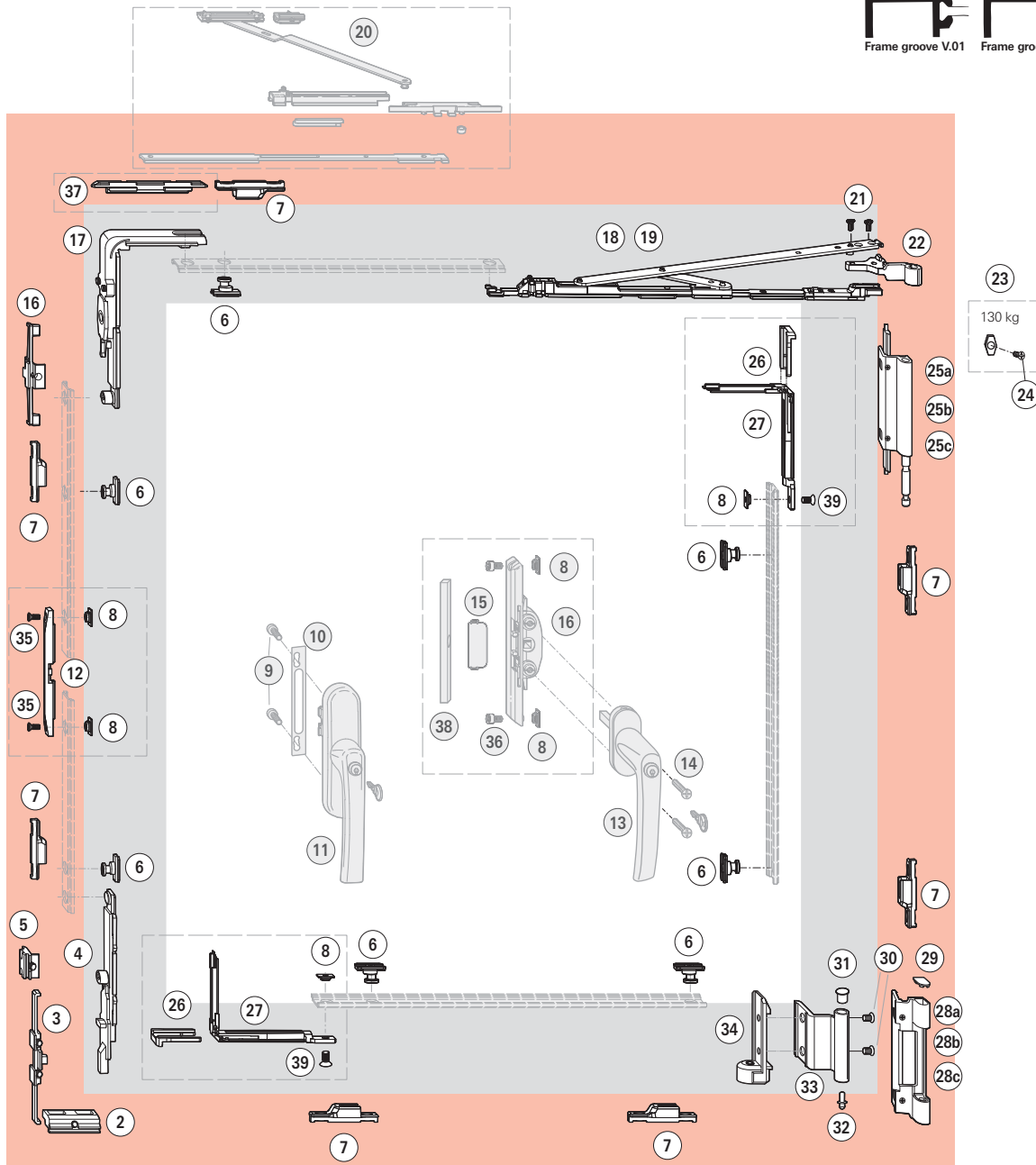
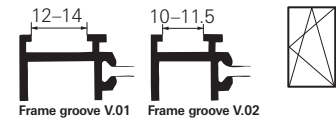
Hinge side

Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
33	1	Corner hinge	Silver	R01.5	50	377498	377498	377498
			Dark bronze	R05.4	50	377502	377502	377502
			Jet-black	R06.2	50	377499	377499	377499
			Traffic-white	R07.2	50	377501	377501	377501
			Special colour	SP COL	50	377503	377503	377503
28a – 28c	1	Pivot rest	Silver	R01.5	50	377504	378295	379279
			Dark bronze	R05.4	50	377508	378299	379283
			Jet-black	R06.2	50	377505	378296	379280
			Traffic-white	R07.2	50	377507	378298	379282
			Special colour	SP COL	50	377509	378300	379284
22	1	Stay-arm hinge	Silver	R01.5	50	377486	377486	377486
			Dark bronze	R05.4	50	377490	377490	377490
			Jet-black	R06.2	50	377487	377487	377487
			Traffic-white	R07.2	50	377489	377489	377489
			Special colour	SP COL	50	377491	377491	377491
25a – 25c	1	Stay bearing 90 kg	Silver	R01.5	50	377492	378289	379267
			Dark bronze	R05.4	50	377496	378293	379271
			Jet-black	R06.2	50	377493	378290	379268
			Traffic-white	R07.2	50	377495	378292	379270
			Special colour	SP COL	50	377497	378294	379272
	1	Misc. small components pack:		100	382881	382881	382881	
34	1	Clamping corner bracket	–	100	377444	377444	377444	
32	1	Pivot-rest pin	–	100	377443	377443	377443	
31	1	End cap corner hinge, black	–	100	377885	377885	377885	
30	2	Countersunk screw M5 x 9, blue	–	100	212751	212751	212751	
21	2	Countersunk screw M5 x 8, red	–	100	212752	212752	212752	
29	1	End cap pivot rest, black	–	100	377887	377887	377887	
	1	130 kg upgrade-kit, consisting of:		10	377461	377461	377461	
23	1	Fixing connecting-link	–	100	377889	377889	377889	
24	1	Countersunk tapping-screw 4.8 x 16	–	100	378067	378067	378067	

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Tilt&Turn hardware

90kg/130kg, RC2, clamped bearing



Grey parts are optional and not included in the basic set.

Locking components and sash stays					
Pos.	Pcs	Description	Colour	PQ	Material no.
4	1	Tilt lock bolt	-	100	331018
2	1	Horizontal Tilt&Turn striker	-	100	212122
3	1	Anti-jemmy device V.01	-	100	331019
	1	Anti-jemmy device V.02	-	100	331020
5	1	Striker V.01	-	100	212633
	1	Striker V.02	-	100	212634
6	7	SEC cam, insertable	-	100	447245
7	7	SEC striker V.01	-	100	212637
		SEC striker V.02	-	100	212638
16	1	Striker stop, V.01	-	100	331014
	1	Striker stop, V.02	-	100	331015
17	1	Corner drive with MD	-	50	331011
19	1	Sash stay 600	-	10	377451
18	1	Sash stay 400	-	10	377452

Locking components and sash stays					
Pos.	Pcs	Description	Colour	PQ	Material no.
37	1	SEC rebate clearance reduction	-	50	447112
	1	Screw M4.8 x 16 not dep.	-	100	212754
27	2	SEC corner drive CL	-	10	334359
8	2	SEC connector	-	100	447113
39	2	Countersunk screw M5 x 7	-	100	335250
26	2	Alignment fork, zinc	-	100	212636

NOTE
Additional components (size-related), see Basic security, page 87.

Application range

Sash width **SW**525–1600 mm
 Sash height **SH**700–2400 mm
 Sash weight **S.kg**max. 90/130 kg¹⁾

Clearance **CL**11.5–12 mm
 Overlap width **OW**21.5–22 mm
 Hinge passage3.5–5 mm

Optional					
Espagnolettes and connectors					
Pos.	Pcs	Description	Colour	PQ	Material no.
11	1	RotoLine geared-handle 26, lockable	–		(→ p. 205)
8	2	SEC connector	–	100	447113
12	1	SEC geared-handle protection	–	10	487407
35	2	Countersunk screw M5 x 10	–	100	210970
10	1	Geared-handle support	–	100	331937
9	2	Flat-headed screw M5 x 12	–	100	212500
Alternatively:					
16	1	SEC flush-encased gearbox w/o MD	–	10	457210
13	1	RotoLine window handle for flush-encased gearbox, lockable	–		(→ p. 209)
14	2	Countersunk screw “niro” (stainless-steel) M5 x 30	–	100	212501
15	1	SEC drilling protection	–	10	487406
8	2	SEC connector	–	100	447113
36	2	Cylinder head screw M5 x 8	–	100	335249
38	1	SEC rebate clearance reduction	–	50	334360
Additional components, size-related					
Pos.	Pcs	Description	Colour	PQ	Material no.
20	1	Additional scissor stay V.01	–	10	331024
		Additional scissor stay V.02	–	10	331025

1) ≥ 90 kg with upgrade-kit 130 kg

Parts list basic sets				
‘10’ basic sets – divided according to locking components & hinge side				
Description	Colour	Material no.		
Locking components V.01	–	331268		
Locking components V.02	–	331269		
SEC rebate clearance reduction set	–	335247		
Rebate clearance reduction, countersunk tapping-screw				
SEC geared-handle protection set	–	485768		
Geared-handle protection, 2 SEC connectors, 2 screws				
SEC corner drive CL set	–	335187		
Corner drive, alignment fork, SEC connector, screw				
SEC flush-encased gearbox set	–	457209		
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection				
Sash stay 400	–	377452		
Sash stay 600	–	377451		
Hinge side T&T				
Description	Colour	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.
Silver	R01.5	377455	378313	378942
Dark bronze	R05.4	377459	378317	379247
Jet-black	R06.2	377456	378314	378943
Traffic-white	R07.2	377458	378316	379246
Special colour	SPCOL	377460	378318	379248

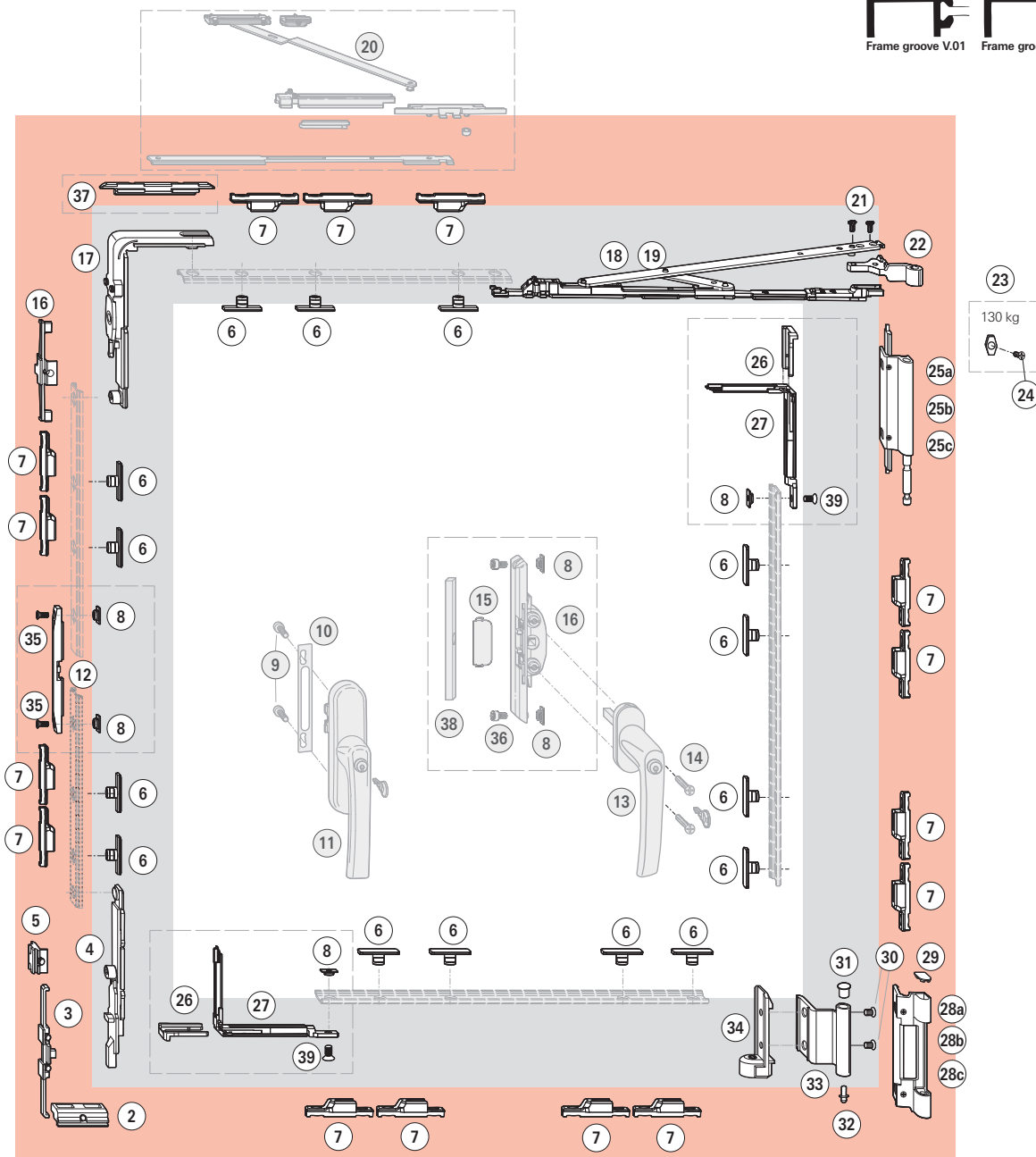
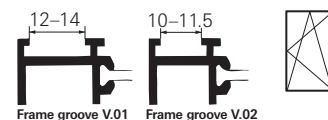
Hinge side								
Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
33	1	Corner hinge	Silver	R01.5	50	377498	377498	377498
			Dark bronze	R05.4	50	377502	377502	377502
			Jet-black	R06.2	50	377499	377499	377499
			Traffic-white	R07.2	50	377501	377501	377501
			Special colour	SP COL	50	377503	377503	377503
28a) – 28c)	1	Pivot rest	Silver	R01.5	50	377504	378295	379279
			Dark bronze	R05.4	50	377508	378299	379283
			Jet-black	R06.2	50	377505	378296	379280
			Traffic-white	R07.2	50	377507	378298	379282
			Special colour	SP COL	50	377509	378300	379284
22	1	Stay-arm hinge	Silver	R01.5	50	377486	377486	377486
			Dark bronze	R05.4	50	377490	377490	377490
			Jet-black	R06.2	50	377487	377487	377487
			Traffic-white	R07.2	50	377489	377489	377489
			Special colour	SP COL	50	377491	377491	377491
25a) – 25c)	1	Stay bearing 90 kg	Silver	R01.5	50	377492	378289	379267
			Dark bronze	R05.4	50	377496	378293	379271
			Jet-black	R06.2	50	377493	378290	379268
			Traffic-white	R07.2	50	377495	378292	379270
			Special colour	SP COL	50	377497	378294	379272
	1	Misc. small components pack:		100	382881	382881	382881	
34	1	Clamping corner bracket	–	100	377444	377444	377444	
32	1	Pivot-rest pin	–	100	377443	377443	377443	
31	1	End cap corner hinge, black	–	100	377885	377885	377885	
30	2	Countersunk screw M5 x 9, blue	–	100	212751	212751	212751	
21	2	Countersunk screw M5 x 8, red	–	100	212752	212752	212752	
29	1	End cap pivot rest, black	–	100	377887	377887	377887	
			–	100	377887	377887	377887	
	1	130 kg upgrade-kit, consisting of:		10	377461	377461	377461	
23	1	Fixing connecting-link	–	100	377889	377889	377889	
24	1	Countersunk tapping-screw 4.8 x 16	–	100	378067	378067	378067	

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Roto AluVision T 540

Tilt&Turn hardware

90kg/130kg, RC3, clamped bearing



Grey parts are optional and not included in the basic set.

Locking components and sash stays				
Pos.	Pcs	Description	Colour	PQ Material no.
4	1	Tilt lock bolt	-	100 331018
2	1	Horizontal Tilt&Turn striker	-	100 212122
3	1	Anti-jemmy device V.01	-	100 331019
	1	Anti-jemmy device V.02	-	100 331020
5	1	Striker V.01	-	100 212633
	1	Striker V.02	-	100 212634
6	15	SEC cam, RC3, insertable	-	100 443530
7	15	SEC striker V.01	-	100 212637
		SEC striker V.02	-	100 212638
16	1	Striker stop, V.01	-	100 331014
	1	Striker stop, V.02	-	100 331015
17	1	Corner drive with MD	-	50 331011
19	1	Sash stay 600	-	10 377451
18	1	Sash stay 400	-	10 377452

Locking components and sash stays				
Pos.	Pcs	Description	Colour	PQ Material no.
37	1	SEC rebate clearance reduction	-	50 447112
	1	Screw M4.8 x 16 not dep.	-	100 212754
27	2	SEC corner drive CL	-	10 334359
8	2	SEC connector	-	100 447113
39	2	Countersunk screw M5 x 7	-	100 335250
26	2	Alignment fork, zinc	-	100 212636

NOTE
Additional components (size-related), see Basic security, page 87.

Application range

Sash width **SW** 600–1600 mm
 Sash height **SH** 840–2400 mm
 Sash weight **S.kg** max. 90/130 kg¹⁾

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
11	1	RotoLine geared-handle 26, lockable	–		(→ p. 205)
8	2	SEC connector	–	100	447113
12	1	SEC geared-handle protection	–	10	487407
35	2	Countersunk screw M5 x 10	–	100	210970
10	1	Geared-handle support	–	100	331937
9	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

16	1	SEC flush-encased gearbox w/o MD	–	10	457210
13	1	RotoLine window handle for flush-encased gearbox, lockable	–		(→ p. 209)
14	2	Countersunk screw “niro” (stainless-steel) M5 x 30	–	100	212501
15	1	SEC drilling protection	–	10	487406
8	2	SEC connector	–	100	447113
36	2	Cylinder head screw M5 x 8	–	100	335249
38	1	SEC rebate clearance reduction	–	50	334360

Additional components, size-related

Pos.	Pcs	Description	Colour	PQ	Material no.
20	1	Additional scissor stay V.01	–	10	331024
		Additional scissor stay V.02	–	10	331025

1) ≥ 90 kg with upgrade-kit 130 kg

Parts list basic sets

‘10’ basic sets – divided according to locking components & hinge side

Description	Colour	Material no.
Locking components V.01	–	331268
Locking components V.02	–	331269
SEC rebate clearance reduction set	–	335247
Rebate clearance reduction, countersunk tapping-screw		
SEC geared-handle protection set	–	485768
Geared-handle protection, 2 SEC connectors, 2 screws		
SEC corner drive CL set	–	335187
Corner drive, alignment fork, SEC connector, screw		
SEC flush-encased gearbox set	–	457209
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection		
Sash stay 400	–	377452
Sash stay 600	–	377451

Hinge side T&T

Description	Colour	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.
Silver	R01.5	377455	378313	378942
Dark bronze	R05.4	377459	378317	379247
Jet-black	R06.2	377456	378314	378943
Traffic-white	R07.2	377458	378316	379246
Special colour	SP COL	377460	378318	379248

Hinge side

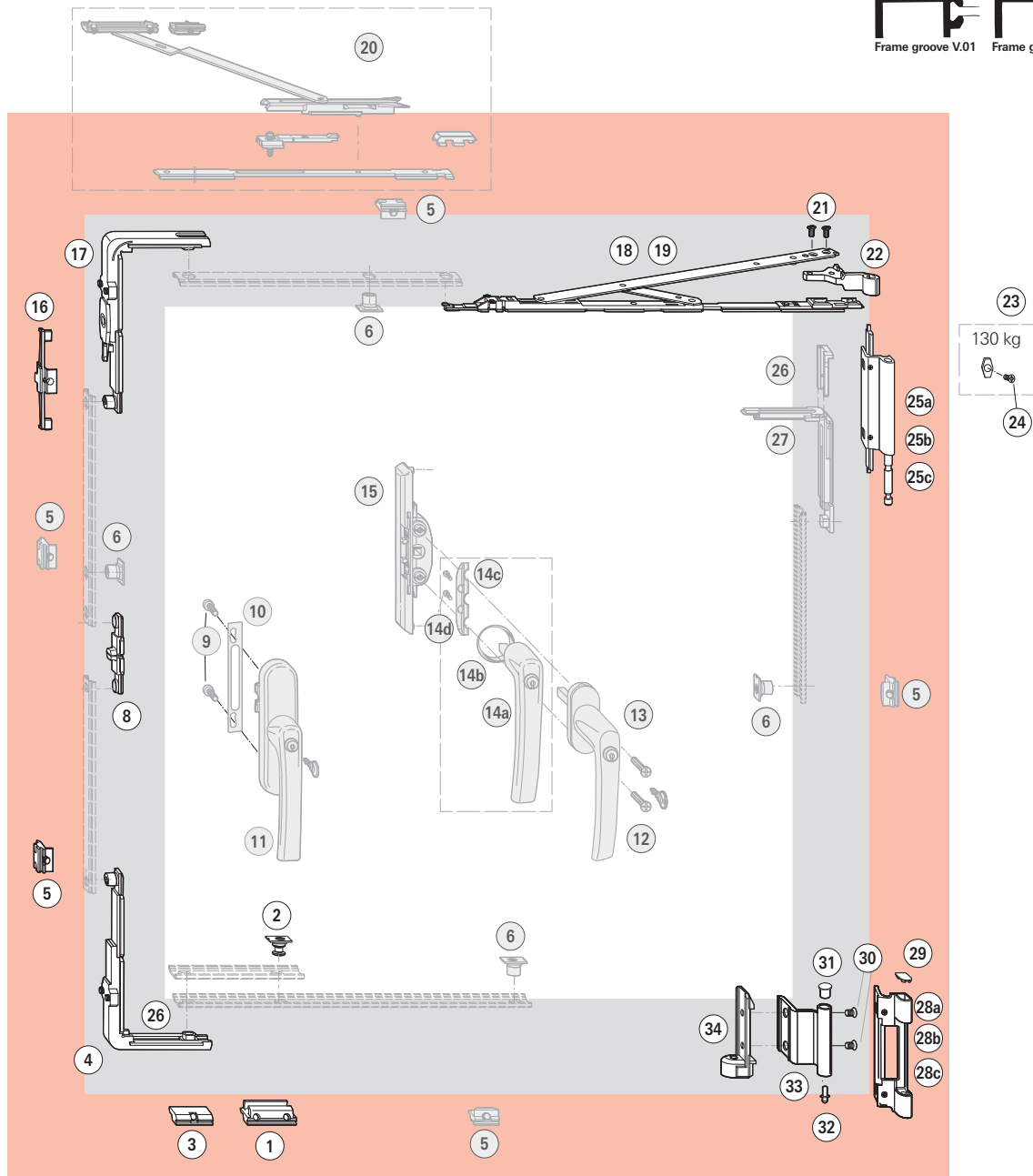
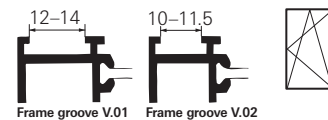
Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
33	1	Corner hinge	Silver	R01.5	50	377498	377498	377498
			Dark bronze	R05.4	50	377502	377502	377502
			Jet-black	R06.2	50	377499	377499	377499
			Traffic-white	R07.2	50	377501	377501	377501
			Special colour	SP COL	50	377503	377503	377503
28a) – 28c)	1	Pivot rest	Silver	R01.5	50	377504	378295	379279
			Dark bronze	R05.4	50	377508	378299	379283
			Jet-black	R06.2	50	377505	378296	379280
			Traffic-white	R07.2	50	377507	378298	379282
			Special colour	SP COL	50	377509	378300	379284
22	1	Stay-arm hinge	Silver	R01.5	50	377486	377486	377486
			Dark bronze	R05.4	50	377490	377490	377490
			Jet-black	R06.2	50	377487	377487	377487
			Traffic-white	R07.2	50	377489	377489	377489
			Special colour	SP COL	50	377491	377491	377491
25a) – 25c)	1	Stay bearing 90 kg	Silver	R01.5	50	377492	378289	379267
			Dark bronze	R05.4	50	377496	378293	379271
			Jet-black	R06.2	50	377493	378290	379268
			Traffic-white	R07.2	50	377495	378292	379270
			Special colour	SP COL	50	377497	378294	379272
	1	Misc. small components pack:		100	382881	382881	382881	
34	1	Clamping corner bracket	–	100	377444	377444	377444	
32	1	Pivot-rest pin	–	100	377443	377443	377443	
31	1	End cap corner hinge, black	–	100	377885	377885	377885	
30	2	Countersunk screw M5 x 9, blue	–	100	212751	212751	212751	
21	2	Countersunk screw M5 x 8, red	–	100	212752	212752	212752	
29	1	End cap pivot rest, black	–	100	377887	377887	377887	
	1	130 kg upgrade-kit, consisting of:		10	377461	377461	377461	
23	1	Fixing connecting-link	–	100	377889	377889	377889	
24	1	Countersunk tapping-screw 4.8 x 16	–	100	378067	378067	378067	

Roto AluVision T 540

Roto AluVision T 540

Tilt-First hardware

90 kg / 130 kg, Basic security, clamped bearing



Grey parts are optional and not included in the basic set.

Parts list bulk packaging					
Locking components and sash stays					
Pos.	Pcs	Description	Colour	PQ	Material no.
3	1	Run-up wedge V.01	-	100	212762
		Run-up wedge V.02	-	100	212512
2	1	Tilt lock bolt TF	-	100	334757
1	1	TF hor. Tilt&Turn striker V.01	-	100	334755
		TF hor. Tilt&Turn striker V.02	-	100	334756
5	1	Striker V.01	-	100	212633
		Striker V.02	-	100	212634
16	1	Striker stop V.01	-	100	331014
		Striker stop V.02	-	100	331015
17	1	Corner drive with MD	-	50	331011
4	1	Corner drive w/o MD	-	50	331012
19	1	TF sash stay 600	-	10	377453
18	1	TF sash stay 390	-	10	377450

Parts list basic sets					
'10' basic sets – divided according to locking components & hinge side					
Description	Colour	Material no.	Material no.	Material no.	Material no.
Locking components V.01	-	331270			
Locking components V.02	-	331271			
Sash stay 390	-	377450			
Sash stay 600	-	377453			
Hinge side T&T					
Description	Colour	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	Material no.
Silver	R01.5	377455	378313		378942
Dark bronze	R05.4	377459	378317		379247
Jet-black	R06.2	377456	378314		378943
Traffic-white	R07.2	377458	378316		379246
Special colour	SP COL	377460	378318		379248

Application range

Sash width **SW** 390 – 1600 mm
 Sash height **SH** 520 – 2400 mm
 Sash weight **S.kg** max. 90/130 kg¹⁾

Clearance **CL** 11.5 – 12 mm
 Overlap width **OW** 21.5 – 22 mm
 Hinge passage 3.5 – 5 mm

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
11	1	RotoLine geared-handle 26 TF, lockable	–		(→ p. 205)
8	1	T connector	–	100	334754
10	1	Geared-handle support	–	100	331937
9	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

15	1	Flush-encased gearbox	–	10	378338
13	1	RotoLine window handle TF for flush-encased gearbox, lockable	–		(→ p. 210)
12	2	Countersunk screw (stainless steel) M5x30	–	100	212501
14a	1	Escutcheonless handle, lockable	–		(→ p. 207)
14b	1	Ring for escutcheonless handle	–		(→ p. 207)
14d	1	Mounting plate	–	10	378134
14c	2	Screws for escutcheonless handle	–		

1) ≥ 90 kg with upgrade-kit 130 kg

Optional – Additional components, size-related

Pos.	Pcs	Description	Colour	PQ	Material no.
6	4	Locking cam, insertable	–	100	334671
5	4	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
27	2	Corner drive CL	–	20	331013
26	2	Alignment fork	–	100	221772
20	1	Additional scissor stay V.01	–	10	331024
		Additional scissor stay V.02	–	10	331025

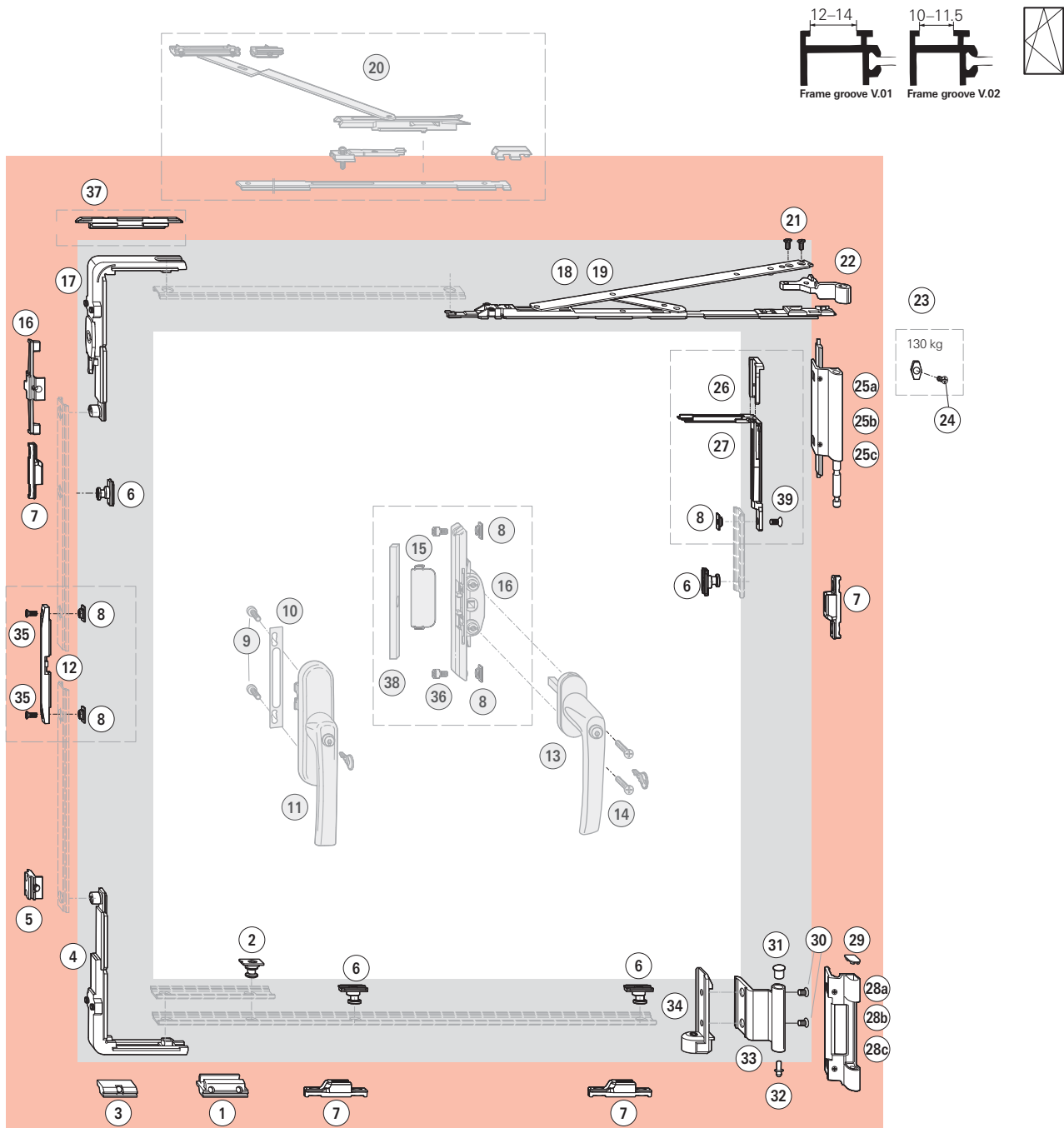
Hinge side

Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
33	1	Corner hinge	Silver	R01.5	50	377498	377498	377498
			Dark bronze	R05.4	50	377502	377502	377502
			Jet-black	R06.2	50	377499	377499	377499
			Traffic-white	R07.2	50	377501	377501	377501
			Special colour	SP COL	50	377503	377503	377503
28a – 28c	1	Pivot rest	Silver	R01.5	50	377504	378295	379279
			Dark bronze	R05.4	50	377508	378299	379283
			Jet-black	R06.2	50	377505	378296	379280
			Traffic-white	R07.2	50	377507	378298	379282
			Special colour	SP COL	50	377509	378300	379284
22	1	Stay-arm hinge	Silver	R01.5	50	377486	377486	377486
			Dark bronze	R05.4	50	377490	377490	377490
			Jet-black	R06.2	50	377487	377487	377487
			Traffic-white	R07.2	50	377489	377489	377489
			Special colour	SP COL	50	377491	377491	377491
25a – 25c	1	Stay bearing 90 kg	Silver	R01.5	50	377492	378289	379267
			Dark bronze	R05.4	50	377496	378293	379271
			Jet-black	R06.2	50	377493	378290	379268
			Traffic-white	R07.2	50	377495	378292	379270
			Special colour	SP COL	50	377497	378294	379272
	1	Misc. small components pack:		100	382881	382881	382881	
34	1	Clamping corner bracket	–	100	377444	377444	377444	
32	1	Pivot-rest pin	–	100	377443	377443	377443	
31	1	End cap corner hinge, black	–	100	377885	377885	377885	
30	2	Countersunk screw M5 x 9, blue	–	100	212751	212751	212751	
21	2	Countersunk screw M5 x 8, red	–	100	212752	212752	212752	
29	1	End cap pivot rest, black	–	100	377887	377887	377887	
	1	130 kg upgrade-kit, consisting of:		10	377461	377461	377461	
23	1	Fixing connecting-link	–	100	377889	377889	377889	
24	1	Countersunk tapping-screw 4.8 x 16	–	100	378067	378067	378067	

Roto AluVision T 540

Tilt-First hardware

90kg/130kg, RC1, clamped bearing



Grey parts are optional and not included in the basic set.

Locking components and sash stays				
Pos.	Pcs	Description	Colour	PQ Material no.
3	1	Run-up wedge V.01	-	100 212762
		Run-up wedge V.02	-	100 212512
2	1	Tilt lock bolt TF	-	100 334757
1	1	TF horizontal Tilt&Turn striker V.01	-	100 334755
		TF horizontal Tilt&Turn striker V.02	-	100 334756
5	1	Striker V.01	-	100 212633
		Striker V.02	-	100 212634
6	4	SEC cam, insertable	-	100 447245
7	4	SEC striker V.01	-	100 212637
		SEC striker V.02	-	100 212638
16	1	Striker stop, V.01	-	100 331014
		Striker stop, V.02	-	100 331015
17	1	Corner drive with MD	-	50 331011
4	1	Corner drive w/o MD	-	50 331012

Locking components and sash stays				
Pos.	Pcs	Description	Colour	PQ Material no.
19	1	TF sash stay 600	-	10 377453
18	1	TF sash stay 390	-	10 377450
37	1	SEC rebate clearance reduction	-	50 447112
		Screw 4.8 x 16 not dep.	-	100 212754
27	1	SEC corner drive CL	-	10 334359
8	1	SEC connector	-	100 447113
39	1	Countersunk screw M5 x 7	-	100 335250
26	1	Alignment fork, zinc	-	100 212636

NOTE
Additional components (size-related), see Basic security, page 95.

Application range

Sash width **SW** 390 – 1600 mm
 Sash height **SH** 600 – 2400 mm
 Sash weight **S.kg** max. 90/130 kg¹⁾

Clearance **CL** 11.5 – 12 mm
 Overlap width **OW** 21.5 – 22 mm
 Hinge passage 3.5 – 5 mm

Optional					
Espagnolettes and connectors					
Pos.	Pcs	Description	Colour	PQ	Material no.
11	1	RotoLine geared-handle 26 TF, lockable	–		(→ p. 205)
8	2	SEC connector	–	100	447113
12	1	SEC geared-handle protection	–	10	487407
35	2	Countersunk screw M5 x 10	–	100	210970
10	1	Geared-handle support	–	100	331937
9	2	Flat-headed screw M5 x 12	–	100	212500
Alternatively:					
16	1	SEC flush-enc. gearbox w/o MD	–	10	457210
13	1	RotoLine window handle TF for flush-encased gearbox, lockable	–		Machining
14	2	Countersunk screw “niro” (stainless-steel) M5 x 30	–	100	212501
15	1	SEC drilling protection	–	10	487406
8	2	SEC connector	–	100	447113
36	2	Cylinder head screw M5 x 8	–	100	335249
38	1	SEC rebate clearance reduction	–	50	334360
Additional components, size-related					
Pos.	Pcs	Description	Colour	PQ	Material no.
20	1	Additional scissor stay V.01	–	10	331024
		Additional scissor stay V.02	–	10	331025

1) ≥ 90 kg with upgrade-kit 130 kg

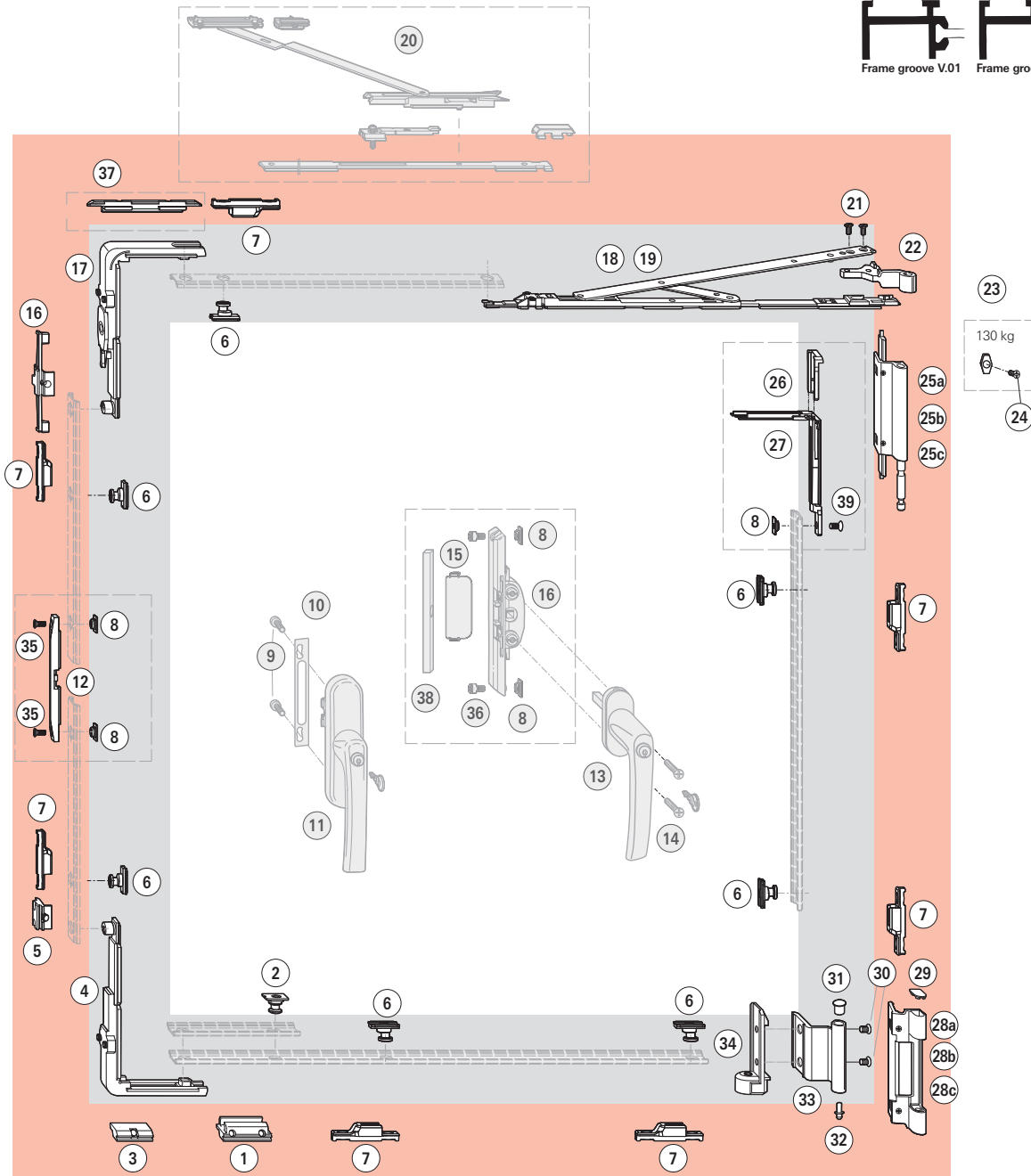
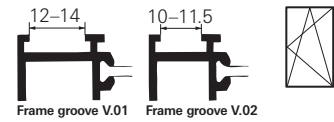
Parts list basic sets				
‘10’ basic sets – divided according to locking components & hinge side				
Description	Colour	Material no.		
Locking components V.01	–	331270		
Locking components V.02	–	331271		
SEC rebate clearance reduction set	–	335247		
Rebate clearance reduction, countersunk tapping-screw				
SEC geared-handle protection set	–	485768		
Geared-handle protection, 2 SEC connectors, 2 screws				
SEC corner drive CL set	–	335187		
Corner drive, alignment fork, SEC connector, screw				
SEC flush-encased gearbox set	–	457209		
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection				
Sash stay 390	–	377450		
Sash stay 600	–	377453		
Hinge side T&T				
Description	Colour	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.
Silver	R01.5	377455	378313	378942
Dark bronze	R05.4	377459	378317	379247
Jet-black	R06.2	377456	378314	378943
Traffic-white	R07.2	377458	378316	379246
Special colour	SPCOL	377460	378318	379248

Hinge side								
Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
33	1	Corner hinge	Silver	R01.5	50	377498	377498	377498
			Dark bronze	R05.4	50	377502	377502	377502
			Jet-black	R06.2	50	377499	377499	377499
			Traffic-white	R07.2	50	377501	377501	377501
			Special colour	SP COL	50	377503	377503	377503
28a) – 28c)	1	Pivot rest	Silver	R01.5	50	377504	378295	379279
			Dark bronze	R05.4	50	377508	378299	379283
			Jet-black	R06.2	50	377505	378296	379280
			Traffic-white	R07.2	50	377507	378298	379282
			Special colour	SP COL	50	377509	378300	379284
22	1	Stay-arm hinge	Silver	R01.5	50	377486	377486	377486
			Dark bronze	R05.4	50	377490	377490	377490
			Jet-black	R06.2	50	377487	377487	377487
			Traffic-white	R07.2	50	377489	377489	377489
			Special colour	SP COL	50	377491	377491	377491
25a) – 25c)	1	Stay bearing 90 kg	Silver	R01.5	50	377492	378289	379267
			Dark bronze	R05.4	50	377496	378293	379271
			Jet-black	R06.2	50	377493	378290	379268
			Traffic-white	R07.2	50	377495	378292	379270
			Special colour	SP COL	50	377497	378294	379272
	1	Misc. small components pack:		100	382881	382881	382881	
34	1	Clamping corner bracket	–	100	377444	377444	377444	
32	1	Pivot-rest pin	–	100	377443	377443	377443	
31	1	End cap corner hinge, black	–	100	377885	377885	377885	
30	2	Countersunk screw M5 x 9, blue	–	100	212751	212751	212751	
21	2	Countersunk screw M5 x 8, red	–	100	212752	212752	212752	
29	1	End cap pivot rest, black	–	100	377887	377887	377887	
	1	130 kg upgrade-kit, consisting of:		100	377461	377461	377461	
23	1	Fixing connecting-link	–	100	377889	377889	377889	
24	1	Countersunk tapping-screw 4.8 x 16	–	100	378067	378067	378067	

Roto AluVision T 540

Tilt-First hardware

90 kg/130 kg, RC2, clamped bearing



Grey parts are optional and not included in the basic set.

Locking components and sash stays				
Pos.	Pcs	Description	Colour	PQ Material no.
3	1	Run-up wedge V.01	-	100 212762
		Run-up wedge V.02	-	100 212512
2	1	Tilt lock bolt TF	-	100 334757
1	1	TF horizontal Tilt&Turn striker V.01	-	100 334755
		TF horizontal Tilt&Turn striker V.02	-	100 334756
5	1	Striker V.01	-	100 212633
		Striker V.02	-	100 212634
6	7	SEC cam, insertable	-	100 447245
7	7	SEC striker V.01	-	100 212637
		SEC striker V.02	-	100 212638
16	1	Striker stop, V.01	-	100 331014
		Striker stop, V.02	-	100 331015
17	1	Corner drive with MD	-	50 331011
4	1	Corner drive w/o MD	-	50 331012

Locking components and sash stays				
Pos.	Pcs	Description	Colour	PQ Material no.
19	1	TF sash stay 600	-	10 377453
18	1	TF sash stay 390	-	10 377450
37	1	SEC rebate clearance reduction	-	50 447112
		Screw 4.8 x 16 not dep.	-	100 212754
27	1	SEC corner drive CL	-	10 334359
8	1	SEC connector	-	100 447113
39	1	Countersunk screw M5 x 7	-	100 335250
26	1	Alignment fork, zinc	-	100 212636

NOTE
Additional components (size-related), see Basic security, page 95.

Application range

Sash width **SW**700–1600 mm
 Sash height **SH**700–2400 mm
 Sash weight **S.kg**max. 90/130 kg¹⁾

Clearance **CL**11.5–12 mm
 Overlap width **OW**21.5–22 mm
 Hinge passage3.5–5 mm

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
11	1	RotoLine geared-handle 26 TF, lockable	–		(→ p. 205)
8	2	SEC connector	–	100	447113
12	1	SEC geared-handle protection	–	10	487407
35	2	Countersunk screw M5 x 10	–	100	210970
10	1	Geared-handle support	–	100	331937
9	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

16	1	SEC flush-enc. gearbox w/o MD	–	10	457210
13	1	RotoLine window handle TF for flush-encased gearbox, lockable	–		Machining
14	2	Countersunk screw “niro” (stainless-steel) M5 x 30	–	100	212501
15	1	SEC drilling protection	–	10	487406
8	2	SEC connector	–	100	447113
36	2	Cylinder head screw M5 x 8	–	100	335249
38	1	SEC rebate clearance reduction	–	50	334360

Additional components, size-related

Pos.	Pcs	Description	Colour	PQ	Material no.
20	1	Additional scissor stay V.01	–	10	331024
		Additional scissor stay V.02	–	10	331025

1) ≥ 90 kg with upgrade-kit 130 kg

Parts list basic sets

'10' basic sets – divided according to locking components & hinge side

Description	Colour	Material no.
Locking components V.01	–	331270
Locking components V.02	–	331271
SEC rebate clearance reduction set	–	335247
Rebate clearance reduction, countersunk tapping-screw		
SEC geared-handle protection set	–	485768
Geared-handle protection, 2 SEC connectors, 2 screws		
SEC corner drive CL set	–	335187
Corner drive, alignment fork, SEC connector, screw		
SEC flush-encased gearbox set	–	457209
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection		
Sash stay 390	–	377450
Sash stay 600	–	377453

Hinge side T&T

Description	Colour	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.
Silver	R01.5	377455	378313	378942
Dark bronze	R05.4	377459	378317	379247
Jet-black	R06.2	377456	378314	378943
Traffic-white	R07.2	377458	378316	379246
Special colour	SPCOL	377460	378318	379248

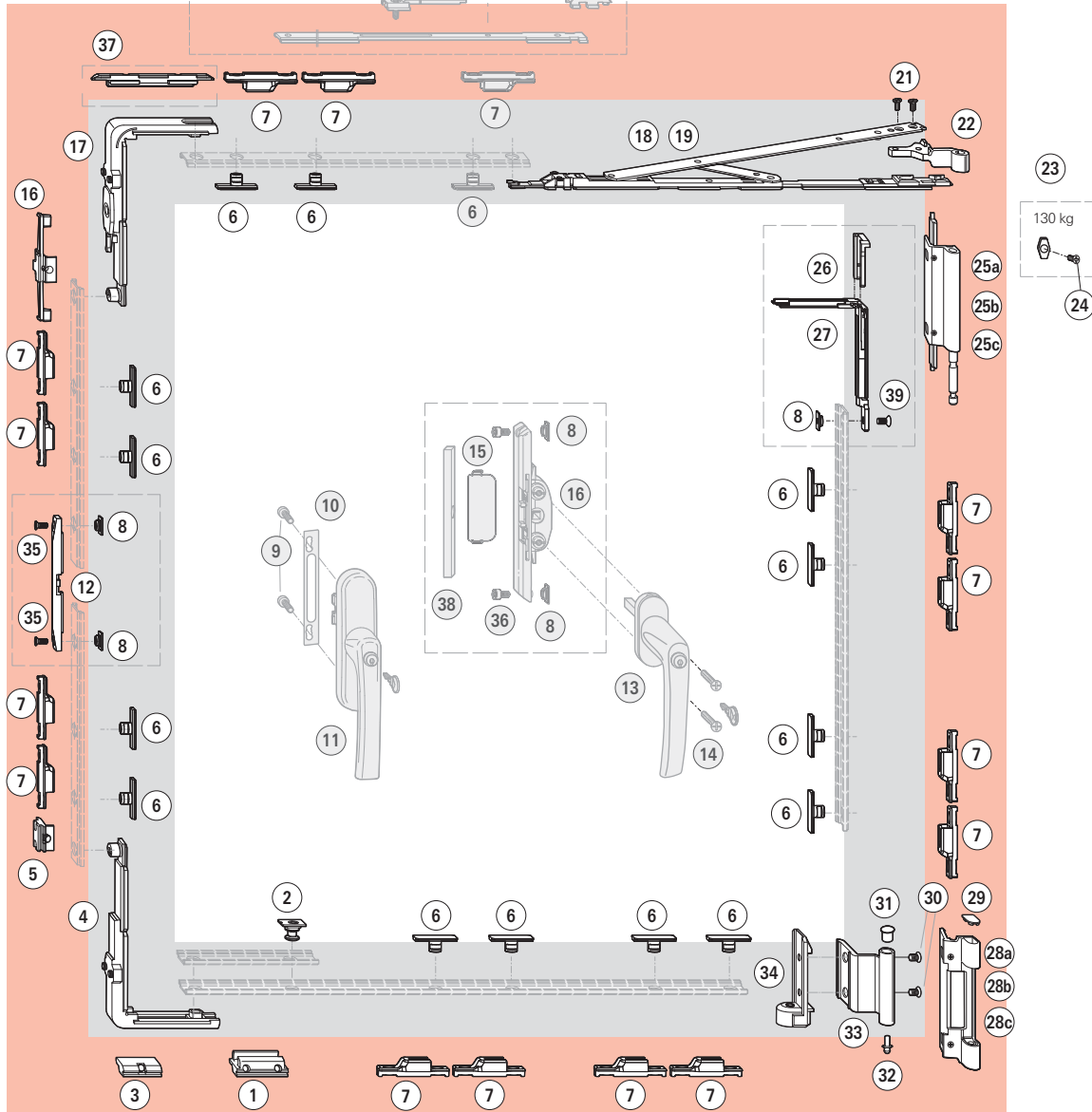
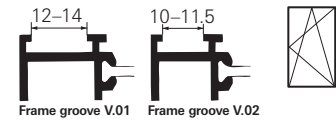
Hinge side

Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
33	1	Corner hinge	Silver	R01.5	50	377498	377498	377498
			Dark bronze	R05.4	50	377502	377502	377502
			Jet-black	R06.2	50	377499	377499	377499
			Traffic-white	R07.2	50	377501	377501	377501
			Special colour	SP COL	50	377503	377503	377503
28a) – 28c)	1	Pivot rest	Silver	R01.5	50	377504	378295	379279
			Dark bronze	R05.4	50	377508	378299	379283
			Jet-black	R06.2	50	377505	378296	379280
			Traffic-white	R07.2	50	377507	378298	379282
			Special colour	SP COL	50	377509	378300	379284
22	1	Stay-arm hinge	Silver	R01.5	50	377486	377486	377486
			Dark bronze	R05.4	50	377490	377490	377490
			Jet-black	R06.2	50	377487	377487	377487
			Traffic-white	R07.2	50	377489	377489	377489
			Special colour	SP COL	50	377491	377491	377491
25a) – 25c)	1	Stay bearing 90 kg	Silver	R01.5	50	377492	378289	379267
			Dark bronze	R05.4	50	377496	378293	379271
			Jet-black	R06.2	50	377493	378290	379268
			Traffic-white	R07.2	50	377495	378292	379270
			Special colour	SP COL	50	377497	378294	379272
	1	Misc. small components pack:		100	382881	382881	382881	
34	1	Clamping corner bracket	–	100	377444	377444	377444	
32	1	Pivot-rest pin	–	100	377443	377443	377443	
31	1	End cap corner hinge, black	–	100	377885	377885	377885	
30	2	Countersunk screw M5 x 9, blue	–	100	212751	212751	212751	
21	2	Countersunk screw M5 x 8, red	–	100	212752	212752	212752	
29	1	End cap pivot rest, black	–	100	377887	377887	377887	
			–	100	377887	377887	377887	
	1	130 kg upgrade-kit, consisting of:		100	377461	377461	377461	
23	1	Fixing connecting-link	–	100	377889	377889	377889	
24	1	Countersunk tapping-screw 4.8 x 16	–	100	378067	378067	378067	

Roto AluVision T 540

Tilt-First hardware

90 kg/130 kg, RC3, clamped bearing



Grey parts are optional and not included in the basic set.

Locking components and sash stays				
Pos.	Pcs	Description	Colour	PQ Material no.
3	1	Run-up wedge V.01	-	100 212762
		Run-up wedge V.02	-	100 212512
2	1	Tilt lock bolt TF	-	100 334757
1	1	TF horizontal Tilt&Turn striker V.01	-	100 334755
		TF horizontal Tilt&Turn striker V.02	-	100 334756
5	1	Striker V.01	-	100 212633
	1	Striker V.02	-	100 212634
6	14	SEC cam, RC3, insertable	-	100 445530
7	14	SEC striker V.01	-	100 212637
		SEC striker V.02	-	100 212638
16	1	Striker stop, V.01	-	100 331014
	1	Striker stop, V.02	-	100 331015
17	1	Corner drive with MD	-	50 331011

Locking components and sash stays				
Pos.	Pcs	Description	Colour	PQ Material no.
4	1	Corner drive w/o MD	-	50 331012
19	1	TF sash stay 600	-	10 377453
18	1	TF sash stay 390	-	10 377450
37	1	SEC rebate clearance reduction	-	50 447112
	1	Screw 4.8 x 16 not dep.	-	100 212754
27	1	SEC corner drive CL	-	10 334359
8	1	SEC connector	-	100 447113
39	1	Countersunk screw M5 x 7	-	100 335250
26	1	Alignment fork, zinc	-	100 212636

NOTE
Additional components (size-related), see Basic security, page 95.

Application range

Sash width **SW**765–1600 mm
 Sash height **SH**840–2400 mm
 Sash weight **S.kg** max. 90/130 kg¹⁾

Clearance **CL**11.5–12 mm
 Overlap width **OW**21.5–22 mm
 Hinge passage3.5–5 mm

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
11	1	RotoLine geared-handle 26 TF, lockable	–		(→ p. 205)
8	2	SEC connector	–	100	447113
12	1	SEC geared-handle protection	–	10	487407
35	2	Countersunk screw M5 x 10	–	100	210970
10	1	Geared-handle support	–	100	331937
9	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

16	1	SEC flush-enc. gearbox w/o MD	–	10	457210
13	1	RotoLine window handle TF for flush-encased gearbox, lockable	–		Machining
14	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100	212501
15	1	SEC drilling protection	–	10	487406
8	2	SEC connector	–	100	447113
36	2	Cylinder head screw M5 x 8	–	100	335249
38	1	SEC rebate clearance reduction	–	50	334360

Additional components, size-related

Pos.	Pcs	Description	Colour	PQ	Material no.
6	1	SEC cam, RC3, insertable	–	100	443530
7	1	SEC striker V.01	–	100	212637
		SEC striker V.02	–	100	212638
20	1	TF additional scissor stay V.01	–	10	331026
		TF additional scissor stay V.02	–	10	331027

1) ≥ 90 kg with upgrade-kit 130 kg

Hinge side

Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
33	1	Corner hinge	Silver	R01.5	50	377498	377498	377498
			Dark bronze	R05.4	50	377502	377502	377502
			Jet-black	R06.2	50	377499	377499	377499
			Traffic-white	R07.2	50	377501	377501	377501
			Special colour	SP COL	50	377503	377503	377503
28a – 28c	1	Pivot rest	Silver	R01.5	50	377504	378295	379279
			Dark bronze	R05.4	50	377508	378299	379283
			Jet-black	R06.2	50	377505	378296	379280
			Traffic-white	R07.2	50	377507	378298	379282
			Special colour	SP COL	50	377509	378300	379284
22	1	Stay-arm hinge	Silver	R01.5	50	377486	377486	377486
			Dark bronze	R05.4	50	377490	377490	377490
			Jet-black	R06.2	50	377487	377487	377487
			Traffic-white	R07.2	50	377489	377489	377489
			Special colour	SP COL	50	377491	377491	377491
25a – 25c	1	Stay bearing 90 kg	Silver	R01.5	50	377492	378289	379267
			Dark bronze	R05.4	50	377496	378293	379271
			Jet-black	R06.2	50	377493	378290	379268
			Traffic-white	R07.2	50	377495	378292	379270
			Special colour	SP COL	50	377497	378294	379272
	1	Misc. small components pack:		100	382881	382881	382881	
34	1	Clamping corner bracket	–	100	377444	377444	377444	
32	1	Pivot-rest pin	–	100	377443	377443	377443	
31	1	End cap corner hinge, black	–	100	377885	377885	377885	
30	2	Countersunk screw M5 x 9, blue	–	100	212751	212751	212751	
21	2	Countersunk screw M5 x 8, red	–	100	212752	212752	212752	
29	1	End cap pivot rest, black	–	100	377887	377887	377887	
	1	130 kg upgrade-kit, consisting of:		100	377461	377461	377461	
23	1	Fixing connecting-link	–	100	377889	377889	377889	
24	1	Countersunk tapping-screw 4.8 x 16	–	100	378067	378067	378067	

Parts list basic sets

'10' basic sets – divided according to locking components & hinge side

Description	Colour	Material no.
Locking components V.01	–	331270
Locking components V.02	–	331271
SEC rebate clearance reduction set	–	335247
Rebate clearance reduction, countersunk tapping-screw		
SEC geared-handle protection set	–	485768
Geared-handle protection, 2 SEC connectors, 2 screws		
SEC corner drive CL set	–	335187
Corner drive, alignment fork, SEC connector, screw		
SEC flush-encased gearbox set	–	457209
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection		
Sash stay 390	–	377450
Sash stay 600	–	377453

Hinge side T&T

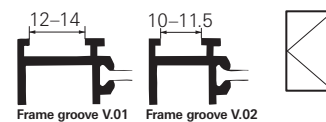
Description	Colour	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.
Silver	R01.5	377455	378313	378942
Dark bronze	R05.4	377459	378317	379247
Jet-black	R06.2	377456	378314	378943
Traffic-white	R07.2	377458	378316	379246
Special colour	SP COL	377460	378318	379248

Roto AluVision T 540

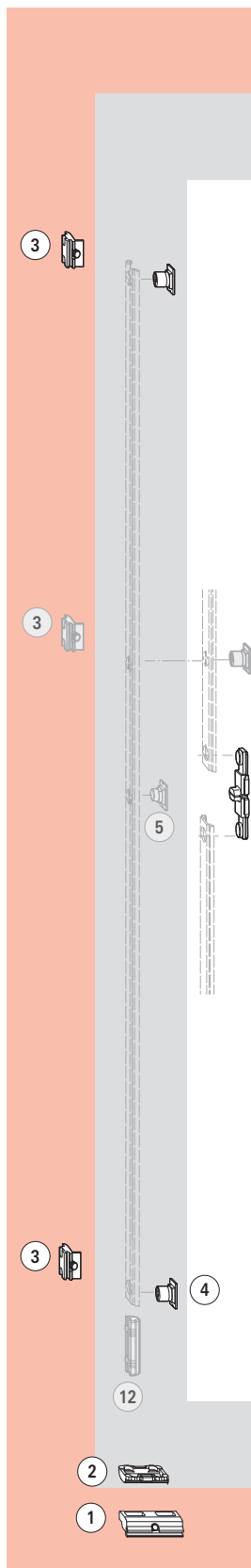
Roto AluVision T 540

Turn-Only hardware

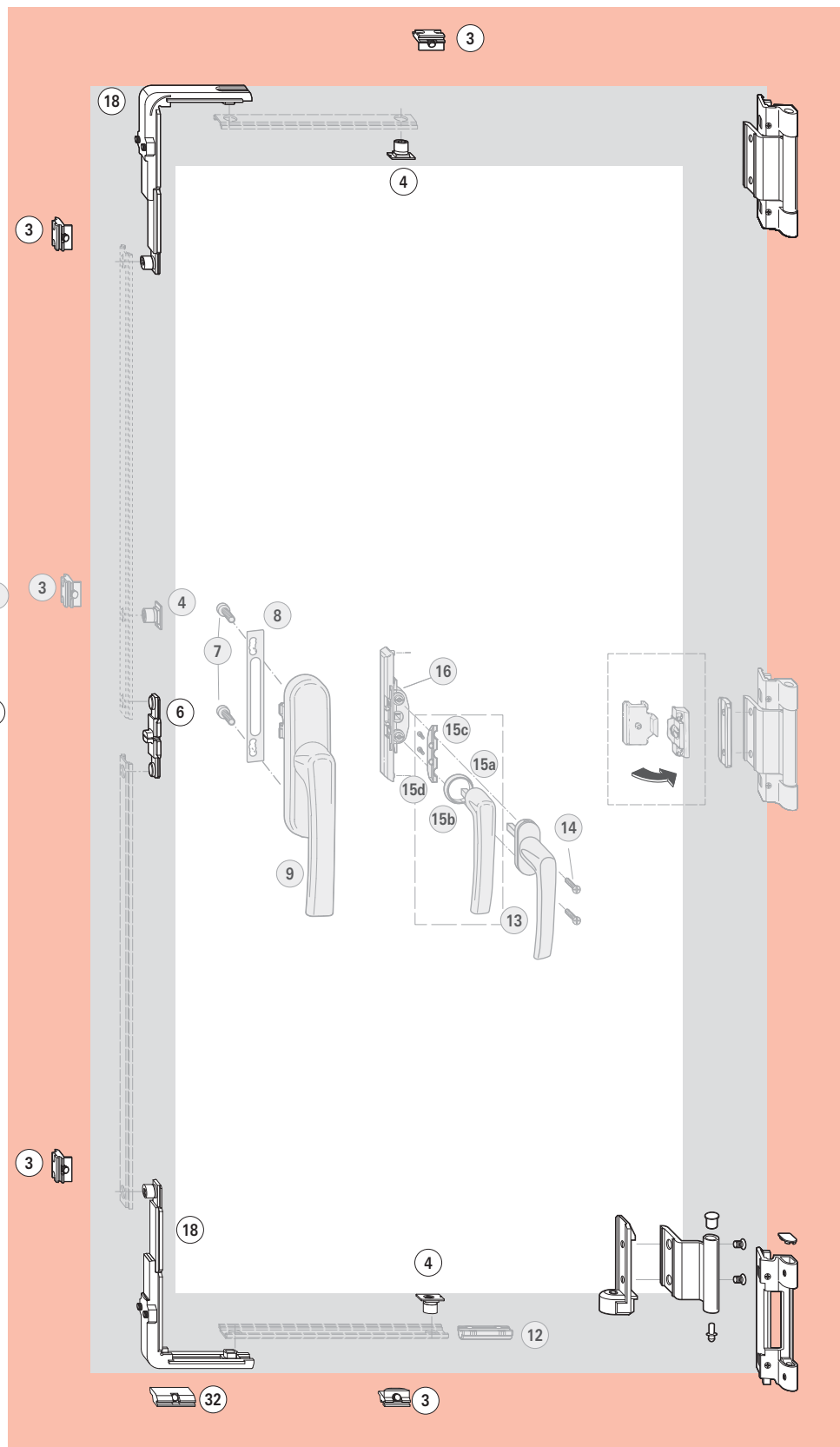
Locking side 90 kg/130 kg, Basic security, clamped bearing



TU-ON



TU-ON CLS



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW**405–1600 mm
 Sash height **SH**520–2400 mm
 Sash weight **S.kg** max. 90/130 kg¹⁾

Clearance **CL**11.5–12 mm
 Overlap width **OW**21.5–22 mm
 Hinge passage3.5–5 mm

Basic sets

'10' basic set V.01/V.02 without hinge side				
Pos.	Pcs	Frame-groove version	Colour	PQ Material no.
		TU-ON basic set V.01	–	331272
		TU-ON basic set V.02	–	331273

'10' basic set V.01/V.02 with central locking system, w/o hinge side				
Pos.	Pcs	Frame-groove version	Colour	PQ Material no.
		TU-ON C basic set V.01	–	331277
		TU-ON C basic set V.02	–	331278

Bulk packaging

Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
②	1	Run-up block	–	100	212008
④	2	Locking cam, insertable	–	100	334671
①	1	Horizontal Tilt&Turn striker	–	100	212122
③	2	Striker V.01	–	100	212633
		Striker V.02	–	100	212634

Locking parts of the central locking system

Pos.	Pcs	Description	Colour	PQ	Material no.
③②	1	Run-up wedge V.01	–	100	212512
		Run-up wedge V.02	–	20	212762
④	4	Locking cam, insertable	–		334671
③	2	Striker V.01	–		212633
		Striker V.02	–		212634
⑱		Corner drive w/o MD	–		331012

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
⑨	1	RotoLine geared-handle 26	–		(→ p.205)
⑥	1	T connector	–	100	334754
⑧	1	Geared-handle support	–	100	331937
⑦	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

⑩⑥	1	Flush-encased gearbox w/o MD	–	10	378338
⑩③	1	RotoLine window handle for flush-encased gearbox	–		(→ p.208)
⑩④	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100	212501
⑩⑤a	1	Escutcheonless handle	–		(→ p.207)
⑩⑤b	1	Ring for escutcheonless handle	–		(→ p.207)
⑩⑤c	1	Mounting plate	–	10	378134
⑩⑤d	4	Screws for escutcheonless handle	–		

Espagnolettes and connectors not dep.

Pos.	Pcs	Description	Colour	PQ	Material no.
	1	RotoLine reverse-action handle	Silver R01.5	10	378925
			Dark bronze R05.4	10	378929
			Jet-black R06.2	10	378926
			Traffic-white R07.2	10	378928
			Special colour SPCOL	10	378930
			Uncoated raw	10	238742
	1	Connector set for mishandling device		10	212325

Optional

Additional components (height-related)

Pos.	Pcs	Description	Colour	PQ	Material no.
⑤	1	Connector-bolt, insertable	–	100	254601
⑫		Child safety lock 90°	–	100	212008

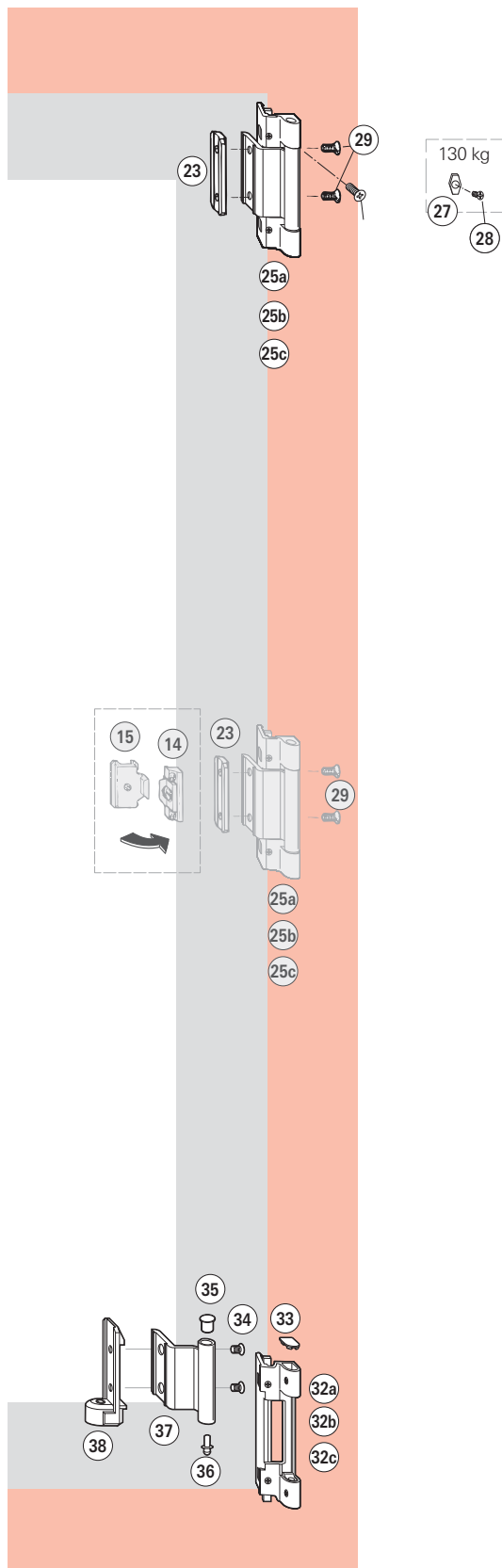
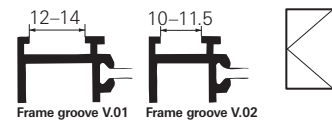
1) ≥ 90 kg with additional screw or upgrade-kit 130 kg
 2) Applicable for SW ≤ 1000 mm & basic security

Roto AluVision T 540

Roto AluVision T 540

Turn-Only hardware

Hinge side 90 kg / 130 kg, Basic security, clamped bearing



Application table

Content:	Turn-Only hinge/Corner hinge
Assembly:	clampable
Hinge passage:	≥ 3.5 mm
Max. sash weight:	130 kg
Adjustment:	Yes
Application:	TU-ON / DM

Grey parts are optional and not included in the basic set.

Application range

Sash width SW	405–1600 mm	Clearance CL	11.5–12 mm
Sash height SH	520–2400 mm	Overlap width OW	21.5–22 mm
Sash weight S.kg	max. 90/130 kg ¹⁾	Hinge passage	3.5–5 mm

Parts list basic set

'10' basic set					
Description	Colour	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
Hinge side TU-ON	Silver	R01.5	377462	378319	379255
	Dark bronze	R05.4	377466	378323	379259
	Jet-black	R06.2	377463	378320	379256
	Traffic-white	R07.2	377465	378322	379258
	Special colour	SP COL	377467	378324	379260

Parts lists bulk packaging

Hinge side								
Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
37	1	Corner hinge	Silver	R01.5	50	377498	377498	377498
			Dark bronze	R05.4	50	377502	377502	377502
			Jet-black	R06.2	50	377499	377499	377499
			Traffic-white	R07.2	50	377501	377501	377501
			Special colour	SP COL	50	377503	377503	377503
32a) – 32c)	1	Pivot rest	Silver	R01.5	50	377504	378295	379279
			Dark bronze	R05.4	50	377508	378299	379283
			Jet-black	R06.2	50	377505	378296	379280
			Traffic-white	R07.2	50	377507	378298	379282
			Special colour	SP COL	50	377509	378300	379284
25a) – 25c)	1	Turn-Only hinge	Silver	R01.5	50	377890	378301	379273
			Dark bronze	R05.4	50	377894	378305	379277
			Jet-black	R06.2	50	377891	378302	379274
			Traffic-white	R07.2	50	377893	378304	379276
			Special colour	SP COL	50	377895	378306	379278
	1	Misc. small components pack:		100	382882	382882	382882	
38	1	Clamping corner bracket	–	100	377444	377444	377444	
36	1	Pivot-rest pin	–	100	377443	377443	377443	
23	1	Clamping support-strip TU-ON	–	100	212055	212055	212055	
35	1	End cap corner hinge, black	–	100	377885	377885	377885	
29	4	Countersunk screw M5 x 9, blue	–	100	212751	212751	212751	
33	1	End cap pivot rest, black	–	100	377887	377887	377887	
26	1	Special screw M5 x 16 (from 90 kg)	–	100	212058	212058	212058	
	1	130 kg upgrade-kit, consisting of:	–	10	377461	377461	377461	
27	1	Fixing connecting-link	–	10	377889	377889	377889	
28	1	Countersunk tapping-screw 4.8 x 16	–	100	378067	378067	378067	

Optional

Central hinge

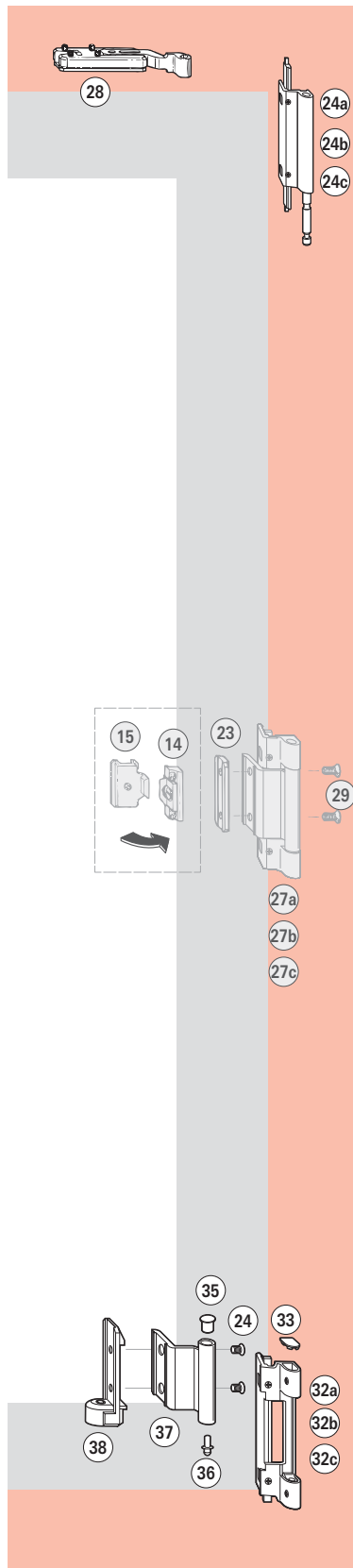
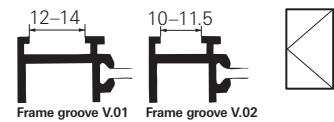
Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
25a) – 25c)	1	Turn-Only hinge	Silver	R01.5	50	377890	378301	379273
			Dark bronze	R05.4	50	377894	378305	379277
			Jet-black	R06.2	50	377891	378302	379274
			Traffic-white	R07.2	50	377893	378304	379276
			Special colour	SP COL	50	377895	378306	379278
	1	Misc. small components pack:		100	382884	382884	382884	
23	1	Clamping support-strip TU-ON	–	100	212055	212055	212055	
29	4	Countersunk screw M5 x 9, blue	–	100	212751	212751	212751	
Alternatively:								
15	1-2	CL sash component		100	212770	212770	212770	
14	1-2	CL frame component V.01		100	212768	212768	212768	
		CL frame component V.02		100	208361	208361	208361	

1) ≥ 90 kg with special screw or upgrade-kit 130 kg

Roto AluVision T 540

Turn-Only hardware

Hinge side, adjustable 90 kg/ 130 kg, Basic security, clamped bearing



Application table

Content:	Turn-Only hinge/Corner hinge
Assembly:	Clampable/Enhanced adjustment
Hinge passage:	≥ 3.5 mm
Max. sash weight:	130 kg
Adjustment:	Yes/Enhanced adjustment
Application:	TU-ON / DM

Grey parts are optional and not included in the basic set.

Application range

Sash width SW	405–1600 mm	Clearance CL	11.5–12 mm
Sash height SH	520–2400 mm	Overlap width OW	21.5–22 mm
Sash weight S.kg	max. 90/130 kg ¹⁾	Hinge passage	3.5–5 mm

Parts list basic set

‘10’ basic set					
Description	Colour		Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.
Hinge side TU-ON adj	Silver	R01.5	377480	378331	379261
	Dark bronze	R05.4	377484	378335	379265
	Jet-black	R06.2	377481	378332	379262
	Traffic-white	R07.2	377483	378334	379264
	Special colour	SP COL	377485	378336	379266

Parts lists bulk packaging

Hinge side								
Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
37	1	Corner hinge	Silver	R01.5	50	377498	377498	377498
			Dark bronze	R05.4	50	377502	377502	377502
			Jet-black	R06.2	50	377499	377499	377499
			Traffic-white	R07.2	50	377501	377501	377501
			Special colour	SP COL	50	377503	377503	377503
32a) – 32c)	1	Pivot rest	Silver	R01.5	50	377504	378295	379279
			Dark bronze	R05.4	50	377508	378299	379283
			Jet-black	R06.2	50	377505	378296	379280
			Traffic-white	R07.2	50	377507	378298	379282
			Special colour	SP COL	50	377509	378300	379284
28	1	Turn-Only stay-arm hinge	Silver	R01.5	50	377902	377902	377902
			Dark bronze	R05.4	50	377906	377906	377906
			Jet-black	R06.2	50	377903	377903	377903
			Traffic-white	R07.2	50	377905	377905	377905
			Special colour	SP COL	50	377907	377907	377907
24a) – 24c)	1	Stay bearing 90 kg	Silver	R01.5	50	377492	378289	379267
			Dark bronze	R05.4	50	377496	378293	379271
			Jet-black	R06.2	50	377493	378290	379268
			Traffic-white	R07.2	50	377495	378292	379270
			Special colour	SP COL	50	377497	378294	379272
	1	Misc. small components pack:		100	382883	382883	382883	
38	1	Clamping corner bracket	–	100	377444	377444	377444	
36	1	Pivot-rest pin	–	100	377443	377443	377443	
35	1	End cap corner hinge, black	–	100	377885	377885	377885	
24	2	Countersunk screw M5 x 9, blue	–	100	212751	212751	212751	
33	1	End cap pivot rest, black	–	100	377887	377887	377887	
	1	130 kg upgrade-kit, consisting of:	–	10	377461	377461	377461	
25	1	Fixing connecting-link	–	10	377889	377889	377889	
26	1	Countersunk tapping-screw 4.8 x 16	–	100	378067	378067	378067	

Optional

Central hinge								
Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
27a) – 27c)	1	Central hinge adj.	Silver	R01.5	50	377896	378307	379285
			Dark bronze	R05.4	50	377900	378311	379289
			Jet-black	R06.2	50	377897	378308	379286
			Traffic-white	R07.2	50	377899	378310	379288
			Special colour	SP COL	50	377901	378312	379290
	1	Misc. small components pack:		100	382884	382884	382884	
23	1	Clamping support-strip TU-ON		100	212055	212055	212055	
29	2	Countersunk screw M5 x 9, blue		100	212751	212751	212751	
Alternatively:								
15	1-2	CL sash component		100	212770	212770	212770	
14	1-2	CL frame component V.01		100	212768	212768	212768	
		CL frame component V.02		100	208361	208361	208361	

1) ≥ 90 kg with upgrade-kit 130 kg

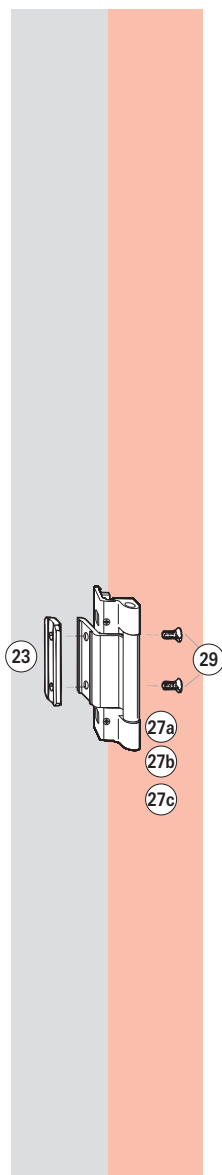
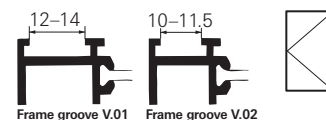
Roto AluVision
T 540



Roto AluVision T 540

Turn-Only hardware

Central hinge, adjustable 90 kg/ 130 kg, Basic security, clamped bearing



Application table

Content:	Central hinge
Assembly:	clampable
Hinge passage:	≥ 3.5 mm
Max. sash weight:	130 kg
Adjustment:	Yes
Application:	TU-ON / TI-ON / DM

Parts lists bulk packaging

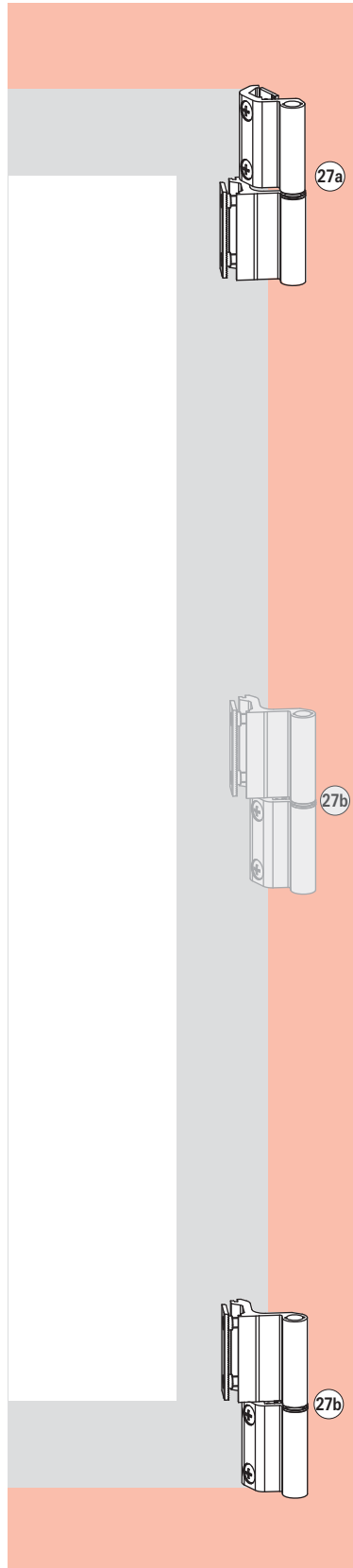
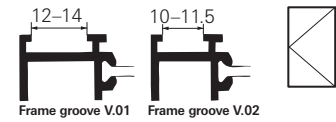
Hinge side

Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.
27a - 27c	1	Central hinge adj.	Silver R01.5	50	377896	378307	379285
			Dark bronze R05.4	50	377900	378311	379289
			Jet-black R06.2	50	377897	378308	379286
			Traffic-white R07.2	50	377899	378310	379288
			Special colour SP COL	50	377901	378312	379290
	1	Misc. small components pack:		100	382884	382884	382884
23	1	Clamping support-strip TU-ON	-	100	212055	212055	212055
29	4	Countersunk screw M5 x 9, blue	-	100	212751	212751	212751

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Turn-Only hardware

CD hinge side 50 kg/70 kg, Basic security, clamped bearing



Parts list bulk packaging

Turn-Only hinges

Pos.	Pcs	Description	Colour	Material no.	
27a	1	Turn-Only hinge EU left	Silver	R01.5	456859
			Jet-black	R06.2	456854
			Traffic-white	R07.2	456856
			Special colour	SPCOL	242684
			Uncoated	raw	457348
27b	1	Turn-Only hinge EU right	Silver	R01.5	456858
			Jet-black	R06.2	456855
			Traffic-white	R07.2	456857
			Special colour	SPCOL	242685
			Uncoated	raw	457348

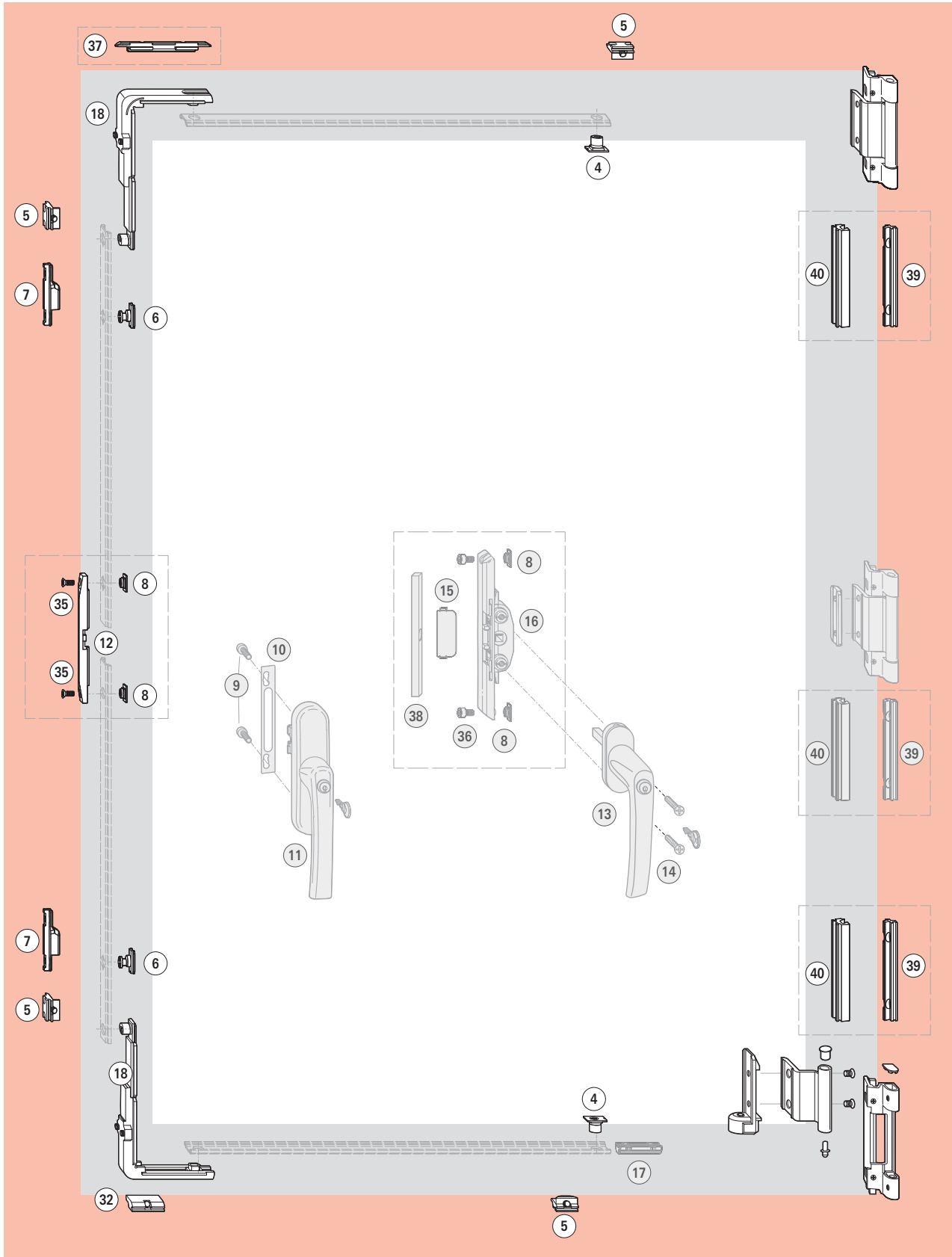
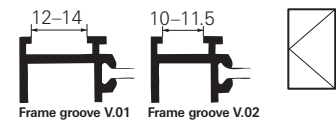
Application table

Content:	Turn-Only hinge EU
Assembly:	clampable
Hinge passage:	≥ 3.5 mm
Max. sash weight:	50 kg / 70 kg
Adjustment:	Yes
Application:	TU-ON / TI-ON / DM

Roto AluVision T 540

Turn-Only hardware

90 kg / 130 kg, RC1, clamped bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW**405–1600 mm
 Sash height **SH**700–2400 mm
 Sash weight **S.kg** max. 90/130 kg¹⁾

Clearance **CL**11.5–12 mm
 Overlap width **OW**21.5–22 mm
 Hinge passage3.5–5 mm

Basic sets

'10' basic set V.01/V.02 with central locking system, w/o hinge side

Pos.	Pcs	Frame-groove version	Colour	PQ	Material no.
		TU-ON C basic set V.01	–		331277
		TU-ON C basic set V.02	–		331278

Locking parts of the central locking system

Pos.	Pcs	Description	Colour	PQ	Material no.
32	1	Run-up wedge V.01	–	100	212762
		Run-up wedge V.02	–	100	212512
5	4	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
4	2	Locking cam, insertable	–	100	334671
6	2	SEC cam, insertable	–	100	447245
7	2	SEC striker V.01	–	100	212637
		SEC striker V.02	–	100	212638
18	2	Corner drive w/o MD	–	50	331012
37	1	SEC rebate clearance reduction	–	50	447112
	1	Screw 4 x 16 not dep.	–	100	212754

NOTE
 Additional components (size-related), see Basic security, page 103.

SEC components, hinge side

Pos.	Pcs	Description	Colour	PQ	Material no.
39	2	SEC hinge lock, frame V.01		20	331788
		SEC hinge lock, frame V.02		20	331789
40	2	SEC hinge lock, sash	–	20	331790
	6	Screw M4.8 x 16 not dep.	–	100	212754

NOTE!
 Standard hinge side, refer to hardware overviews Turn-Only sash, page 105.

1) ≥ 90 kg with special screw or upgrade-kit 130 kg

Parts list basic sets

'10' SEC basic set

Description	Colour	Material no.
SEC rebate clearance reduction set	–	335247
Rebate clearance reduction, countersunk tapping-screw		
SEC geared-handle protection set	–	485768
Geared-handle protection, 2 SEC connectors, 2 screws		
SEC hinge lock set V.01	–	335185
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC hinge lock set V.02	–	335186
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC flush-encased gearbox set	–	457209
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection		

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
11	1	RotoLine geared-handle 26, lockable	–		(→ p.205)
8	2	SEC connector	–	100	447113
12	1	SEC geared-handle protection	–	10	487407
35	2	Countersunk screw M5 x 10	–	100	210970
10	1	Geared-handle support	–	100	331937
9	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

16	1	SEC flush-enc. gearbox w/o MD	–	10	457210
13	1	RotoLine window handle for flush-encased gearbox, lockable			(→ p.209)
14	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100	212501
15	1	SEC drilling protection	–	10	487406
8	2	SEC connector		100	447113
36	2	Cylinder head screw M5 x 8	–	100	335249
38	1	SEC rebate clearance reduction	–	50	334360

Additional components, size-related

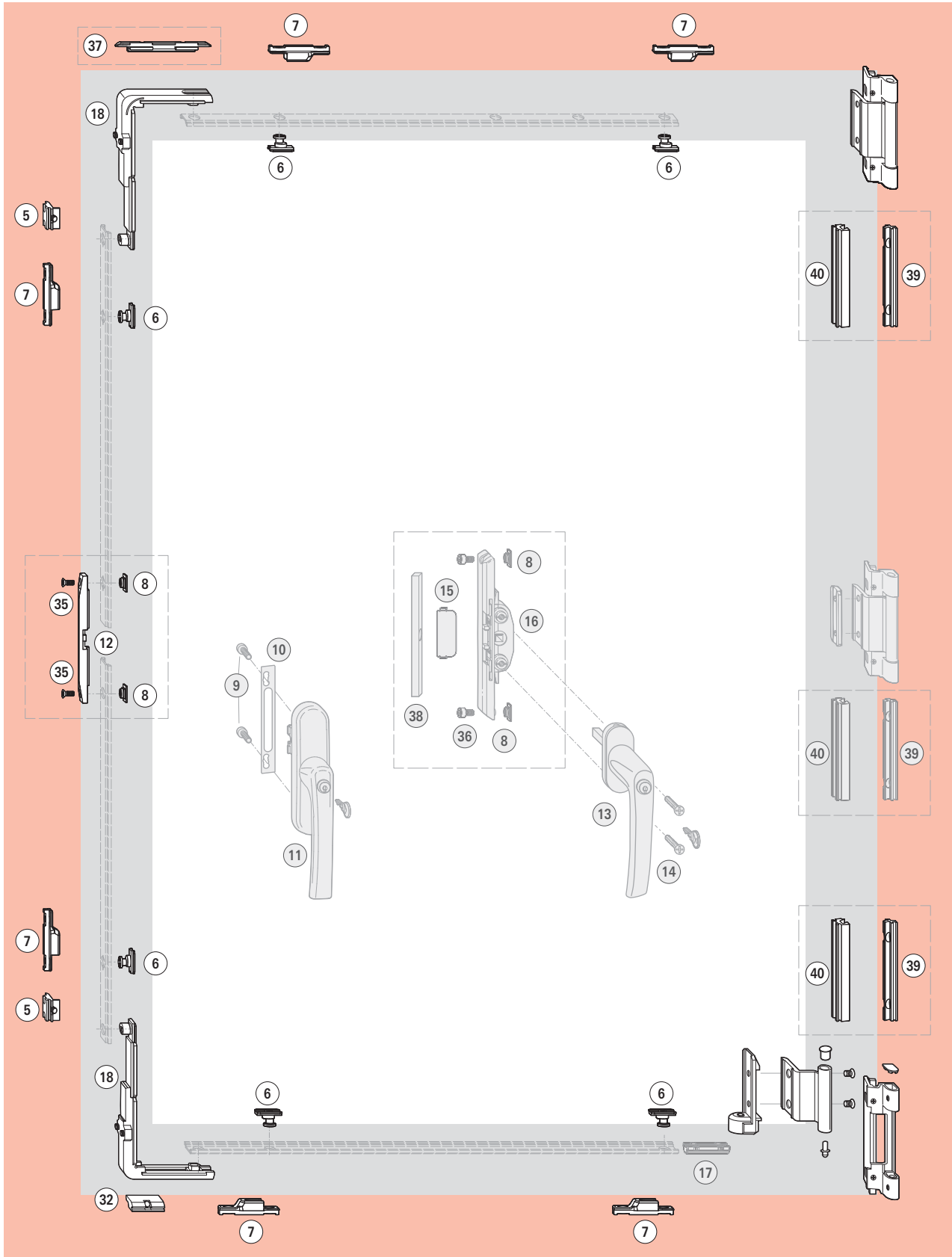
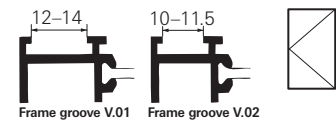
Pos.	Pcs	Description	Colour	PQ	Material no.
17	1	Handle lock 90°	–	100	212008
39	1	SEC hinge lock, frame V.01		20	331788
		SEC hinge lock, frame V.02		20	331789
40	1	SEC hinge lock, sash	–	20	331790
	3	Screw M4.8 x 16 not dep.	–	100	212754

Roto AluVision T 540

Roto AluVision T 540

Turn-Only hardware

90 kg / 130 kg, RC2, clamped bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 525–1600 mm
 Sash height **SH** 700–2400 mm
 Sash weight **S.kg** max. 90/130 kg¹⁾

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Basic sets				
'10' basic set V.01/V.02 with central locking system, w/o hinge side				
Pos.	Pcs	Frame-groove version	Colour	PQ Material no.
		TU-ON C basic set V.01	–	331277
		TU-ON C basic set V.02	–	331278
Locking parts of the central locking system				
Pos.	Pcs	Description	Colour	PQ Material no.
32	1	Run-up wedge V.01	–	100 212762
		Run-up wedge V.02	–	100 212512
5	4	Striker V.01	–	100 212633
		Striker V.02	–	100 212634
6	6	SEC cam, insertable	–	100 447245
7	6	SEC striker V.01	–	100 212637
		SEC striker V.02	–	100 212638
18	2	Corner drive w/o MD	–	50 331012
37	1	SEC rebate clearance reduction	–	50 447112
	1	Screw 4 x 16 (not dep.)	–	100 212754

NOTE
 Additional components (size-related), see Basic security, page 103.

SEC components, hinge side				
Pos.	Pcs	Description	Colour	PQ Material no.
39	2	SEC hinge lock, frame V.01		20 331788
		SEC hinge lock, frame V.02		20 331789
40	2	SEC hinge lock, sash	–	20 331790
	6	Screw M4.8 x 16 not dep.	–	100 212754

NOTE!
 Standard hinge side, refer to hardware overviews Turn-Only sash, page 105.

1) ≥ 90 kg with special screw or upgrade-kit 130 kg

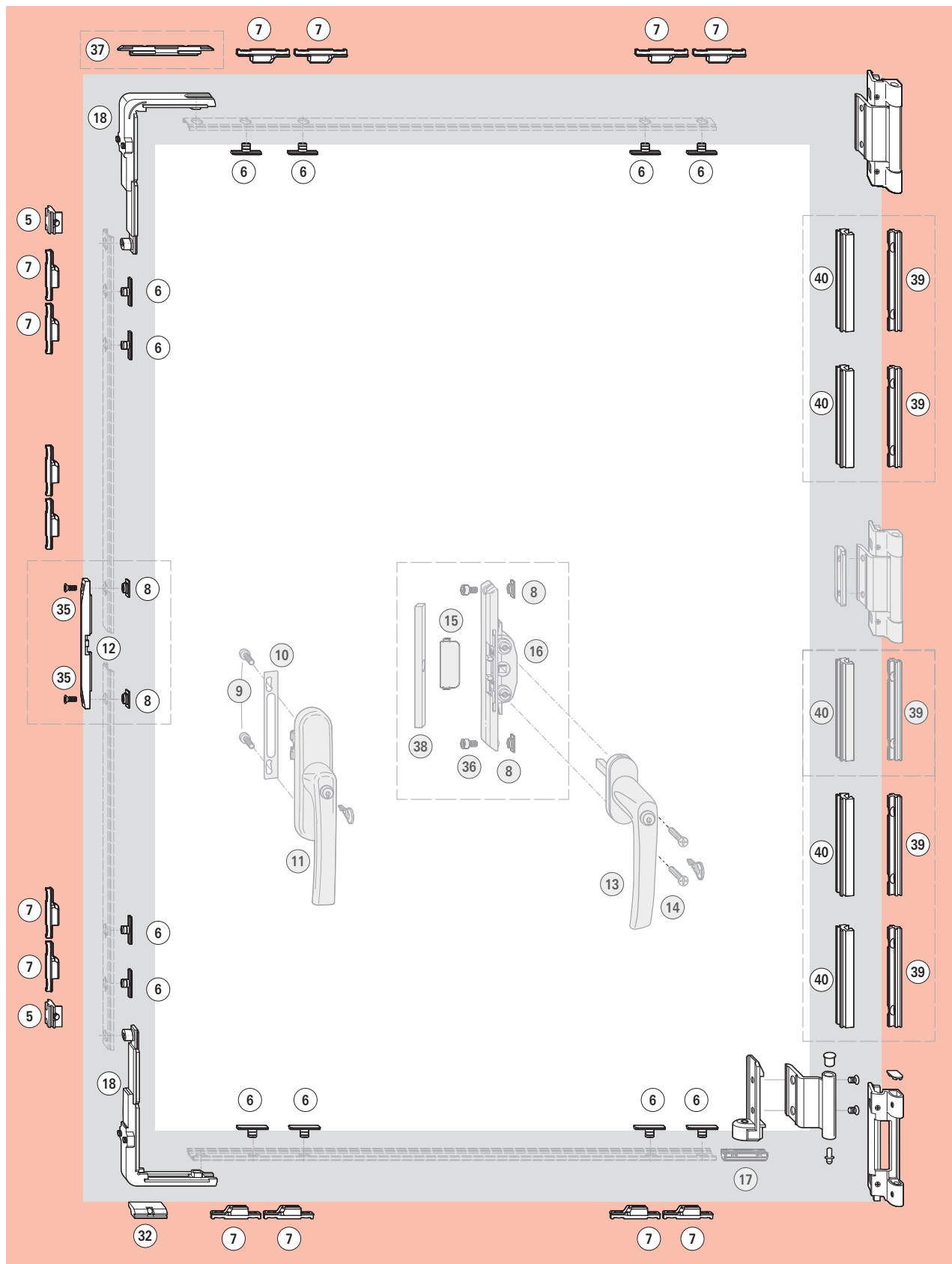
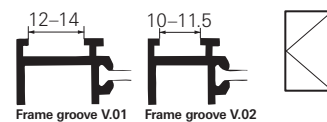
Parts list basic sets				
'10' SEC basic set				
Description	Colour	Material no.		
SEC rebate clearance reduction set	–	335247		
Rebate clearance reduction, countersunk tapping-screw				
SEC geared-handle protection set	–	485768		
Geared-handle protection, 2 SEC connectors, 2 screws				
SEC hinge lock set V.01	–	335185		
Hinge lock frame/sash, 3 countersunk tapping-screws				
SEC hinge lock set V.02	–	335186		
Hinge lock frame/sash, 3 countersunk tapping-screws				
SEC flush-encased gearbox set	–	457209		
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection				
Optional				
Espagnolettes and connectors				
Pos.	Pcs	Description	Colour	PQ Material no.
11	1	RotoLine geared-handle 26, lockable	–	(→ p.205)
8	2	SEC connector	–	100 447113
12	1	SEC geared-handle protection	–	10 487407
35	2	Countersunk screw M5 x 10	–	100 210970
10	1	Geared-handle support	–	100 331937
9	2	Flat-headed screw M5 x 12	–	100 212500
Alternatively:				
16	1	SEC flush-enc. gearbox w/o MD	–	10 457210
13	1	RotoLine window handle for flush-encased gearbox, lockable		(→ p.209)
14	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100 212501
15	1	SEC drilling protection	–	10 487406
8	2	SEC connector		100 447113
36	2	Cylinder head screw M5 x 8	–	100 335249
38	1	SEC rebate clearance reduction	–	50 334360
Additional components, size-related				
Pos.	Pcs	Description	Colour	PQ Material no.
17	1	Handle lock 90°	–	100 212008
39	1	SEC hinge lock, frame V.01		20 331788
		SEC hinge lock, frame V.02		20 331789
40	1	SEC hinge lock, sash	–	20 331790
	3	Screw M4.8 x 16 not dep.	–	100 212754

Roto AluVision T 540

Roto AluVision T 540

Turn-Only hardware

90kg/130kg, RC3, clamped bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 675–1600 mm
 Sash height **SH** 840–2400 mm
 Sash weight **S.kg** max. 90/130 kg¹⁾

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Basic sets

'10' basic set V.01/V.02 with central locking system, w/o hinge side

Pos.	Pcs	Frame-groove version	Colour	PQ	Material no.
		TU-ON C basic set V.01	–		331277
		TU-ON C basic set V.02	–		331278

Locking parts of the central locking system

Pos.	Pcs	Description	Colour	PQ	Material no.
32	1	Run-up wedge V.01	–	100	212762
		Run-up wedge V.02	–	100	212512
5	4	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
6	12	SEC cam, RC3, insertable	–	100	443530
7	12	SEC striker V.01	–	100	212637
		SEC striker V.02	–	100	212638
18	2	Corner drive w/o MD	–	50	331012
37	1	SEC rebate clearance reduction	–	50	447112
	1	Screw 4 x 16 (not dep.)	–	100	212754

NOTE
 Additional components (size-related), see Basic security, page 103.

SEC components, hinge side

Pos.	Pcs	Description	Colour	PQ	Material no.
39	4	SEC hinge lock, frame V.01	–	20	331788
		SEC hinge lock, frame V.02	–	20	331789
40	4	SEC hinge lock, sash	–	20	331790
	12	Screw M4.8 x 16 not dep.	–	100	212754

NOTE!
 Standard hinge side, refer to hardware overviews Turn-Only sash, page 105.

1) ≥ 90 kg with special screw or upgrade-kit 130 kg

Parts list basic sets

'10' SEC basic set

Description	Colour	Material no.
SEC rebate clearance reduction set	–	335247
Rebate clearance reduction, countersunk tapping-screw		
SEC geared-handle protection set	–	485768
Geared-handle protection, 2 SEC connectors, 2 screws		
SEC hinge lock set V.01	–	335185
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC hinge lock set V.02	–	335186
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC flush-encased gearbox set	–	457209
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection		

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
11	1	RotoLine geared-handle 26, lockable	–		(→ p.205)
8	2	SEC connector	–	100	447113
12	1	SEC geared-handle protection	–	10	487407
35	2	Countersunk screw M5 x 10	–	100	210970
10	1	Geared-handle support	–	100	331937
9	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

16	1	SEC flush-enc. gearbox w/o MD	–	10	457210
13	1	RotoLine window handle for flush-encased gearbox, lockable	–		(→ p.209)
14	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100	212501
15	1	SEC drilling protection	–	10	487406
8	2	SEC connector	–	100	447113
36	2	Cylinder head screw M5 x 8	–	100	335249
38	1	SEC rebate clearance reduction	–	50	334360

Additional components, size-related

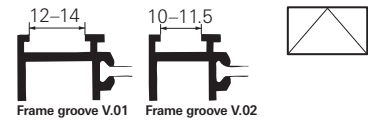
Pos.	Pcs	Description	Colour	PQ	Material no.
17	1	Handle lock 90°	–	100	212008
39	1	SEC hinge lock, frame V.01	–	20	331788
		SEC hinge lock, frame V.02	–	20	331789
40	1	SEC hinge lock, sash	–	20	331790
	3	Screw M4.8 x 16 not dep.	–	100	212754

Roto AluVision T 540

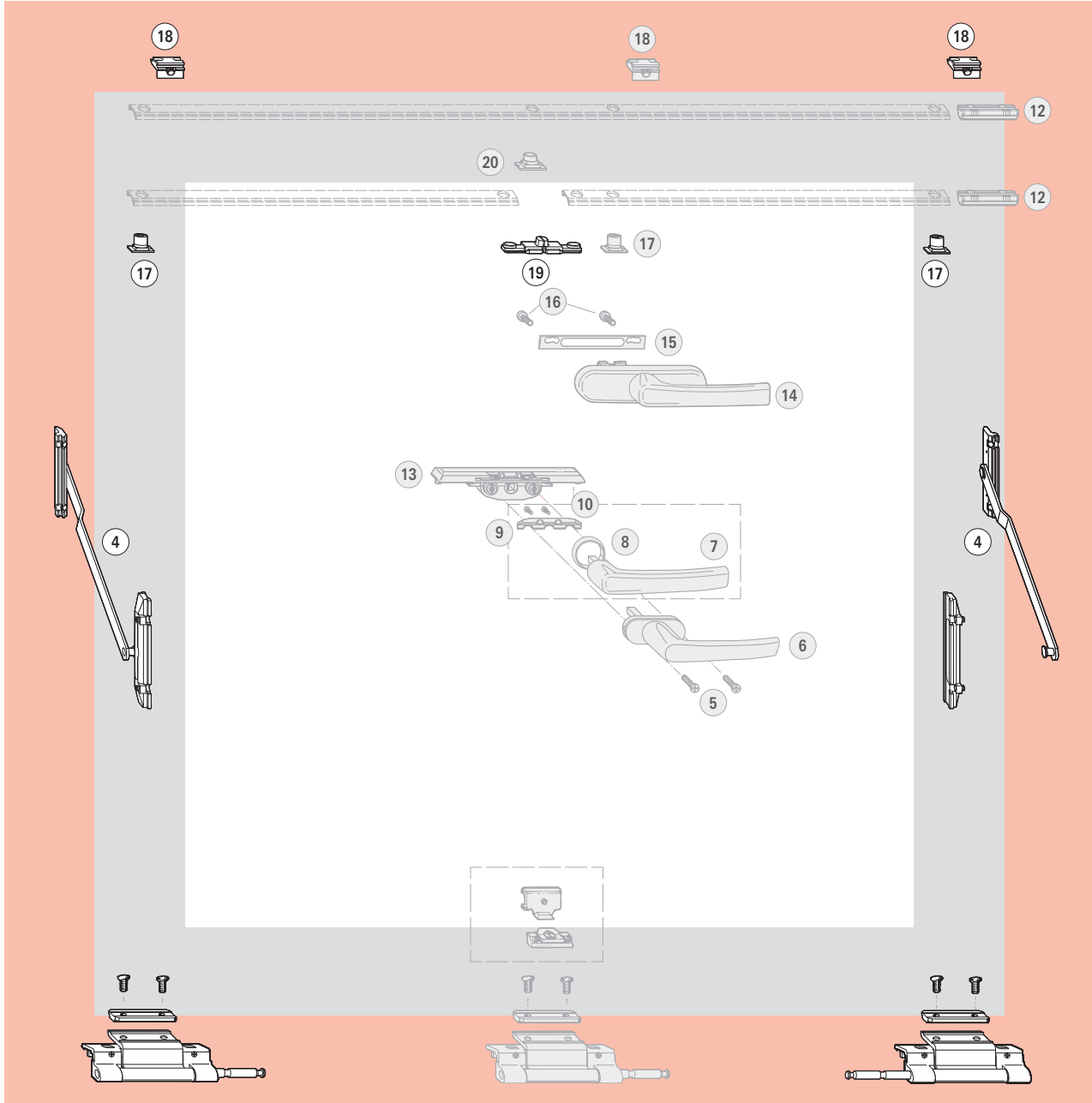
Roto AluVision T 540

Tilt-Only hardware

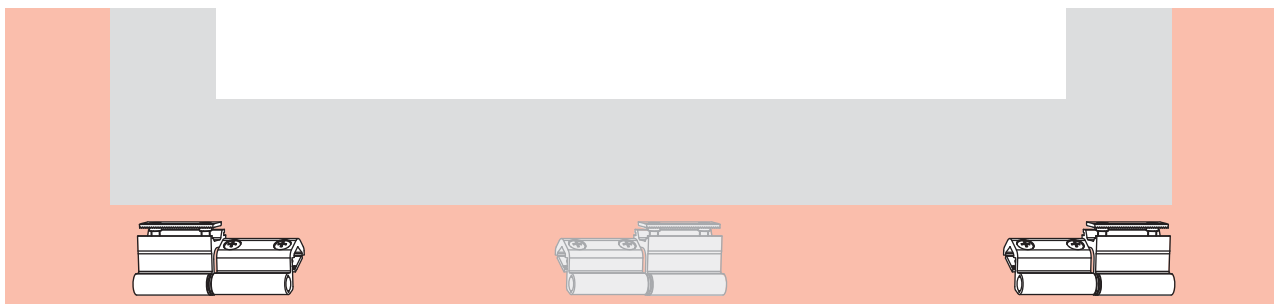
Handle on top, locking side 70 kg / 130 kg, Basic security, clamped bearing



130 kg



70 kg



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 520 – 1600 mm
 Sash height **SH** 405 – 1300 mm
 Sash weight **S.kg** max. 70/130 kg

Clearance **CL** 11.5 – 12 mm
 Overlap width **OW** 21.5 – 22 mm
 Hinge passage 3.5 – 5 mm

Basic sets

'10' basic set V.01/V.02 without hinge side				
Pos.	Pcs	Frame-groove version	Colour	PQ Material no.
		TI-ON basic set V.01	–	331930
		TI-ON basic set V.02	–	331931

Bulk packaging

Locking components				
Pos.	Pcs	Description	Colour	PQ Material no.
17	2	Locking cam, insertable	–	100 334671
18	2	Striker V.01	–	100 212633
		Striker V.02	–	100 212634
4	2	Tilt-Only stay-arm V.01	–	20 331022
		Tilt-Only stay-arm V.02	–	20 331023

Optional

Espagnolettes and connectors				
Pos.	Pcs	Description	Colour	PQ Material no.
14	1	RotoLine geared-handle 26	–	10 (→ p. 205)
19	1	T connector	–	100 334754
15	1	Geared-handle support	–	100 331937
16	2	Flat-headed screw M5 x 12	–	100 212500

Alternatively:

Pos.	Pcs	Description	Colour	PQ Material no.
13	1	Flush-encased gearbox w/o MD	–	10 378338
6	1	RotoLine window handle for flush-encased gearbox	–	(→ p. 208)
5	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100 212501
7	1	Escutcheonless handle	–	(→ p. 207)
8	1	Ring for escutcheonless handle	–	(→ p. 207)
9	1	Mounting plate	–	10 378134
10	2	Screws for escutcheonless handle	–	

Additional components, (size-related) not dep.

Pos.	Pcs	Description	Colour	PQ Material no.
20	1	Connector-bolt, insertable	–	100 254601
17	1	Locking cam, insertable	–	100 334671
18	1	Striker V.01	–	100 212633
		Striker V.02	–	100 212634
12		Child safety lock 90°	–	100 212008

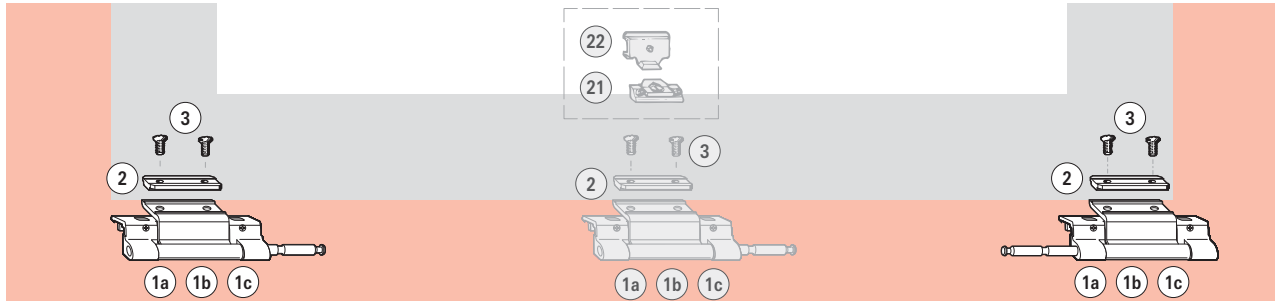
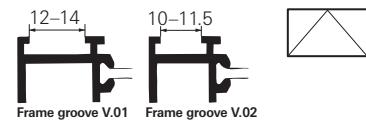
Roto AluVision T 540

Tilt-Only hardware

Handle on top, hinge side 130 kg, Basic security, clamped bearing

Application range

Sash width **SW** 520 – 1600 mm
 Sash height **SH** 405 – 1300 mm
 Sash weight **S.kg** max. 130 kg



Grey parts are optional and not included in the basic set.

Application table

Content:	Turn-Only hinge/Turn-Only hinge
Assembly:	clampable
Hinge passage:	≥ 3.5 mm
Max. sash weight:	130 kg
Adjustment:	No
Application:	TI-ON

Parts list basic set

'10' basic set

Description	Colour	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
Hinge side TI-ON	Silver	R01.5	377468	378325	379249
	Dark bronze	R05.4	377472	378329	379253
	Jet-black	R06.2	377469	378326	379250
	Traffic-white	R07.2	377471	378328	379252
	Special colour	SP COL	377473	378330	379254

Parts lists bulk packaging

Hinge side

Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
①a-①c	2	Turn-Only hinge	Silver	R01.5	50	377890	378301	379273
			Dark bronze	R05.4	50	377894	378305	379277
			Jet-black	R06.2	50	377891	378302	379274
			Traffic-white	R07.2	50	377893	378304	379276
			Special colour	SP COL	50	377895	378306	379278
	2	Misc. small components pack:		100	382884	382884	382884	
②	1	Clamping support-strip TU-ON	–	100	212055	212055	212055	
③	2	Countersunk screw M5 x 9, blue	–	100	212751	212751	212751	

Optional

Central hinge

Pos.	Pcs	Description	Colour	PQ	Clamp-strip version no. 1 Material no.	Clamp-strip version no. 2 Material no.	Clamp-strip version no. 3 Material no.	
①a-①c	1	Turn-Only hinge	Silver	R01.5	50	377890	378301	379273
			Dark bronze	R05.4	50	377894	378305	379277
			Jet-black	R06.2	50	377891	378302	379274
			Traffic-white	R07.2	50	377893	378304	379276
			Special colour	SP COL	50	377895	378306	379278
	1	Misc. small components pack:		100	382884	382884	382884	
②	1	Clamping support-strip TU-ON		100	212055	212055	212055	
③	4	Countersunk screw M5 x 9, blue		100	212751	212751	212751	

Alternatively:

②0	1-2	CL sash component		100	212770	212770	212770
②1		CL frame component V.01		100	212768	212768	212768
	1-2	CL frame component V.02		100	208361	208361	208361

Roto AluVision T 540

Tilt-Only hardware

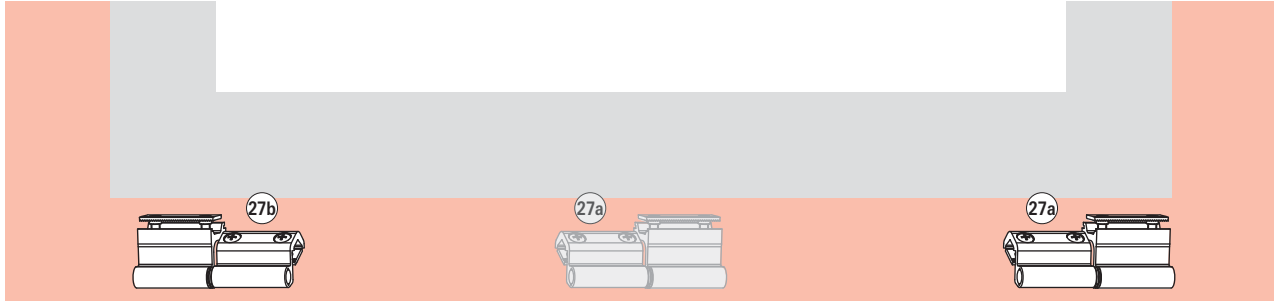
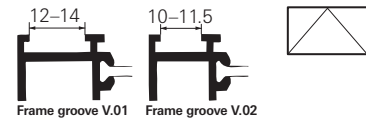
Handle on top, EU hinge side 70 kg, Basic security, clamped bearing

Application range

Sash width **SW** 520–1600 mm

Sash height **SH** 405–1300 mm

Sash weight **S.kg** max. 70 kg



Grey parts are optional and not included in the basic set.

Application table

Content:	Turn-Only hinge EU
Assembly:	clampable
Hinge passage:	≥ 3.5 mm
Max. sash weight:	70 kg
Adjustment:	Yes
Application:	TU-ON / TI-ON / DM

Parts list bulk packaging

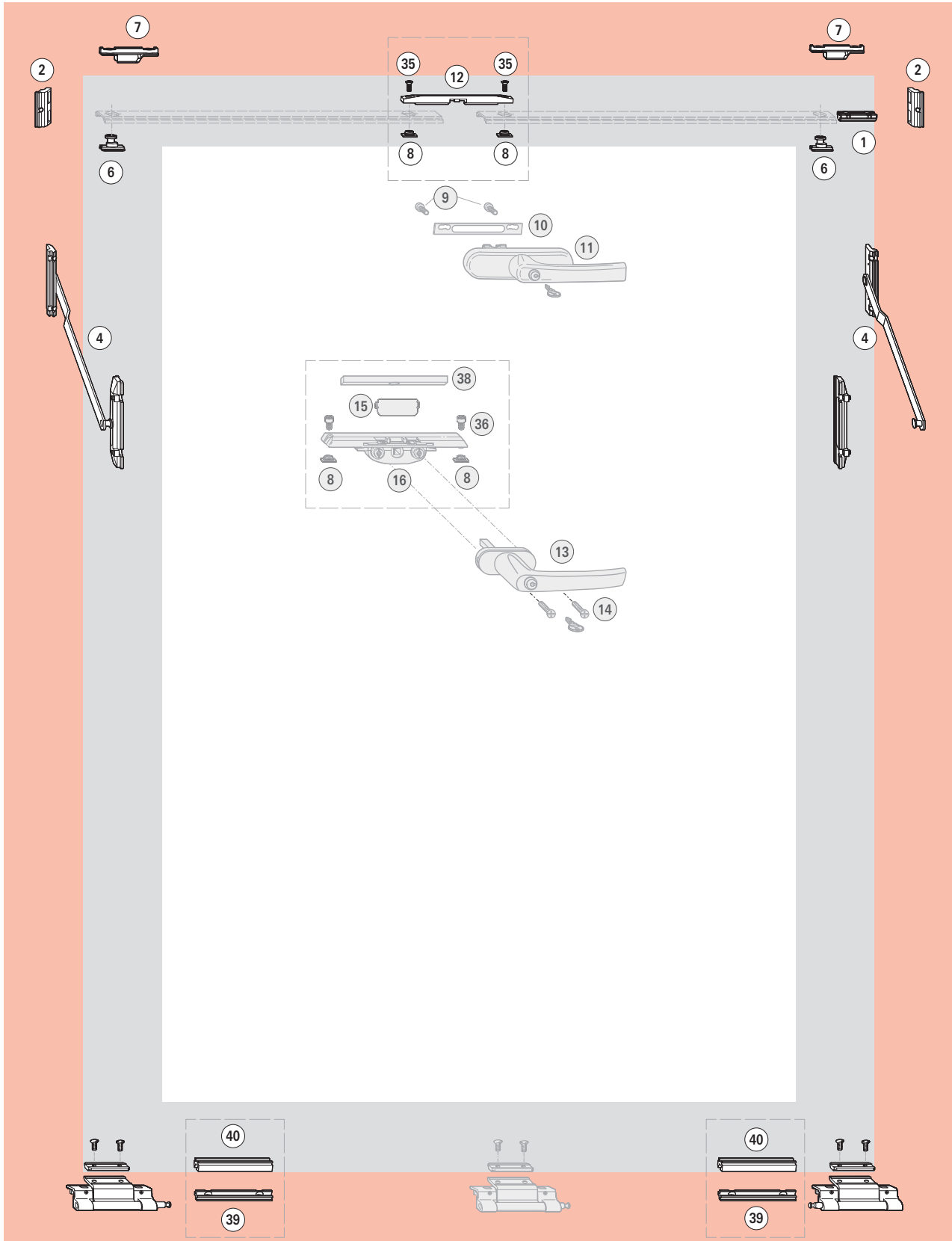
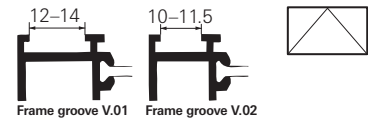
Turn-Only hinges

Pos.	Pcs	Description	Colour	Material no.	
27a	2	Turn-Only hinge EU left	Silver	R01.5	456859
			Jet-black	R06.2	456854
			Traffic-white	R07.2	456856
			Special colour	SP COL	242684
			Uncoated	raw	457348
27b	2	Turn-Only hinge EU right	Silver	R01.5	456858
			Jet-black	R06.2	456855
			Traffic-white	R07.2	456857
			Special colour	SP COL	242685
			Uncoated	raw	457348

Roto AluVision T 540

Tilt-Only hardware

Handle on top, 130 kg, RC1, clamped bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 520–1600 mm
 Sash height **SH** 405–1300 mm
 Sash weight **S.kg** max. 130 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Basic sets

'10' basic set V.01/V.02 without hinge side				
Pos.	Pcs	Frame-groove version	Colour	PQ Material no.
		TI-ON basic set V.01	–	331930
		TI-ON basic set V.02	–	331931

Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
①	1	Handle lock 90°	–	100	212008
⑥	2	SEC cam, insertable	–	100	447245
⑦	2	SEC striker V.01	–	100	212637
		SEC striker V.02	–	100	212638
②	2	Horizontal Tilt&Turn striker	–	100	212122
④	2	Tilt-Only stay-arm V.01	–	20	331022
		Tilt-Only stay-arm V.02	–	20	331023

SEC components, hinge side

Pos.	Pcs	Description	Colour	PQ	Material no.
③⑨	2	SEC hinge lock, frame V.01		20	331788
		SEC hinge lock, frame V.02		20	331789
④⑩	2	SEC hinge lock, sash	–	20	331790
	6	Screw M4.8 x 16 not dep.	–	100	212754

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
⑪	1	RotoLine geared-handle 26, lockable	–		(→ p. 205)
⑧	2	SEC connector	–	100	447113
⑫	1	SEC geared-handle protection	–	10	487407
③⑤	2	Countersunk screw M5 x 10	–	100	210970
⑩	1	Geared-handle support	–	100	331937
⑨	2	Flat-headed screw M5 x 12	–	100	212500

NOTE!
 Standard hinge side, refer to hardware overviews Tilt-Only sash, page 118.

Alternatively:

⑬	1	SEC flush-enc. gearbox w/o MD	–	10	457210
⑬	1	RotoLine window handle for flush-encased gearbox, lockable			(→ p. 209)
⑭	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100	212501
⑮	1	SEC drilling protection	–	10	487406
⑧	2	SEC connector	–	100	447113
③⑥	2	Cylinder head screw M5 x 8	–	100	335249
③⑧	1	SEC rebate clearance reduction	–	50	334360

Parts list basic sets

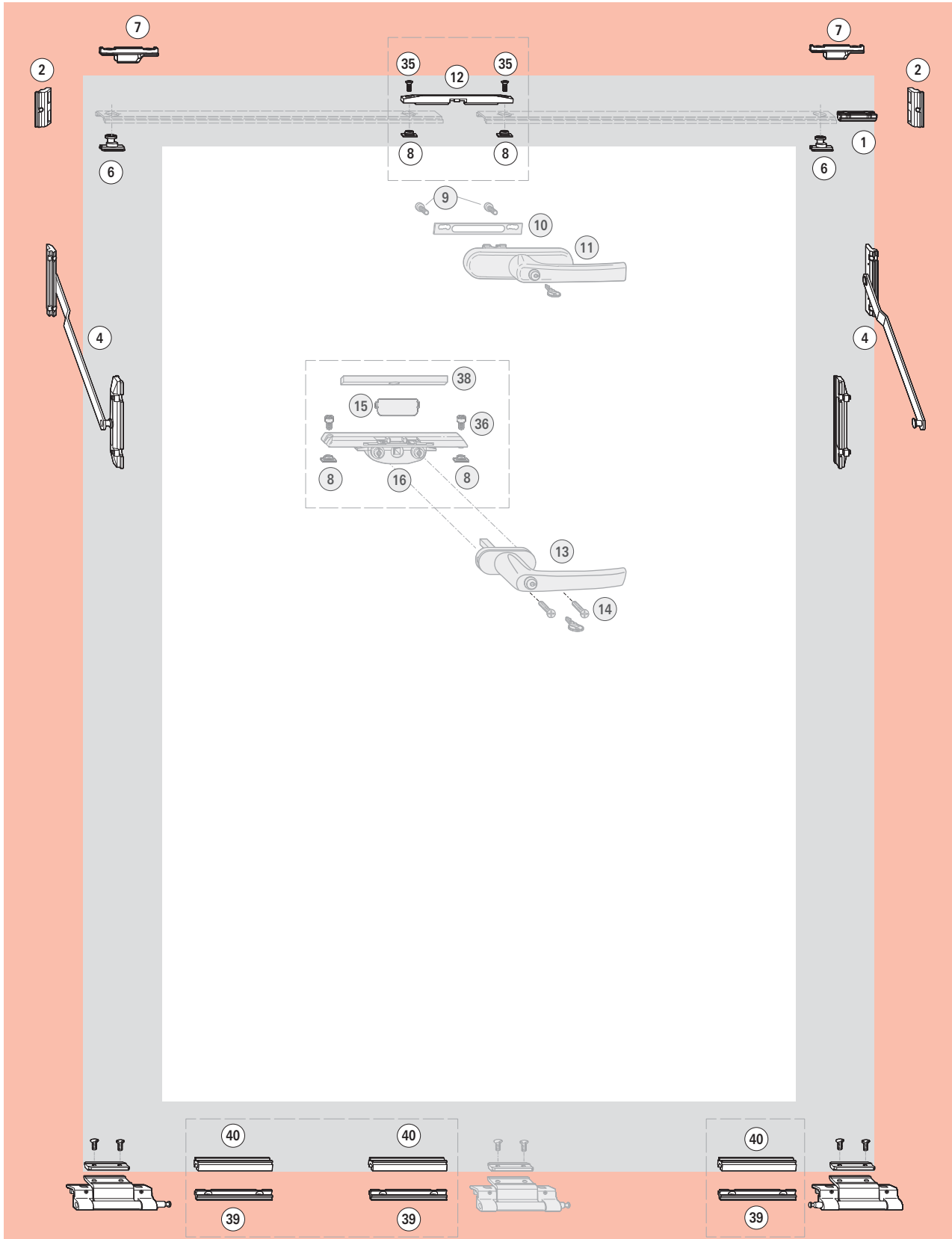
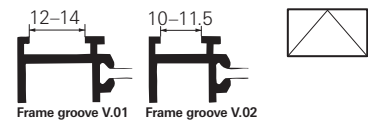
'10' SEC basic set		
Description	Colour	Material no.
SEC geared-handle protection set	–	485768
Geared-handle protection, 2 SEC connectors, 2 screws		
SEC hinge lock set V.01	–	335185
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC hinge lock set V.02	–	335186
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC flush-encased gearbox set	–	457209
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection		

Roto AluVision T 540

Roto AluVision T 540

Tilt-Only hardware

Handle on top, 130 kg, RC2, clamped bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 520–1600 mm
 Sash height **SH** 405–1300 mm
 Sash weight **S.kg** max. 130 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Basic sets

'10' basic set V.01/V.02 without hinge side

Pos.	Pcs	Frame-groove version	Colour	PQ	Material no.
		TI-ON basic set V.01	–		331930
		TI-ON basic set V.02	–		331931

Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
①	1	Handle lock 90°	–	100	212008
⑥	2	SEC cam, insertable	–	100	447245
⑦	2	SEC striker V.01	–	100	212637
		SEC striker V.02	–	100	212638
②	2	Horizontal Tilt&Turn striker	–	100	212122
④	2	Tilt-Only stay-arm V.01	–	20	331022
		Tilt-Only stay-arm V.02	–	20	331023

SEC components, hinge side

Pos.	Pcs	Description	Colour	PQ	Material no.
③⑨	3	SEC hinge lock, frame V.01		20	331788
		SEC hinge lock, frame V.02		20	331789
④⑩	3	SEC hinge lock, sash	–	20	331790
	9	Screw M4.8 x 16 not dep.	–	100	212754



NOTE!

Standard hinge side, refer to hardware overviews Tilt-Only sash, page 118.

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
⑪	1	RotoLine geared-handle 26, lockable	–		(→ p.205)
⑧	2	SEC connector	–	100	447113
⑫	1	SEC geared-handle protection	–	10	487407
③⑤	2	Countersunk screw M5 x 10	–	100	210970
⑩	1	Geared-handle support	–	100	331937
⑨	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

⑬	1	SEC flush-enc. gearbox w/o MD	–	10	457210
⑬	1	RotoLine window handle for flush-encased gearbox, lockable			(→ p.209)
⑭	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100	212501
⑮	1	SEC drilling protection	–	10	487406
⑧	2	SEC connector	–	100	447113
③⑥	2	Cylinder head screw M5 x 8	–	100	335249
③⑧	1	SEC rebate clearance reduction	–	50	334360

Parts list basic sets

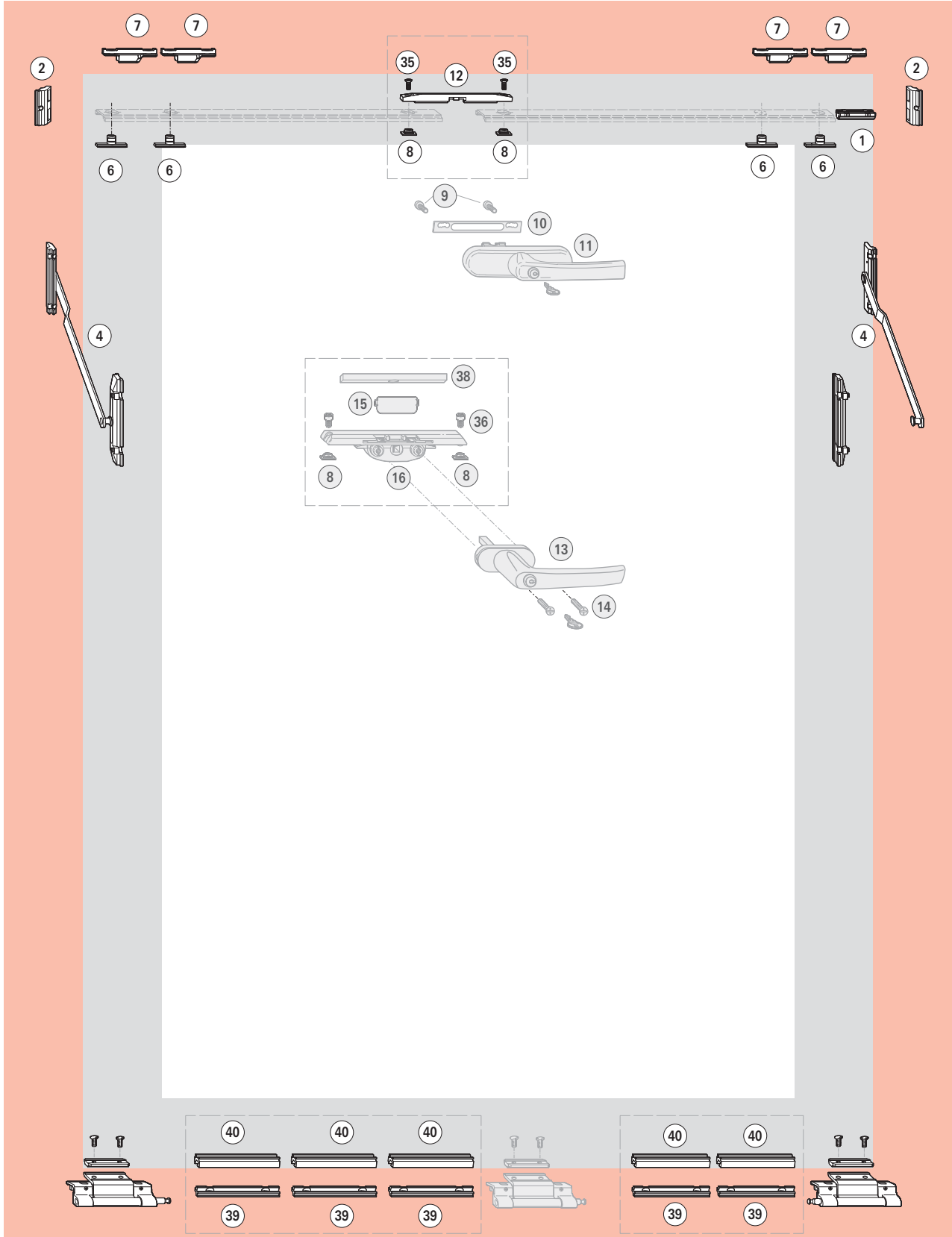
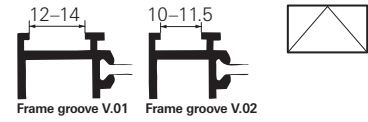
'10' SEC basic set

Description	Colour	Material no.
SEC geared-handle protection set	–	485768
Geared-handle protection, 2 SEC connectors, 2 screws		
SEC hinge lock set V.01	–	335185
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC hinge lock set V.02	–	335186
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC flush-encased gearbox set	–	457209
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection		

Roto AluVision T 540

Tilt-Only hardware

Handle on top, 130 kg, RC3, clamped bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 670–1600 mm
 Sash height **SH** 405–1300 mm
 Sash weight **S.kg** max. 130 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Basic sets

'10' basic set V.01/V.02 without hinge side				
Pos.	Pcs	Frame-groove version	Colour	PQ Material no.
		TI-ON basic set V.01	–	331930
		TI-ON basic set V.02	–	331931

Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
①	1	Handle lock 90°	–	100	212008
⑥	4	SEC cam, RC3, insertable	–	100	447530
⑦	4	SEC striker V.01	–	100	212637
		SEC striker V.02	–	100	212638
②	2	Horizontal Tilt&Turn striker	–	100	212122
④	2	Tilt-Only stay-arm V.01	–	20	331022
		Tilt-Only stay-arm V.02	–	20	331023

SEC components, hinge side

Pos.	Pcs	Description	Colour	PQ	Material no.
③⑨	5	SEC hinge lock, frame V.01		20	331788
		SEC hinge lock, frame V.02		20	331789
④⑩	5	SEC hinge lock, sash	–	20	331790
	15	Screw M4.8 x 16 not dep.	–	100	212754



NOTE!

Standard hinge side, refer to hardware overviews Tilt-Only sash, page 118.

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
⑪	1	RotoLine geared-handle 26, lockable	–		(→ p.205)
⑧	2	SEC connector	–	100	447113
⑫	1	SEC geared-handle protection	–	10	487407
③⑤	2	Countersunk screw M5 x 10	–	100	210970
⑩	1	Geared-handle support	–	100	331937
⑨	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

⑬	1	SEC flush-enc. gearbox w/o MD	–	10	457210
⑬	1	RotoLine window handle for flush-encased gearbox, lockable			(→ p.209)
⑭	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100	212501
⑮	1	SEC drilling protection	–	10	487406
⑧	2	SEC connector	–	100	447113
③⑥	2	Cylinder head screw M5 x 8	–	100	335249
③⑧	1	SEC rebate clearance reduction	–	50	334360

Parts list basic sets

'10' SEC basic set

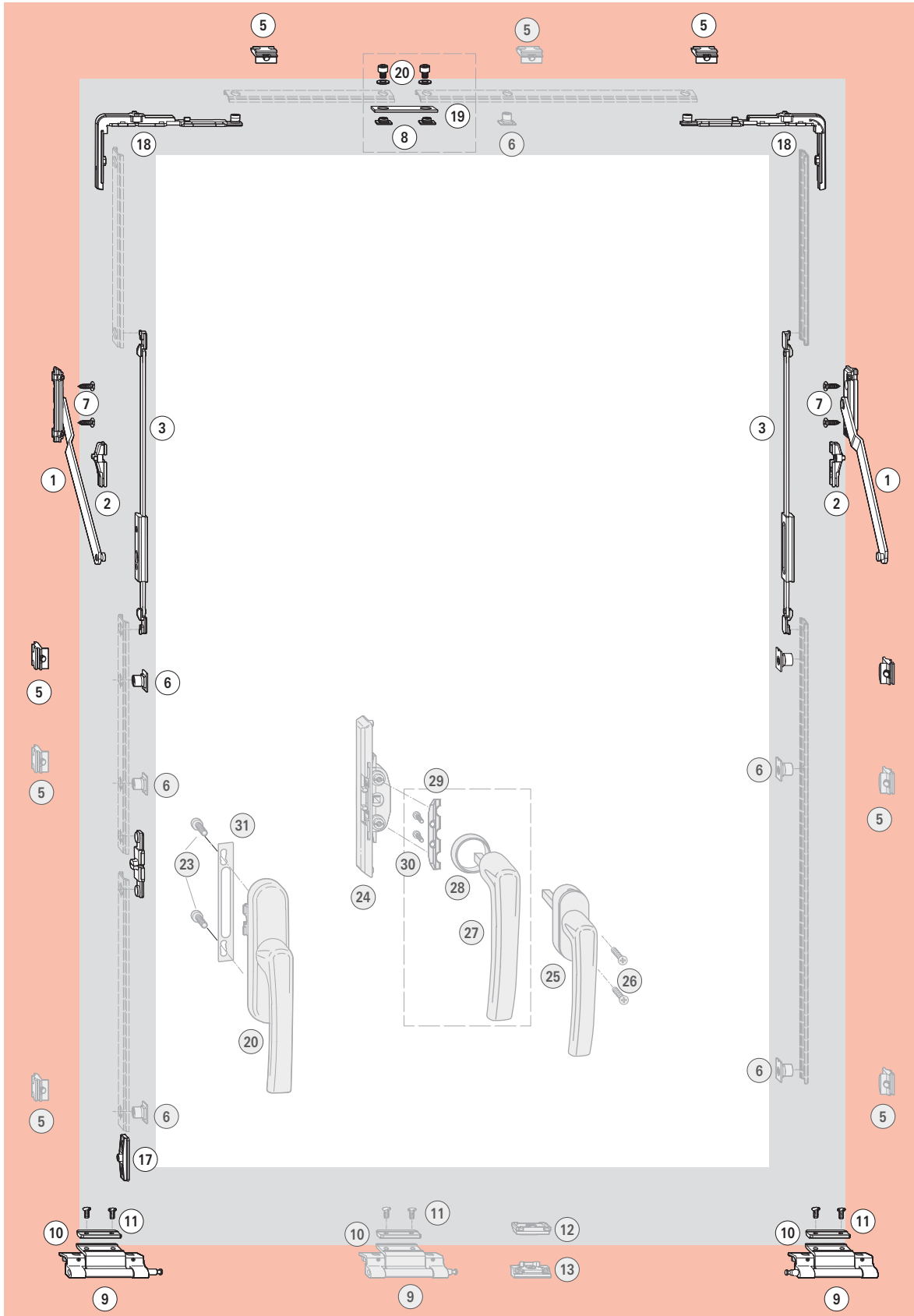
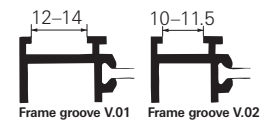
Description	Colour	Material no.
SEC geared-handle protection set	–	485768
Geared-handle protection, 2 SEC connectors, 2 screws		
SEC hinge lock set V.01	–	335185
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC hinge lock set V.02	–	335186
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC flush-encased gearbox set	–	457209
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection		

Roto AluVision T 540

Roto AluVision T 540

Tilt-Only hardware

Handle on side, 130 kg, Basic security, clamped bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 520–1600 mm
 Sash height **SH** 1200–2400 mm
 Sash weight **S.kg** max. 130 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Basic sets

Locking components

Pos.	Pcs	Frame-groove version	Colour	PQ	Material no.
17	1	Stop	–	100	211425
18	2	Corner drive w/o MD	–	50	331012
5	4	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
6	2	Locking cam, insertable	–	100	334671
	1	Coupler component set, consists of:	–	100	449296
8	2	SEC connector	–	100	–
19	1	SEC coupler component, mounting-plate	–	100	–
20	2	Cylinder screw M5 x 6, washer	–	100	–
	1	Tilt-Only stay-arm set V.01	–	20	449295
	1	Tilt-Only stay-arm set V.02	–	20	380319
		consists of:	–		
1	2	Scissor-stay arm	–	20	–
2	2	Stop	–	20	–
3	2	Coupling rod & slider	–	20	–
7	4	Self-tapping screw ISO 7050 ST 4.8 x 19	–	100	–

Hinge side

Pos.	Pcs	Description	Colour	PQ	Material no.
9	2	TU-ON hinge T 540, no. 1	Silver R01.5	50	377890
		TU-ON hinge T 540, no. 2	Silver R01.5	50	378301
		TU-ON hinge T 540, no. 3	Silver R01.5	50	379273
10	2	Clamping support-strip TU-ON	–	100	212055
11	4	Countersunk screw M5 x 9, blue	–	100	212751

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
20	1	RotoLine geared-handle 26	–	10	(→ p.205)
21	1	T connector	–	100	334754
31	1	Geared-handle support	–	100	331937
23	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

Pos.	Pcs	Description	Colour	PQ	Material no.
24	1	Flush-encased gearbox w/o MD	–	10	378338
25	1	RotoLine window handle for flush-encased gearbox	–		(→ p.208)
26	2	Countersunk screw “niro” (stainless-steel) M5 x 30	–	100	212501
27	1	Escutcheonless handle	–		(→ p.207)
28	1	Ring for escutcheonless handle	–		(→ p.207)
29	1	Mounting plate	–	10	378134
30	4	Screws for escutcheonless handle	–		–

Additional components, size-related

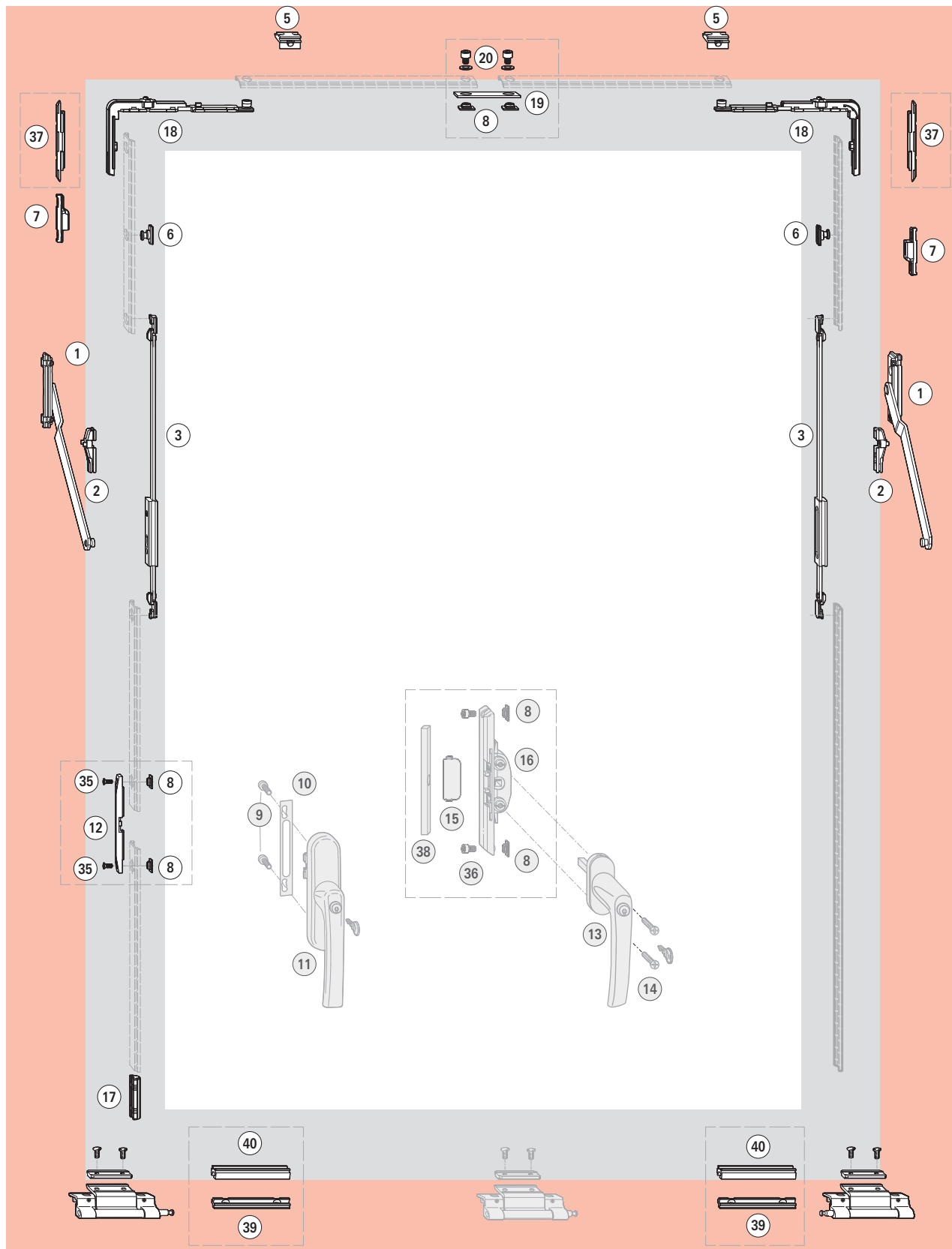
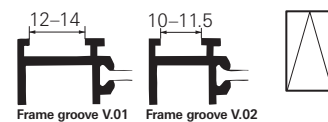
Pos.	Pcs	Description	Colour	PQ	Material no.
5	5	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
6	5	Locking cam, insertable	–	100	334671
9	1	TU-ON hinge T 540, no. 1	Silver R01.5	50	377890
		TU-ON hinge T 540, no. 2	Silver R01.5	50	378301
		TU-ON hinge T 540, no. 3	Silver R01.5	50	379273
10	1	Clamping support-strip TU-ON	–	100	212055
11	2	Countersunk screw M5 x 9, blue	–	100	212751
12	1-2	CL sash component	–	100	212770
13	1-2	CL frame component V.01	–	100	212768
		CL frame component V.02	–	100	208361

Roto AluVision
T 540

Roto AluVision T 540

Tilt-Only hardware

Handle on side, 130 kg, RC1, clamped bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 520–1600 mm
 Sash height **SH** 1200–2400 mm
 Sash weight **S.kg** max. 130 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Locking components				
Pos.	Pcs	Description	Colour	PQ Material no.
17	1	Child safety lock 90°	–	100 212008
18	2	Corner drive w/o MD	–	50 331012
5	2	Striker V.01	–	100 212633
		Striker V.02	–	100 212634
6	2	SEC cam, insertable	–	100 447245
7	2	SEC striker V.01	–	100 212637
		SEC striker V.02	–	100 212638
37	2	SEC rebate clearance reduction	–	50 447112
	2	Screw not depicted	–	100 212754
	1	Coupler component set, consists of:	–	100 449296
8	2	SEC connector	–	100 –
19	1	SEC coupler component, mounting-plate	–	100 –
20	2	Cylinder screw M5 x 6, washer		100 –
	1	Tilt-Only stay-arm set V.01	–	20 348390
		Tilt-Only stay-arm set V.02	–	20 473253
		consists of:		
1	2	Scissor-stay arm	–	20 –
2	2	Stop	–	20 –
3	2	Coupling rod & slider	–	20 –

NOTE
 Additional components (size-related), see Basic security, page 127.

SEC components, hinge side				
Pos.	Pcs	Description	Colour	PQ Material no.
39	2	SEC hinge lock, frame V.01		20 331788
		SEC hinge lock, frame V.02		20 331789
40	2	SEC hinge lock, sash	–	20 331790
	6	Screw M4.8 x 16 not dep.	–	100 212754

NOTE!
 Standard hinge side, refer to hardware overview Tilt-Only sash, handle on side, page 127.

Parts list basic sets		
Description	Colour	Material no.
'10' SEC basic set		
SEC rebate clearance reduction set	–	335247
Rebate clearance reduction, countersunk tapping-screw		
SEC geared-handle protection set	–	485768
Geared-handle protection, 2 SEC connectors, 2 screws		
SEC hinge lock set V.01	–	335185
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC hinge lock set V.02	–	335186
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC flush-encased gearbox set	–	457209
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection		
SEC coupler component set	–	449296
SEC coupler component, 2 SEC connectors, 2 washers, 2 cylinder screws		

Optional				
Espagnolettes and connectors				
Pos.	Pcs	Description	Colour	PQ Material no.
11	1	RotoLine geared-handle 26, lockable	–	(→ p.205)
8	2	SEC connector	–	100 447113
12	1	SEC geared-handle protection	–	10 487407
35	2	Countersunk screw M5 x 10	–	100 210970
10	1	Geared-handle support	–	100 331937
9	2	Flat-headed screw M5 x 12	–	100 212500

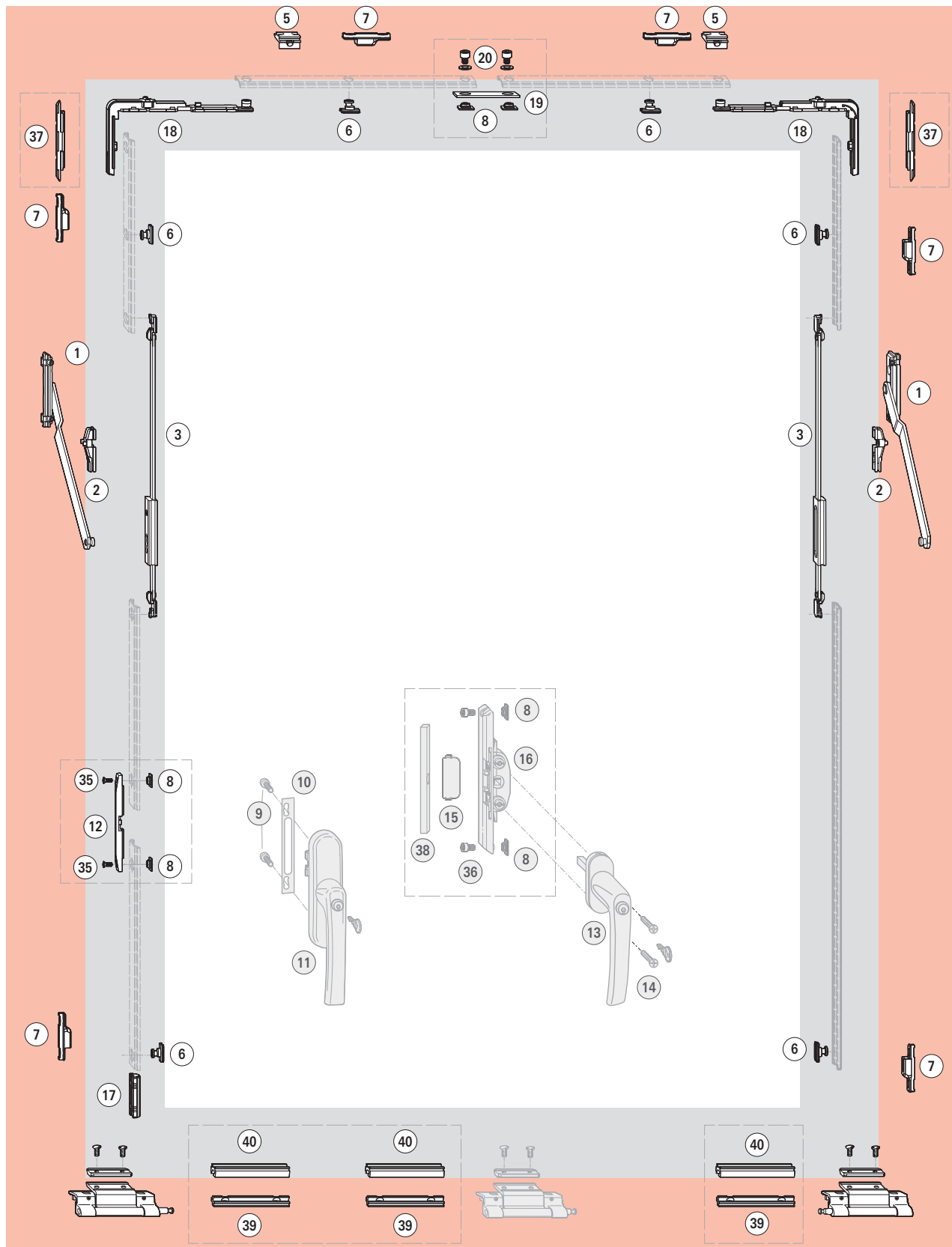
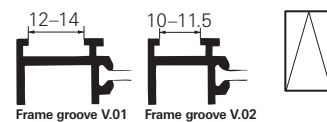
Alternatively:				
16	1	SEC flush-enc. gearbox w/o MD	–	10 457210
13	1	RotoLine window handle for flush-encased gearbox, lockable		(→ p.209)
14	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100 212501
15	1	SEC drilling protection	–	10 487406
8	2	SEC connector		100 447113
36	2	Cylinder head screw M5 x 8	–	100 335249
38	1	SEC rebate clearance reduction	–	50 334360

Roto AluVision T 540

Roto AluVision T 540

Tilt-Only hardware

Handle on side, 130 kg, RC2, clamped bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 520–1600 mm
 Sash height **SH** 1200–2400 mm
 Sash weight **S.kg** max. 130 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Locking components				
Pos.	Pcs	Description	Colour	PQ Material no.
17	1	Child safety lock 90°	–	100 212008
18	2	Corner drive w/o MD	–	50 331012
5	2	Striker V.01	–	100 212633
		Striker V.02	–	100 212634
6	6	SEC cam, insertable	–	100 447245
7	6	SEC striker V.01	–	100 212637
		SEC striker V.02	–	100 212638
37	2	SEC rebate clearance reduction	–	50 447112
	2	Screw not depicted	–	100 212754
	1	Coupler component set, consists of:	–	100 449296
8	2	SEC connector	–	100 –
19	1	SEC coupler component, mounting-plate	–	100 –
20	2	Cylinder screw M5 x 6, washer		100 –
	1	Tilt-Only stay-arm set V.01	–	20 348390
		Tilt-Only stay-arm set V.02	–	20 473253
		consists of:		
1	2	Scissor-stay arm	–	20 –
2	2	Stop	–	20 –
3	2	Coupling rod & slider		20 –

NOTE
 Additional components (size-related), see Basic security, page 127.

SEC components, hinge side				
Pos.	Pcs	Description	Colour	PQ Material no.
39	3	SEC hinge lock, frame V.01		20 331788
		SEC hinge lock, frame V.02		20 331789
40	3	SEC hinge lock, sash	–	20 331790
	9	Screw M4.8 x 16 not dep.	–	100 212754

NOTE!
 Standard hinge side, refer to hardware overview Tilt-Only sash, handle on side, page 127.

Parts list basic sets		
Description	Colour	Material no.
'10' SEC basic set		
SEC rebate clearance reduction set	–	335247
Rebate clearance reduction, countersunk tapping-screw		
SEC geared-handle protection set	–	485768
Geared-handle protection, 2 SEC connectors, 2 screws		
SEC hinge lock set V.01	–	335185
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC hinge lock set V.02	–	335186
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC flush-encased gearbox set	–	457209
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection		
SEC coupler component set	–	449296
SEC coupler component, 2 SEC connectors, 2 washers, 2 cylinder screws		

Optional				
Espagnolettes and connectors				
Pos.	Pcs	Description	Colour	PQ Material no.
11	1	RotoLine geared-handle 26, lockable	–	(→ p.205)
8	2	SEC connector	–	100 447113
12	1	SEC geared-handle protection	–	10 487407
35	2	Countersunk screw M5 x 10	–	100 210970
10	1	Geared-handle support	–	100 331937
9	2	Flat-headed screw M5 x 12	–	100 212500

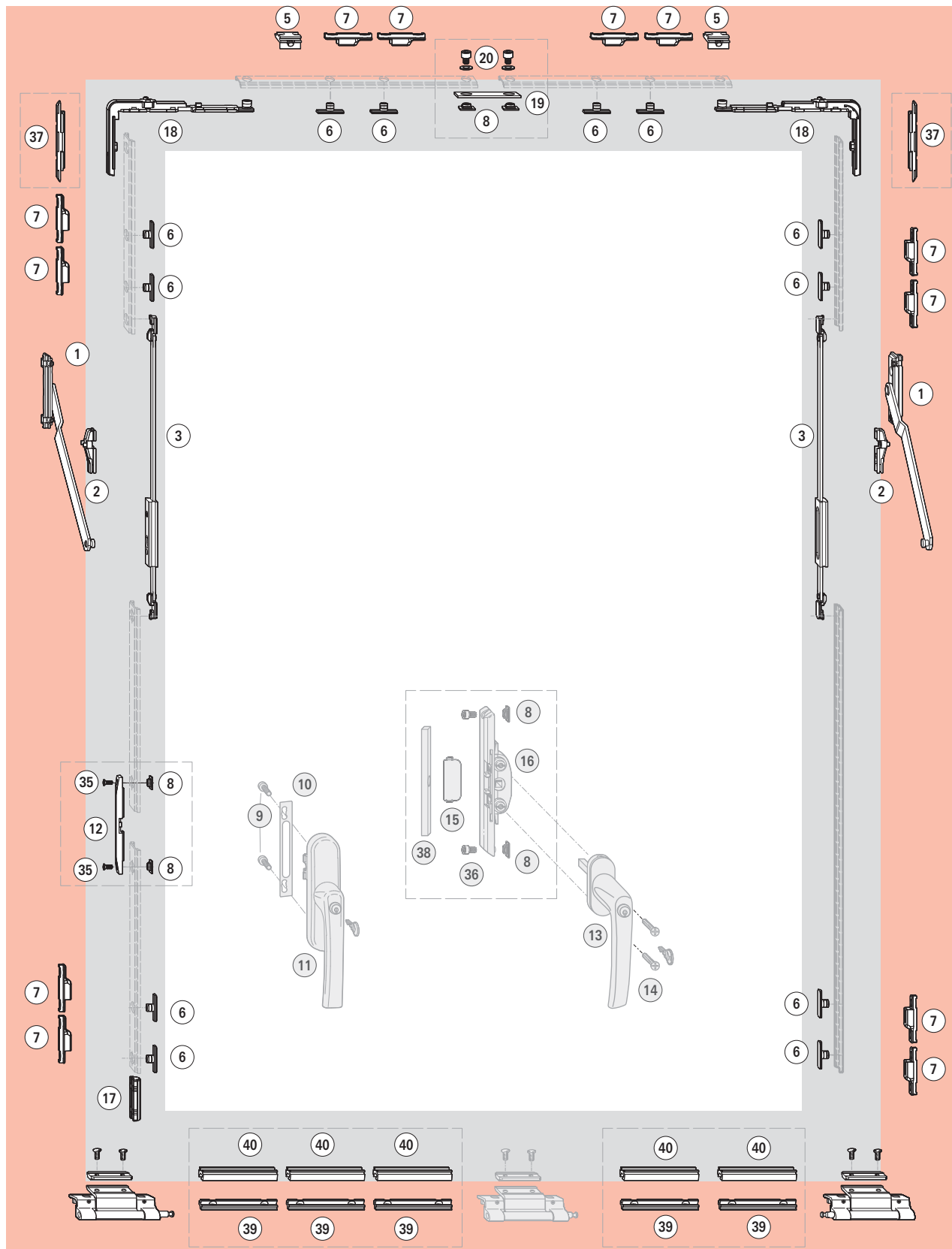
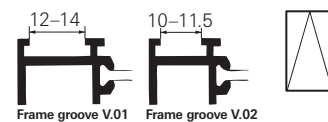
Alternatively:				
16	1	SEC flush-enc. gearbox w/o MD	–	10 457210
13	1	RotoLine window handle for flush-encased gearbox, lockable		(→ p.209)
14	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100 212501
15	1	SEC drilling protection	–	10 487406
8	2	SEC connector		100 447113
36	2	Cylinder head screw M5 x 8	–	100 335249
38	1	SEC rebate clearance reduction	–	50 334360

Roto AluVision T 540

Roto AluVision T 540

Tilt-Only hardware

Handle on side, 130 kg, RC3, clamped bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 670–1600 mm
 Sash height **SH** 1200–2400 mm
 Sash weight **S.kg** max. 130 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 3.5–5 mm

Locking components				
Pos.	Pcs	Description	Colour	PQ Material no.
17	1	Child safety lock 90°	–	100 212008
18	2	Corner drive w/o MD	–	50 331012
5	2	Striker V.01	–	100 212633
		Striker V.02	–	100 212634
6	12	SEC cam, RC3, insertable	–	100 443530
7	12	SEC striker V.01	–	100 212637
		SEC striker V.02	–	100 212638
37	2	SEC rebate clearance reduction	–	50 447112
	1	Screw not depicted	–	100 212754
	1	Coupler component set, consists of:	–	100 449296
8	2	SEC connector	–	100 –
19	1	SEC coupler component, mounting-plate	–	100 –
20	2	Cylinder screw M5 x 6, washer		100 –
	1	Tilt-Only stay-arm set V.01	–	20 348390
		Tilt-Only stay-arm set V.02	–	20 473253
		consists of:		
1	2	Scissor-stay arm	–	20 –
2	2	Stop	–	20 –
3	2	Coupling rod & slider		20 –

NOTE
 Additional components (size-related), see Basic security, page 127.

SEC components, hinge side				
Pos.	Pcs	Description	Colour	PQ Material no.
39	5	SEC hinge lock, frame V.01		20 331788
		SEC hinge lock, frame V.02		20 331789
40	5	SEC hinge lock, sash	–	20 331790
	15	Screw M4.8 x 16 not dep.	–	100 212754

NOTE!
 Standard hinge side, refer to hardware overview Tilt-Only sash, handle on side, page 127.

Parts list basic sets		
Description	Colour	Material no.
'10' SEC basic set		
SEC rebate clearance reduction set	–	335247
Rebate clearance reduction, countersunk tapping-screw		
SEC geared-handle protection set	–	485768
Geared-handle protection, 2 SEC connectors, 2 screws		
SEC hinge lock set V.01	–	335185
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC hinge lock set V.02	–	335186
Hinge lock frame/sash, 3 countersunk tapping-screws		
SEC flush-encased gearbox set	–	457209
SEC flush-encased gearbox, 2 SEC connectors, 3 screws, SEC rebate clearance reduction, SEC drilling protection		
SEC coupler component set	–	449296
SEC coupler component, 2 SEC connectors, 2 washers, 2 cylinder screws		

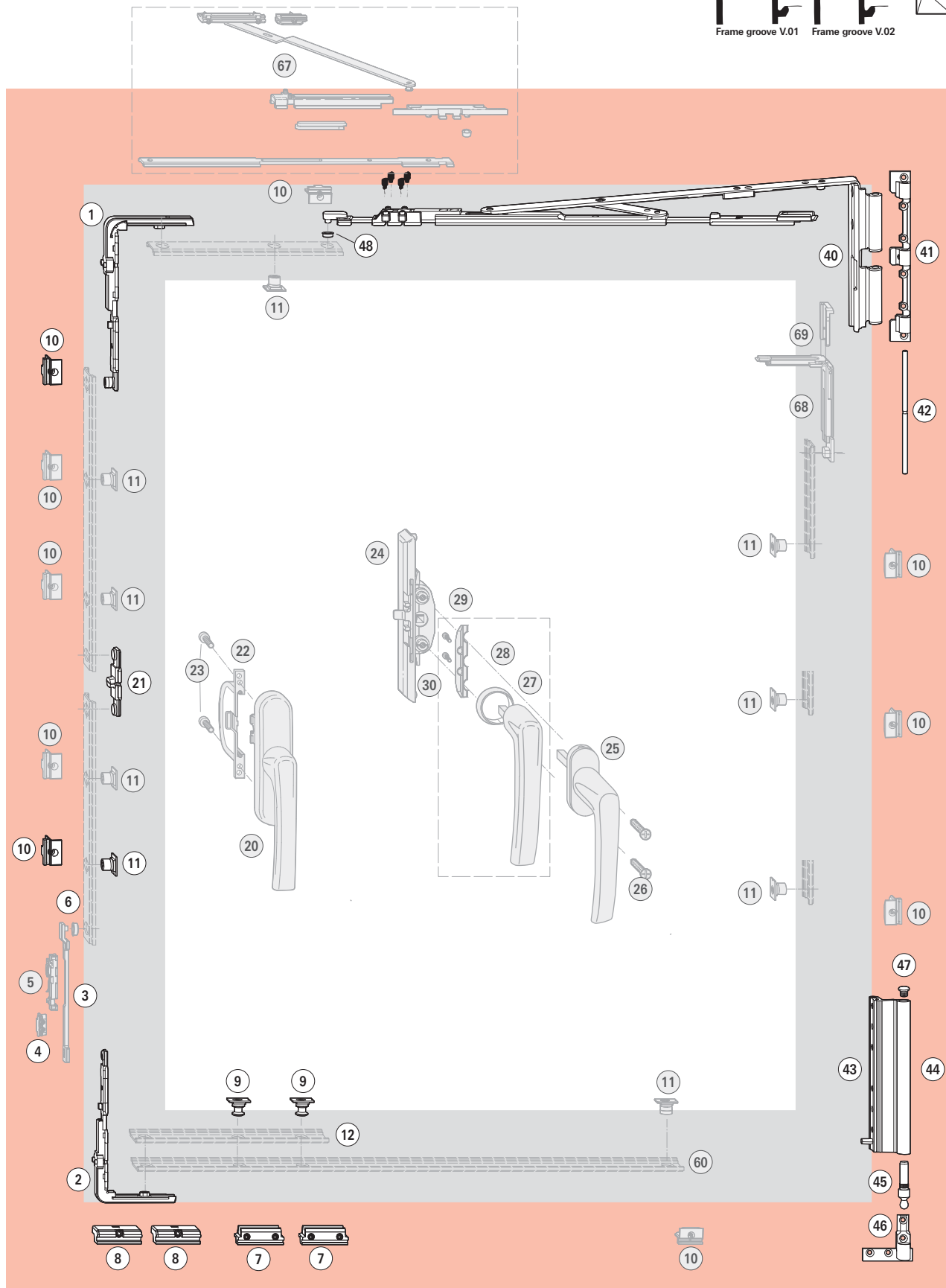
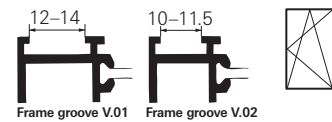
Optional				
Espagnolettes and connectors				
Pos.	Pcs	Description	Colour	PQ Material no.
11	1	RotoLine geared-handle 26, lockable	–	(→ p. 205)
8	2	SEC connector	–	100 447113
12	1	SEC geared-handle protection	–	10 487407
35	2	Countersunk screw M5 x 10	–	100 210970
10	1	Geared-handle support	–	100 331937
9	2	Flat-headed screw M5 x 12	–	100 212500
Alternatively:				
16	1	SEC flush-enc. gearbox w/o MD	–	10 457210
13	1	RotoLine window handle for flush-encased gearbox, lockable		(→ p. 209)
14	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100 212501
15	1	SEC drilling protection	–	10 487406
8	2	SEC connector	–	100 447113
36	2	Cylinder head screw M5 x 8	–	100 335249
38	1	SEC rebate clearance reduction	–	50 334360

Roto AluVision T 540

Roto AluVision T 540

Heavy-duty hardware

Tilt&Turn hardware 200 kg, screw-fixed bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 680–1600 mm
 Sash height **SH** 520–2400 mm
 Sash weight **S.kg** max. 200 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 7 mm

Parts list basic sets

Locking set T&T 200 kg

Pos.	Pcs	Description	Colour	PQ	Material no.
	1	Locking set T&T 200 kg V.01		1	380012
		Locking set T&T 200 kg V.02		1	380013
		consists of:			
①	1	Corner drive, top	–	–	–
②	1	Corner drive, bottom	–	–	–
⑦	2	Horizontal Tilt&Turn striker V.01/V.02	–	–	–
⑧	2	Run-up block TF V.01/V.02	–	–	–
⑨	2	Tilt lock bolt TF	–	–	–
⑩	2	Striker V.01/V.02	–	–	–
⑪	1	Locking cam, insertable	–	–	–
⑫	1	Connecting-rod VTC (ECC) 170	–	–	–

Hinge side T&T 200 kg

Pos.	Pcs	Description	Colour	DIN	PQ	Material no.
	1	T&T set 200 kg	Special colour SP COL	R	1	380008
			Special colour SP COL	L	1	380009
		consists of:				
④①	1	Sash stay 600 T&T 200 kg	–	–	–	–
④②	1	Stay bearing T&T 200 kg	–	–	–	–
④③	1	Stay-bearing pin T&T 200 kg	–	–	–	–
④④	1	Clamping support-strip TU-ON 200 kg	–	–	–	–
④⑤	1	Corner hinge T&T 200 kg	–	–	–	–
④⑥	1	Pivot-rest pin T&T 200 kg	–	–	–	–
④⑦	1	Pivot rest T&T 200 kg	–	–	–	–
④⑧	1	End cap corner hinge, black	–	–	–	–
		End cap corner hinge, grey (optional)	–	–	–	–
④⑨	1	Compensation sleeve	–	–	–	–
		Misc. small components pack:				
–	10	Countersunk tapping-screw M4.8 x 19	–	–	100	–
–	4	Countersunk screw M5 x 10	–	–	100	–

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
⑳	1	RotoLine geared-handle 26	–	10	(→ p.205)
㉑	1	T connector	–	100	334754
㉒	1	Mishandling device 26	–	100	213806
㉓	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

Pos.	Pcs	Description	Colour	PQ	Material no.
㉔	1	Flush-encased gearbox with mishandling device	–	10	378337
㉕	1	RotoLine window handle for flush-encased gearbox	–	–	(→ p.208)
㉖	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100	212501
㉗	1	Escutcheonless handle	–	–	(→ p.207)
㉘	1	Ring for escutcheonless handle	–	–	(→ p.207)
㉙	1	Mounting plate	–	10	378134
㉚	2	Screws for escutcheonless handle	–	–	–

Additional components, size-related

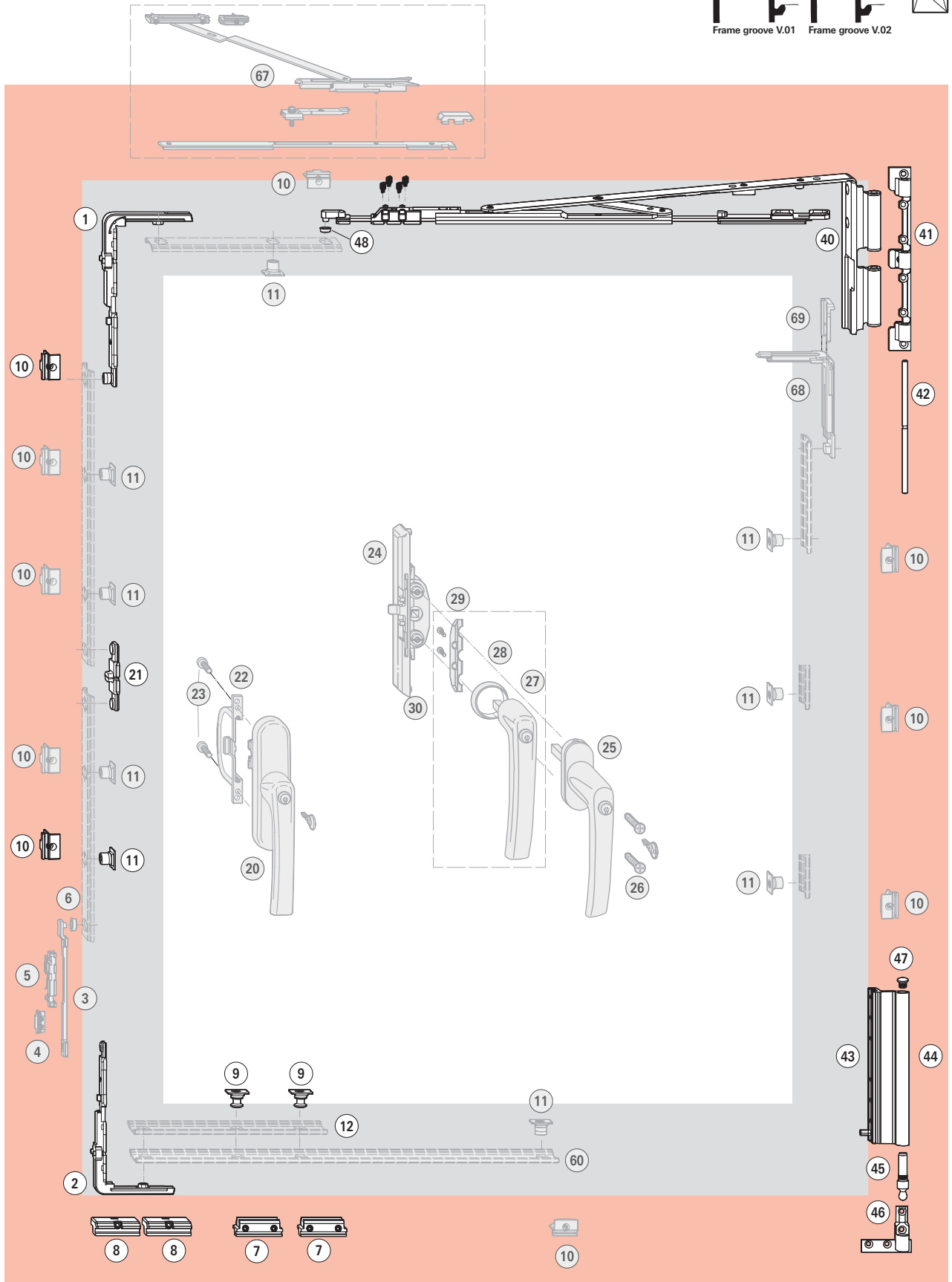
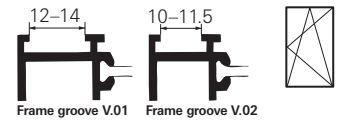
Pos.	Pcs	Description	Colour	DIN	PQ	Material no.
⑪	8	Locking cam, insertable	–	–	100	334671
⑩	8	Striker V.01	–	–	100	212633
		Striker V.02	–	–	100	212634
	1	Centre lock set V.01	–	–	1	380014
		Centre lock set V.02	–	–	1	381905
		consists of:				
⑥①		Connecting-rod VTC (ECC) 700	–	–	–	–
⑪		Locking cam, insertable	–	–	–	–
⑩		Striker V.01/V.02	–	–	–	–
	1	Sash lifter set	–	R	1	382152
		consists of:	–	L	1	382153
③	1	Coupler component	–	–	–	–
④	1	Stop	–	–	–	–
⑤	1	Run-up block	–	–	–	–
⑥	1	Compensation sleeve	–	–	–	–
⑥⑦	1	Additional scissor stay V.01	–	–	10	331024
		Additional scissor stay V.02	–	–	10	331025
⑥⑧		Corner drive CL	–	–	20	331013
⑥⑨		Alignment fork	–	–	100	221772

Roto AluVision T 540

Roto AluVision T 540

Heavy-duty hardware

Tilt-First hardware 200 kg, screw-fixed bearing



Application range

Sash width **SW** 680–1600 mm
 Sash height **SH** 520–2400 mm
 Sash weight **S.kg** max. 200 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 7 mm

Parts list basic sets

Locking set T&T 200 kg

Pos.	Pcs	Description	Colour	PQ	Material no.
	1	Locking set T&T 200 kg V.01		1	380012
		Locking set T&T 200 kg V.02		1	380013
		consists of:			
①	1	Corner drive, top	–	–	–
②	1	Corner drive, bottom	–	–	–
⑦	2	Horizontal Tilt&Turn striker V.01/V.02	–	–	–
⑧	2	Run-up block TF V.01/V.02	–	–	–
⑨	2	Tilt lock bolt TF	–	–	–
⑩	2	Striker V.01/V.02	–	–	–
⑪	1	Locking cam, insertable	–	–	–
⑫	1	Connecting-rod VTC (ECC) 170	–	–	–

Hinge side TF 200 kg

Pos.	Pcs	Description	Colour	DIN	PQ	Material no.
	1	TF set 200 kg	Special colour SP COL	R	1	620634
			Special colour SP COL	L	1	620645
		consists of:				
④①	1	Sash stay 600 TF 200 kg	–	–	–	–
④②	1	Stay bearing 200 kg	–	–	–	–
④③	1	Stay-bearing pin 200 kg	–	–	–	–
④④	1	Clamping support-strip 200 kg	–	–	–	–
④⑤	1	Corner hinge 200 kg	–	–	–	–
④⑥	1	Pivot-rest pin 200 kg	–	–	–	–
④⑦	1	Pivot rest 200 kg	–	–	–	–
④⑧	1	End cap corner hinge	–	–	–	–
④⑨	1	Compensation sleeve	–	–	–	–
	1	Misc. small components pack:				
–	10	Countersunk tapping-screw M4.8 x 19	–	–	100	–
–	4	Countersunk screw M5 x 10	–	–	100	–

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
⑳	1	RotoLine geared-handle 26 Tilt-First, lockable	–	10	(→ p.205)
㉑	1	T connector	–	100	334754
㉒	1	Mishandling device 26	–	100	213806
㉓	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

Pos.	Pcs	Description	Colour	PQ	Material no.
㉔	1	Flush-encased gearbox with mishandling device	–	10	378338
㉕	1	RotoLine window handle TF for flush-encased gearbox, lockable	–		(→ p.210)
㉖	2	Countersunk screw “niro” (stainless-steel) M5 x 30	–	100	212501
㉗	1	Escutcheonless handle, lockable	–		(→ p.207)
㉘	1	Ring for escutcheonless handle	–		(→ p.207)
㉙	1	Mounting plate	–	10	378134
㉚	2	Screws for escutcheonless handle	–		

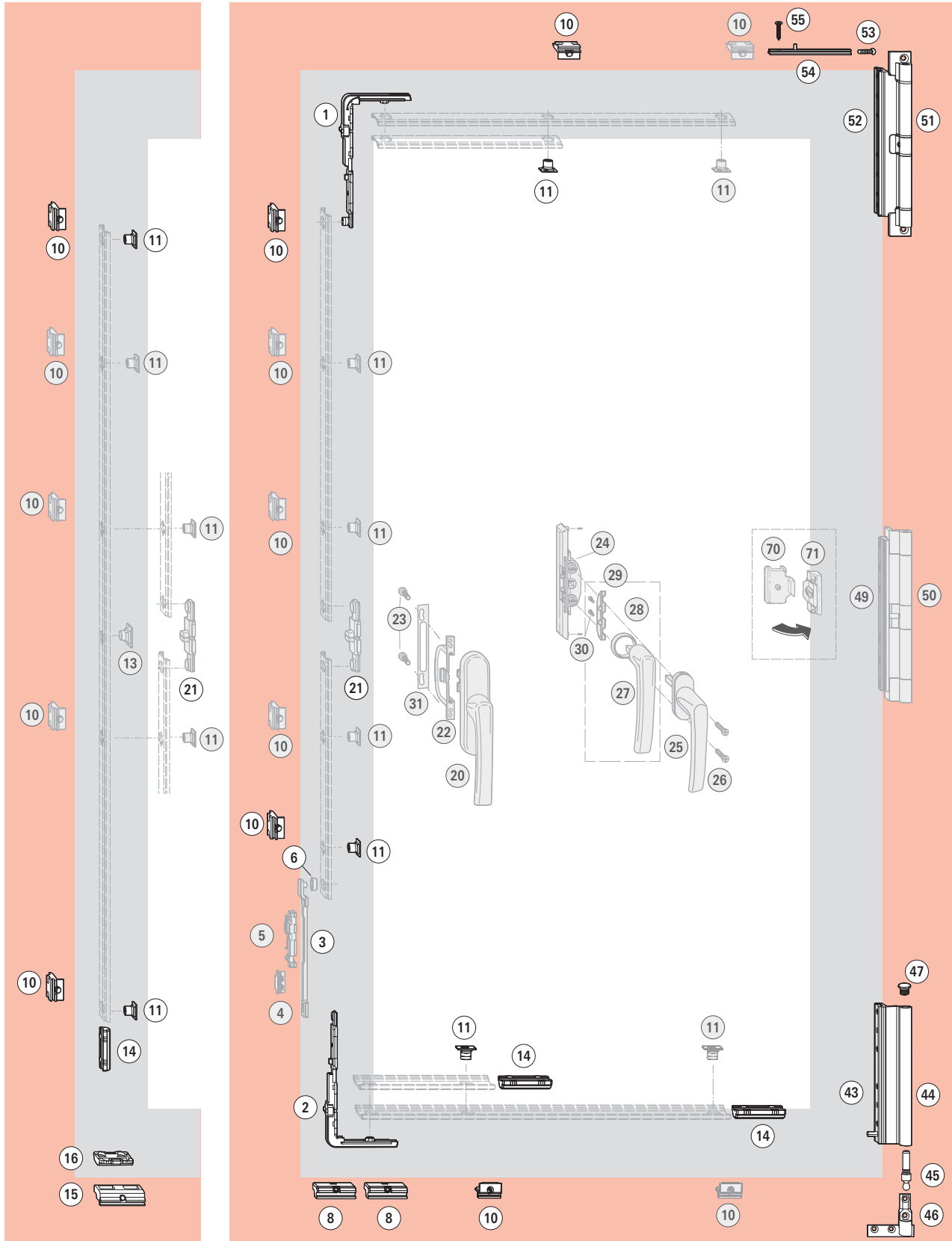
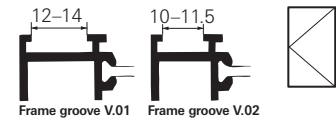
Additional components, size-related

Pos.	Pcs	Description	Colour	DIN	PQ	Material no.
⑪	8	Locking cam, insertable	–	–	100	334671
⑩	8	Striker V.01	–	–	100	212633
		Striker V.02	–	–	100	212634
	1	Centre lock set V.01	–	–	1	380014
		Centre lock set V.02	–	–	1	381905
		consists of:				
⑩		Connecting-rod VTC (ECC) 700	–	–	–	–
⑪		Locking cam, insertable	–	–	–	–
⑩		Striker V.01/V.02	–	–	–	–
	1	Sash lifter set	–	R	1	382152
		consists of:		L	1	382153
③	1	Coupler component	–	–	–	–
④	1	Stop	–	–	–	–
⑤	1	Run-up block	–	–	–	–
⑥	1	Compensation sleeve	–	–	–	–
⑥⑦	1	Additional scissor stay V.01	–	–	10	331024
		Additional scissor stay V.02	–	–	10	331025
⑥⑧		Corner drive CL	–	–	20	331013
⑥⑨		Alignment fork	–	–	100	221772

Roto AluVision T 540

Heavy-duty hardware

Turn-Only hardware 200 kg, screw-fixed bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 600–1600 mm
 Sash height **SH** 520–2400 mm
 Sash weight **S.kg** max. 200 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 7 mm

Parts list basic sets						
Locking set TU-ON 200 kg						
Pos.	Pcs	Description	Colour	PQ	Material no.	
	1	Locking set TU-ON 200 kg V.01		1	389809	
		Locking set TU-ON 200 kg V.02		1	389810	
		consists of:				
①	1	Corner drive, top	–	–	–	
②	1	Corner drive, bottom	–	–	–	
⑧	2	Run-up block TF V.01/V.02	–	–	–	
⑩	4	Striker V.01/V.02	–	–	–	
⑪	3	Locking cam, insertable	–	–	–	
⑯		Run-up block	–	–	–	
Alternative locking components						
Pos.	Pcs	Description	Colour	DIN	PQ	Material no.
⑬	1	Connector-bolt, insertable	–	–	100	254601
⑭	1	Handle lock 90°	–	–	100	212008
⑮	1	Horizontal Tilt&Turn striker	–	–	100	212122
⑪	2	Locking cam, insertable	–	–	100	334671
⑩	2	Striker V.01	–	–	100	212633
		Striker V.02	–	–	100	212634
Hinge side TU-ON 200 kg						
Pos.	Pcs	Description	Colour	DIN	PQ	Material no.
		TU-ON set 200 kg	Special colour SP COL	R	1	380095
			Special colour SP COL	L	1	380096
		consists of:				
④③	1	Clamping support-strip T&T 200 kg	–	–	–	–
④④	1	Corner hinge T&T 200 kg	–	–	–	–
④⑤	1	Pivot-rest pin T&T 200 kg	–	–	–	–
④⑥	1	Pivot rest T&T 200 kg	–	–	–	–
④⑦	1	End cap corner hinge, black	–	–	–	–
		End cap corner hinge, grey	–	–	–	–
		(optional)				
⑤①	1	TU-ON hinge 200 kg	–	–	–	–
⑤②	1	Clamping support-strip TU-ON 200 kg	–	–	–	–
⑤③	1	Countersunk screw M5 x 40	–	–	–	–
⑤④	1	Clamping block TU-ON 200 kg	–	–	–	–
⑤⑤	1	Fillister head self-tapping screw M4.8 x 25	–	–	–	–
	1	Misc. small components pack:				
–	10	Countersunk tapping-screw M4.8 x 19	–	–	100	–
–	8	Countersunk screw M5 x 10	–	–	100	–

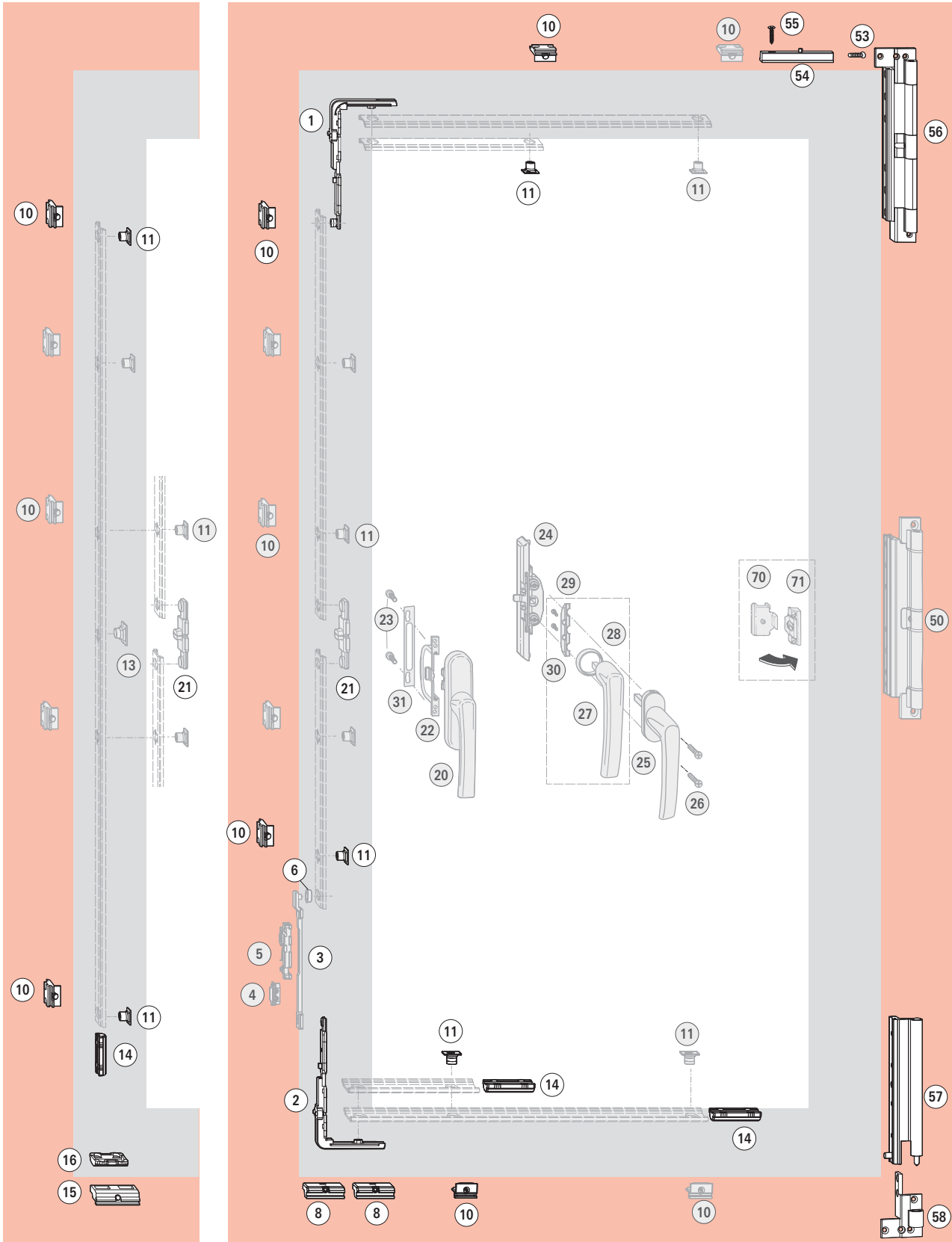
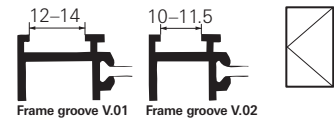
Optional						
Espagnolettes and connectors						
Pos.	Pcs	Description	Colour	PQ	Material no.	
⑳	1	RotoLine geared-handle 26	–	10	(→ p.205)	
㉑	1	T connector	–	100	334754	
㉒	1	Mishandling device 26	–	100	213806	
㉓	2	Flat-headed screw M5 x 12	–	100	212500	
Alternatively:						
Pos.	Pcs	Description	Colour	PQ	Material no.	
⑳	1	Geared-handle support	–	100	331937	
㉔	1	Flush-encased gearbox with MD	–	10	378338	
㉕	1	RotoLine window handle for flush-encased gearbox	–	–	(→ p.208)	
㉖	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100	212501	
㉗	1	Escutcheonless handle	–	–	(→ p.207)	
㉘	1	Ring for escutcheonless handle	–	–	(→ p.207)	
㉙	1	Mounting plate	–	10	378134	
㉚	2	Screws for escutcheonless handle	–	–	–	
Additional components, size-related						
Pos.	Pcs	Description	Colour	DIN	PQ	Material no.
⑪	5	Locking cam, insertable	–	–	100	334671
⑩	5	Striker V.01	–	–	100	212633
		Striker V.02	–	–	100	212634
	1	Central hinge set 200 kg	–	–	1	380097
		consists of:				
④⑨	1	Clamping support-strip TU-ON 200 kg	–	–	–	–
⑤①	1	TU-ON central hinge	–	–	–	–
	4	Countersunk screw M5 x 10	–	–	–	210970
	4	Countersunk tapping-screw ST 4.8 x 19	–	–	–	208224
	1	Sash lifter set	–	R	–	382152
		consists of:		L	–	382153
③	1	Coupler component	–	–	–	–
④	1	Stop	–	–	–	–
⑤	1	Run-up block	–	–	–	–
⑥	1	Compensation sleeve	–	–	–	–
⑦①	1	CL sash component	–	–	100	212770
⑦②	1	CL frame component V.01	–	–	100	212768
		CL frame component V.02	–	–	100	208361

Roto AluVision T 540

Roto AluVision T540

Heavy-duty hardware

Turn-Only hardware 300 kg, screw-fixed bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 690–1600 mm
 Sash height **SH** 520–2400 mm
 Sash weight **S.kg** max. 300 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 8 mm

Parts list basic sets

Locking set TU-ON 200 kg

Pos.	Pcs	Description	Colour	PQ	Material no.
	1	Locking set TU-ON 200 kg V.01		1	389809
		Locking set TU-ON 200 kg V.02		1	389810
		consists of:			
①	1	Corner drive, top	–	–	–
②	1	Corner drive, bottom	–	–	–
⑧	2	Run-up block TF V.01/V.02	–	–	–
⑩	4	Striker V.01/V.02	–	–	–
⑪	3	Locking cam, insertable	–	–	–
⑯		Run-up block	–	–	–

Alternative locking components

Pos.	Pcs	Description	Colour	DIN	PQ	Material no.
⑬	1	Connector-bolt, insertable	–	–	100	254601
⑭	1	Handle lock 90°	–	–	100	212008
⑮	1	Horizontal Tilt&Turn striker	–	–	100	212122
⑪	2	Locking cam, insertable	–	–	100	334671
⑩	2	Striker V.01	–	–	100	212633
		Striker V.02	–	–	100	212634

Hinge side TU-ON 300 kg

Pos.	Pcs	Description	Colour	DIN	PQ	Material no.
	1	TU-ON set 300 kg	Special colour SP COL	R	1	380320
			Special colour SP COL	L	1	380321
		consists of:				
⑤⑦	1	Corner hinge TU-ON 300 kg	–	–	–	–
⑤⑧	1	Pivot rest TU-ON 300 kg	–	–	–	–
⑤⑥	1	TU-ON hinge 300 kg	–	–	–	–
⑤③	1	Countersunk screw M5 x 40	–	–	–	–
⑤④	1	Clamping block TU-ON 200 kg	–	–	–	–
⑤⑤	1	Fillister head self-tapping screw M4.8 x 25	–	–	–	–
	1	Misc. small components pack:				
–	8	Countersunk tapping-screw M5 x 16	–	–	100	–
–	9	Countersunk screw M5 x 20	–	–	100	–
–	10	Countersunk tapping-screw M4.8 x 19	–	–	100	–

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
⑳	1	RotoLine geared-handle 26	–	10	(→ p.205)
㉑	1	T connector	–	100	334754
㉒	1	Mishandling device 26	–	100	213806
㉓	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

Pos.	Pcs	Description	Colour	PQ	Material no.
⑳	1	Geared-handle support	–	100	331937
㉔	1	Flush-encased gearbox with MD	–	10	378338
㉕	1	RotoLine window handle for flush-encased gearbox	–	–	(→ p.208)
㉖	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100	212501
㉗	1	Escutcheonless handle	–	–	(→ p.207)
㉘	1	Ring for escutcheonless handle	–	–	(→ p.207)
㉙	1	Mounting plate	–	10	378134
㉚	2	Screws for escutcheonless handle	–	–	–

Additional components, size-related

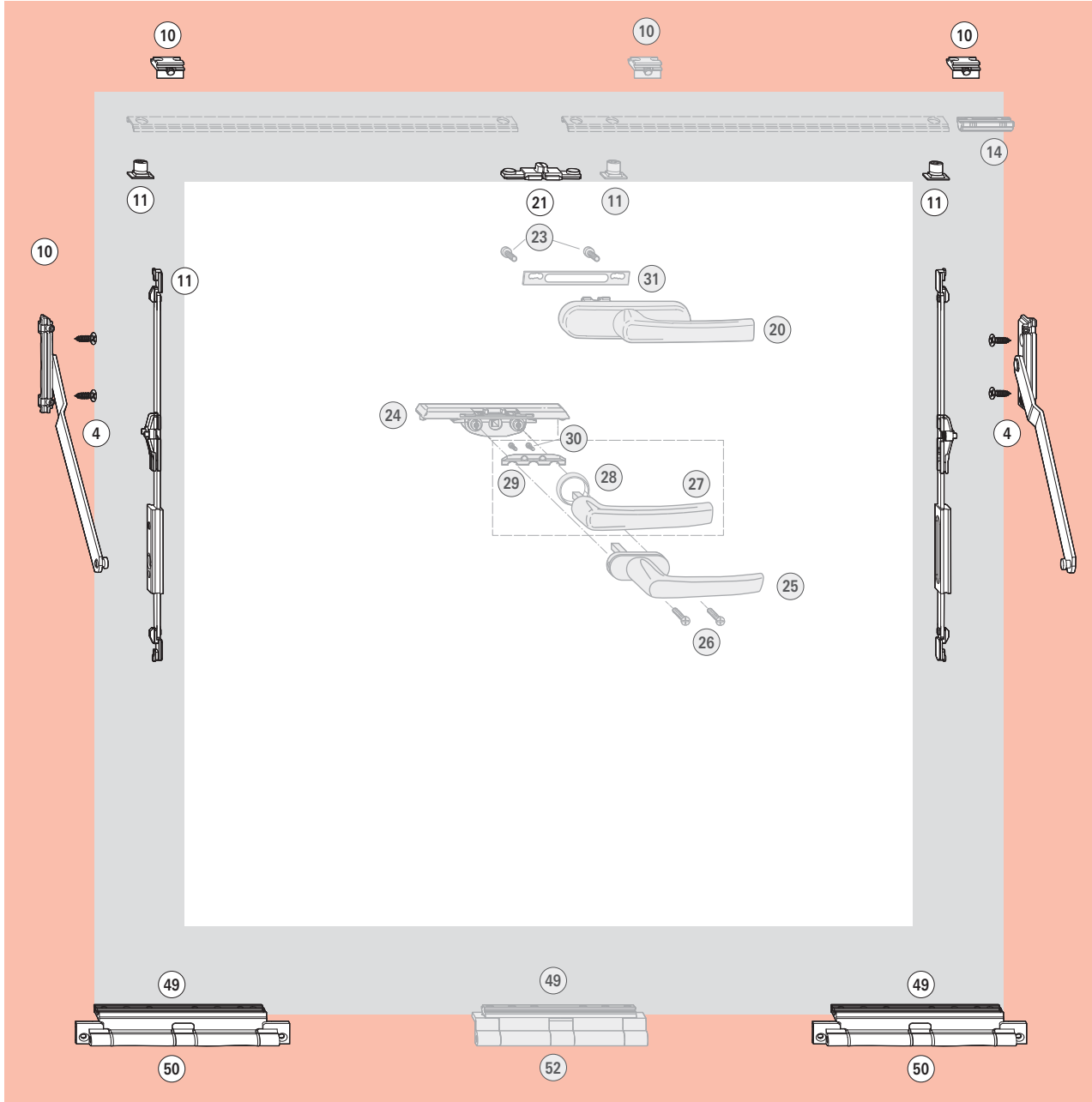
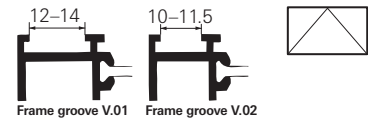
Pos.	Pcs	Description	Colour	DIN	PQ	Material no.
⑪	5	Locking cam, insertable	–	–	100	334671
⑩	5	Striker V.01	–	–	100	212633
		Striker V.02	–	–	100	212634
⑤①	1	Central hinge set 300 kg	–	–	1	380322
		consists of:				
	1	TU-ON central hinge 300 kg	–	–	–	–
	4	Countersunk screw M5 x 16	–	–	–	–
	3	Countersunk tapping-screw M5 x 20	–	–	–	–
	6	Fillister head screw ST 4.8 x 25	–	–	–	–
	1	Sash lifter set	–	R	–	382152
		consists of:		L	–	382153
③	1	Coupler component	–	–	–	–
④	1	Stop	–	–	–	–
⑤	1	Run-up block	–	–	–	–
⑥	1	Compensation sleeve	–	–	–	–
⑦①	1	CL sash component	–	–	100	212770
⑦②	1	CL frame component V.01	–	–	100	212768
		CL frame component V.02	–	–	100	208361

Roto AluVision T 540

Roto AluVision T 540

Heavy-duty hardware

Tilt-Only hardware 200 kg, handle on top, screw-fixed bearing



Grey parts are optional and not included in the basic set.

Roto AluVision T 540

Heavy-duty hardware

Tilt-Only hardware 200 kg, handle on top, screw-fixed bearing

Application range

Sash width **SW** 520–1600 mm
 Sash height **SH** 405–1300 mm
 Sash weight **S.kg** max. 200 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 7 mm

Locking components TI-ON 200 kg

Pos.	Pcs	Description	Colour	PQ	Material no.
11	2	Locking cam, insertable	–	100	334671
10	2	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
4	2	Tilt-Only stay-arm set V.01	–	10	623595
		Tilt-Only stay-arm set V.02	–	10	623596

Hinge side TI-ON 200 kg

Pos.	Pcs	Description	Colour	PQ	Material no.
	1	TI-ON set 200 kg consists of:	SP COL	1	612987
49	2	Clamping support-strip TI-ON – 200 kg	–	–	–
50	2	Tilt-Only hinge 200 kg	–	–	–
	8	Countersunk screw M5 x 10	–	–	–
	12	Countersunk tapping-screw M4.8 x 19	–	–	–

Optional

Espagnolettes and connectors

Pos.	Pcs	Description	Colour	PQ	Material no.
20	1	RotoLine geared-handle 26	–	10	(→ p.205)
21	1	T connector	–	100	334754
22	1	Mishandling device 26	–	100	213806
23	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

Pos.	Pcs	Description	Colour	PQ	Material no.
24	1	Flush-encased gearbox w/o MD	–	10	378338
25	1	RotoLine window handle for flush-encased gearbox	–	–	(→ p.208)
26	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100	212501
27	1	Escutcheonless handle	–	–	(→ p.207)
28	1	Ring for escutcheonless handle	–	–	(→ p.207)
29	1	Mounting plate	–	10	378134
30	2	Screws for escutcheonless handle	–	–	–

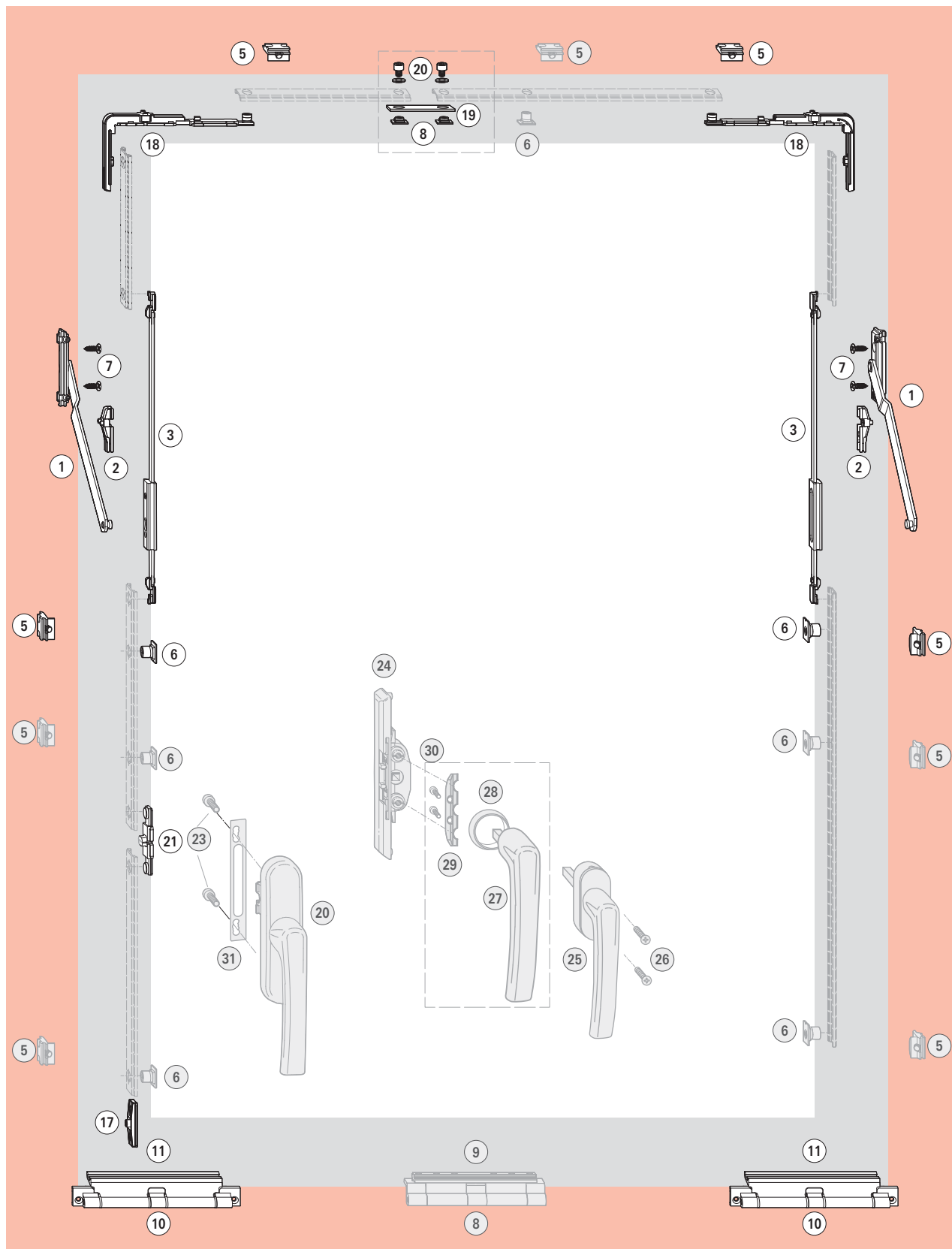
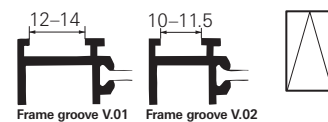
Additional components, size-related

Pos.	Pcs	Description	Colour	PQ	Material no.
14	1	Handle lock 90°	–	100	212008
11	1	Locking cam, insertable	–	100	334671
10	3	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
	1	TI-ON central hinge set 200 kg consists of:	–	1	612988
49	1	Clamping support-strip TI-ON – 200 kg	–	–	–
52	1	Central hinge 200 kg	–	–	–
	4	Countersunk screw M5 x 10	–	–	–
	4	Self-tapping screw ST 4.8 x 19	–	–	–

Roto AluVision T540

Heavy-duty hardware

Tilt-Only hardware 200 kg, handle on side, screw-fixed bearing



Grey parts are optional and not included in the basic set.

Roto AluVision T 540

Heavy-duty hardware

Tilt-Only hardware 200 kg, handle on side, screw-fixed bearing

Application range

Sash width **SW** 650–1600 mm
 Sash height **SH** 1200–2400 mm
 Sash weight **S.kg** max. 200 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm
 Hinge passage 7 mm

Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
17	1	Handle lock 90°	–	100	211425
18	2	Corner drive w/o MD	–	50	331012
5	4	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
6	2	Locking cam, insertable	–	100	334671
	1	Coupler component set	–	100	449296
		consists of:			
8	2	SEC connector	–	100	–
19	1	SEC coupler component, mounting-plate	–	100	–
20	2	Cylinder screw M5 x 6, washer	–	100	–
	1	Tilt-Only stay-arm set V.01	–	20	623595
		Tilt-Only stay-arm set V.02	–		623596
		consists of:			
1	2	Scissor-stay arm	–	20	–
2	2	Stop	–	20	–
3	2	Coupling rod & slider	–	20	–
7	4	Self-tapping screw ISO 7050 ST 4.8 x 19	–	100	–

Hinge side TI-ON 200 kg

Pos.	Pcs	Description	Colour	PQ	Material no.
10	1	TI-ON hinge-side set 200 kg	SP COL	1	612987
11		consists of:			
	11	Clamping support-strip TI-ON 200 kg	–		–
	10	TI-ON hinge 200 kg	–		–
	1	Misc. small components pack:			
	8	Countersunk screw M5 x 10	–	100	–
	12	Countersunk tapping-screw M4.8 x 19	–	100	–

Optional

Espagnolettes and connectors

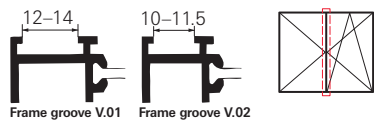
Pos.	Pcs	Description	Colour	PQ	Material no.
20	1	RotoLine geared-handle 26	–	10	(→ p.205)
21	1	T connector	–	100	334754
22	1	Mishandling device 26	–	100	213806
23	2	Flat-headed screw M5 x 12	–	100	212500

Alternatively:

24	1	Flush-encased gearbox w/o MD	–	10	378338
25	1	RotoLine window handle for flush-encased gearbox	–		(→ p.208)
26	2	Countersunk screw "niro" (stainless-steel) M5 x 30	–	100	212501
27	1	Escutcheonless handle	–		(→ p.207)
28	1	Ring for escutcheonless handle	–		(→ p.207)
29	1	Mounting plate	–	10	378134
30	2	Screws for escutcheonless handle	–		

Additional components, size-related

Pos.	Pcs	Description	Colour	PQ	Material no.
6	5	Locking cam, insertable	–	100	334671
5	5	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
	1	TI-ON central hinge set 200 kg	SP COL	1	612988
		consists of:			
8	1	Clamping support-strip TI-ON 200 kg	–		–
9	1	TI-ON hinge 200 kg	–		–
	4	Countersunk screw M5 x 10	–		–
	4	Self-tapping screw ST 4.8 x 19	–		–



Application range

Sash width **SW** (passive sash: TU-ON)....405– 1600 mm
 Sash height **SH**.....max. 2400 mm
 Clearance **CL** 11.5– 12 mm
 Overlap width **OW**21.5– 22 mm

Bulk packaging DM

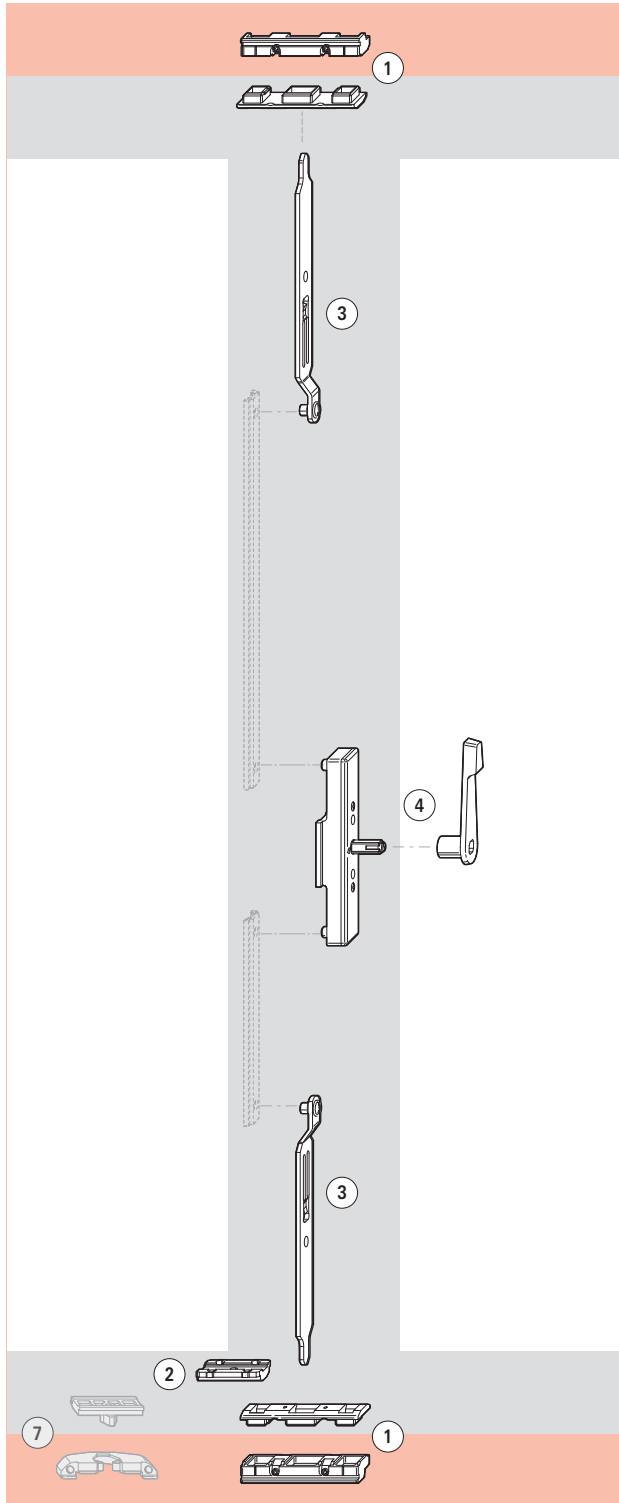
Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
④	1	DM lever-operated espagnolette, concealed	–	20	212264
③	2	Shootbolt-rod	VS1 –	100	212144
①	2	Multi-ported striker	VB 5/6 –	20	212120
②	1	Run-up block	–	100	212008

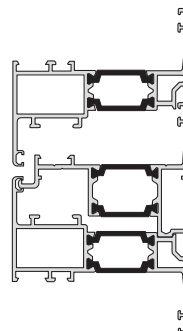
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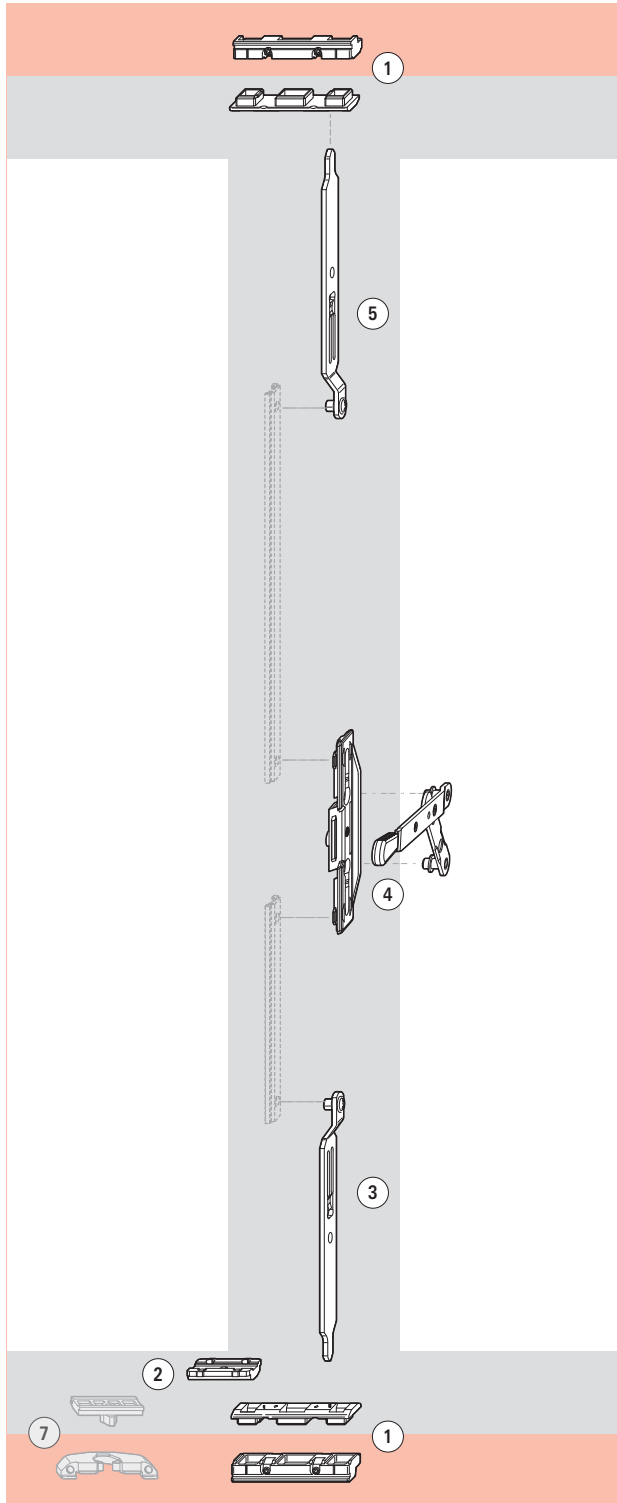
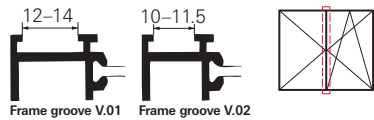
Bullet catch

Pos.	Description	Material no.
⑦	Bullet catch set	334667



Grey parts are optional and not included in the basic set.





Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** (passive sash: TU-ON)....405– 1600 mm
 Sash height **SH**.....max. 2400 mm
 Clearance **CL** 11.5– 12 mm
 Overlap width **OW**21.5– 22 mm

Bulk packaging DM-SM

Lever-operated espagnolette, surface-mounted – Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
⑤	1	Shootbolt-rod	VS1 LG –	100	341486
		Shootbolt-rod	VS2 LG –		341487
		Shootbolt-rod	VS3 LG –		341488
③	1	Shootbolt-rod	VS1 –	100	212144
		Shootbolt-rod	VS2 –		212145
		Shootbolt-rod	VS3 –		212146
①	2	Multi-ported striker	VB 1/2 –	20	212118
		Multi-ported striker	VB 3/4 –		212119
		Multi-ported striker	VB 5/6 –		212120
④	1	DM-SM espagnolette, surface-mounted	–	20	256474
②	1	Run-up block	–	100	212008

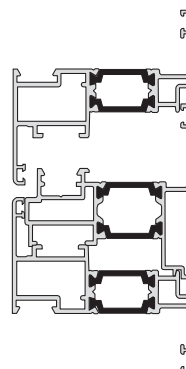
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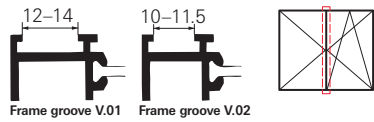
Bullet catch

Pos.	Description	Material no.
⑦	Bullet catch set	334667

NOTE

Floating-mullion hardware DM-SM can only be used for profiles with double-C-groove.





Application range

Sash width **SW** (passive sash: TU-ON)....405– 1600 mm

Sash height **SH**.....max. 2400 mm

Clearance **CL** 11.5– 12 mm

Overlap width **OW**21.5– 22 mm

Basic sets DM-SB

'10' basic set Dummy mullion – shootbolt (DM-SB)

Pos.	Pcs	Description	Colour	PQ	Material no.
		DM-SB Basic set T 540	–		330258

Bulk packaging DM-SB

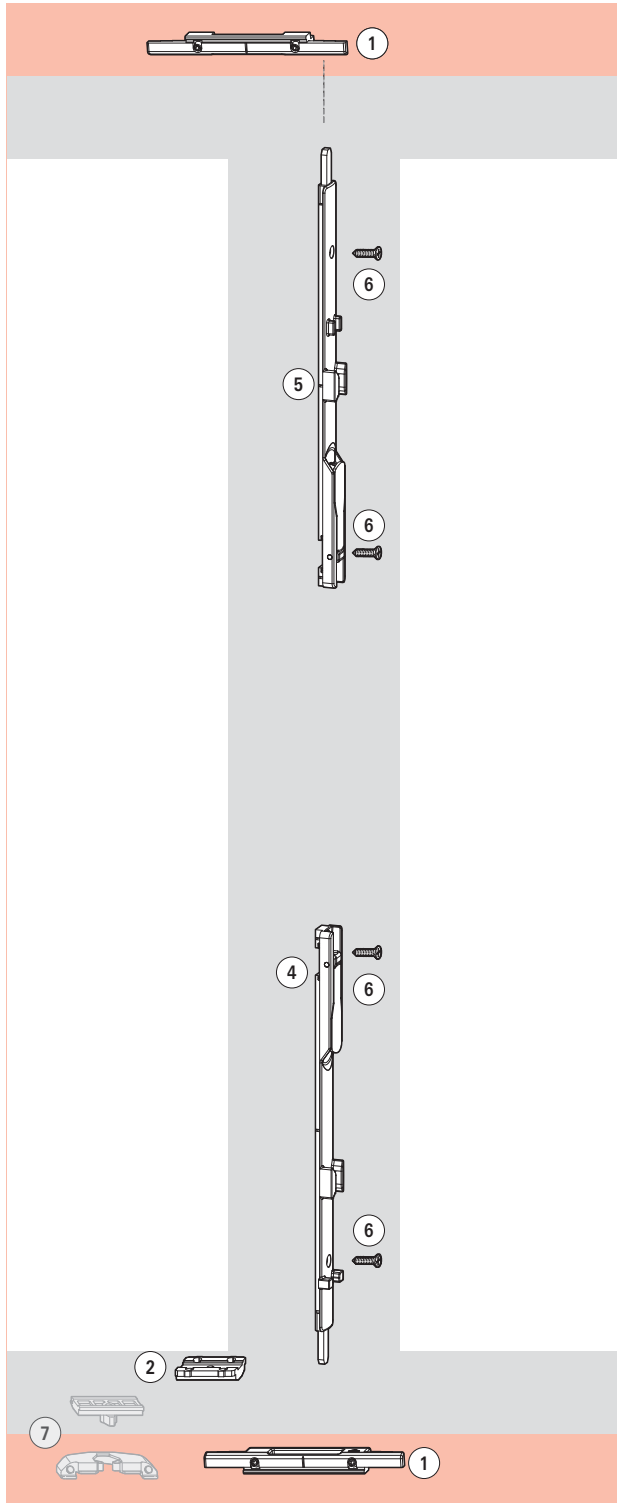
Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
5	1	DM shootbolt, top	–	50	355560
4	1	DM shootbolt, bottom	–	50	355561
1	2	DM-SB Multi-ported striker	–	100	355559
6	4	Countersunk screw 3.9 x 25	–	100	213006
2	1	Run-up block	–	100	212008

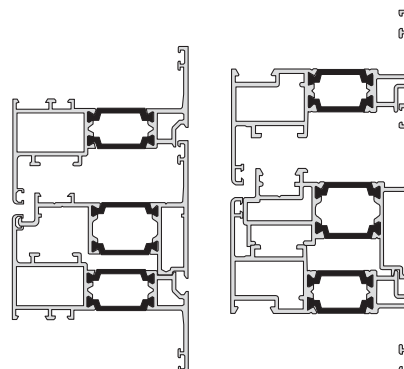
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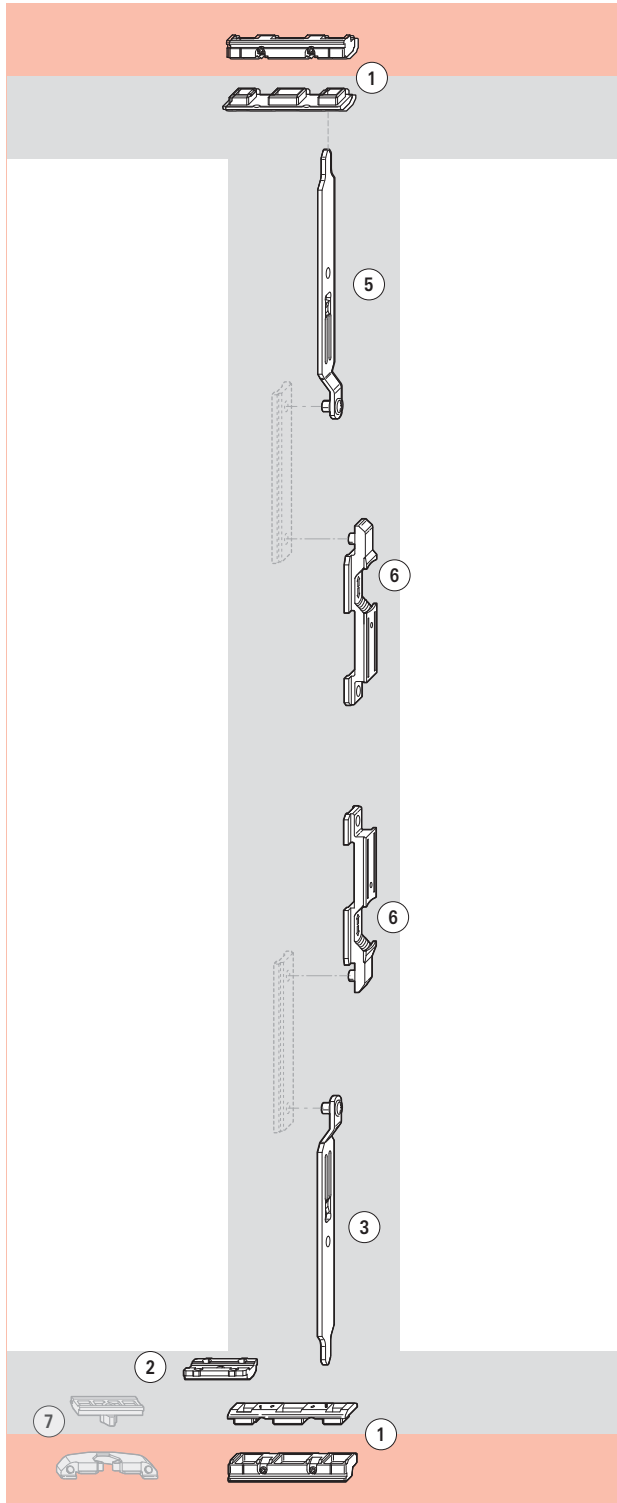
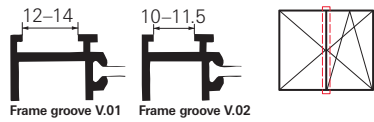
Bullet catch

Pos.	Description	Material no.
7	Bullet catch set	334667



Grey parts are optional and not included in the basic set.





Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** (passive sash: TU-ON)....405– 1600 mm

Sash height **SH**.....max. 2400 mm

Clearance **CL** 11.5– 12 mm

Overlap width **OW**21.5– 22 mm

Bulk packaging DM-SL

Lever-operated espagnolette, surface-mounted – Locking components

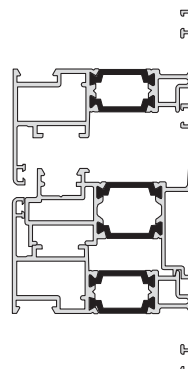
Pos.	Pcs	Description	Colour	PQ	Material no.
⑤	1	Shootbolt-rod	VS1 LG –	100	341486
		Shootbolt-rod	VS2 LG –		341487
		Shootbolt-rod	VS3 LG –		341488
③	1	Shootbolt-rod	VS1 –	100	212144
		Shootbolt-rod	VS2 –		212145
		Shootbolt-rod	VS3 –		212146
①	2	Multi-ported striker	VB 1/2 –	20	212118
		Multi-ported striker	VB 3/4 –		212119
		Multi-ported striker	VB 5/6 –		212120
⑥	2	Slider	VS1 –	100	212141
		Slider	VS2 –		212142
		Slider	VS3 –		212143
②	1	Run-up block	–	100	212008

Optional:

Bullet catch

Pos.	Description	Material no.
⑦	Bullet catch set	334667

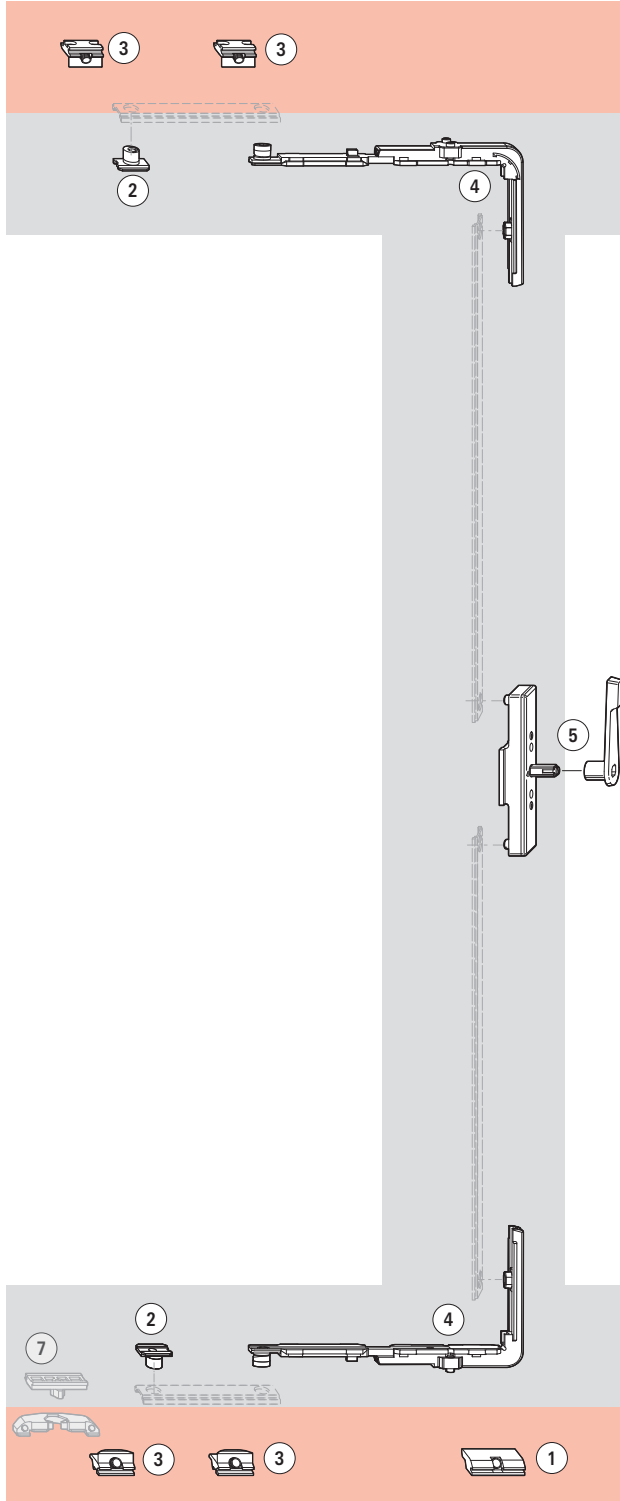
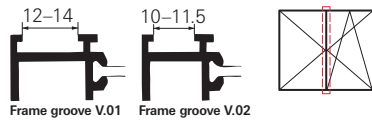
NOTE
 Floating-mullion hardware DM-SL can only be used for profiles with double-C-groove.



Roto AluVision T 540

Floating-mullion hardware

Lever-operated espagnolette, concealed, coupleable



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 405 – 1600 mm
 Sash height **SH** max. 2400 mm
 Clearance **CL** 11.5 – 12 mm
 Overlap width **OW** 21.5 – 22 mm

Basic sets

Dummy mullion with central locking system, TU-ON/TU-ON w/o hinge side '10' basic set V.01/V.02

Pos.	Description	Colour	PQ	Material no.
	TU-ON C basic set V.01	–		331277
	TU-ON C basic set V.02	–		331278

Bulk packaging

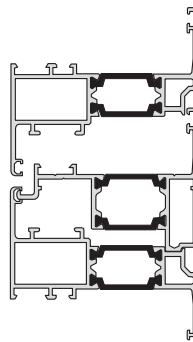
Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
①	1	Run-up wedge V.01	–	100	212762
		Run-up wedge V.02	–	100	212512
②	2	Locking cam, insertable	–	100	334671
③	4	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
④	2	Corner drive w/o MD	–	50	331012
⑤	1	DM Lever-operated espagnolette (dummy mullion), concealed	–		212264

Optional:

Bullet catch

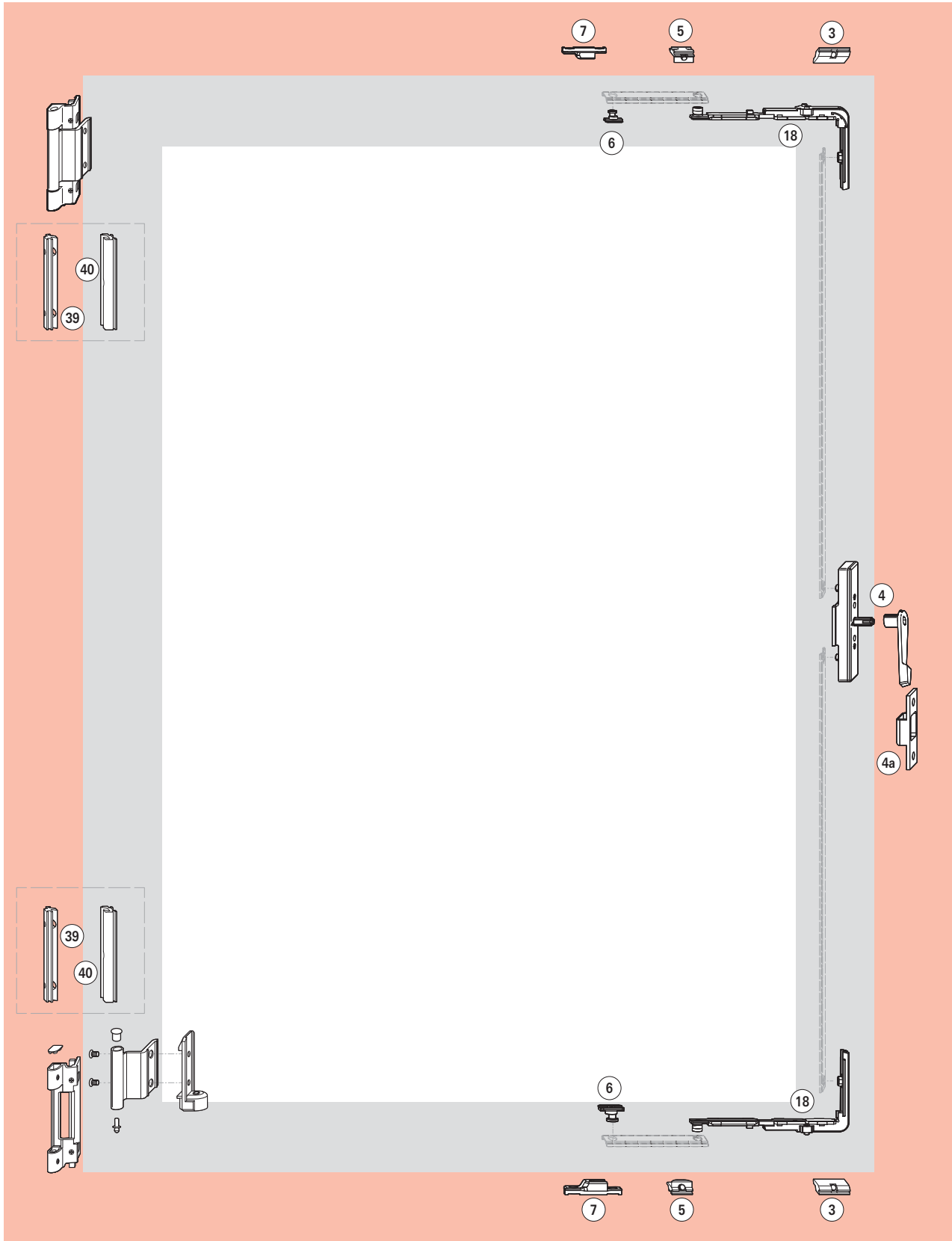
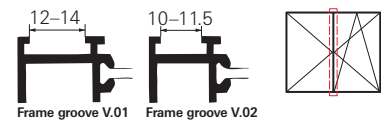
Pos.	Description	Material no.
⑦	Bullet catch set	334667



Roto AluVision T 540

Floating-mullion hardware (passive sash DIN L)

RC1, clamped bearing



Application range

Sash width **SW**405–1600 mm

Sash height **SH**max. 2400 mm

Clearance **CL**11.5–12 mm

Overlap width **OW**21.5–22 mm

NOTE!
Active sash not depicted – refer to hardware overviews Tilt&Turn/Turn-Only sash RC1 to RC3 and standard hardware overviews Tilt&Turn/Tilt-First/Turn-Only hardware.

Locking components					
Pos.	Pcs	Description	Colour	PQ	Material no.
④	1	DM lever-operated espagnolette, concealed	–	20	212264
④a	1	DM lever-operated espagnolette, concealed (with espagnolette block)	–	20	606423
⑱	2	Corner drive w/o MD	–	50	331012
③	2	Run-up wedge V.01	–	100	212762
		Run-up wedge V.02	–	100	212512
⑤	2	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
⑥	2	SEC cam, insertable	–	100	447245
⑦	2	SEC striker V.01	–	100	212637
		SEC striker V.02	–	100	212638

NOTE!
Additional components (size-related), see Basic security, page 103.

SEC components, hinge side					
Pos.	Pcs	Description	Colour	PQ	Material no.
③⑨	2	SEC hinge lock, frame V.01	–	20	331788
		SEC hinge lock, frame V.02	–	20	331789
④⑩	2	SEC hinge lock, sash	–	20	331790
	6	Screw M4.8 x 16 not dep.	–	100	212754

NOTE!
Standard hinge side, refer to hardware overview Turn-Only sash, page 105.

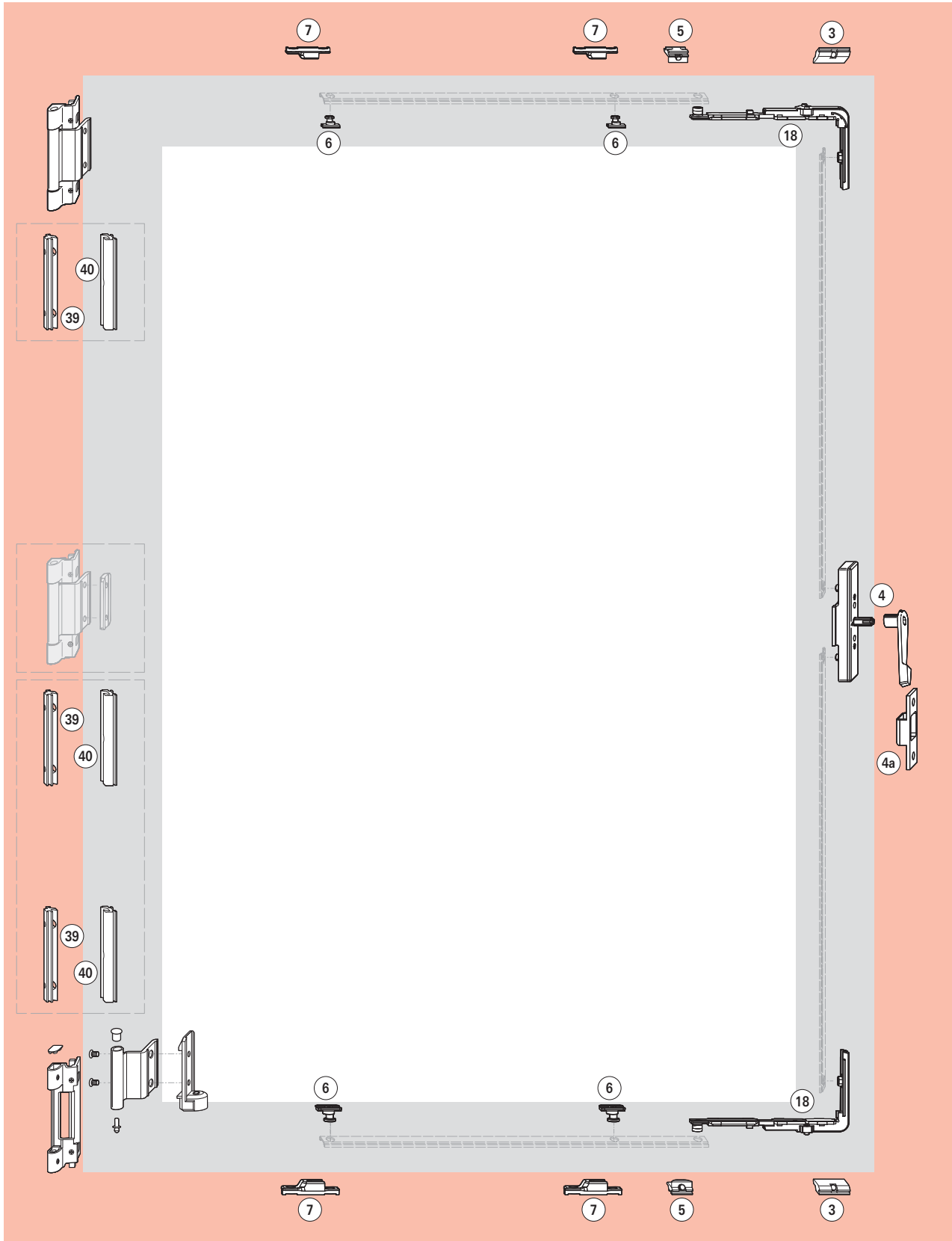
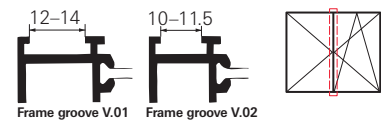
Parts list basic sets			
'10' SEC basic set			
Description	Colour	Material no.	
SEC hinge lock set V.01	–	335185	
Hinge lock frame/sash, 3 countersunk tapping-screws			
SEC hinge lock set V.02	–	335186	
Hinge lock frame/sash, 3 countersunk tapping-screws			

Roto AluVision T 540

Roto AluVision T 540

Floating-mullion hardware (passive sash DIN L)

RC2, clamped bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW**525–1600 mm

Sash height **SH**max. 2400 mm

Clearance **CL**11.5–12 mm

Overlap width **OW**21.5–22 mm

NOTE!
Active sash not depicted – refer to hardware overviews Tilt&Turn/Turn-Only sash RC1 to RC3 and standard hardware overviews Tilt&Turn/Tilt-First/Turn-Only hardware.

Locking components				
Pos.	Pcs	Description	Colour	PQ Material no.
④	1	DM lever-operated espagnolette, concealed	–	20 212264
④a	1	DM lever-operated espagnolette, concealed (with espagnolette block)	–	20 606423
⑱	2	Corner drive w/o MD	–	50 331012
③	2	Run-up wedge V.01	–	100 212762
		Run-up wedge V.02	–	100 212512
⑤	2	Striker V.01	–	100 212633
		Striker V.02	–	100 212634
⑥	4	SEC cam, insertable	–	100 447245
⑦	4	SEC striker V.01	–	100 212637
		SEC striker V.02	–	100 212638

NOTE!
Additional components (size-related), see Basic security, page 103.

SEC components, hinge side				
Pos.	Pcs	Description	Colour	PQ Material no.
③⑨	3	SEC hinge lock, frame V.01	–	20 331788
		SEC hinge lock, frame V.02	–	20 331789
④⑩	3	SEC hinge lock, sash	–	20 331790
	9	Screw M4.8 x 16 not dep.	–	100 212754

NOTE!
Standard hinge side, refer to hardware overview Turn-Only sash, page 105.

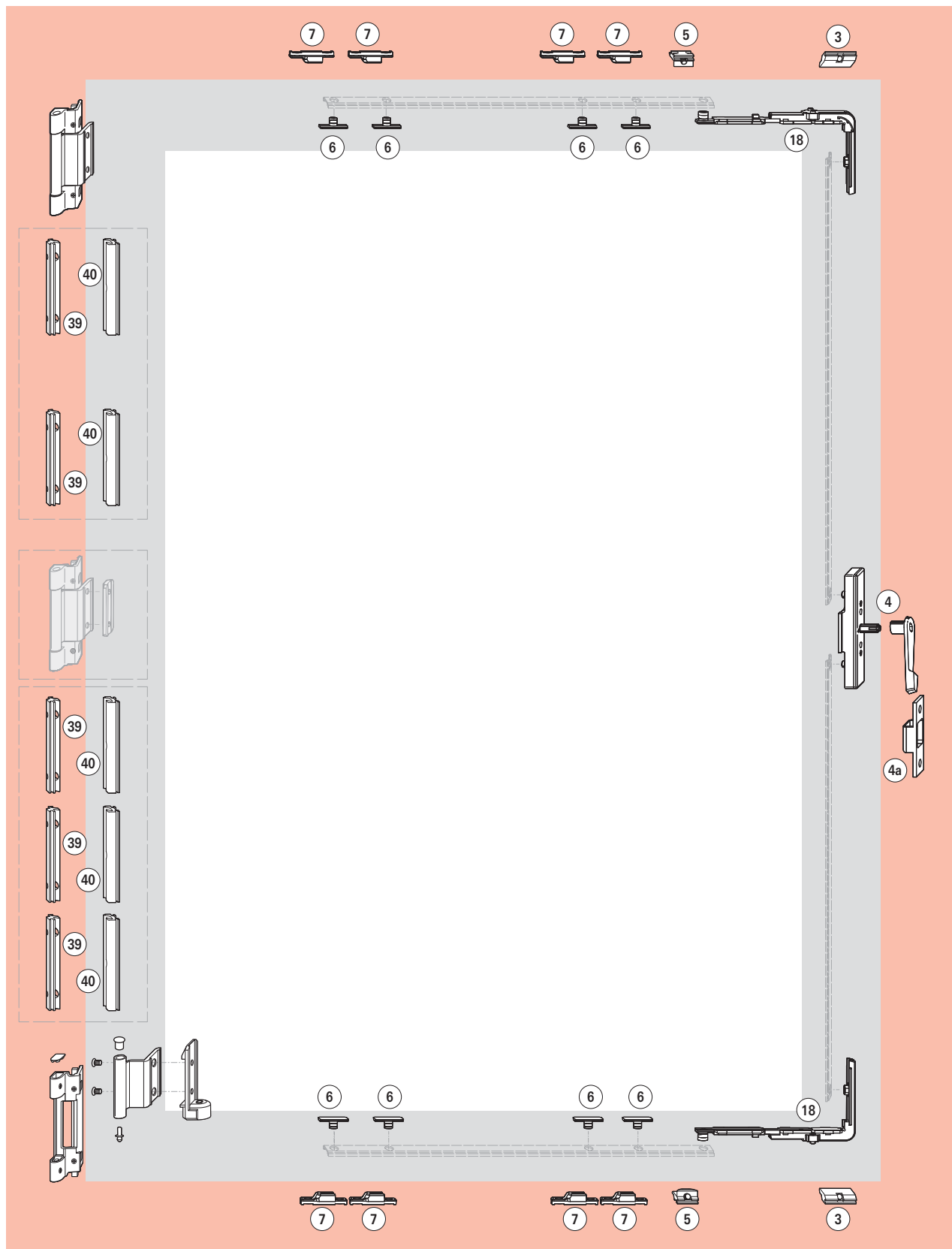
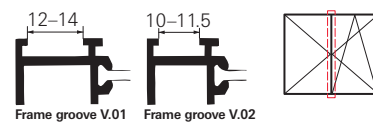
Parts list basic sets			
'10' SEC basic set			
Description	Colour	Material no.	
SEC hinge lock set V.01	–	335185	
Hinge lock frame/sash, 3 countersunk tapping-screws			
SEC hinge lock set V.02	–	335186	
Hinge lock frame/sash, 3 countersunk tapping-screws			

Roto AluVision
T 540

Roto AluVision T 540

Floating-mullion hardware (passive sash DIN L)

RC3, clamped bearing



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 675–1600 mm

Sash height **SH** max. 2400 mm

Clearance **CL** 11.5–12 mm

Overlap width **OW** 21.5–22 mm

NOTE!
Active sash not depicted – refer to hardware overviews Tilt&Turn/Turn-Only sash RC1 to RC3 and standard hardware overviews Tilt&Turn/Tilt-First/Turn-Only hardware.

Locking components				
Pos.	Pcs	Description	Colour	PQ Material no.
④	1	DM lever-operated espagnolette, concealed	–	20 212264
④a	1	DM lever-operated espagnolette, concealed (with espagnolette block)	–	20 606423
⑱	2	Corner drive w/o MD	–	50 331012
③	2	Run-up wedge V.01	–	100 212762
		Run-up wedge V.02	–	100 212512
⑤	2	Striker V.01	–	100 212633
		Striker V.02	–	100 212634
⑥	8	SEC cam, RC3, insertable	–	100 443530
⑦	8	SEC striker V.01	–	100 212637
		SEC striker V.02	–	100 212638

NOTE!
Additional components (size-related), see Basic security, page 103.

SEC components, hinge side				
Pos.	Pcs	Description	Colour	PQ Material no.
③⑨	5	SEC hinge lock, frame V.01	–	20 331788
		SEC hinge lock, frame V.02	–	20 331789
④⑩	5	SEC hinge lock, sash	–	20 331790
	15	Screw M4.8 x 16 not dep.	–	100 212754

NOTE!
Standard hinge side, refer to hardware overview Turn-Only sash, page 105.

Parts list basic sets			
'10' SEC basic set			
Description	Colour	Material no.	
SEC hinge lock set V.01	–	335185	
Hinge lock frame/sash, 3 countersunk tapping-screws			
SEC hinge lock set V.02	–	335186	
Hinge lock frame/sash, 3 countersunk tapping-screws			

Roto AluVision T 540

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Roto AluVision Designo: Beauty from its best side

The requirements placed by planning engineers and property developers on the aesthetics and functionality of windows are growing. Today there is – literally – a heavy emphasis on large sash elements and complex multiple glazing. At the same time, requirements for aesthetical shapes and slimline profile is growing. The less one sees of the fenestration technology involved, the better. Roto AluVision Designo meets these demands – as fully concealed hardware for large aluminium windows.

Sash weights of up to 150 kg no longer represented a problem

Large sashes or soundproofed window surface areas are aesthetically beautiful, but are heavy at the same time. Sash weights of over 100 kg are not uncommon. Unobtrusive hardware is therefore in demand for these “elegant heavyweights”. The solution: Roto AluVision Designo – the completely concealed hardware system for large and heavy aluminium windows up to 150 kg. Your advantage: only one additional special component (also invisible from the outside), is enough to achieve the highest weight stability in conjunction with the standard hardware.

Ultimate corrosion protection due to the unique surface-finish

Regarding durability, Roto focuses on high-quality, part hardened and tempered types of steel. Roto again confirms its claim as leader in fenestration technology with the innovative surface coating, RotoSil Nano. Tiny Nano particles create a surface that is equipped not only with optimal corrosion protection, but also unique self-healing properties. This new surface treatment technology is available as standard on the new hinge-side components at no additional charge. Quality is Roto AluVision’s first priority.

Less parts, less installation time

Roto AluVision Designo uses the AluVision T 540-10 central locking system. This has a lot of advantages: The smaller variety of components reduces the stock space required and this reduces costs. The pivot rest is designed in such a manner that one can do without drilling or milling in the frame. All hinge-side components are clamped on the frame and sash; simplifying the installation. Everything fits perfectly and functions simply, quickly and therefore inexpensively. Form-fitting, positive clamping is ensured by a combination of clamp-block and clamp-strip with a piercing screw which penetrates the profile. Various clamp-strips are available for different profile geometries. In addition to that there is the convenient adjustment: Roto AluVision Designo can be installed and adjusted with max. 3 tools. The adjustment levels are visually marked.

Small components create large security reserves.

Roto AluVision Designo provides excellent burglary protection for concealed hardware. By integrating it into the modular T540 locking system, a high level of security is possible (burglary inhibition from RC1 up to RC3 in accordance with DIN EN 1627-1630). The small compact pivot rests provide a lot of space for additional security components and warrant increased anti-jemmy protection.



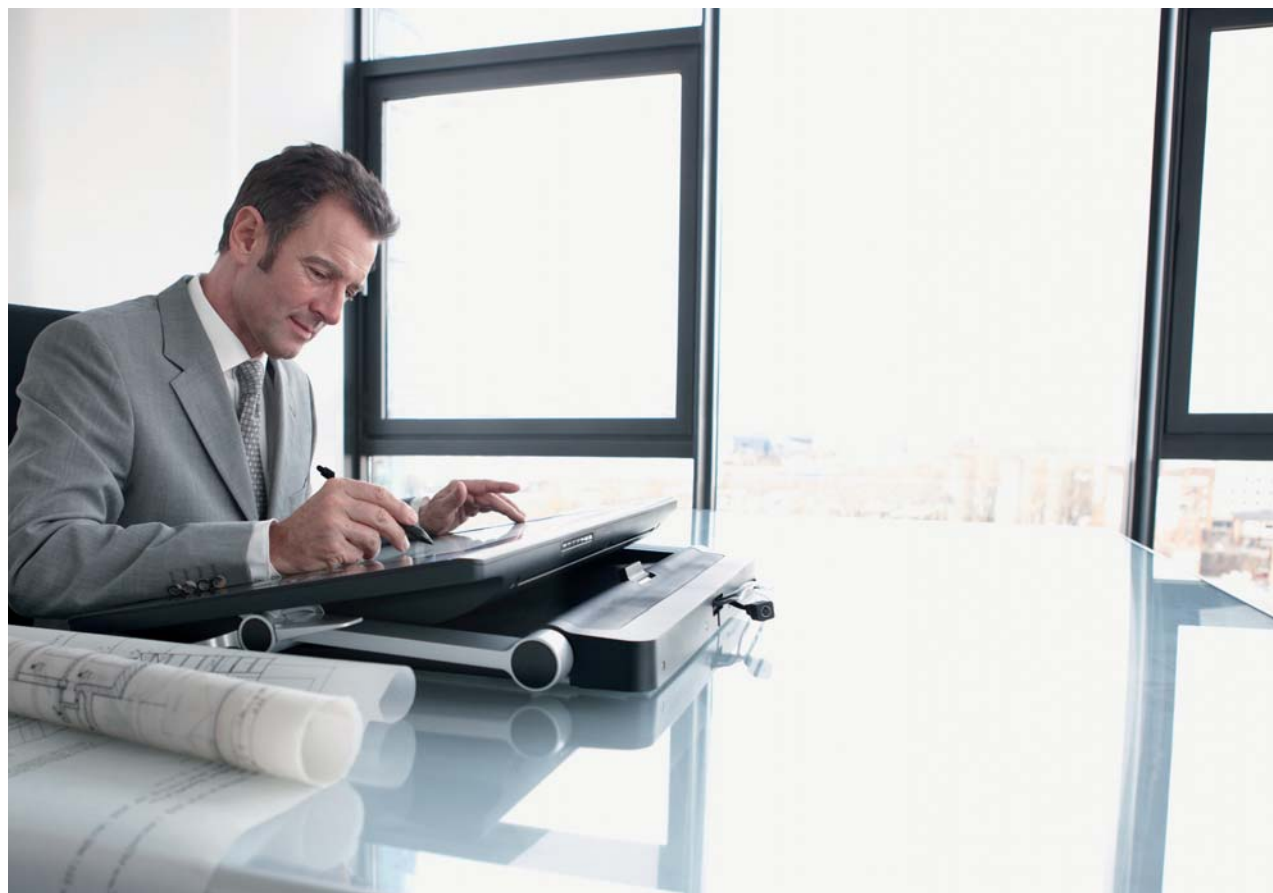
Aluminium window with Roto AluVision Designo and concealed hinges



Ultimate corrosion protection due to the unique surface-finish: RotoSil Nano



High security for RC2 by means of adjustable security cam



Roto AluVision
Designo

High-quality architecture can be realised at any time

Whether it's for standard sash formats or individual architecture solutions, AluVision Designo provides the perfect solution for every challenge. Very high and narrow sash formats represent a special challenge for the hardware system. By using the coupleable rebate hinge, the maximum sash tightness on the hinge side is possible even with completely concealed hardware. The optional turn-restrictor (braked and damped) for opening restriction enables new application areas for meeting the highest requirements.

Large opening angle of 100 degrees

Others also offer concealed hinge sides. However you'll find it hard to find a window opening angle of up to 100 degrees. Roto AluVision Designo meets these demands and allows an uninterrupted view to the outside. Further design-related advantage: Unlike conventional concealed aluminium hardware, this model enables the sash to open fully, which results in a clear, unobstructed view.

Easy adjustment on the sash stay
thanks to 4 mm Allen key



Convenient installation
of pivot rest and stay bearing
thanks to hexalobular socket T20



No danger of catching your fingers!
The narrow gap on the hinge side reduces the
risk of catching your fingers



- Applicable with aluminium profiles with:
 - Overlap width from 21.5 mm up to 22 mm, clearance: from 11.5 mm up to 12 mm,
 - hardware axis: 10 mm
- Hardware certified according to QM 328

- Hinge side / sash stay clampable in the frame groove by means of pre-assembled clamp-strips with clamping-blocks
- Integrated piercing-screw protects against horizontal slipping
- Preassembled sash stay with integrated anti-slam device and lateral adjustment
- Hinging of the sash in tilted position
- Optional load transfer device for sash weights of 80 – 150 kg

- Lateral adjustment at the scissor-stay guide (± 2 mm) and height adjustment ($+2$ mm/ -0.5 mm) as well as lateral adjustment ($+2$ mm/ -1 mm) at the corner hinge when installed
- Turn-Only sash with rebate hinge and integrated lateral adjustment (± 2 mm), passive concealed locking points on the hinge side
- Turn-Only sash with coupleable rebate hinge and integrated lateral adjustment (± 2 mm) for active locking points (in combination with CL corner drive) at the hinge side

- Centre locks can be randomly located due to insertable locking cams
- Gasket-compression adjustable via eccentric cams (± 1 mm)
- Upgrading or retrofitting up to RC3 (DIN EN 1627-1630)

- Geared-handle (window handles lockable as an option)
- Geared-handle with separate service handle
- Flush-encased gearbox with/without integrated mishandling device (window handles lockable as an option 40/100 Nm)
- Escutcheonless handle for flush-encased gearbox (optionally lockable)

- Concealed dummy-mullion hardware (sash with floating mullion) in the versions:
 - Lever-operated espagnolette (dummy mullion), concealed (DM)
 - Dummy mullion with shootbolts (DM-SB)
 - Lever-operated espagnolette (dummy mullion), surface-mounted (DM-SM)
 - Dummy mullion with slider (DM-SL)

- Application of the turn-restrictor $SW \geq 1200$ mm
- Application of the turn-restrictor (damped/arrestable) $SW \geq 1200$ mm
- Child safety lock with cylinder locking, lockable
- Night-vent
- Bullet catch

Opening type	TU-ONc 300-500		Rebate hinge TU-ON		Sash stay 500		Sash stay 735		min. SH				min. HH Handle height
	min. SW		min. SW		min. SW		min. SW		min. SH				
	with TR	without TR	with TR	without TR	with TR	without TR	with TR	without TR	with LTD & GH	w/o LTD & GH	with LTD & FEG	w/o LTD & FEG	
T&T	-	-	-	-	500	500	735	735	555	555	650	650	260
T&T (RC2)	-	-	-	-	775	625	800	800	720 ¹⁾	700 ¹⁾	720 ¹⁾	700 ¹⁾	390
T&T (RC3)	-	-	-	-	850	700	875	875	870 ¹⁾	850 ¹⁾	870 ¹⁾	850 ¹⁾	465
TF	-	-	-	-	500	500	735	735	555	555	650	650	260
TF (RC2)	-	-	-	-	775	625	800	800	720 ¹⁾	700 ¹⁾	720 ¹⁾	700 ¹⁾	390
TF (RC3)	-	-	-	-	850	700	875	875	870 ¹⁾	850 ¹⁾	870 ¹⁾	850 ¹⁾	465
TU-ON	-	-	450	250	-	-	-	-	520	520	520 ²⁾	520 ²⁾	260
TU-ON (RC2)	-	-	700	550	-	-	-	-	720 ¹⁾	700 ¹⁾	720 ¹⁾	700 ¹⁾	390
TU-ON (RC3)	-	-	830	680	-	-	-	-	1050	840 ¹⁾	1050	840 ¹⁾	465
TU-ONc	365	300	-	-	-	-	-	-	-	555	-	650	260
TU-ONc (RC2)	470	370	-	-	-	-	-	-	-	700 ¹⁾	-	700 ¹⁾	390
TU-ONc (RC3)	-	450	-	-	-	-	-	-	-	850 ¹⁾	-	850 ¹⁾	465

1) Dimension only possible without additional locking point above handle/geared-handle.
 2) Dimension only possible without corner drive above handle/geared-handle.

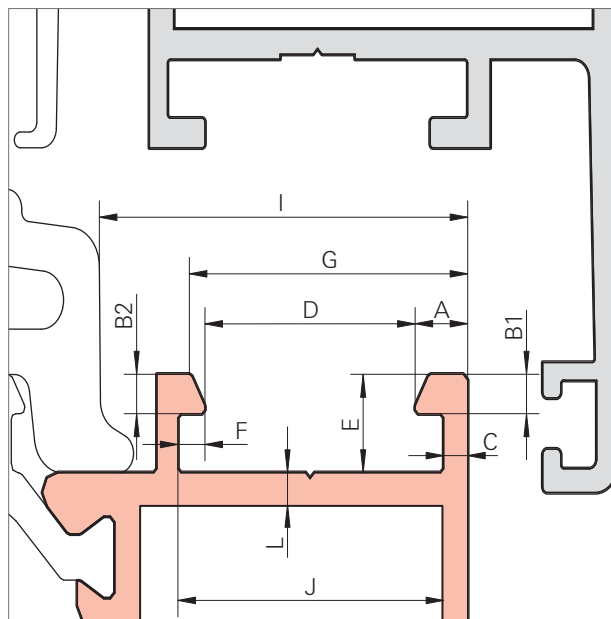
- GH = Geared-handle
- FEG = Flush-encased gearbox
- TR = Turn-restrictor
- TU-ONc = Turn-Only hardware with coupleable rebate hinge
- LTD = Load transfer device

Clamp-strip versions

Profile-specific hardware components

Parameter	min.	max.
A Flange width, front	3.50	4.30
B1 Flange thickness, front	1.50	2.00
B2 Flange thickness, rear	1.50	2.00
C Leg thickness, front	1.50	2.00
D Groove width	10.00	14.00
E Groove depth	4.50	5.20
F Flange overlap, rear	1.70	2.50
HH Pivot rest contact surface	13.20	18.50
L* Groove-base thickness	1.50	2.00
I Installation space (frame)	22.00	
J Inner groove width	14.00	18.60

Profile section / hardware components



* Drilling jig for groove-base thickness > 2 mm see "Jigs and tools"

Clamp-strip version no. 1

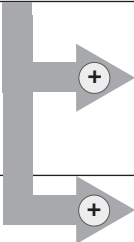
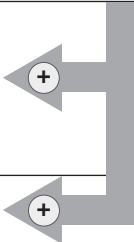


	DIN	Pivot rest	Sash stay 735	Sash stay 500	Rebate hinge	Rebate-hinge set, coupleable
C+J Clamp-strip dimension	16.00	17.10	L 624970	624947	624945	627256
			R 624969	624946	624944	627255

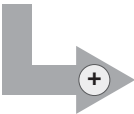
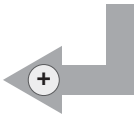
Clamp-strip version no. 3

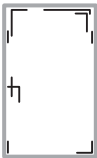
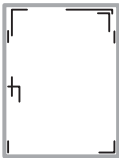


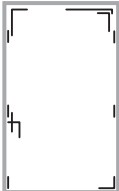
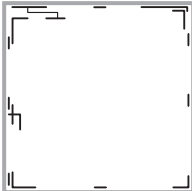

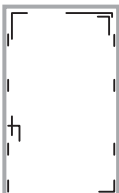
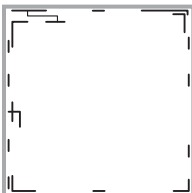

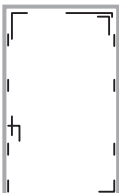
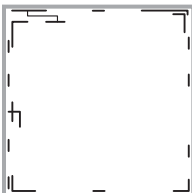
	DIN	Pivot rest	Sash stay 735	Sash stay 500	Rebate hinge	Rebate-hinge set, coupleable
C+J Clamp-strip dimension	18.20	19.20	L 624972	624953	624951	627258
			R 624971	624952	624950	627257

Clamp-strip version no. 4

	DIN	Pivot rest	Sash stay 735	Sash stay 500	Rebate hinge	Rebate-hinge set, coupleable
C+J Clamp-strip dimension	19.30	20.50	L 624974	624959	624957	627260
			R 624973	624958	624956	627259

Example: Groove version V.01, clamp-strip version 1									
SW	500 – 734 mm		735 – 1300 mm		1301 – 1600 mm				
SH	Pcs	Description	Material no.	Pcs	Description	Material no.	Pcs	Description	Material no.
	1	Locking components V.01	331268	1	Locking components V.01	331268	1	Locking components V.01	331268
	1	Scissor-stay guide 500	625024	1	Scissor-stay guide 735	495042	1	Scissor-stay guide 735	626998
	1	Sash stay 500 no. 1 – DIN L	624945	1	Sash stay 735 no. 1 – DIN L	624947	1	Sash stay 735 no. 1 – DIN L	624947
		Sash stay 500 no. 1 – DIN R	624944		Sash stay 735 no. 1 – DIN R	624946		Sash stay 735 no. 1 – DIN R	624946
	1	Corner hinge incl. adj. piece – DIN L	625008	1	Corner hinge incl. adj. piece – DIN L	625007	1	Corner hinge incl. adj. piece – DIN L	625008
		Corner hinge incl. adj. piece – DIN R	625007		Corner hinge incl. adj. piece – DIN R	625007		Corner hinge incl. adj. piece – DIN R	625007
	1	Pivot rest no. 1 – DIN L	624970	1	Pivot rest no. 1 – DIN L	624970	1	Pivot rest no. 1 – DIN L	624970
		Pivot rest no. 1 – DIN R	624969		Pivot rest no. 1 – DIN R	624969		Pivot rest no. 1 – DIN R	624969
	1	Corner drive CL set V.01	334668	1	Corner drive CL set V.01	334668	1	Additional sc. stay V.01(SW≥1400)	331024
1	Load transfer dev. setV.01(100-150kg)	624920	1	Turn-restrictor set V.01(SW≥1200)	625018	2	Corner drive CL set V.01	334668	
			1	Load transfer device setV.01 (100-150kg)	624920	1	Turn-restrictor set V.01(SW≥1200)	625018	
						1	Load transfer device setV.01(100-150kg)	624920	
1201 – 1800 mm			Above-mentioned components, combined with:						
			Pcs	Description				Material no.	
			2	Locking cam, insertable	334671				
			2	Striker V.01	212633				
1801 – 2400 mm			Above-mentioned components, combined with:						
			Pcs	Description				Material no.	
			2	Locking cam, insertable	334671				
			2	Striker V.01	212633				

Espagnolette versions			
	Geared-handle		
	Pcs	Description	Material no.
	1	RotoLine geared-handle	377474
	1	T connector set	335184
	1	Geared-handle support	331937
	Flush-encased gearbox (without handle)		
	Pcs	Description	Material no.
	1	Flush-encased gearbox w/o MD	387338

SW	500 – 734 mm	735 – 1300 mm	1301 – 1600 mm
SH			
555 – 1200 mm			
1201 – 1800 mm			
1801 – 2400 mm			

Note: The number of centre locks depends on the profile stability (profile system) and is to be adapted in accordance with the requirements resp. the stress test groups.

Example: Groove version V.01, clamp-strip version 1			
SW SH	250 – 1300 mm		1301 – 1600 mm*
520 – 1200 mm	Pcs Description Material no.		Pcs Description Material no.
	1 TU-ON Locking components V.01 331272		1 TU-ON C Locking components V.01 331277
	1 Rebate hinge no. 1 – DIN L 627256		1 Rebate hinge no. 1 – DIN L 627256
	1 Rebate hinge no. 1 – DIN R 627255		Rebate hinge no. 1 – DIN R 627255
	Rebate hinge 502340		1 Rebate hinge 502340
	1 Corner hinge incl. adj. piece – DIN L 625008		1 Corner hinge incl. adj. piece – DIN L 625008
	Corner hinge incl. adj. piece – DIN R 625007		Corner hinge incl. adj. piece – DIN R 625007
	1 Pivot rest no. 1 – DIN L 624970		1 Pivot rest no. 1 – DIN L 624970
	Pivot rest no. 1 – DIN R 624969		Pivot rest no. 1 – DIN R 624969
	1 Turn-restrictor set V.01 (SW ≥ 1200) 625018		1 Turn-restrictor set V.01 (SW ≥ 1200) 625018
1 Load transfer device set V.01 (80–150 kg) 624920		1 Load transfer device set V.01 (80–150 kg) 624920	
1201 – 1800 mm		Above-mentioned components, combined with:	
		Pcs Description Material no.	
		1 Centre-closer V.01 502759	
		1 Locking cam, insertable 334671	
1 Striker V.01 212633			
1801 – 2400 mm		Above-mentioned components, combined with:	
		Pcs Description Material no.	
		1 Centre-closer V.01 502759	
		1 Locking cam, insertable 334671	
1 Striker V.01 212633			

* Note the different application diagrams for the different hinge sides.

Espagnolette versions		
	Geared-handle	
	Pcs Description Material no.	
	1 RotoLine geared-handle 377474	
	1 T connector set 335184	
	Flush-encased gearbox (without handle)	
	Pcs Description Material no.	
	1 Flush-encased gearbox w/o MD 387338	

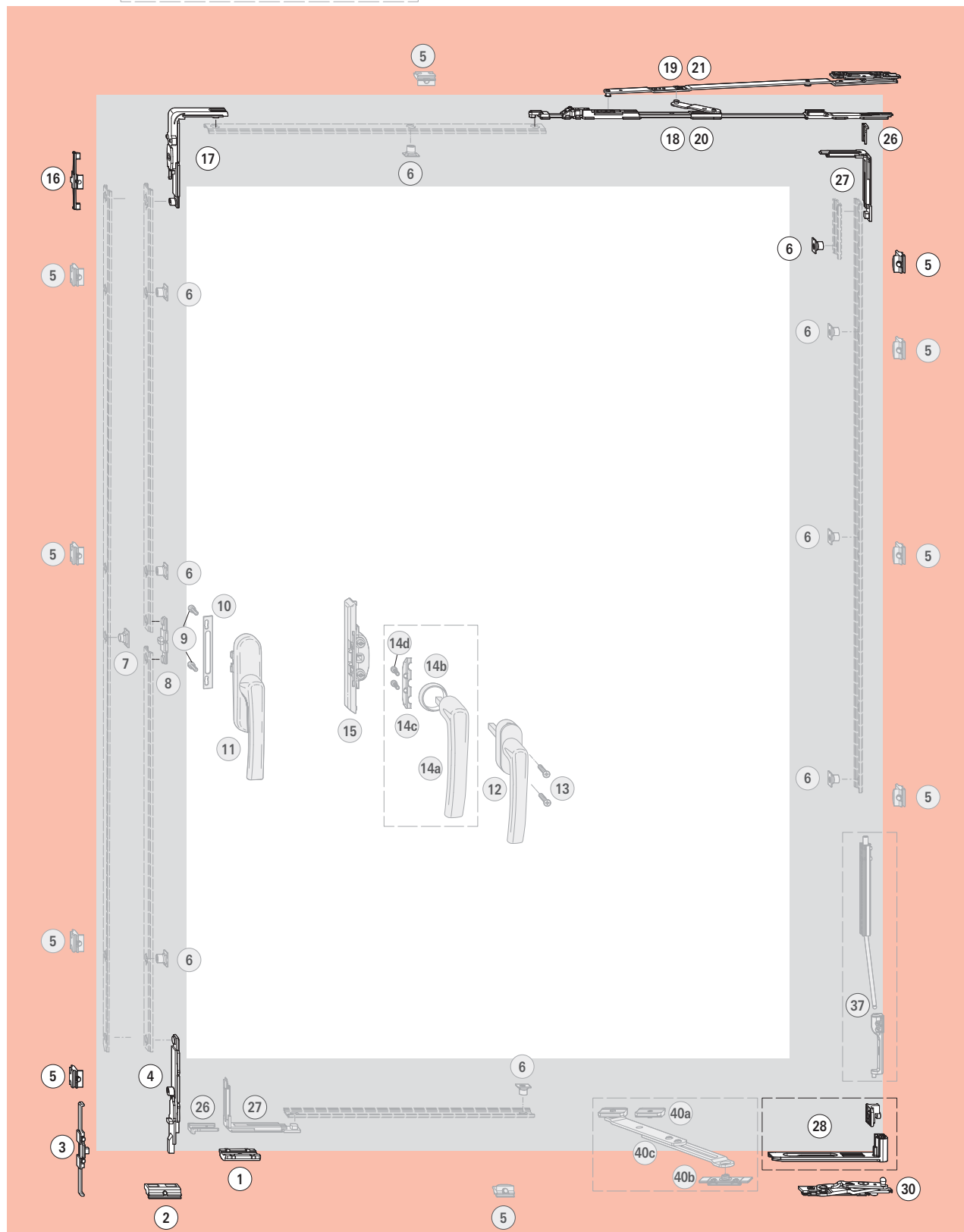
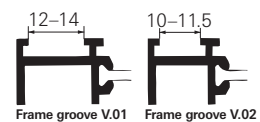
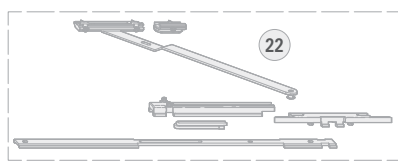
SW SH	250 – 1300 mm		1301 – 1600 mm*
520 – 1200 mm			
1201 – 1800 mm			
1801 – 2400 mm			

Note: The number of centre locks depends on the profile stability (profile system) and is to be adapted in accordance with the requirements resp. the stress test groups.

Roto AluVision Designo

Tilt&Turn hardware

100 kg / 150 kg, Basic security



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 500–1600 mm
 Sash height **SH** 555–2400 mm
 Sash weight **S.kg** max. 100/150 kg¹⁾

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm

Basic sets

T&T Locking

	Frame-groove version	PQ	Material no.
① ② ③ ④	Locking components V.01	10	331268
⑤ ⑬ ⑭	Locking components V.02	10	331269
⑤ ⑥ ⑫ ⑰	Corner drive CL set V.01	20	334668
	Corner drive CL set V.02	20	334669

Sash stay

Pcs	Description	DIN	PQ	Material no.
⑱	Scissor-stay guide 735	L/R	10	626998
⑲	Sash stay 735 no. 1	L	10	624947
	Sash stay 735 no. 1	R	10	624946
	Sash stay 735 no. 3	L	10	624953
	Sash stay 735 no. 3	R	10	624952
	Sash stay 735 no. 4	L	10	624959
	Sash stay 735 no. 4	R	10	624958
⑳	Scissor-stay guide 500	L/R	10	625024
㉑	Sash stay 500 no. 1	L	10	624945
	Sash stay 500 no. 1	R	10	624944
	Sash stay 500 no. 3	L	10	624951
	Sash stay 500 no. 3	R	10	624950
	Sash stay 500 no. 4	L	10	624957
	Sash stay 500 no. 4	R	10	624956

Hinge side

Pcs	Description	DIN	PQ	Material no.
㉒	Corner hinge incl. adjusting piece	L	10	625008
	Corner hinge incl. adjusting piece	R	10	625007
㉓	Pivot rest no. 1	L	10	624970
	Pivot rest no. 1	R	10	624969
	Pivot rest no. 3	L	10	624972
	Pivot rest no. 3	R	10	624971
	Pivot rest no. 4	L	10	624974
	Pivot rest no. 4	R	10	624973

Optional

Espagnolettes and connectors

Pcs	Description	PQ	Material no.
⑪	RotoLine geared-handle		(→ p. 205)
⑧	T connector	100	334754
⑩	Geared-handle support	100	331937
⑨	Flat-headed screw M5 x 12	100	212500
⑧	T connector set	10	335184
⑨	Geared-handle support set	10	335002

Alternatively:

⑫	RotoLine window handle for flush-encased gearbox		(→ p. 208)
⑬	Countersunk screws (stainless steel) M5x30	100	212501
⑭a	Escutcheonless handle ³⁾		(→ p. 207)
⑭b	Ring for escutcheonless handle		(→ p. 207)
⑭c	Mounting plate	100	378134
⑭d	Screws for escutcheonless handle	20	–
⑮	Flush-encased gearbox w/o MD	10	378338

Basic sets

Locking components

Pcs	Description	PQ	Material no.
①	Run-up block	100	212008
④	Tilt lock bolt	100	331018
②	Horizontal Tilt&Turn striker	100	212122
③	Anti-jemmy device V.01	100	331019
	Anti-jemmy device V.02	100	331020
⑤	Striker V.01	100	212633
	Striker V.02	100	212634
⑥	Locking cam, insertable	100	334671
⑬	Striker A, V.01	100	331014
	Striker A, V.02	100	331015
⑰	Corner drive with MD ²⁾	50	331011
⑰	Corner drive CL	20	331013
⑫	Alignment fork	100	221772

Optional

⑳ Upgrade-kit 150 kg

Pcs	Description	DIN	PQ	Material no.
1	Load transfer device, V.01	L	10	624921
	Load transfer device, V.01	R	10	624920
	Load transfer device, V.02	L	10	624923
	Load transfer device, V.02	R	10	624922

Additional components, size-related

Pcs	Description	PQ	Material no.
⑥	Locking cam, insertable	100	334671
⑦	Connector-bolt, insertable	100	254601
⑤	Striker V.01	100	212633
	Striker V.02	100	212634
㉒	Additional scissor stay V.01	10	331024
	Additional scissor stay V.02	10	331025
1	Tilt-depth regulator not dep.	10	502834
1	Transport protection for corner hinge not dep.	100	624333
⑰	Corner drive CL	20	331013
⑫	Alignment fork	100	221772
1	Turn-restrictor set V.01 ⁴⁾	10	625018
	Turn-restrictor set V.02 ⁴⁾	10	625019
④a	Sash stop		
④b	Frame hinge-bearing		
④c	Turn-restrictor arm		

1) ≥ 100 kg with upgrade-kit 150 kg
 2) Installation of a mishandling device is prescribed according to VOB-DIN 18360 (German construction tendering and contract regulations). When using a central lock on the hinge side and/or an additional scissor stay, the installation of a mishandling device is technically required.
 3) The escutcheonless handle can only be used with profile systems with an overlap height (OH) ≥ 10 mm.
 4) Arrestable/damped turn-restrictor → p. 217

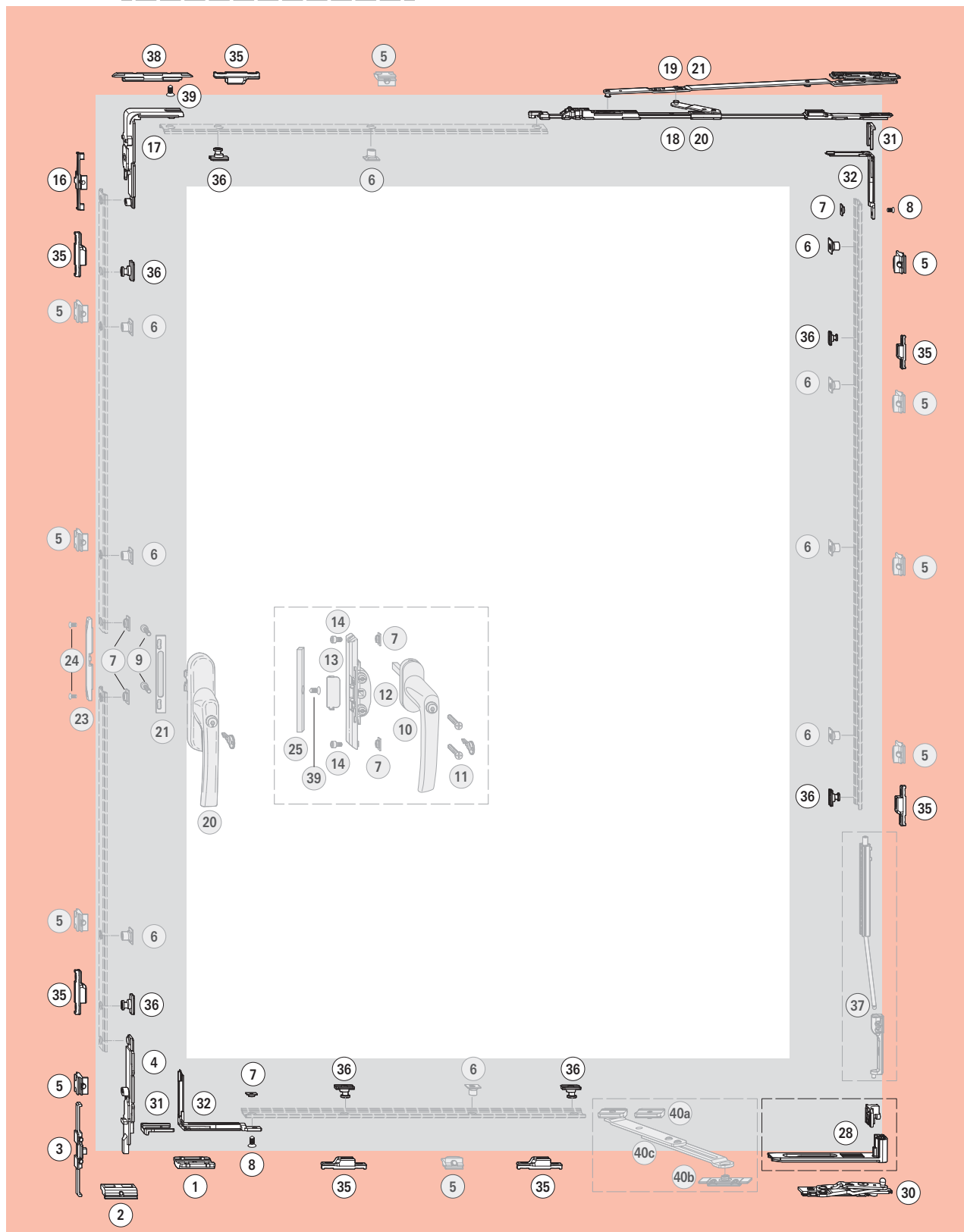
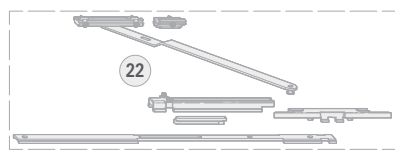
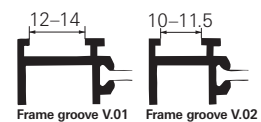
NOTE!
 Only use bearings/clamping support-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Roto AluVision Designo

Tilt&Turn hardware

100 kg / 150 kg, RC2



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 625 – 1600 mm
 Sash height **SH** 700 – 2400 mm
 Sash weight **S.kg** max. 100/150 kg¹⁾

Clearance **CL** 11.5 – 12 mm
 Overlap width **OW** 21.5 – 22 mm

Basic sets

T&T Locking

	Frame-groove version	PQ	Material no.
① ② ③ ④	Locking components V.01	10	331268
⑤ ⑬ ⑭	Locking components V.02	10	331269

Security sets

	Description	PQ	Material no.
③⑧ ③⑨	SEC rebate clearance reduction set	10	335247
⑦ ⑧ ⑮ ⑲	SEC geared-handle protection set	10	485768
⑦ ⑧ ⑮ ⑲ ⑳	SEC corner drive CL set	20	335187
④ ⑦ ⑮ ⑲	SEC flush-encased gearbox set	10	457209

Sash stay

Pcs	Description	DIN	PQ	Material no.
⑱	1 Scissor-stay guide 735	L/R	10	626998
⑲	1 Sash stay 735 no. 1	L	10	624947
	Sash stay 735 no. 1	R	10	624946
	Sash stay 735 no. 3	L	10	624953
	Sash stay 735 no. 3	R	10	624952
	Sash stay 735 no. 4	L	10	624959
	Sash stay 735 no. 4	R	10	624958
⑳	1 Scissor-stay guide 500	L/R	10	625024
㉑	1 Sash stay 500 no. 1	L	10	624945
	Sash stay 500 no. 1	R	10	624944
	Sash stay 500 no. 3	L	10	624951
	Sash stay 500 no. 3	R	10	624950
	Sash stay 500 no. 4	L	10	624957
	Sash stay 500 no. 4	R	10	624956

Hinge side

Pcs	Description	DIN	PQ	Material no.
㉔	1 Corner hinge incl. adjusting piece	L	10	625008
	Corner hinge incl. adjusting piece	R	10	625007
⑳	1 Pivot rest no. 1	L	10	624970
	Pivot rest no. 1	R	10	624969
	Pivot rest no. 3	L	10	624972
	Pivot rest no. 3	R	10	624971
	Pivot rest no. 4	L	10	624974
	Pivot rest no. 4	R	10	624973

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
⑩	1 RotoLine window handle, lockable	–		(→ p. 209)
⑪	2 Countersunk screw (stainless steel) M3x30	–	100	212501
⑦	2 SEC connector	–	100	447113
⑫	1 SEC flush-encased gearbox	–	10	457210
⑬	1 SEC drilling protection	–	10	487406
⑭	2 Cylinder screw M5 x 8	–	100	335249
③⑨	1 Screw M4.8 x 16	–	100	212754
⑲	1 SEC rebate clearance reduction	–	50	334360
⑳	1 RotoLine geared-handle 26, lockable	–		(→ p. 205)
㉑	1 Geared-handle support	–	100	331937
⑨	2 Flat-headed screw M5 x 12	–	100	212500
⑦	2 SEC connector	–	100	447113
⑲	1 SEC geared-handle protection	–	10	487407
⑳	2 Countersunk screw M5 x 10	–	100	210970

Basic sets

Locking components

Pcs	Description	PQ	Material no.
①	1 Run-up block	100	212008
④	1 Tilt lock bolt	100	331018
②	1 Horizontal Tilt&Turn striker	100	212122
③	1 Anti-jemmy device V.01	100	331019
	Anti-jemmy device V.02	100	331020
⑤	2 Striker V.01	100	212633
	Striker V.02	100	212634
⑥	1 Locking cam, insertable	100	334671
⑬	1 Striker A, V.01	100	331014
	Striker A, V.02	100	331015
⑰	1 Corner drive with MD²⁾	50	331011

SEC hardware components

Pcs	Description	Colour	PQ	Material no.
③⑥	7 SEC locking cam, insertable, RC2	–	100	447245
③⑤	7 SEC striker V.01	–	100	212637
	SEC striker V.02	–	100	212638
③⑧	1 SEC rebate clearance reduction	–	100	447112
③⑨	1 Screw M4.8 x 16	–	100	212754
③⑲	2 SEC corner drive CL	–	10	334359
③⑱	2 SEC alignment fork	–	100	212636
⑦	2 SEC connector	–	100	447113
⑧	2 Countersunk screw M5 x 7	–	100	335250

Optional

⑳ Upgrade-kit 150 kg

Pcs	Description	DIN	PQ	Material no.
1	Load transfer device, V.01	L	10	624921
	Load transfer device, V.01	R	10	624920
	Load transfer device, V.02	L	10	624923
	Load transfer device, V.02	R	10	624922

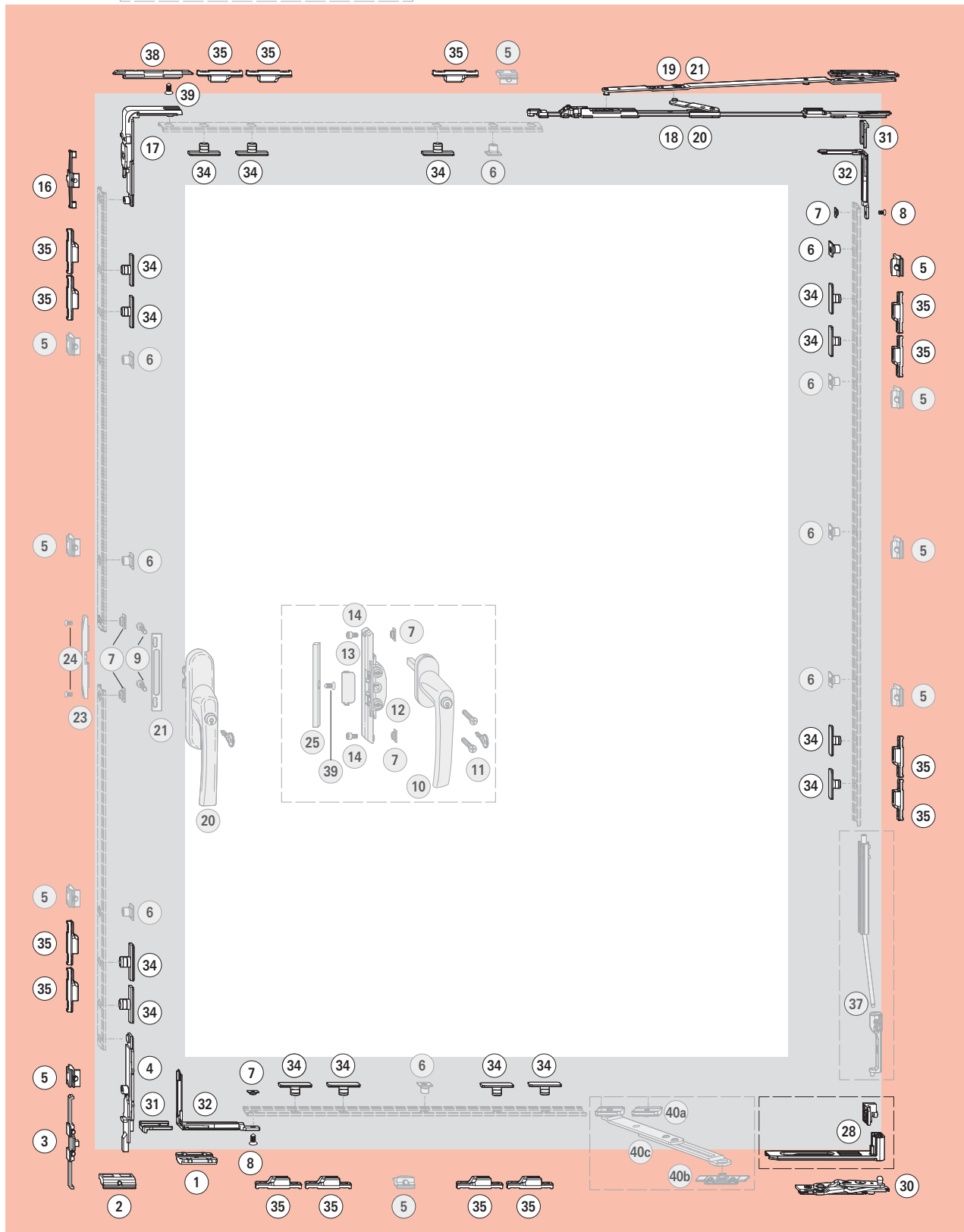
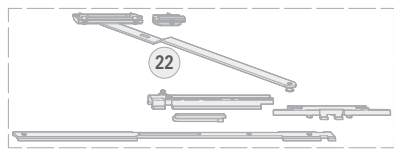
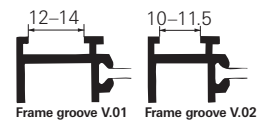
Additional components, size-related

Pcs	Description	PQ	Material no.
⑥	8 Locking cam, insertable	100	334671
⑤	8 Striker V.01	100	212633
	Striker V.02	100	212634
㉒	1 Additional scissor stay V.01	10	331024
	Additional scissor stay V.02	10	331025
1	Tilt-depth regulator not dep.	10	502834
1	Transport protection for corner hinge not dep.	100	624333
1	Turn-restrictor set V.01³⁾	10	625018
	Turn-restrictor set V.02³⁾	10	625019
④⑩	1 Sash stop		
④⑩b	1 Frame hinge-bearing		
④⑩c	1 Turn-restrictor arm		

1) ≥ 100 kg with upgrade-kit 150 kg
 2) Installation of a mishandling device is prescribed according to VOB-DIN 18360 (German construction tendering and contract regulations). When using a central lock on the hinge side and/or an additional scissor stay, the installation of a mishandling device is technically required.
 3) Arrestable/damped turn-restrictor → p. 217

NOTE!
 Only use bearings/clamping support-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW**700–1600 mm
 Sash height **SH**850–2400 mm
 Sash weight **S.kg** max. 100/150 kg¹⁾

Clearance **CL**11.5–12 mm
 Overlap width **OW**21.5–22 mm

Basic sets

T&T Locking

	Frame-groove version	PQ	Material no.
① ② ③ ④	Locking components V.01	10	331268
⑤ ⑬ ⑭	Locking components V.02	10	331269

Security sets

	Description	PQ	Material no.
③⑧ ③⑨	SEC rebate clearance reduction set	10	335247
⑦ ⑧ ⑩ ⑪ ⑫	SEC geared-handle protection set	10	485768
⑦ ⑧ ⑩ ⑪ ⑫	SEC corner drive CL set	20	335187
④ ⑦ ⑩ ⑫	SEC flush-encased gearbox set	10	457209

Sash stay

Pcs	Description	DIN	PQ	Material no.
⑱	1 Scissor-stay guide 735	L/R	10	626998
⑲	1 Sash stay 735 no. 1	L	10	624947
	Sash stay 735 no. 1	R	10	624946
	Sash stay 735 no. 3	L	10	624953
	Sash stay 735 no. 3	R	10	624952
	Sash stay 735 no. 4	L	10	624959
	Sash stay 735 no. 4	R	10	624958
⑳	1 Scissor-stay guide 500	L/R	10	625024
㉑	1 Sash stay 500 no. 1	L	10	624945
	Sash stay 500 no. 1	R	10	624944
	Sash stay 500 no. 3	L	10	624951
	Sash stay 500 no. 3	R	10	624950
	Sash stay 500 no. 4	L	10	624957
	Sash stay 500 no. 4	R	10	624956

Hinge side

Pcs	Description	DIN	PQ	Material no.
㉒	1 Corner hinge incl. adjusting piece	L	10	625008
	Corner hinge incl. adjusting piece	R	10	625007
⑳	1 Pivot rest no. 1	L	10	624970
	Pivot rest no. 1	R	10	624969
	Pivot rest no. 3	L	10	624972
	Pivot rest no. 3	R	10	624971
	Pivot rest no. 4	L	10	624974
	Pivot rest no. 4	R	10	624973

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
⑩	1 RotoLine window handle, lockable	–		(→ p. 209)
⑪	2 Countersunk screw (stainless steel) M3x30	–	100	212501
⑦	2 SEC connector	–	100	447113
⑫	1 SEC flush-encased gearbox	–	10	457210
⑬	1 SEC drilling protection	–	10	487406
⑭	2 Cylinder screw M5 x 8	–	100	335249
③⑨	1 Screw M4.8 x 16	–	100	212754
②⑤	1 SEC rebate clearance reduction	–	50	334360
⑳	1 RotoLine geared-handle 26, lockable	–		(→ p. 205)
㉑	1 Geared-handle support	–	100	331937
⑨	2 Flat-headed screw M5 x 12	–	100	212500
⑦	2 SEC connector	–	100	447113
②③	1 SEC geared-handle protection	–	10	487407
②④	2 Countersunk screw M5 x 10	–	100	210970

Basic sets

Locking components

Pcs	Description	PQ	Material no.
①	1 Run-up block	100	212008
④	1 Tilt lock bolt	100	331018
②	1 Horizontal Tilt&Turn striker	100	212122
③	1 Anti-jemmy device V.01	100	331019
	Anti-jemmy device V.02	100	331020
⑤	2 Striker V.01	100	212633
	Striker V.02	100	212634
⑥	1 Locking cam, insertable	100	334671
⑬	1 Striker A, V.01	100	331014
	Striker A, V.02	100	331015
⑰	1 Corner drive with MD²⁾	50	331011

SEC hardware components

Pcs	Description	Colour	PQ	Material no.
③④	15 SEC locking cam, insertable, RC3	–	100	443530
③⑤	15 SEC striker V.01	–	100	212637
	SEC striker V.02	–	100	212638
③⑧	1 SEC rebate clearance reduction	–	100	447112
③⑨	1 Screw M4.8 x 16	–	100	212754
③⑫	2 SEC corner drive CL	–	10	334359
③⑪	2 SEC alignment fork	–	100	212636
⑦	2 SEC connector	–	100	447113
⑧	2 Countersunk screw M5 x 7	–	100	335250

Optional

⑳ Upgrade-kit 150 kg

Pcs	Description	DIN	PQ	Material no.
1	Load transfer device, V.01	L	10	624921
	Load transfer device, V.01	R	10	624920
	Load transfer device, V.02	L	10	624923
	Load transfer device, V.02	R	10	624922

Additional components, size-related

Pcs	Description	PQ	Material no.
⑥	8 Locking cam, insertable	100	334671
⑤	8 Striker V.01	100	212633
	Striker V.02	100	212634
②②	1 Additional scissor stay V.01	10	331024
	Additional scissor stay V.02	10	331025
1	Tilt-depth regulator not dep.	10	502834
1	Transport protection for corner hinge not dep.	100	624333
1	Turn-restrictor set V.01³⁾	10	625018
	Turn-restrictor set V.02³⁾	10	625019
④⑩a	1 Sash stop		
④⑩b	1 Frame hinge-bearing		
④⑩c	1 Turn-restrictor arm		

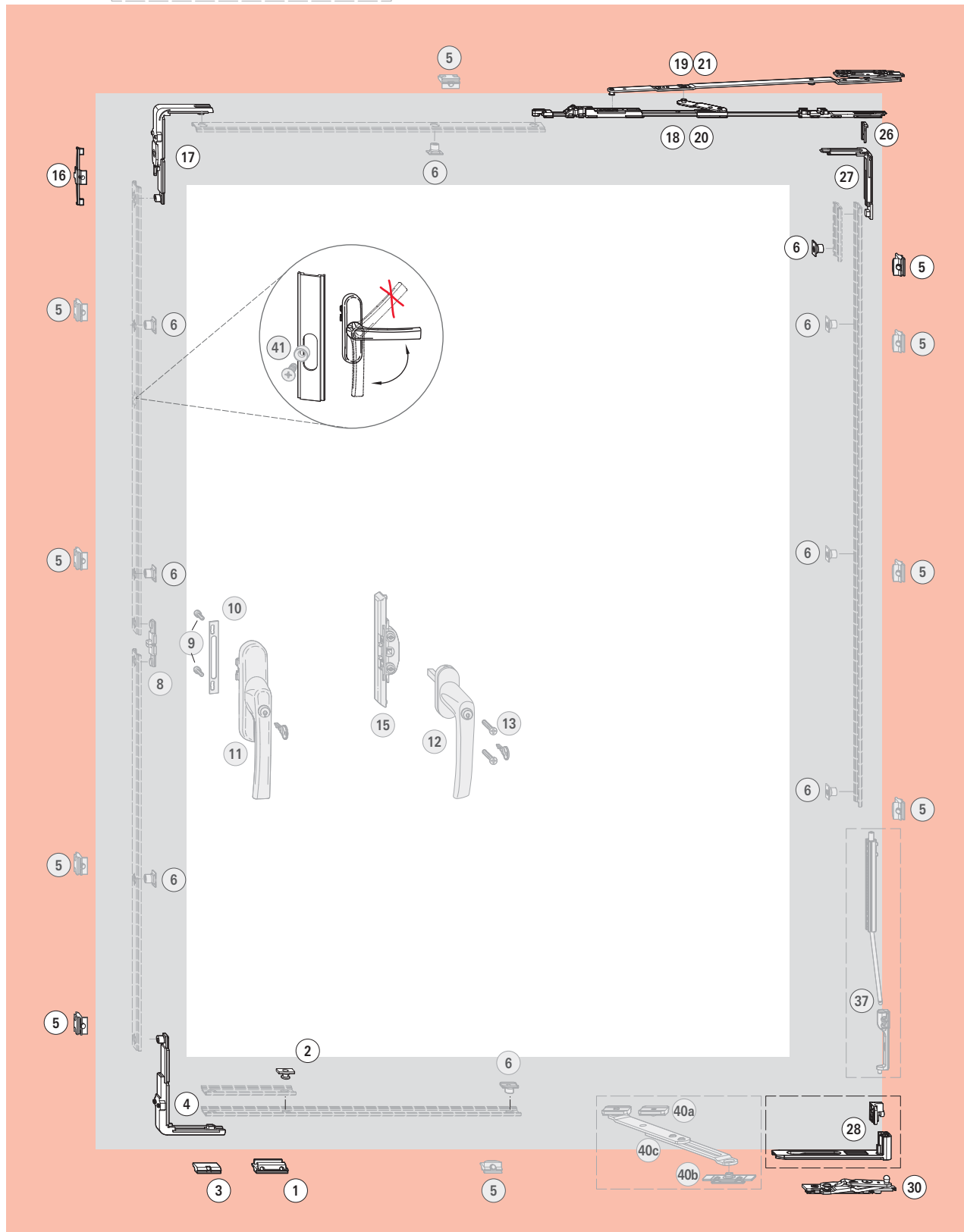
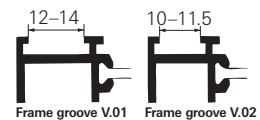
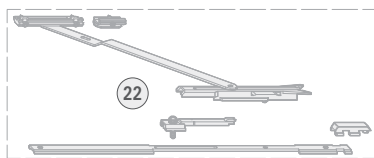
1) ≥ 100 kg with upgrade-kit 150 kg
 2) Installation of a mishandling device is prescribed according to VOB-DIN 18360 (German construction tendering and contract regulations). When using a central lock on the hinge side and/or an additional scissor stay, the installation of a mishandling device is technically required.
 3) Arrestable/damped turn-restrictor → p. 217

NOTE!
 Only use bearings/clamping support-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Tilt-First/Tilt-Only hardware, handle on side

100 kg / 150 kg, Basic security



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 500–1600 mm
 Sash height **SH** 555–2400 mm
 Sash weight **S.kg** max. 100/150 kg¹⁾

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm

Basic sets

TF Locking

Frame-groove version		PQ	Material no.
① ② ③ ④	TF Locking components V.01	10	331270
⑤ ⑬ ⑭	TF Locking components V.02	10	331271
⑤ ⑥ ⑳ ㉑	Corner drive CL set V.01	20	334668
	Corner drive CL set V.02	20	334669

Sash stay

Pcs	Description	DIN	PQ	Material no.
⑱	TF scissor-stay guide 735	L/R	10	626999
⑲	Sash stay 735 no. 1	L	10	624947
	Sash stay 735 no. 1	R	10	624946
	Sash stay 735 no. 3	L	10	624953
	Sash stay 735 no. 3	R	10	624952
	Sash stay 735 no. 4	L	10	624959
	Sash stay 735 no. 4	R	10	624958
㉒	TF scissor-stay guide 500	L/R	10	625025
㉓	Sash stay 500 no. 1	L	10	624945
	Sash stay 500 no. 1	R	10	624944
	Sash stay 500 no. 3	L	10	624951
	Sash stay 500 no. 3	R	10	624950
	Sash stay 500 no. 4	L	10	624957
	Sash stay 500 no. 4	R	10	624956

Hinge side

Pcs	Description	DIN	PQ	Material no.
㉔	Corner hinge incl. adjusting piece	L	10	625008
	Corner hinge incl. adjusting piece	R	10	625007
㉕	Pivot rest no. 1	L	10	624970
	Pivot rest no. 1	R	10	624969
	Pivot rest no. 3	L	10	624972
	Pivot rest no. 3	R	10	624971
	Pivot rest no. 4	L	10	624974
	Pivot rest no. 4	R	10	624973

Optional

Espagnolettes and connectors

Pcs	Description	PQ	Material no.
⑪	RotoLine geared-handle TF, lockable		(→ p. 205)
⑧	T connector	100	334754
⑩	Geared-handle support	100	331937
⑨	Flat-headed screw M5 x 12	100	212500
⑧	T connector set	10	335184
⑨			
⑨	Geared-handle support set	10	335002
⑩			

Alternatively:

⑫	RotoLine window handle TF for lockable flush-encased gearbox		(→ p. 210)
⑬	Countersunk screws (stainless steel) M5x30	100	212501
⑮	Flush-encased gearbox w/o MD	10	378338

Basic sets

Locking components

Pcs	Description	PQ	Material no.
③	Run-up wedge V.01	100	212762
	Run-up wedge V.02	100	212512
②	Tilt lock bolt TF	100	334757
①	TF horizontal Tilt&Turn striker V.01	100	334755
	TF horizontal Tilt&Turn striker V.02	100	334756
⑤	Striker V.01	100	212633
	Striker V.02	100	212634
⑥	Locking cam, insertable	100	334671
⑯	Striker A, V.01	100	331014
	Striker A, V.02	100	331015
⑰	Corner drive with MD²⁾	50	331011
④	Corner drive w/o MD	50	331012
㉑	Corner drive CL	20	331013
㉒	Alignment fork	100	221772

Optional

⑳ Upgrade-kit 150 kg

Pcs	Description	DIN	PQ	Material no.
1	Load transfer device, V.01	L	10	624921
	Load transfer device, V.01	R	10	624920
	Load transfer device, V.02	L	10	624923
	Load transfer device, V.02	R	10	624922

Tilt-Only version, handle on side

Pcs	Description	PQ	Material no.
④①	Locking bush with self-tapping screw 4.8x19	100	627027

Additional components, size-related

Pcs	Description	PQ	Material no.
⑥	Locking cam, insertable		334671
⑤	Striker V.01		212633
	Striker V.02		212634
㉒	TF additional scissor stay V.01		331026
	TF additional scissor stay V.02		331027
1	Tilt-depth regulator not dep.		502834
1	Transport protection for corner hinge not dep.	100	624333
1	Turn-restrictor set V.01³⁾	10	625018
	Turn-restrictor set V.02³⁾	10	625019
④①a	Sash stop		
④①b	Frame hinge-bearing		
④①c	Turn-restrictor arm		

1) ≥ 100 kg with upgrade-kit 150 kg
 2) Installation of a mishandling device is prescribed according to VOB-DIN 18360 (German construction tendering and contract regulations). When using a central lock on the hinge side and/or an additional scissor stay, the installation of a mishandling device is technically required.
 3) Arrestable/damped turn-restrictor → p. 217

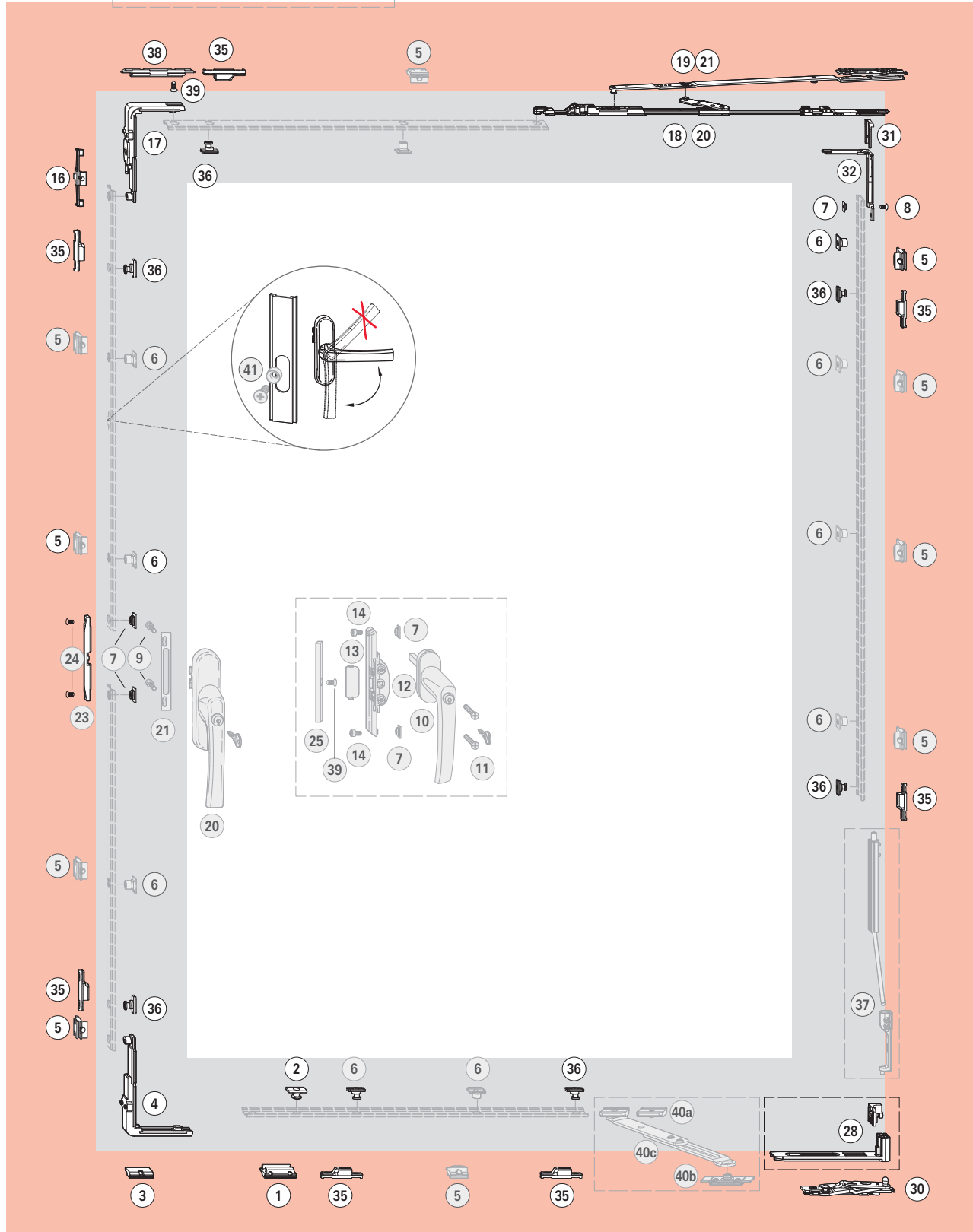
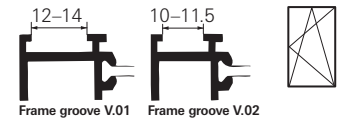
NOTE!
 Only use bearings/clamp-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Roto AluVision Designo

Tilt-First/Tilt-Only hardware, handle on side

100 kg / 150 kg, RC2



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 625 – 1600 mm
 Sash height **SH** 700 – 2400 mm
 Sash weight **S.kg** max. 100/150 kg¹⁾

Clearance **CL** 11.5 – 12 mm
 Overlap width **OW** 21.5 – 22 mm

Basic sets

TF Locking

	Frame-groove version	PQ	Material no.
① ② ③ ④	TF Locking components V.01	10	331270
⑤ ⑬ ⑭	TF Locking components V.02	10	331271

Security sets

	Description	PQ	Material no.
③⑧ ③⑨	SEC rebate clearance reduction set	10	335247
⑦ ⑧ ⑮ ⑲	SEC geared-handle protection set	10	485768
⑦ ⑧ ⑮ ⑲ ⑳	SEC corner drive CL set	20	335187
④ ⑦ ⑮ ⑲	SEC flush-encased gearbox set	10	457209

Sash stay

Pcs	Description	DIN	PQ	Material no.
⑮	TF scissor-stay guide 735	L/R	10	626999
⑲	Sash stay 735 no. 1	L	10	624947
	Sash stay 735 no. 1	R	10	624946
	Sash stay 735 no. 3	L	10	624953
	Sash stay 735 no. 3	R	10	624952
	Sash stay 735 no. 4	L	10	624959
	Sash stay 735 no. 4	R	10	624958
⑳	TF scissor-stay guide 500	L/R	10	625025
㉑	Sash stay 500 no. 1	L	10	624945
	Sash stay 500 no. 1	R	10	624944
	Sash stay 500 no. 3	L	10	624951
	Sash stay 500 no. 3	R	10	624950
	Sash stay 500 no. 4	L	10	624957
	Sash stay 500 no. 4	R	10	624956

Hinge side

Pcs	Description	DIN	PQ	Material no.
㉔	Corner hinge incl. adjusting piece	L	10	625008
	Corner hinge incl. adjusting piece	R	10	625007
⑳	Pivot rest no. 1	L	10	624970
	Pivot rest no. 1	R	10	624969
	Pivot rest no. 3	L	10	624972
	Pivot rest no. 3	R	10	624971
	Pivot rest no. 4	L	10	624974
	Pivot rest no. 4	R	10	624973

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
⑩	RotoLine window handle TF, lockable			on site
⑪	Countersunk screw (stainless steel) M3x30	–	100	212501
⑦	SEC connector	–	100	447113
⑫	SEC flush-encased gearbox	–	10	457210
⑬	SEC drilling protection	–	10	487406
⑭	Cylinder screw M5 x 8	–	100	335249
③⑨	Screw M4.8 x 16	–	100	212754
⑮	SEC rebate clearance reduction	–	50	334360
⑳	RotoLine geared-handle 26 TF, lockable			(→ p. 205)
㉑	Geared-handle support	–	100	331937
⑨	Flat-headed screw M5 x 12	–	100	212500
⑦	SEC connector	–	100	447113
㉓	SEC geared-handle protection	–	10	487407
㉔	Countersunk screw M5 x 10	–	100	210970

Basic sets

Locking components

Pcs	Description	PQ	Material no.
③	Run-up wedge V.01	100	212762
	Run-up wedge V.02	100	212512
②	Tilt lock bolt TF	100	334757
①	TF horizontal Tilt&Turn striker V.01	100	334755
	TF horizontal Tilt&Turn striker V.02	100	334756
⑤	Striker V.01	100	212633
	Striker V.02	100	212634
⑥	Locking cam, insertable	100	334671
⑮	Striker A, V.01	100	331014
	Striker A, V.02	100	331015
⑰	Corner drive with MD²⁾	50	331011
④	Corner drive w/o MD	50	331012

SEC hardware components

Pcs	Description	Colour	PQ	Material no.
③⑥	SEC locking cam, insertable, RC2	–	100	447245
③⑤	SEC striker V.01	–	100	212637
	SEC striker V.02	–	100	212638
③⑧	SEC rebate clearance reduction	–	100	447112
③⑨	Screw M4.8 x 16	–	100	212754
③⑲	SEC corner drive CL	–	10	334359
③⑰	SEC alignment fork	–	100	212636
③⑰	SEC connector	–	100	447113
③⑰	Countersunk screw M5 x 7	–	100	335250

Optional

Upgrade-kit 150 kg

Pcs	Description	DIN	PQ	Material no.
1	Load transfer device, V.01	L	10	624921
	Load transfer device, V.01	R	10	624920
	Load transfer device, V.02	L	10	624923
	Load transfer device, V.02	R	10	624922

Tilt-Only version, handle on side

Pcs	Description	PQ	Material no.
④①	Locking bush with self-tapping screw 4.8 x 19	100	627027

Additional components, size-related

Pcs	Description	PQ	Material no.
⑥	Locking cam, insertable		334671
⑤	Striker V.01		212633
	Striker V.02		212634
㉒	TF additional scissor stay V.01		331026
	TF additional scissor stay V.02		331027
1	Tilt-depth regulator not dep.		502834
1	Transport protection for corner hinge not dep.	100	624333
1	Turn-restrictor set V.01³⁾	10	625018
	Turn-restrictor set V.02³⁾	10	625019
④①a	Sash stop		
④①b	Frame hinge-bearing		
④①c	Turn-restrictor arm		

1) ≥ 100 kg with upgrade-kit 150 kg
 2) Installation of a mishandling device is prescribed according to VOB-DIN 18360 (German construction tendering and contract regulations). When using a central lock on the hinge side and/or an additional scissor stay, the installation of a mishandling device is technically required.
 3) Arrestable/damped turn-restrictor → p. 217

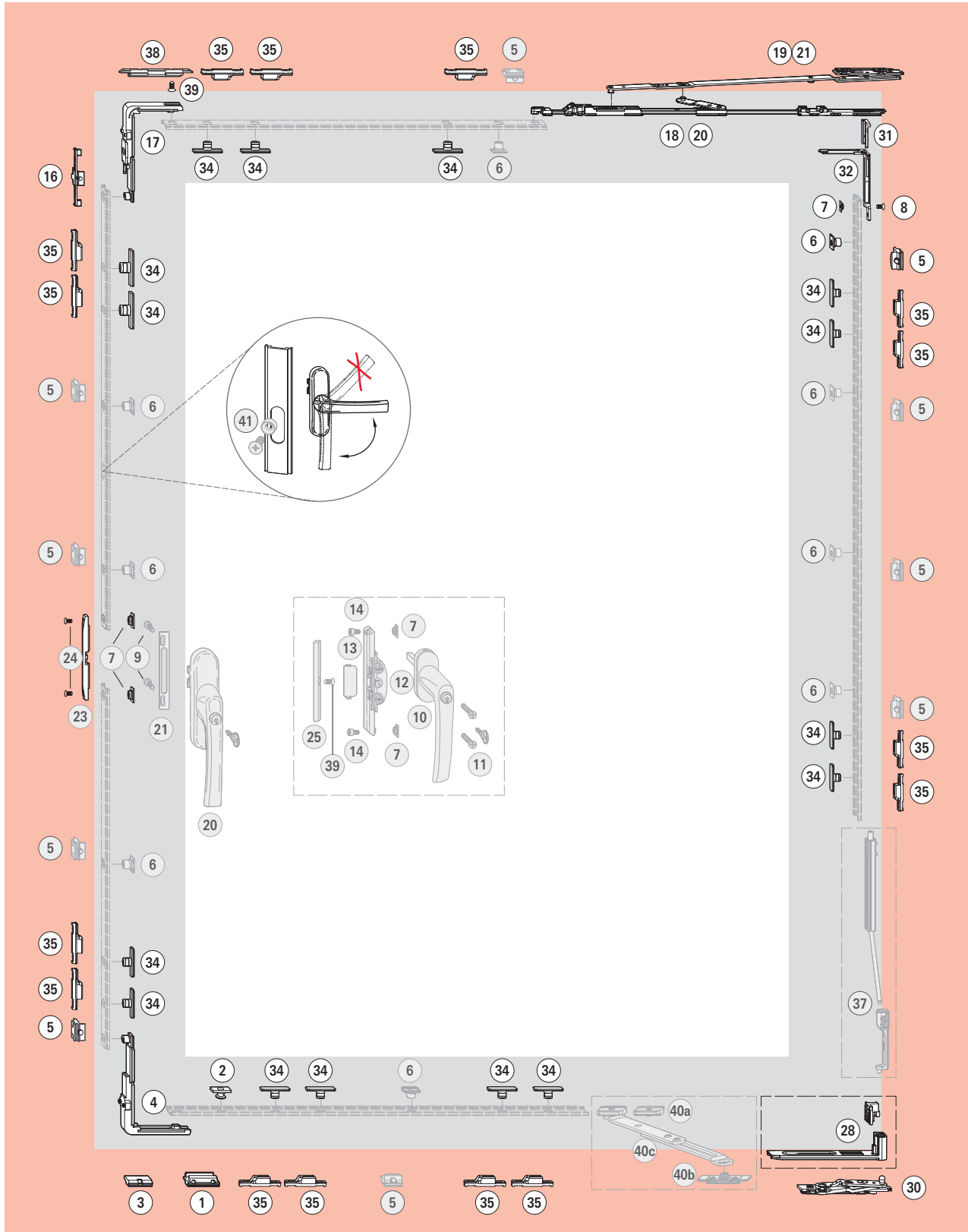
NOTE!
 Only use bearings/clamp-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Roto AluVision Designo

Tilt-First/Tilt-Only hardware, handle on side

100 kg / 150 kg, RC3



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW**700–1600 mm
 Sash height **SH**850–2400 mm
 Sash weight **S.kg** max. 100/150 kg¹⁾

Clearance **CL**11.5–12 mm
 Overlap width **OW**21.5–22 mm

Basic sets

TF Locking

	Frame-groove version	PQ	Material no.
① ② ③ ④	TF Locking components V.01	10	331270
⑤ ⑬ ⑭	TF Locking components V.02	10	331271

Security sets

	Description	PQ	Material no.
③⑧ ③⑨	SEC rebate clearance reduction set	10	335247
⑦ ⑧ ⑮ ⑯	SEC geared-handle protection set	10	485768
⑦ ⑧ ⑮ ⑰ ⑱	SEC corner drive CL set	20	335187
④ ⑦ ⑮ ⑲	SEC flush-encased gearbox set	10	457209

Sash stay

Pcs	Description	DIN	PQ	Material no.
⑮	TF scissor-stay guide 735	L/R	10	626999
⑲	Sash stay 735 no. 1	L	10	624947
	Sash stay 735 no. 1	R	10	624946
	Sash stay 735 no. 3	L	10	624953
	Sash stay 735 no. 3	R	10	624952
	Sash stay 735 no. 4	L	10	624959
	Sash stay 735 no. 4	R	10	624958
⑳	TF scissor-stay guide 500	L/R	10	625025
㉑	Sash stay 500 no. 1	L	10	624945
	Sash stay 500 no. 1	R	10	624944
	Sash stay 500 no. 3	L	10	624951
	Sash stay 500 no. 3	R	10	624950
	Sash stay 500 no. 4	L	10	624957
	Sash stay 500 no. 4	R	10	624956

Hinge side

Pcs	Description	DIN	PQ	Material no.
㉔	Corner hinge incl. adjusting piece	L	10	625008
	Corner hinge incl. adjusting piece	R	10	625007
⑳	Pivot rest no. 1	L	10	624970
	Pivot rest no. 1	R	10	624969
	Pivot rest no. 3	L	10	624972
	Pivot rest no. 3	R	10	624971
	Pivot rest no. 4	L	10	624974
	Pivot rest no. 4	R	10	624973

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
⑩	RotoLine window handle TF, lockable			Machining
⑪	Countersunk screw (stainless steel) M3 x 30	–	100	212501
⑦	SEC connector	–	100	447113
⑫	SEC flush-encased gearbox	–	10	457210
⑬	SEC drilling protection	–	10	487406
⑭	Cylinder screw M5 x 8	–	100	335249
⑳	Screw M4.8 x 16	–	100	212754
㉕	SEC rebate clearance reduction	–	50	334360
㉖	RotoLine geared-handle 26 TF, lockable			(→ p. 205)
㉗	Geared-handle support	–	100	331937
⑨	Flat-headed screw M5 x 12	–	100	212500
⑦	SEC connector	–	100	447113
㉙	SEC geared-handle protection	–	10	487407
㉚	Countersunk screw M5 x 10	–	100	210970

1) ≥ 100 kg with upgrade-kit 150 kg

2) Installation of a mishandling device is prescribed according to VOB-DIN 18360 (German construction tendering and contract regulations). When using a central lock on the hinge side and/or an additional scissor stay, the installation of a mishandling device is technically required.

3) Arrestable/damped turn-restrictor → p. 217

Basic sets

Locking components

Pcs	Description	PQ	Material no.
③	Run-up wedge V.01	100	212762
	Run-up wedge V.02	100	212512
②	Tilt lock bolt TF	100	334757
①	TF horizontal Tilt&Turn striker V.01	100	334755
	TF horizontal Tilt&Turn striker V.02	100	334756
⑤	Striker V.01	100	212633
	Striker V.02	100	212634
⑥	Locking cam, insertable	100	334671
⑮	Striker A, V.01	100	331014
	Striker A, V.02	100	331015
⑰	Corner drive with MD²⁾	50	331011
④	Corner drive w/o MD	50	331012

SEC hardware components

Pcs	Description	Colour	PQ	Material no.
③④	SEC locking cam, insertable, RC3	–	100	443530
③⑤	SEC striker V.01	–	100	212637
	SEC striker V.02	–	100	212638
③⑧	SEC rebate clearance reduction	–	100	447112
③⑨	Screw M4.8 x 16	–	100	212754
③⑲	SEC corner drive CL	–	10	334359
③⑰	SEC alignment fork	–	100	212636
③⑲	SEC connector	–	100	447113
③⑱	Countersunk screw M5 x 7	–	100	335250

Optional

Upgrade-kit 150 kg

Pcs	Description	DIN	PQ	Material no.
1	Load transfer device, V.01	L	10	624921
	Load transfer device, V.01	R	10	624920
	Load transfer device, V.02	L	10	624923
	Load transfer device, V.02	R	10	624922

Tilt-Only version, handle on side

Pcs	Description	PQ	Material no.
④①	Locking bush with self-tapping screw 4.8 x 19	100	627027

Additional components, size-related

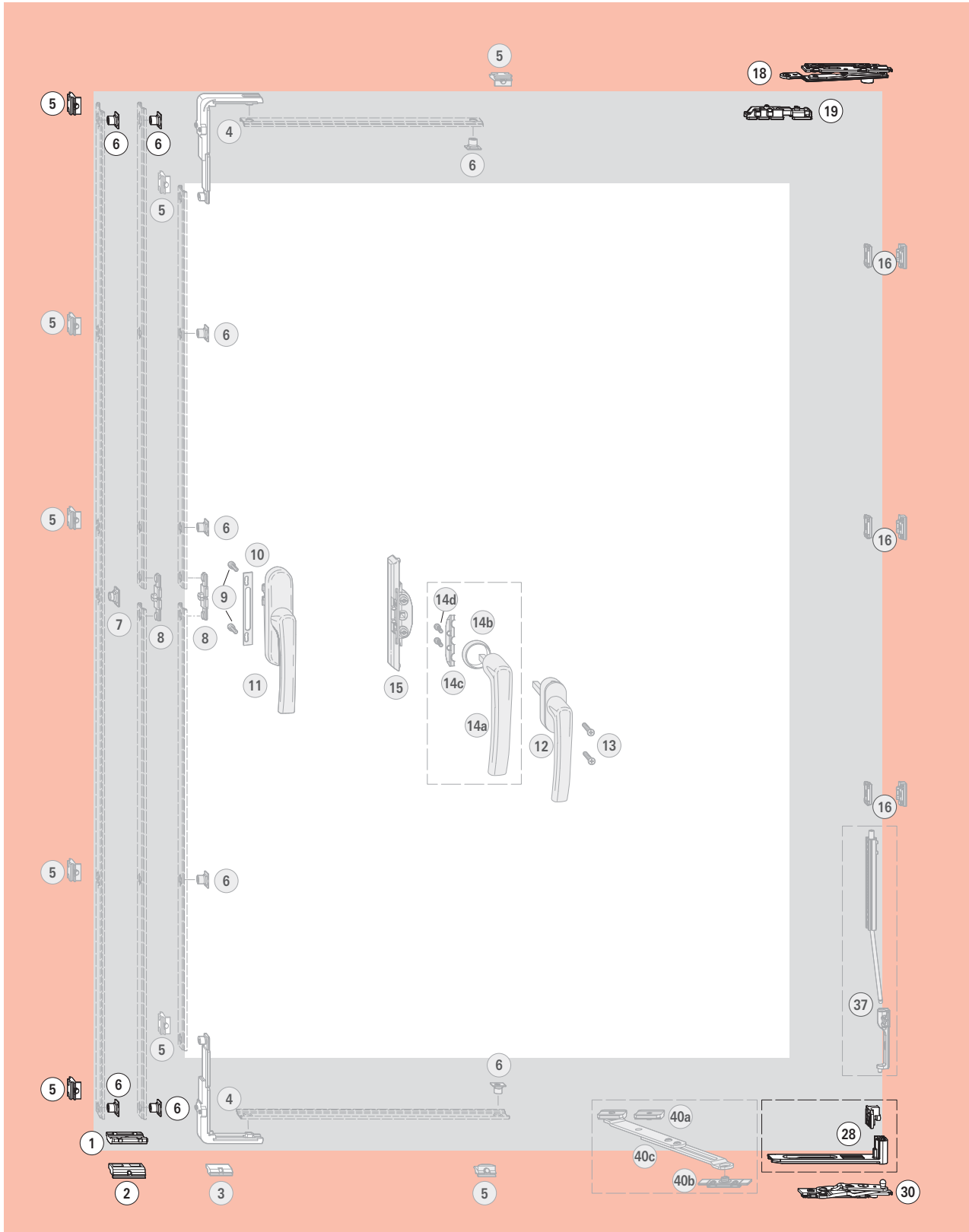
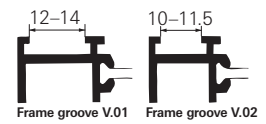
Pcs	Description	PQ	Material no.
⑥	Locking cam, insertable		334671
⑤	Striker V.01		212633
	Striker V.02		212634
②②	TF additional scissor stay V.01		331026
	TF additional scissor stay V.02		331027
1	Tilt-depth regulator not dep.		502834
1	Transport protection for corner hinge not dep.	100	624333
1	Turn-restrictor set V.01³⁾	10	625018
	Turn-restrictor set V.02³⁾	10	625019
④①a	Sash stop		
④①b	Frame hinge-bearing		
④①c	Turn-restrictor arm		

NOTE!
 Only use bearings/clamp-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Turn-Only hardware

80 kg / 150 kg, Basic security



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW**250–1600 mm
 Sash height **SH**520–2400 mm
 Sash weight **S.kg** max. 80/150 kg¹⁾

Clearance **CL**11.5–12 mm
 Overlap width **OW**21.5–22 mm

Basic sets

TU-ON Locking

	Frame-groove version	PQ	Material no.
① ② ⑤	TU-ON Locking components V.01	10	331272
⑥	TU-ON Locking components V.02	10	331273
③ ④	TU-ON C Locking components V.01	10	331277
⑤ ⑥	TU-ON C Locking components V.02	10	331278

Hinge side

Pcs	Description	DIN	PQ	Material no.
⑱	Rebate hinge no. 1	L	10	627256
	Rebate hinge no. 1	R	10	627255
	Rebate hinge no. 3	L	10	627258
	Rebate hinge no. 3	R	10	627257
	Rebate hinge no. 4	L	10	627260
	Rebate hinge no. 4	R	10	627259
⑲	Rebate hinge		10	502340
⑳	Corner hinge incl. adjusting piece	L	10	625008
	Corner hinge incl. adjusting piece	R	10	625007
㉑	Pivot rest no. 1	L	10	624970
	Pivot rest no. 1	R	10	624969
	Pivot rest no. 3	L	10	624972
	Pivot rest no. 3	R	10	624971
	Pivot rest no. 4	L	10	624974
	Pivot rest no. 4	R	10	624973

Optional

Espagnolettes and connectors

Pcs	Description	PQ	Material no.
⑪	RotoLine geared-handle		(→ p. 205)
⑧	T connector	100	334754
⑩	Geared-handle support	100	331937
⑨	Flat-headed screw M5 x 12	100	212500
⑧	T connector set	10	335184
⑨			
⑨	Geared-handle support set	10	335002
⑩			

Alternatively:

⑫	RotoLine window handle for flush-enc. gearbox		(→ p. 208)
⑬	Countersunk screws (stainless steel) M5 x 30	100	212501
⑭a	Escutcheonless handle²⁾		(→ p. 207)
⑭b	Ring for escutcheonless handle		(→ p. 207)
⑭c	Mounting plate	100	378134
⑭d	Screws for escutcheonless handle	20	–
⑮	Flush-encased gearbox w/o MD	10	378338

Basic sets

Locking components

Pcs	Description	PQ	Material no.
①	Run-up block	100	212008
②	Horizontal Tilt&Turn striker	100	212122
⑦	Connector-bolt, insertable	100	254601
⑤	Striker V.01	100	212633
	Striker V.02	100	212634
⑥	Locking cam, insertable	100	334671

Optional

⑳ **Upgrade-kit 150 kg**

Pcs	Description	DIN	PQ	Material no.
1	Load transfer device, V.01	L	10	624921
	Load transfer device, V.01	R	10	624920
	Load transfer device, V.02	L	10	624923
	Load transfer device, V.02	R	10	624922

Additional components, size-related

Pcs	Description	PQ	Material no.
⑥	Locking cam, insertable	100	334671
⑤	Striker V.01	100	212633
	Striker V.02	100	212634
③	Run-up wedge V.01	100	212512
	Run-up wedge V.02	100	212762
④	Corner drive w/o MD	50	331012
⑮	Centre-closer V.01	10	502759
	Centre-closer V.02	10	502757
⑦	Connector-bolt, insertable	100	254601
1	Transport protection for corner hinge	not dep.	100 624333
1	Turn-restrictor set V.01³⁾	10	625018
	Turn-restrictor set V.02³⁾	10	625019
④a	Sash stop		
④b	Frame hinge-bearing		
④c	Turn-restrictor arm		

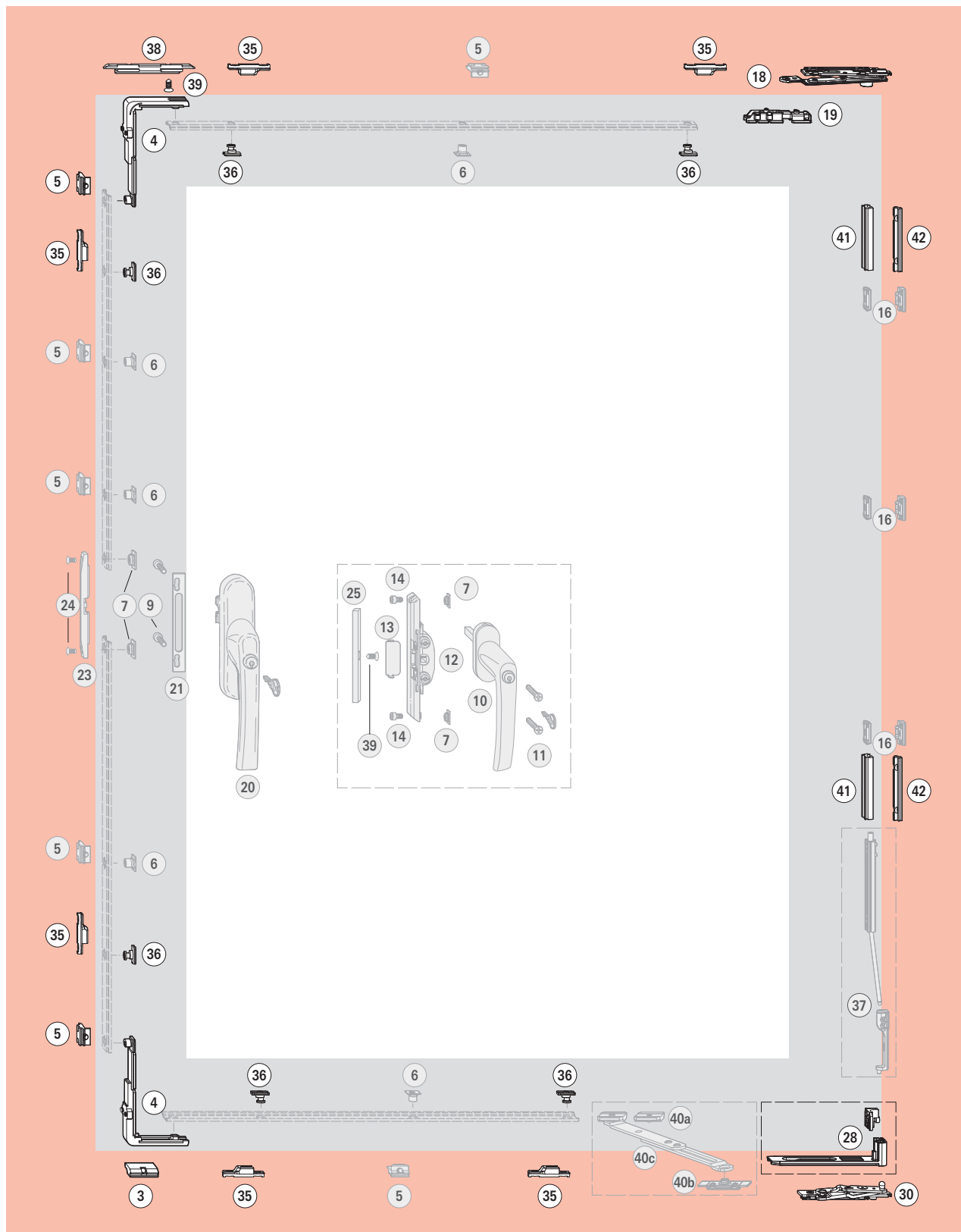
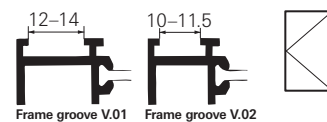
1) ≥ 80 kg with upgrade-kit 150 kg
 2) The escutcheonless handle can only be used with profile systems with an overlap height (OH) ≥ 10 mm.
 3) Arrestable/damped turn-restrictor → p. 217

NOTE!
 Only use bearings/clamp-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Turn-Only hardware

80 kg / 150 kg, RC2



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 550–1600 mm
 Sash height **SH** 700–2400 mm
 Sash weight **S.kg** max. 80/150 kg¹⁾

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm

Basic sets

TU-ON Locking

	Frame-groove version	PQ	Material no.
③ ④	TU-ON C Locking components V.01	10	331277
⑤ ⑥	TU-ON C Locking components V.02	10	331278

Security sets

	Description	PQ	Material no.
③⑧ ③⑨	SEC rebate clearance reduction set	10	335247
⑦ ②③ ②④	SEC geared-handle protection set	10	485768
④① ④②	SEC hinge-lock set V.01	20	335185
	SEC hinge-lock set V.02	20	335186
④ ⑦ ⑫	SEC flush-encased gearbox set	10	457209
⑩③ ⑩④ ⑩⑤ ⑩⑥			

Hinge side

Pcs	Description	DIN	PQ	Material no.
⑩⑧	1 Rebate hinge no. 1	L	10	627256
	Rebate hinge no. 1	R	10	627255
	Rebate hinge no. 3	L	10	627258
	Rebate hinge no. 3	R	10	627257
	Rebate hinge no. 4	L	10	627260
	Rebate hinge no. 4	R	10	627259
⑩⑨	1 Rebate hinge		10	502340
⑩⑧	1 Corner hinge incl. adjusting piece	L	10	625008
	Corner hinge incl. adjusting piece	R	10	625007
⑩⑩	1 Pivot rest no. 1	L	10	624970
	Pivot rest no. 1	R	10	624969
	Pivot rest no. 3	L	10	624972
	Pivot rest no. 3	R	10	624971
	Pivot rest no. 4	L	10	624974
	Pivot rest no. 4	R	10	624973

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
⑩⑩	1 RotoLine window handle, lockable	–		(→ p. 209)
⑩①	2 Countersunk screw (stainless steel) M3 x 30	–	100	212501
⑦	2 SEC connector	–	100	447113
⑩②	1 SEC flush-encased gearbox	–	10	457210
⑩③	1 SEC drilling protection	–	10	487406
⑩④	2 Cylinder screw M5 x 8	–	100	335249
⑩⑨	1 Screw M4.8 x 16	–	100	212754
⑩⑤	1 SEC rebate clearance reduction	–	50	334360
⑩⑥	1 RotoLine geared-handle 26, lockable	–		(→ p. 205)
⑩⑦	1 Geared-handle support	–	100	331937
⑨	2 Flat-headed screw M5 x 12	–	100	212500
⑦	2 SEC connector	–	100	447113
⑩③	1 SEC geared-handle protection	–	10	487407
⑩④	2 Countersunk screw M5 x 10	–	100	210970

Basic sets

Locking components

Pcs	Description	PQ	Material no.
④	2 Corner drive w/o MD	50	331012
③	1 Run-up wedge V.01	100	212512
	Run-up wedge V.02	100	212762
⑤	2 Striker V.01	100	212633
	Striker V.02	100	212634
⑥	2 Locking cam, insertable	100	334671

SEC hardware components

Pcs	Description	Colour	PQ	Material no.
⑩⑥	6 SEC locking cam, insertable, RC2	–	100	447245
⑩⑤	6 SEC striker V.01	–	100	212637
	SEC striker V.02	–	100	212638
⑩⑧	1 SEC rebate clearance reduction	–	100	447112
⑩⑨	1 Screw M4.8 x 16	–	100	212754
④②	2 SEC hinge lock, frame V.01		20	331788
	SEC hinge lock, frame V.02		20	331789
④①	2 SEC hinge lock, sash		20	331790
	6 Screw M4.8 x 16 (not dep.)		100	212754

Optional

⑩⑦ Upgrade-kit 150 kg

Pcs	Description	DIN	PQ	Material no.
1	Load transfer device, V.01	L	10	624921
	Load transfer device, V.01	R	10	624920
	Load transfer device, V.02	L	10	624923
	Load transfer device, V.02	R	10	624922

Additional components, size-related

Pcs	Description	PQ	Material no.
⑥	5 Locking cam, insertable	100	334671
⑤	5 Striker V.01	100	212633
	Striker V.02	100	212634
⑩⑥	3 Centre-closer V.01	10	502759
	Centre-closer V.02	10	502757
1	Transport protection for corner hinge not dep.	100	624333
1	Turn-restrictor set V.01²⁾	10	625018
	Turn-restrictor set V.02²⁾	10	625019
④⑩a	1 Sash stop		
④⑩b	1 Frame hinge-bearing		
④⑩c	1 Turn-restrictor arm		

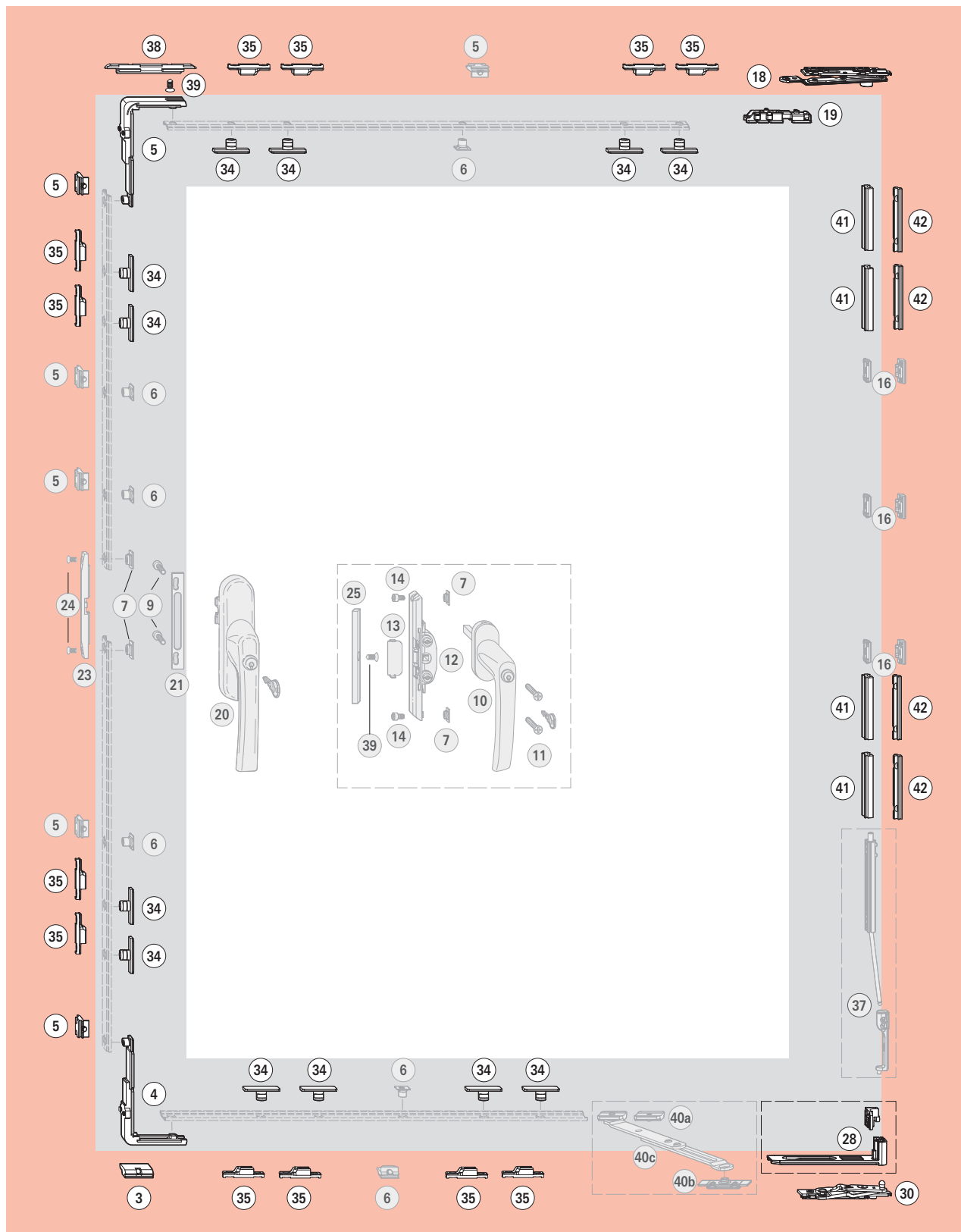
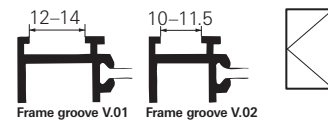
1) ≥ 80 kg with upgrade-kit 150 kg
 2) Arrestable/damped turn-restrictor → p. 217

NOTE!
 Only use bearings/clamp-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Turn-Only hardware

80 kg / 150 kg, RC3



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 680–1600 mm
 Sash height **SH** 840–2400 mm
 Sash weight **S.kg** max. 80/150 kg¹⁾

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm

Basic sets

TU-ON Locking

	Frame-groove version	PQ	Material no.
③ ④	TU-ON C Locking components V.01	10	331277
⑤ ⑥	TU-ON C Locking components V.02	10	331278

Security sets

	Description	PQ	Material no.
③⑧ ③⑨	SEC rebate clearance reduction set	10	335247
⑦ ②③ ②④	SEC geared-handle protection set	10	485768
④① ④②	SEC hinge-lock set V.01	20	335185
	SEC hinge-lock set V.02	20	335186
④ ⑦ ⑫	SEC flush-encased gearbox set	10	457209
⑩③ ⑩④ ②⑤ ③⑨			

Hinge side

Pcs	Description	DIN	PQ	Material no.
⑩⑧	1 Rebate hinge no. 1	L	10	627256
	Rebate hinge no. 1	R	10	627255
	Rebate hinge no. 3	L	10	627258
	Rebate hinge no. 3	R	10	627257
	Rebate hinge no. 4	L	10	627260
	Rebate hinge no. 4	R	10	627259
⑩⑨	1 Rebate hinge		10	502340
⑩⑧	1 Corner hinge incl. adjusting piece	L	10	625008
	Corner hinge incl. adjusting piece	R	10	625007
⑩⑩	1 Pivot rest no. 1	L	10	624970
	Pivot rest no. 1	R	10	624969
	Pivot rest no. 3	L	10	624972
	Pivot rest no. 3	R	10	624971
	Pivot rest no. 4	L	10	624974
	Pivot rest no. 4	R	10	624973

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
⑩⑩	1 RotoLine window handle, lockable	–		(→ p. 209)
⑩①	2 Countersunk screw (stainless steel) M3 x 30	–	100	212501
⑦	2 SEC connector	–	100	447113
⑩②	1 SEC flush-encased gearbox	–	10	457210
⑩③	1 SEC drilling protection	–	10	487406
⑩④	2 Cylinder screw M5 x 8	–	100	335249
③⑨	1 Screw M4.8 x 16	–	100	212754
②⑤	1 SEC rebate clearance reduction	–	50	334360
②⑥	1 RotoLine geared-handle 26, lockable	–		(→ p. 205)
②⑦	1 Geared-handle support	–	100	331937
②	2 Flat-headed screw M5 x 12	–	100	212500
⑦	2 SEC connector	–	100	447113
②③	1 SEC geared-handle protection	–	10	487407

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
②④	2 Countersunk screw M5 x 10	–	100	210970

Basic sets

Locking components

Pcs	Description	PQ	Material no.
④	2 Corner drive w/o MD	50	331012
③	1 Run-up wedge V.01	100	212512
	Run-up wedge V.02	100	212762
⑤	2 Striker V.01	100	212633
	Striker V.02	100	212634
⑥	2 Locking cam, insertable	100	334671

SEC hardware components

Pcs	Description	Colour	PQ	Material no.
③④	12 SEC locking cam, insertable, RC3	–	100	443530
③⑤	12 SEC striker V.01	–	100	212637
	SEC striker V.02	–	100	212638
③⑧	1 SEC rebate clearance reduction	–	100	447112
③⑨	1 Screw M4.8 x 16	–	100	212754
④②	4 SEC hinge lock, frame V.01		20	331788
	SEC hinge lock, frame V.02		20	331789
④①	4 SEC hinge lock, sash		20	331790
	12 Screw M4.8 x 16 (not dep.)		100	212754

Optional

③⑦ Upgrade-kit 150 kg

Pcs	Description	DIN	PQ	Material no.
1	Load transfer device, V.01	L	10	624921
	Load transfer device, V.01	R	10	624920
	Load transfer device, V.02	L	10	624923
	Load transfer device, V.02	R	10	624922

Additional components, size-related

Pcs	Description	PQ	Material no.	
⑥	5 Locking cam, insertable	100	334671	
⑤	5 Striker V.01	100	212633	
	Striker V.02	100	212634	
⑩⑥	3 Centre-closer V.01	10	502759	
	Centre-closer V.02	10	502757	
1	Transport protection for corner hinge	not dep.	100	624333
1	Turn-restrictor set V.01²⁾		10	625018
	Turn-restrictor set V.02²⁾		10	625019
④⑩a	1 Sash stop			
④⑩b	1 Frame hinge-bearing			
④⑩c	1 Turn-restrictor arm			

1) ≥ 80 kg with upgrade-kit 150 kg
 2) Arrestable/damped turn-restrictor → p. 217

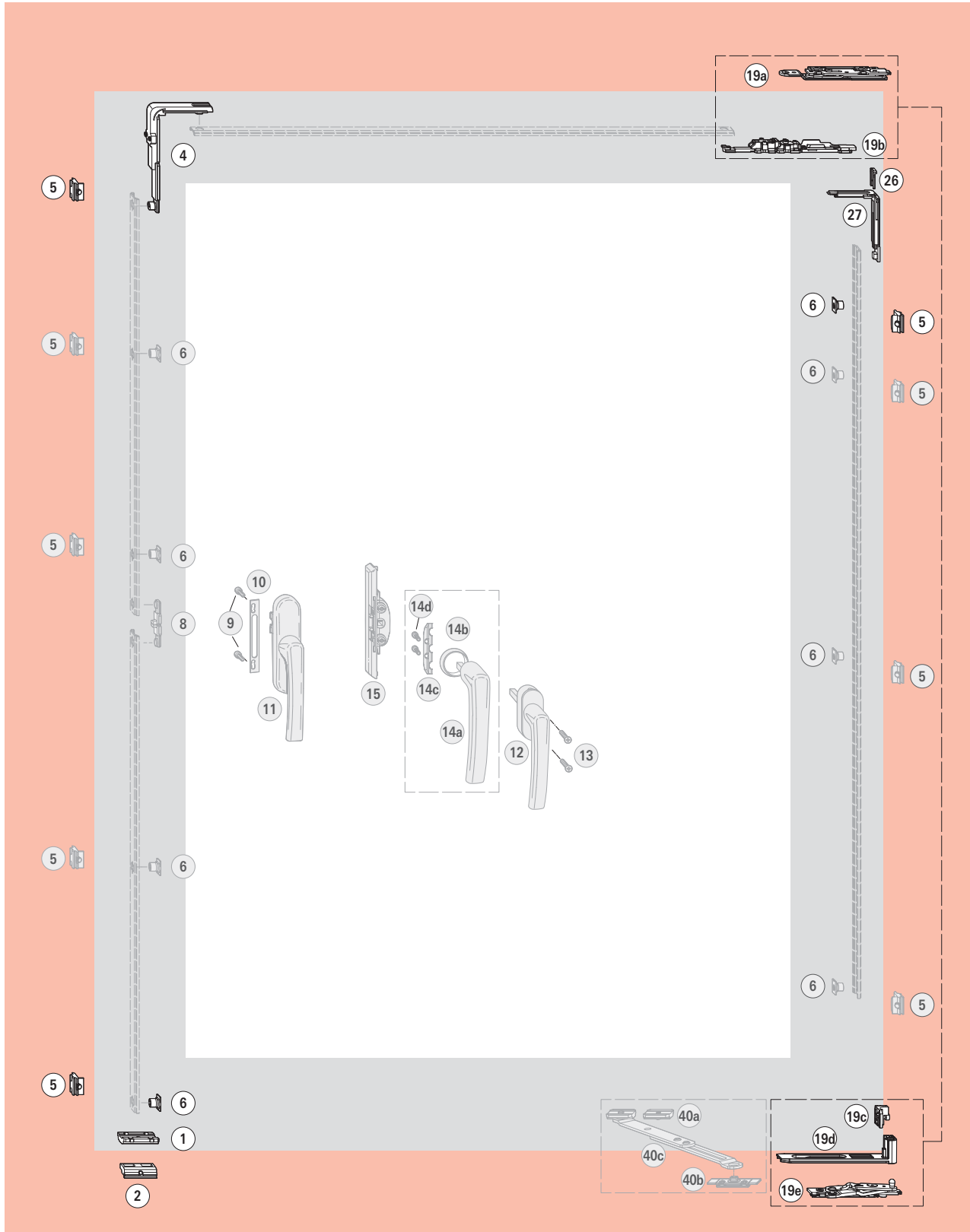
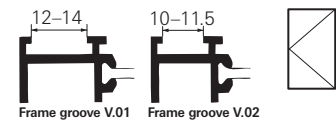
NOTE!
 Only use bearings/clamp-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Roto AluVision Designo

Turn-Only hardware with coupleable rebate hinge

80 kg, Basic security



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 300–500 mm
 Sash height **SH** 555–2400 mm
 Sash weight **S.kg** max. 80 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm

Basic sets

Locking TU-ON, coupleable

Frame-groove version		PQ	Material no.
① ② ④	Locking components V.01	10	635729
⑤ ⑥	Locking components V.02	10	635730

Hinge side

Pcs	Description	DIN	PQ	Material no.
1	Rebate-hinge set, coupleable, no. 1	L	10	627072
	Rebate-hinge set, coupleable, no. 1	R	10	627069
	Rebate-hinge set, coupleable, no. 3	L	10	627073
	Rebate-hinge set, coupleable, no. 3	R	10	627070
	Rebate-hinge set, coupleable, no. 4	L	10	627074
	Rebate-hinge set, coupleable, no. 4	R	10	627071
①9a	1 Rebate hinge			
①9b	1 Rebate hinge, coupleable			
①9c	1 Adjusting piece			
①9d	1 Corner hinge			
①9e	1 Pivot rest			

Optional

Espagnolettes and connectors

Pcs	Description	PQ	Material no.
①1	1 RotoLine geared-handle		(→ p. 205)
⑧	1 T connector	100	334754
⑩	1 Geared-handle support	100	331937
⑨	2 Flat-headed screw M5 x 12	100	212500
⑧	1 T connector set	10	335184
⑨			
⑨	1 Geared-handle support set	10	335002
⑩			

Alternatively:

⑫	1 RotoLine window handle for flush-encased gearbox		(→ p. 208)
⑬	2 Countersunk screws (stainless steel) M5 x 30	100	212501
⑭a	1 Escutcheonless handle²⁾		(→ p. 207)
⑭b	1 Ring for escutcheonless handle		(→ p. 207)
⑭c	1 Mounting plate	100	378134
⑭d	2 Screws for escutcheonless handle	20	–

Alternatively:

⑮	1 Flush-encased gearbox w/o MD	10	378338
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Basic sets

Locking components

Pcs	Description	PQ	Material no.
①	1 Run-up block	100	212008
②	1 Horizontal Tilt&Turn striker	100	212122
⑤	3 Striker V.01	100	212633
	Striker V.02	100	212634
⑥	2 Locking cam, insertable	100	334671
④	1 Corner drive w/o MD	50	331012
⑳	1 Corner drive CL	20	331013
㉔	1 Alignment fork	100	221772

Optional

Additional components, size-related

Pcs	Description	PQ	Material no.
⑤	6 Striker V.01	100	212633
	Striker V.02	100	212634
⑥	6 Locking cam, insertable	100	334671
	1 Transport protection for corner hinge not dep.	100	624333
	1 Turn-restrictor set V.01²⁾	10	625018
	Turn-restrictor set V.02²⁾	10	625019
④0a	1 Sash stop		
④0b	1 Frame hinge-bearing		
④0c	1 Turn-restrictor arm		

1) The escutcheonless handle can only be used with profile systems with an overlap height (OH) ≥ 10 mm.
 2) Arrestable/damped turn-restrictor → p. 217



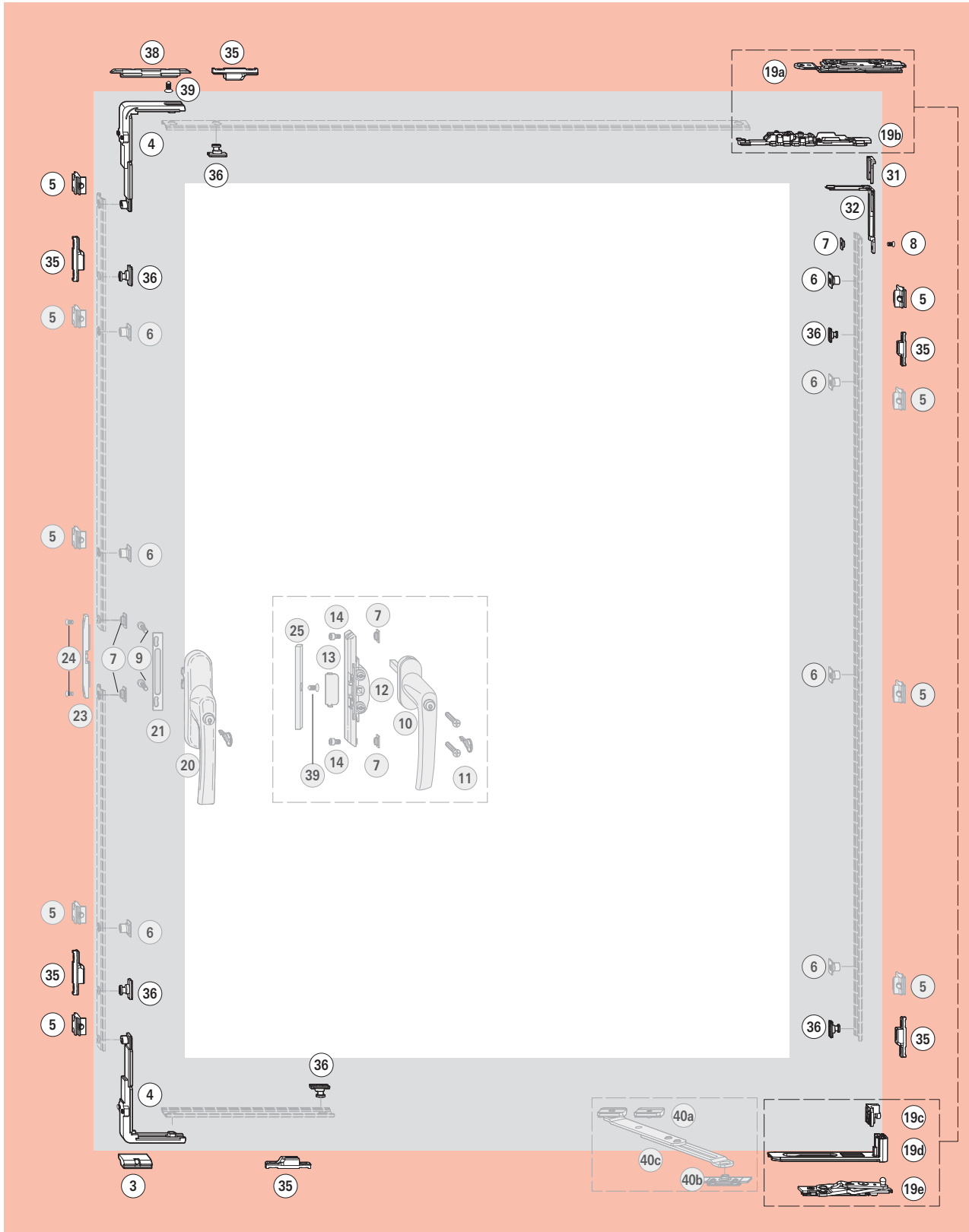
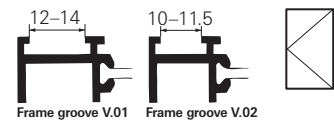
NOTE!

Only use bearings/clamp-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Turn-Only hardware with coupleable rebate hinge

80 kg, RC2



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 370–500 mm
 Sash height **SH** 700–2400 mm
 Sash weight **S.kg** max. 80 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm

Basic sets

Locking TU-ON, coupleable

Frame-groove version	PQ	Material no.
① ② ④	10	635729
⑤ ⑥	10	635730

Security sets

Description	PQ	Material no.
③⑧ ③⑨	10	335247
⑦ ②③ ②④	10	485768
⑦ ⑧ ③① ③②	20	335187
④ ⑦ ①②	10	457209
①③ ①④ ②⑤ ③⑨		

Hinge side

Pcs	Description	DIN	PQ	Material no.
1	Rebate-hinge set, coupleable, no. 1	L	10	627072
	Rebate-hinge set, coupleable, no. 1	R	10	627069
	Rebate-hinge set, coupleable, no. 3	L	10	627073
	Rebate-hinge set, coupleable, no. 3	R	10	627070
	Rebate-hinge set, coupleable, no. 4	L	10	627074
	Rebate-hinge set, coupleable, no. 4	R	10	627071
①⑨a	1 Rebate hinge			
①⑨b	1 Rebate hinge, coupleable			
①⑨c	1 Adjusting piece			
①⑨d	1 Corner hinge			
①⑨e	1 Pivot rest			

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
⑩	1 RotoLine window handle, lockable	–		(→ p.209)
⑪	2 Countersunk screw (stainless steel) M3 x 30	–	100	212501
⑦	2 SEC connector	–	100	447113
⑫	1 SEC flush-encased gearbox	–	10	457210
⑬	1 SEC drilling protection	–	10	487406
⑭	2 Cylinder screw M5 x 8	–	100	335249
③⑨	1 Screw M4.8 x 16	–	100	212754
②⑤	1 SEC rebate clearance reduction	–	50	334360
②①	1 RotoLine geared-handle 26, lockable	–		(→ p.205)
②①	1 Geared-handle support	–	100	331937
⑨	2 Flat-headed screw M5 x 12	–	100	212500
⑦	2 SEC connector	–	100	447113
②③	1 SEC geared-handle protection	–	10	487407
②④	2 Countersunk screw M5 x 10	–	100	210970

Basic sets

Locking components

Pcs	Description	PQ	Material no.
④	2 Corner drive w/o MD	50	331012
③	1 Run-up wedge V.01	100	212512
	Run-up wedge V.02	100	212762
⑤	2 Striker V.01	100	212633
	Striker V.02	100	212634
⑥	2 Locking cam, insertable	100	334671

SEC hardware components

Pcs	Description	Colour	PQ	Material no.
③④	6 SEC locking cam, insertable, RC2	–	100	447245
③⑤	6 SEC striker V.01	–	100	212637
	SEC striker V.02	–	100	212638
③⑧	1 SEC rebate clearance reduction	–	100	447112
③⑨	1 Screw M4.8 x 16	–	100	212754

Optional

Additional components, size-related

Pcs	Description	PQ	Material no.
⑥	6 Locking cam, insertable	100	334671
⑤	6 Striker V.01	100	212633
	Striker V.02	100	212634
1	Transport protection for corner hinge not dep.	100	624333
1	Turn-restrictor set V.01 ¹⁾	10	625018
	Turn-restrictor set V.02 ¹⁾	10	625019
④①a	1 Sash stop		
④①b	1 Frame hinge-bearing		
④①c	1 Turn-restrictor arm		

1) Arrestable/damped turn-restrictor → p. 217

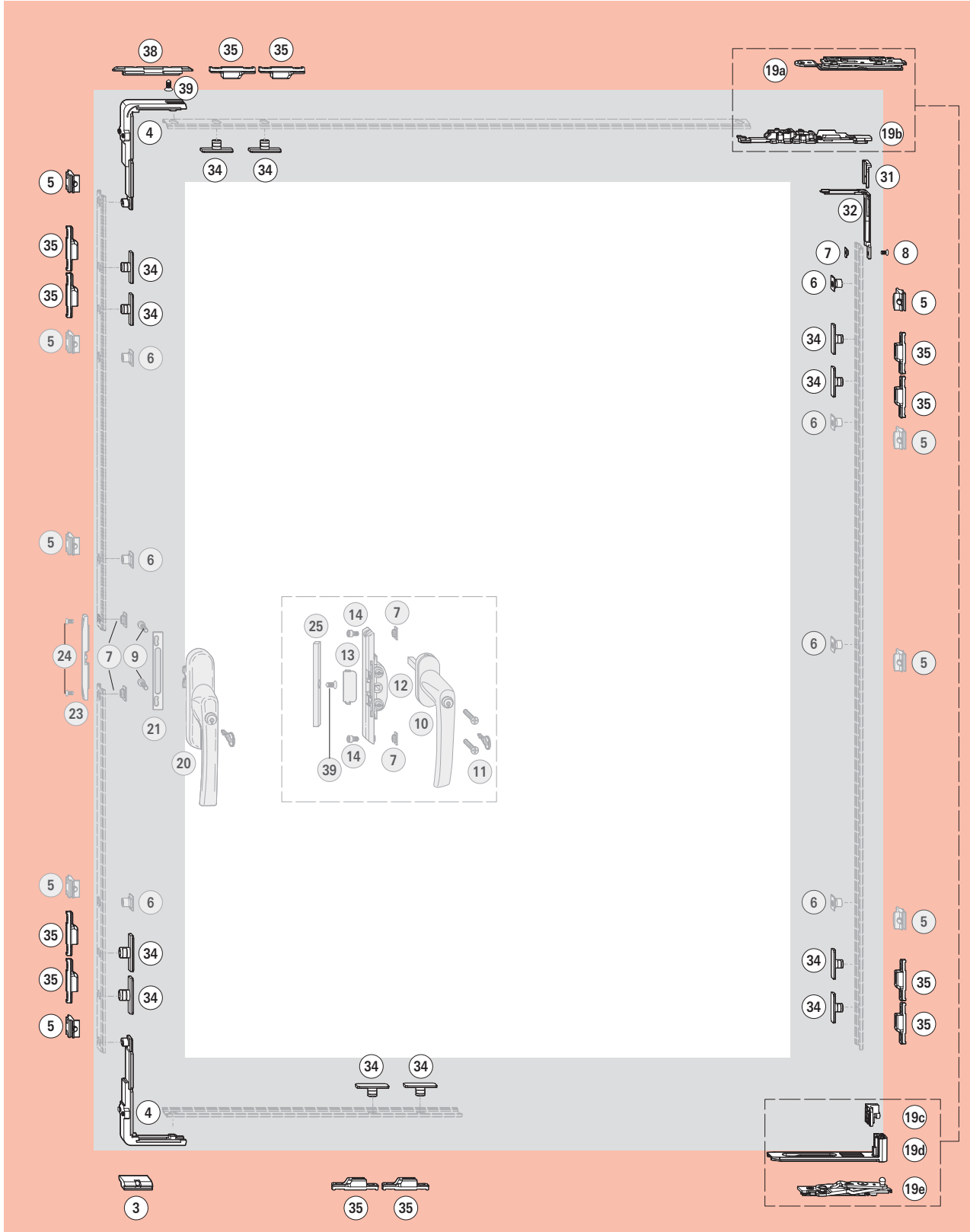
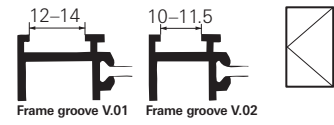
NOTE!
 Only use bearings/clamp-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Roto AluVision Designo

Turn-Only hardware with coupleable rebate hinge

80 kg, RC3



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW**450–500 mm
 Sash height **SH**850–2400 mm
 Sash weight **S.kg** max. 80 kg

Clearance **CL**11.5–12 mm
 Overlap width **OW**21.5–22 mm

Basic sets

Locking TU-ON, coupleable				
Frame-groove version		PQ	Material no.	
① ② ④	Locking components V.01	10	635729	
⑤ ⑥	Locking components V.02	10	635730	

Security sets

Description	PQ	Material no.	
③⑧ ③⑨ SEC rebate clearance reduction set	10	335247	
⑦ ②③ ②④ SEC geared-handle protection set	10	485768	
⑦ ⑧ ③① ③② SEC corner drive CL set	20	335187	
④ ⑦ ①② SEC flush-encased gearbox set	10	457209	
⑩③ ⑩④ ②⑤ ③⑨			

Hinge side

Pcs	Description	DIN	PQ	Material no.
1	Rebate-hinge set, coupleable, no. 1	L	10	627072
	Rebate-hinge set, coupleable, no. 1	R	10	627069
	Rebate-hinge set, coupleable, no. 3	L	10	627073
	Rebate-hinge set, coupleable, no. 3	R	10	627070
	Rebate-hinge set, coupleable, no. 4	L	10	627074
	Rebate-hinge set, coupleable, no. 4	R	10	627071
⑩⑨a	1 Rebate hinge			
⑩⑨b	1 Rebate hinge, coupleable			
⑩⑨c	1 Adjusting piece			
⑩⑨d	1 Corner hinge			
⑩⑨e	1 Pivot rest			

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
⑩⑩	1 RotoLine window handle, lockable	–		(→ p.209)
⑩⑪	2 Countersunk screw (stainless steel) M3 x 30	–	100	212501
⑦	2 SEC connector	–	100	447113
⑩⑫	1 SEC flush-encased gearbox	–	10	457210
⑩⑬	1 SEC drilling protection	–	10	487406
⑩⑭	2 Cylinder screw M5 x 8	–	100	335249
⑩③⑨	1 Screw M4.8 x 16	–	100	212754
⑩②⑤	1 SEC rebate clearance reduction	–	50	334360
⑩②①	1 RotoLine geared-handle 26, lockable	–		(→ p.205)
⑩②①	1 Geared-handle support	–	100	331937
⑩⑨	2 Flat-headed screw M5 x 12	–	100	212500
⑦	2 SEC connector	–	100	447113
⑩②③	1 SEC geared-handle protection	–	10	487407
⑩②④	2 Countersunk screw M5 x 10	–	100	210970

Basic sets

Locking components				
Pcs	Description	PQ	Material no.	
④	2 Corner drive w/o MD	50	331012	
③	1 Run-up wedge V.01	100	212512	
	Run-up wedge V.02	100	212762	
⑤	2 Striker V.01	100	212633	
	Striker V.02	100	212634	
⑥	2 Locking cam, insertable	100	334671	

SEC hardware components

Pcs	Description	Colour	PQ	Material no.
⑩④	12 SEC locking cam, insertable, RC3	–	100	443530
⑩⑤	12 SEC striker V.01	–	100	212637
	SEC striker V.02	–	100	212638
⑩③⑧	1 SEC rebate clearance reduction	–	100	447112
⑩③⑨	1 Screw M4.8 x 16	–	100	212754

Optional

Additional components, size-related

Pcs	Description	PQ	Material no.
⑩⑥	6 Locking cam, insertable	100	334671
⑩⑤	6 Striker V.01	100	212633
	Striker V.02	100	212634
1	Transport protection for corner hinge not dep.	100	624333

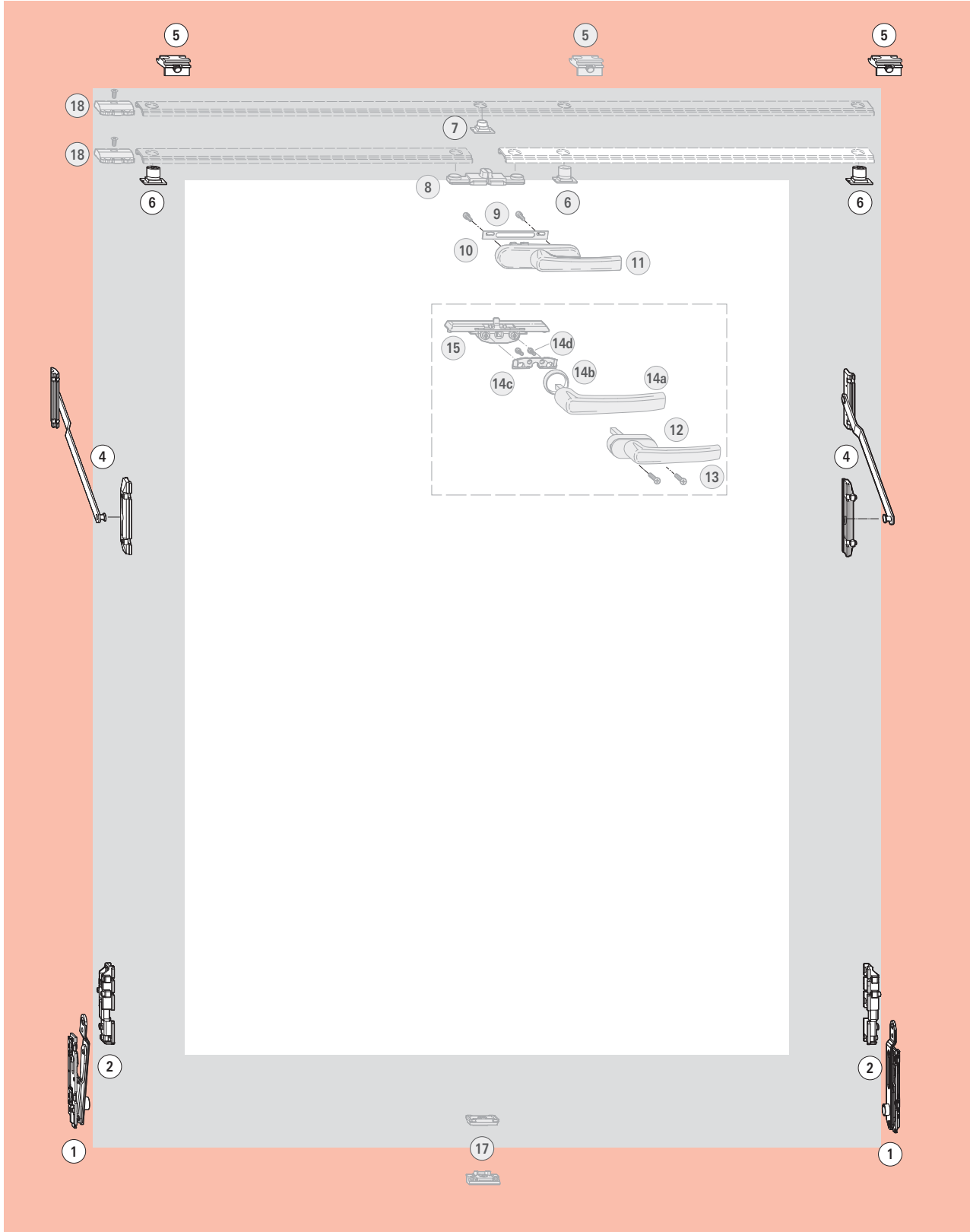
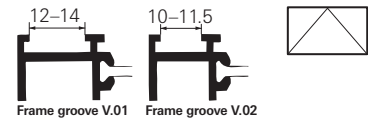
NOTE!
 Only use bearings/clamp-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Roto AluVision Designo

Tilt-Only hardware, handle on top

100 kg, Basic security



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 520–1600 mm
 Sash height **SH** 500–1300 mm
 Sash weight **S.kg** max. 100 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm

Basic sets				
TI-ON Locking				
	Frame-groove version	PQ	Material no.	
④ ⑤ ⑥	TI-ON Locking components V.01	10	331930	
	TI-ON Locking components V.02	10	331931	
Hinge side				
Pcs	Description	DIN	PQ	Material no.
①	2 Rebate hinge no. 1	L	10	627256
	Rebate hinge no. 1	R	10	627255
	Rebate hinge no. 3	L	10	627258
	Rebate hinge no. 3	R	10	627257
	Rebate hinge no. 4	L	10	627260
	Rebate hinge no. 4	R	10	627259
②	2 Rebate hinge		10	502340
Optional				
Espagnolettes and connectors				
Pcs	Description	PQ	Material no.	
⑪	1 RotoLine geared-handle		(→ p. 205)	
⑧	1 T connector	100	334754	
⑩	1 Geared-handle support	100	331937	
⑨	2 Flat-headed screw M5 x 12	100	212500	
⑧	1 T connector set	10	335184	
⑨				
⑨	1 Geared-handle support set	10	335002	
⑩				
Alternatively:				
⑫	1 RotoLine window handle for flush-encased gearbox		(→ p. 208)	
⑬	2 Countersunk screws (stainless steel) M5 x 30	100	212501	
⑭a	1 Escutcheonless handle²⁾		(→ p. 207)	
⑭b	1 Ring for escutcheonless handle		(→ p. 207)	
⑭c	1 Mounting plate	100	378134	
⑭d	2 Screws for escutcheonless handle	20	-	
⑮	1 Flush-encased gearbox w/o MD	10	378338	

Basic sets				
Locking components				
Pcs	Description	PQ	Material no.	
④	2 Tilt-Only stay-arm V.01	20	331022	
	Tilt-Only stay-arm V.02	20	331023	
⑤	2 Striker V.01	100	212633	
	Striker V.02	100	212634	
⑥	2 Locking cam, insertable	100	334671	
Optional				
Additional components, size-related				
Pcs	Description	PQ	Material no.	
⑥	1 Locking cam, insertable	100	334671	
⑦	1 Connector-bolt, insertable	100	254601	
⑤	1 Striker V.01	100	212633	
	Striker V.02	100	212634	
⑰	1 Centre-closer set V.01	10	502759	
	Centre-closer set V.02	10	502757	
⑱	1 Run-up block²⁾	100	212008	

1) The escutcheonless handle can only be used with profile systems with an overlap height (OH) ≥ 10 mm.
 2) Screw not included in delivery scope.

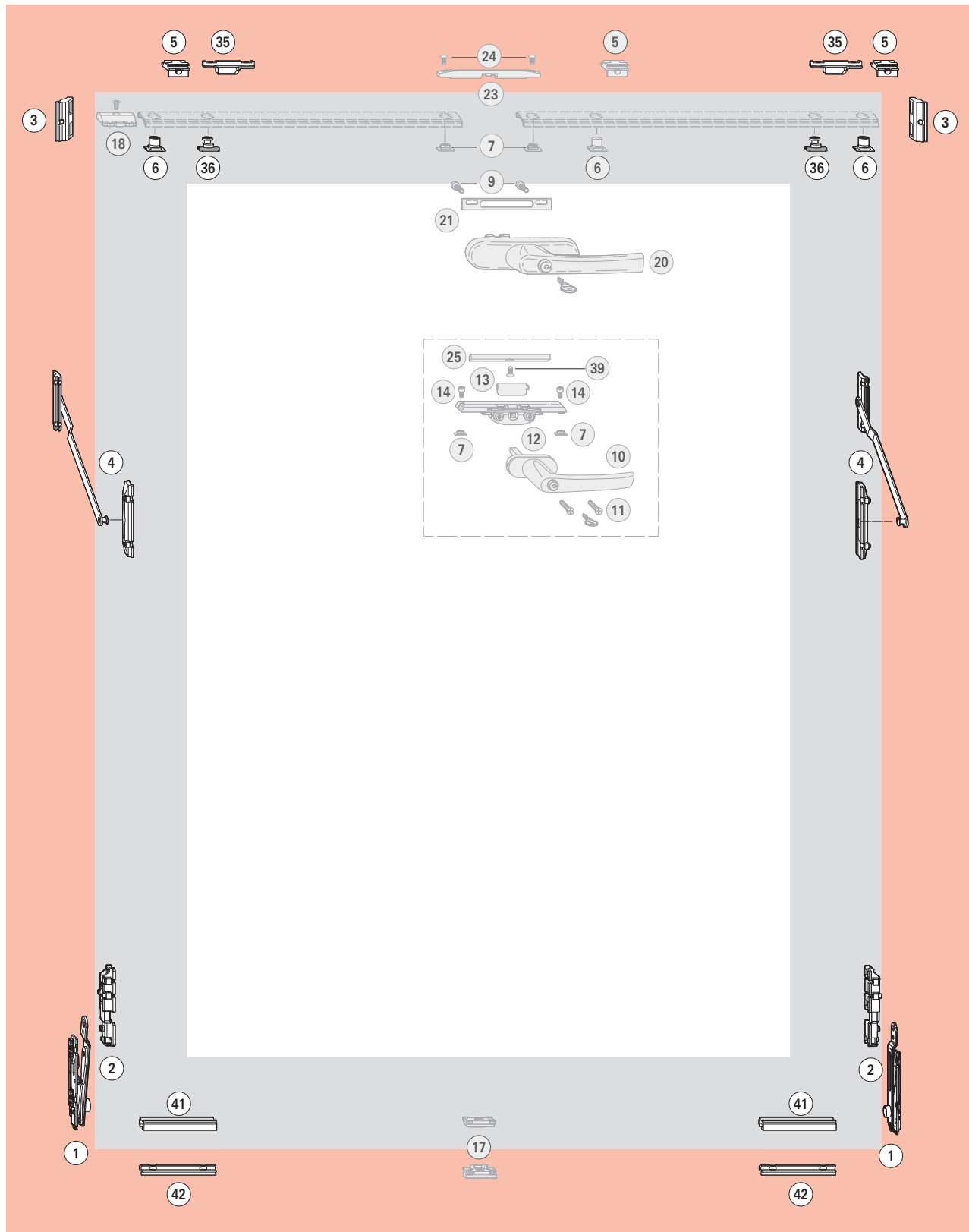
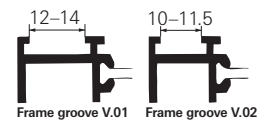
NOTE!
 Only use bearings/clamp-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Roto AluVision Designo

Tilt-Only hardware, handle on top

100 kg, RC2



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 520–1600 mm
 Sash height **SH** 500–1300 mm
 Sash weight **S.kg** max. 100 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm

Basic sets

TI-ON Locking

	Frame-groove version	PQ	Material no.
④ ⑤ ⑥	TI-ON Locking components V.01	10	331930
	TI-ON Locking components V.02	10	331931

Security sets

	Description	PQ	Material no.
⑦ ②③ ②④	SEC geared-handle protection set	10	485768
④① ④②	SEC hinge-lock set V.01	20	335185
	SEC hinge-lock set V.02	20	335186
④ ⑦ ⑫	SEC flush-encased gearbox set	10	457209
⑩③ ⑩④ ⑩⑤ ⑩⑥			

Hinge side

Pcs	Description	DIN	PQ	Material no.
①	2 Rebate hinge no. 1	L	10	627256
	Rebate hinge no. 1	R	10	627255
	Rebate hinge no. 3	L	10	627258
	Rebate hinge no. 3	R	10	627257
	Rebate hinge no. 4	L	10	627260
	Rebate hinge no. 4	R	10	627259
②	2 Rebate hinge		10	502340

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
⑩	1 RotoLine window handle, lockable			(→ p. 209)
⑪	2 Countersunk screw (stainless steel) M3 x 30	–	100	212501
⑦	2 SEC connector	–	100	447113
⑫	1 SEC flush-encased gearbox	–	10	457210
⑬	1 SEC drilling protection	–	10	487406
⑭	2 Cylinder screw M5 x 8	–	100	335249
③⑨	1 Screw M4.8 x 16	–	100	212754
②⑤	1 SEC rebate clearance reduction	–	50	334360
②⑩	1 RotoLine geared-handle 26, lockable			(→ p. 205)
②①	1 Geared-handle support	–	100	331937
⑨	2 Flat-headed screw M5 x 12	–	100	212500
⑦	2 SEC connector	–	100	447113
②③	1 SEC geared-handle protection	–	10	487407

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
②④	2 Countersunk screw M5 x 10	–	100	210970

Basic sets

Locking components

Pcs	Description	PQ	Material no.
④	2 Tilt-Only stay-arm V.01	20	331022
	Tilt-Only stay-arm V.02	20	331023
⑤	2 Striker V.01	100	212633
	Striker V.02	100	212634
⑥	2 Locking cam, insertable	100	334671

SEC hardware components

Pcs	Description	Colour	PQ	Material no.
③⑥	2 SEC locking cam, insertable, RC2	–	100	447245
③⑤	2 SEC striker V.01	–	100	212637
	SEC striker V.02	–	100	212638
③	2 Horizontal Tilt&Turn striker	–	100	212122
②⑧	2 SEC hinge lock, frame V.01		20	331788
	SEC hinge lock, frame V.02		20	331789
②⑨	2 SEC hinge lock, sash		20	331790
6	Screw M4.8 x 16 (not dep.)		100	212754

Optional

Additional components, size-related

Pcs	Description	PQ	Material no.
⑥	1 Locking cam, insertable	100	334671
⑤	1 Striker V.01	100	212633
	Striker V.02	100	212634
①⑦	1 Centre-closer set V.01	10	502759
	Centre-closer set V.02	10	502757
①⑧	1 Run-up block¹⁾	100	212008

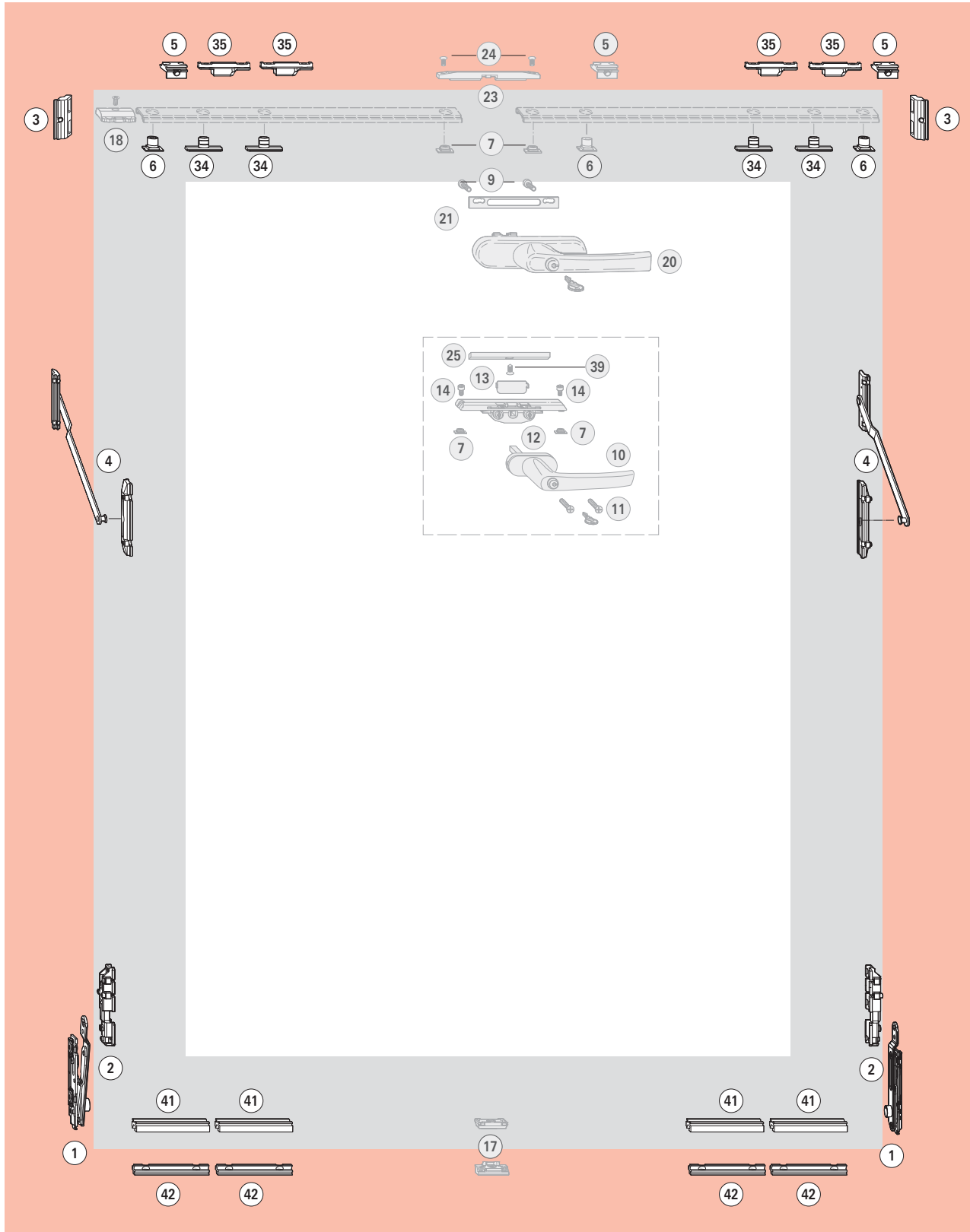
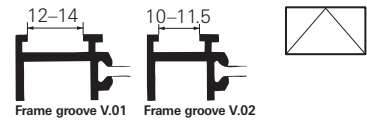
1) Screw not included in delivery scope.

NOTE!
 Only use bearings/clamp-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo

Tilt-Only hardware, handle on top

100 kg, RC3



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** 670–1600 mm
 Sash height **SH** 500–1300 mm
 Sash weight **S.kg** max. 100 kg

Clearance **CL** 11.5–12 mm
 Overlap width **OW** 21.5–22 mm

Basic sets

TI-ON Locking

	Frame-groove version	PQ	Material no.
④ ⑤ ⑥	TI-ON Locking components V.01	10	331930
	TI-ON Locking components V.02	10	331931

Security sets

	Description	PQ	Material no.
⑦ ②③ ②④	SEC geared-handle protection set	10	485768
④① ④②	SEC hinge-lock set V.01	20	335185
	SEC hinge-lock set V.02	20	335186
④ ⑦ ⑫	SEC flush-encased gearbox set	10	457209
⑩③ ⑩④ ⑩⑤ ⑩⑥			

Hinge side

Pcs	Description	DIN	PQ	Material no.
①	2 Rebate hinge no. 1	L	10	627256
	Rebate hinge no. 1	R	10	627255
	Rebate hinge no. 3	L	10	627258
	Rebate hinge no. 3	R	10	627257
	Rebate hinge no. 4	L	10	627260
	Rebate hinge no. 4	R	10	627259
②	2 Rebate hinge		10	502340

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
⑩	1 RotoLine window handle, lockable			(→ p. 209)
⑪	2 Countersunk screw (stainless steel) M3 x 30	–	100	212501
⑦	2 SEC connector	–	100	447113
⑫	1 SEC flush-encased gearbox	–	10	457210
⑬	1 SEC drilling protection	–	10	487406
⑭	2 Cylinder screw M5 x 8	–	100	335249
③⑨	1 Screw M4.8 x 16	–	100	212754
②⑤	1 SEC rebate clearance reduction	–	50	334360
②⑩	1 RotoLine geared-handle 26, lockable			(→ p. 205)
②①	1 Geared-handle support	–	100	331937
⑨	2 Flat-headed screw M5 x 12	–	100	212500
⑦	2 SEC connector	–	100	447113
②③	1 SEC geared-handle protection	–	10	487407

Optional

SEC espagnolettes and connectors

Pcs	Description	Colour	PQ	Material no.
②④	2 Countersunk screw M5 x 10	–	100	210970

Basic sets

Locking components

Pcs	Description	PQ	Material no.
④	2 Tilt-Only stay-arm V.01	20	331022
	Tilt-Only stay-arm V.02	20	331023
⑤	2 Striker V.01	100	212633
	Striker V.02	100	212634
⑥	2 Locking cam, insertable	100	334671

SEC hardware components

Pcs	Description	Colour	PQ	Material no.
③④	4 SEC locking cam, insertable, RC3	–	100	443530
③⑤	4 SEC striker V.01	–	100	212637
	SEC striker V.02	–	100	212638
③	2 Horizontal Tilt&Turn striker	–	100	212122
⑤	4 SEC hinge lock, frame V.01		20	331788
	SEC hinge lock, frame V.02		20	331789
⑥	4 SEC hinge lock, sash		20	331790
	12 Screw M4.8 x 16 (not dep.)		100	212754

Optional

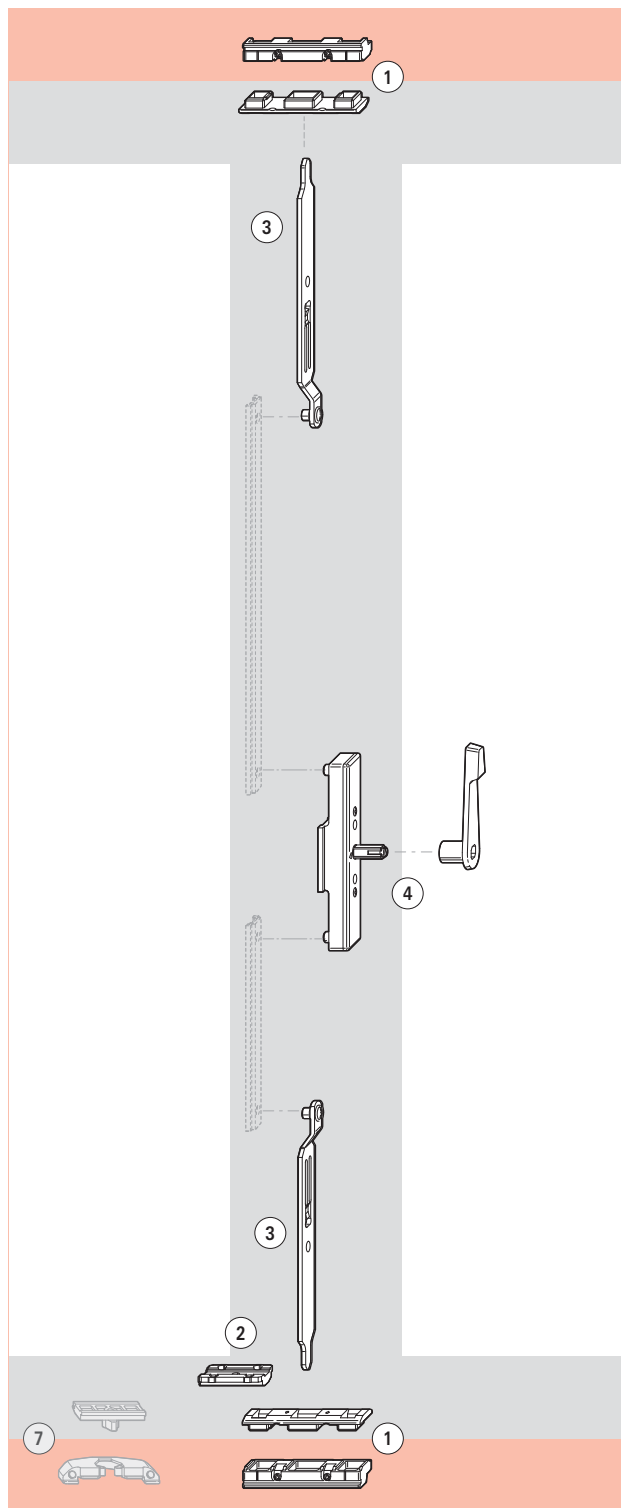
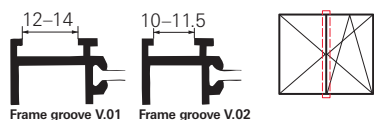
Additional components, size-related

Pcs	Description	PQ	Material no.
⑥	1 Locking cam, insertable	100	334671
⑤	1 Striker V.01	100	212633
	Striker V.02	100	212634
⑰	1 Centre-closer set V.01	10	502759
	Centre-closer set V.02	10	502757
⑱	1 Run-up block¹⁾	100	212008

1) Screw not included in delivery scope.

NOTE!
 Only use bearings/clamp-strips, which are released for the profile. Further information is available from the Roto sales staff.

Roto AluVision Designo



Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** (passive sash: TU-ON).....250–max. 1600mm

Sash height **SH**.....max. 2400mm

Clearance **CL** 11.5–12mm

Overlap width **OW** 21.5–22mm

Bulk packaging DM

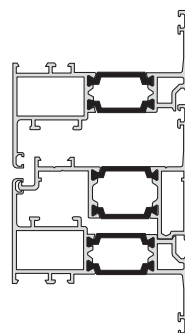
Locking components

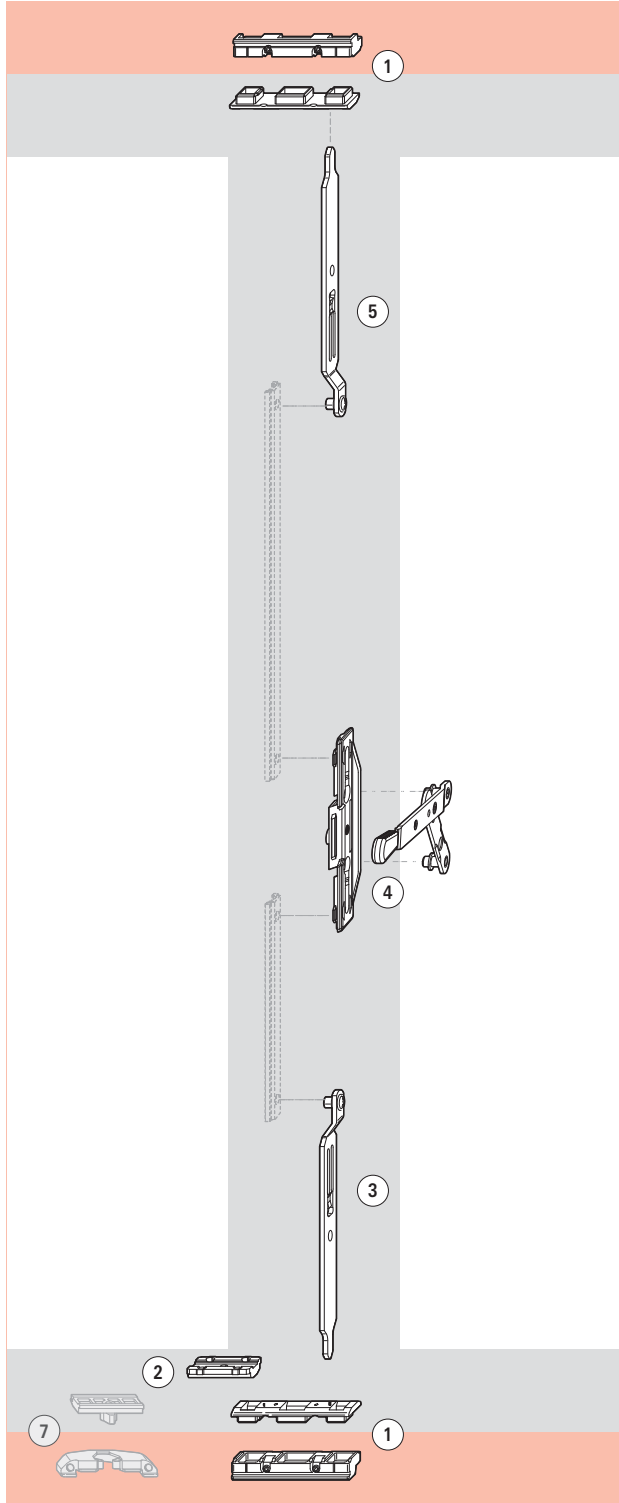
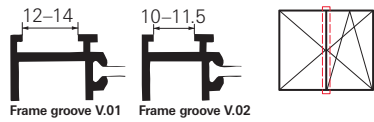
Pos.	Pcs	Description	Colour	PQ	Material no.
④	1	DM lever-operated espagnolette, concealed	–	20	212264
③	2	Shootbolt-rod	VS1 –	100	212144
①	2	Multi-ported striker	VB 5/6 –	20	212120
②	1	Run-up block	–	100	212008

Optional

Bullet catch

Pos.	Description	Material no.
⑦	Bullet catch set	10 334667





Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** (passive sash: TU-ON)250–max. 1600mm
 Sash height **SH**.....max. 2400mm
 Clearance **CL**11.5–12mm
 Overlap width **OW**21.5–22mm

Bulk packaging DM-SM

Lever-operated espagnolette, surface-mounted – Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
⑤	1	Shootbolt-rod	VS1 LG –	100	341486
		Shootbolt-rod	VS2 LG –		341487
		Shootbolt-rod	VS3 LG –		341488
③	1	Shootbolt-rod	VS1 –	100	212144
		Shootbolt-rod	VS2 –		212145
		Shootbolt-rod	VS3 –		212146
①	2	Multi-ported striker	VB 1/2 –	20	212118
		Multi-ported striker	VB 3/4 –		212119
		Multi-ported striker	VB 5/6 –		212120
④	1	DM-SM espagnolette, surface-mounted	–	20	256474
②	1	Run-up block	–	100	212008

Optional

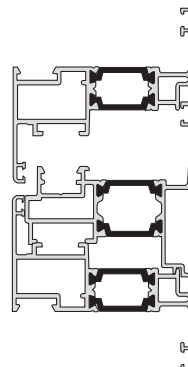
Bullet catch

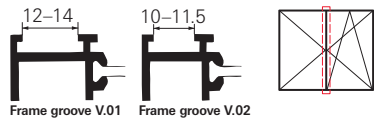
Pos.	Description	Material no.
⑦	Bullet catch set	334667



NOTE

Floating-mullion hardware DM-SM can only be used for profiles with double-C-groove.





Application range

Sash width **SW** (passive sash: TU-ON)..... 250–max. 1600mm
 Sash height **SH** max. 2400mm
 Clearance **CL** 11.5–12mm
 Overlap width **OW** 21.5–22mm

Basic sets DM-SB

'10' basic set Dummy mullion – shootbolt (DM-SB)

Pos.	Pcs	Description	Colour	PQ	Material no.
		DM-SB basic set T540-10	–		330258

Bulk packaging DM-SB

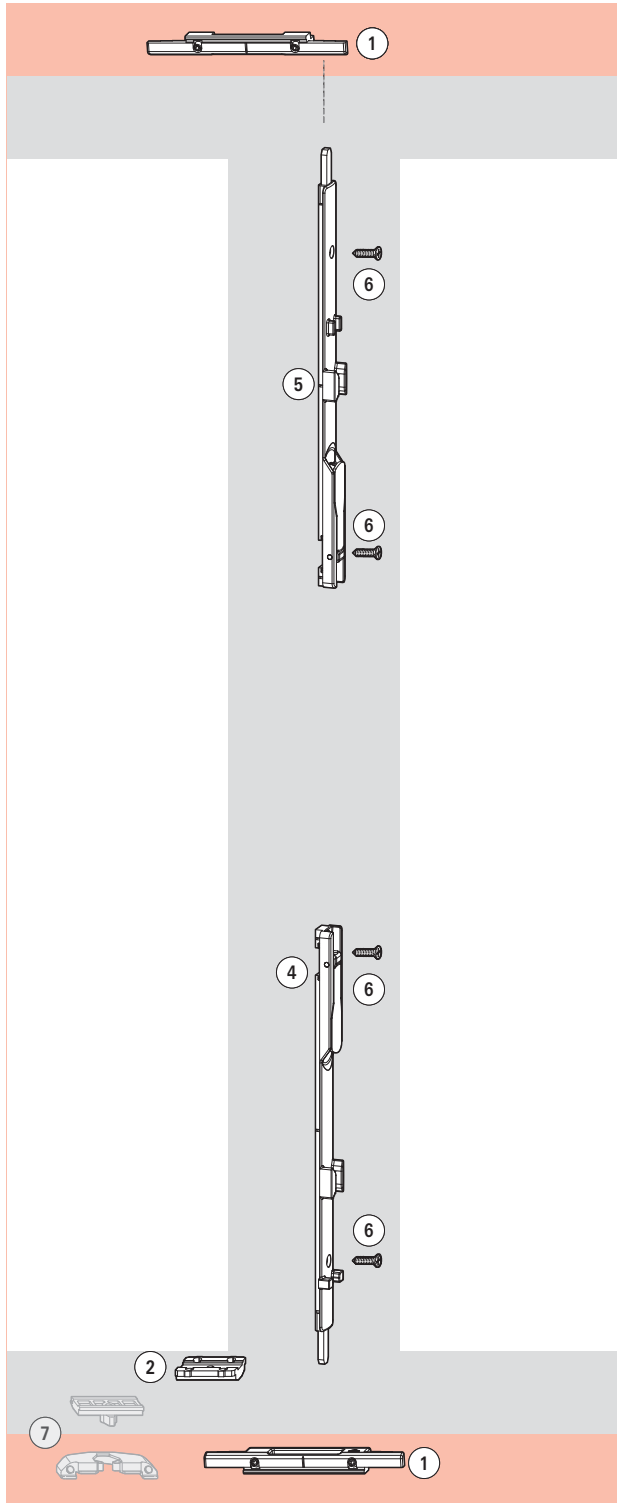
Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
⑤	1	DM shootbolt, top	–	50	355562
④	1	DM shootbolt, bottom	–	50	355563
①	2	DM-SB Multi-ported striker	–	100	355559
⑥	4	Countersunk screw 3.9 x 25	–	100	213006
②	1	Run-up block	–	100	212008

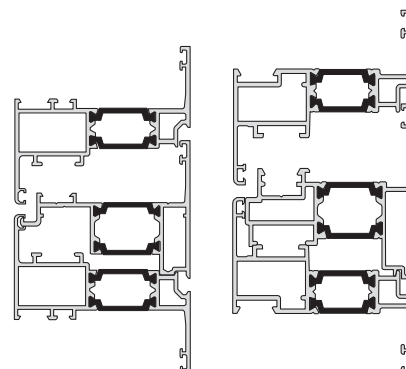
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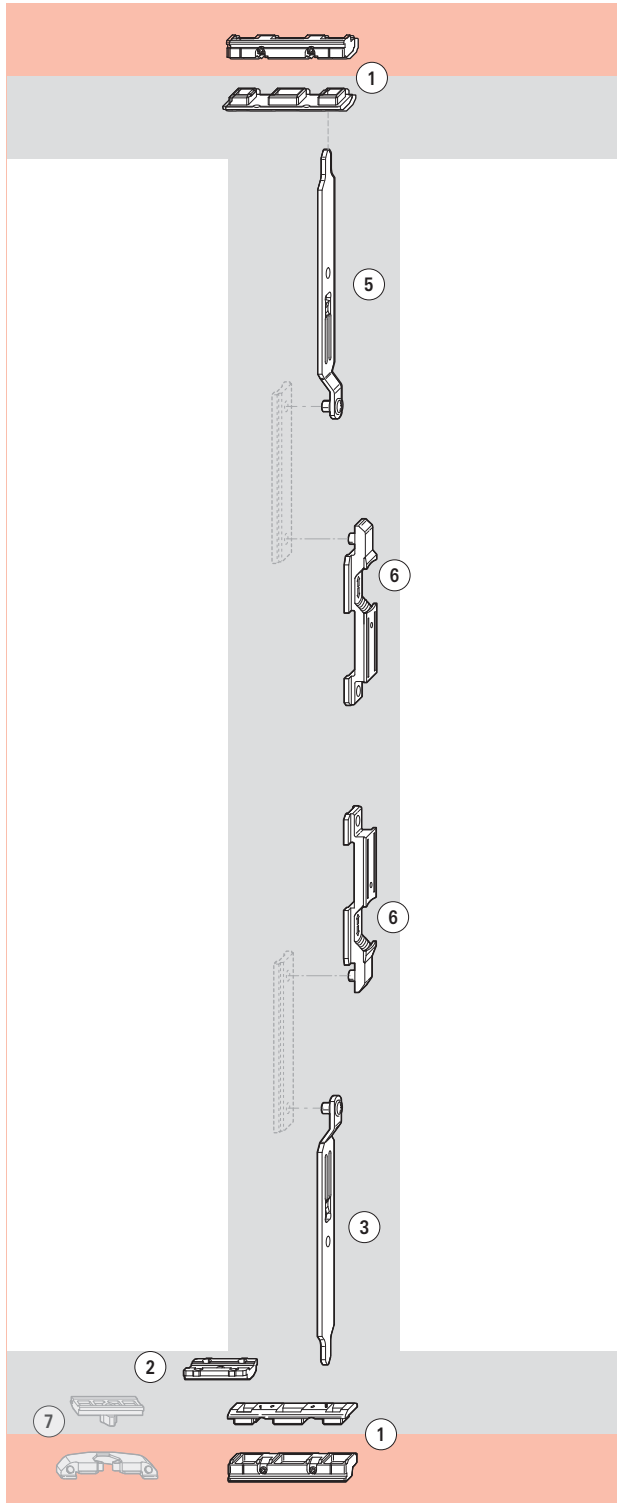
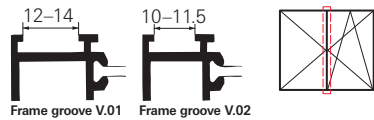
Bullet catch

Pos.	Description	Material no.
⑦	Bullet catch set	334667



Grey parts are optional and not included in the basic set.





Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** (passive sash: TU-ON)250–max. 1600mm
 Sash height **SH**.....max. 2400mm
 Clearance **CL** 11.5–12mm
 Overlap width **OW** 21.5–22mm

Basic sets DM-SL

Lever-operated espagnolette, surface-mounted – Locking components

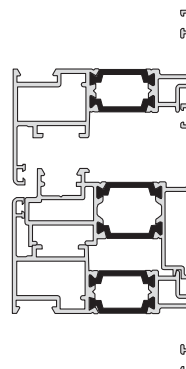
Pos.	Pcs	Description	Colour	PQ	Material no.
⑤	1	Shootbolt-rod	VS1 LG –	100	341486
		Shootbolt-rod	VS2 LG –		341487
		Shootbolt-rod	VS3 LG –		341488
③	1	Shootbolt-rod	VS1 –	100	212144
		Shootbolt-rod	VS2 –		212145
		Shootbolt-rod	VS3 –		212146
①	2	Multi-ported striker	VB 1/2 –	20	212118
		Multi-ported striker	VB 3/4 –		212119
		Multi-ported striker	VB 5/6 –		212120
⑥	2	Slider	VS1 –	100	212141
		Slider	VS2 –		212142
		Slider	VS3 –		212143
②	1	Run-up block	–	100	212008

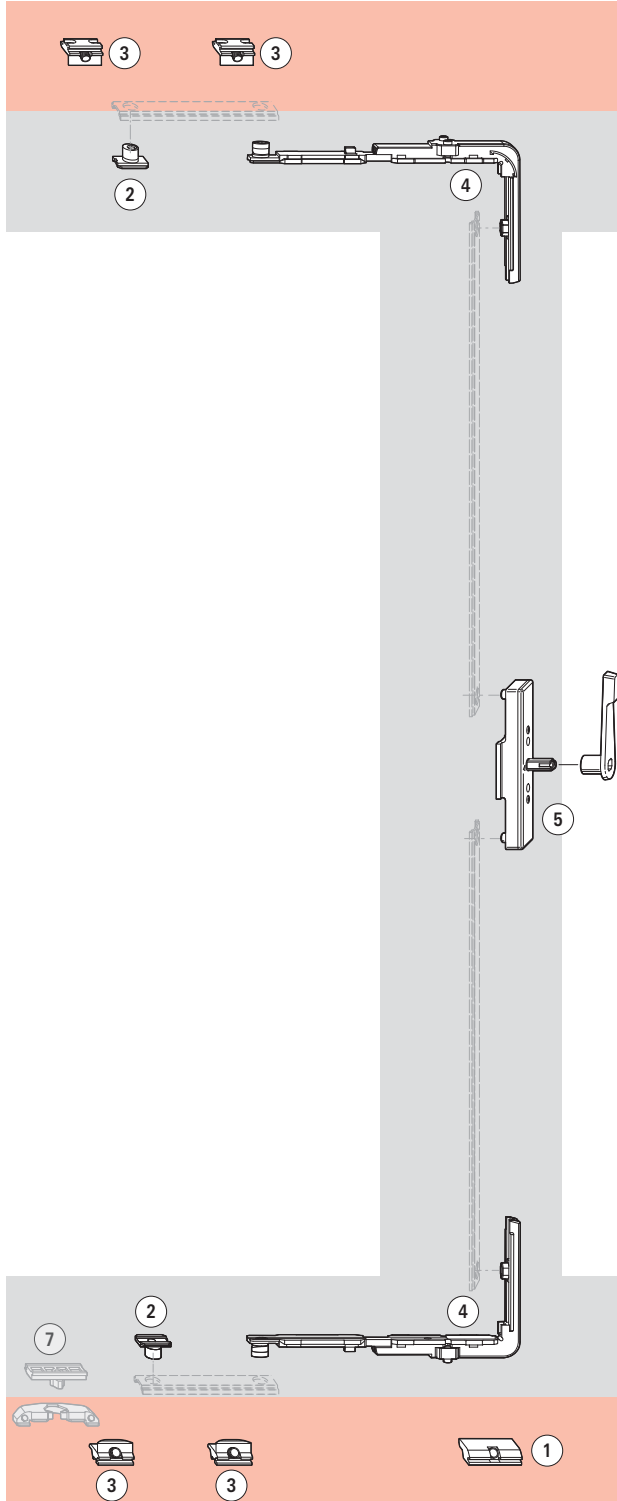
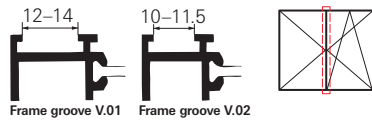
Optional

Bullet catch

Pos.	Description	Material no.
⑦	Bullet catch set	334667

NOTE
 Floating-mullion hardware DM-SL can only be used for profiles with double-C-groove.





Grey parts are optional and not included in the basic set.

Application range

Sash width **SW** (passive sash: TU-ON)..... 250–max. 1600mm
 Sash height **SH** max. 2400mm
 Clearance **CL** 11.5–12mm
 Overlap width **OW** 21.5–22mm

Basic sets

Dummy mullion with central locking system, TU-ON/TU-ON w/o hinge side '10' basic set V.01/V.02

Pos.	Description	Colour	PQ	Material no.
	TU-ON C basic set V.01	–		331277
	TU-ON C basic set V.02	–		331278

Bulk packaging

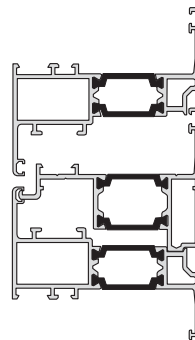
Locking components

Pos.	Pcs	Description	Colour	PQ	Material no.
①	1	Run-up wedge V.01	–	100	212762
		Run-up wedge V.02	–	100	212512
②	2	Locking cam, insertable	–	100	334671
③	2-4	Striker V.01	–	100	212633
		Striker V.02	–	100	212634
④	2	Corner drive w/o MD	–	50	331012
⑤	1	DM Lever-operated espagnolette (dummy mullion), concealed	–		212264

Optional

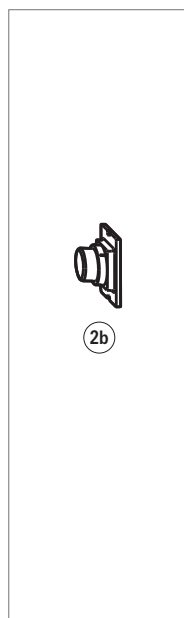
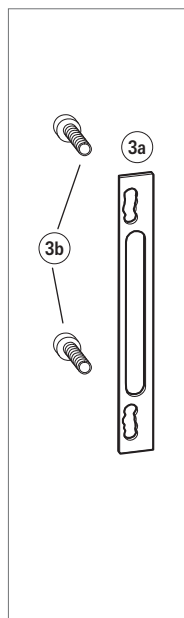
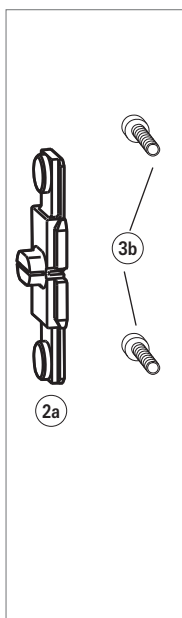
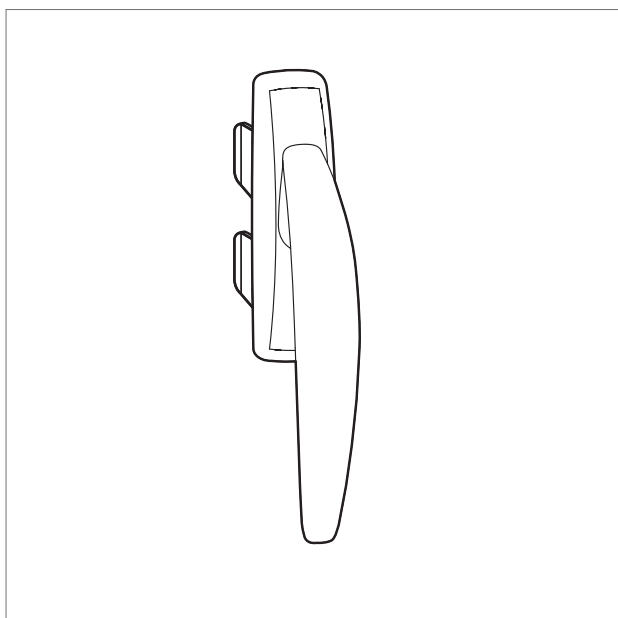
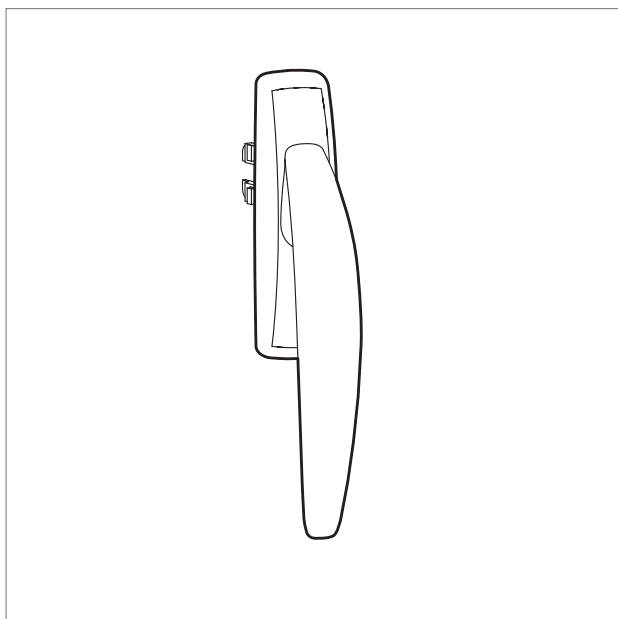
Bullet catch

Pos.	Description	Material no.
⑦	Bullet catch set	334667





Espagnolette T 300	204
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RotoSwing window handles with logo.....	211



Espagnolette T 300

Colour description	Colour	PQ	Material no.
Silver	R01.5	10	486161
Jet-black	R06.2	10	486162
Traffic-white	R07.2	10	486163
Unpainted, uncoated	raw	50	486165
Special colour	SP COL	10	486164

T 300 Reverse-action espagnolette

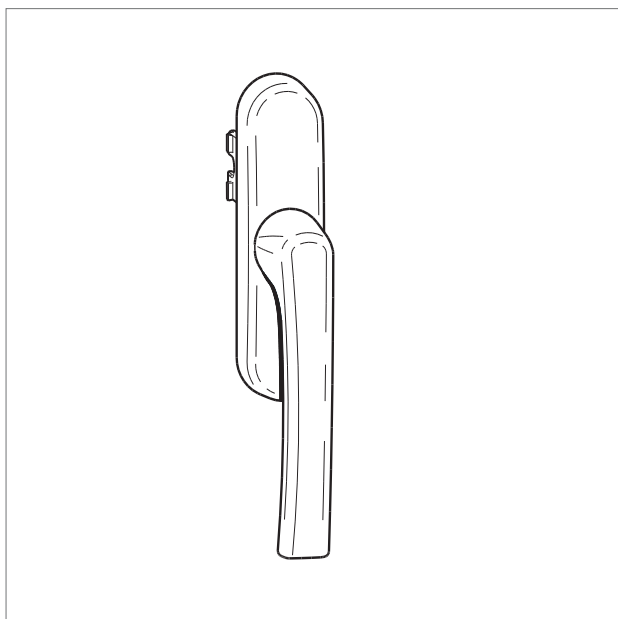
Colour description	Colour	PQ	Material no.
Silver	R01.5	10	486277
Jet-black	R06.2	10	490162
Traffic-white	R07.2	10	490163
Unpainted, uncoated	raw	50	490164
Special colour	SP COL	10	490235

Connector set for RotoLine espagnolette 26

Description	PQ	Material no.
Connector set AluVision	10	335184
contains T connector and 2 screws		
Espag. accessories set AluVision T 540-10	10	335002
Geared-handle support and 2 screws		

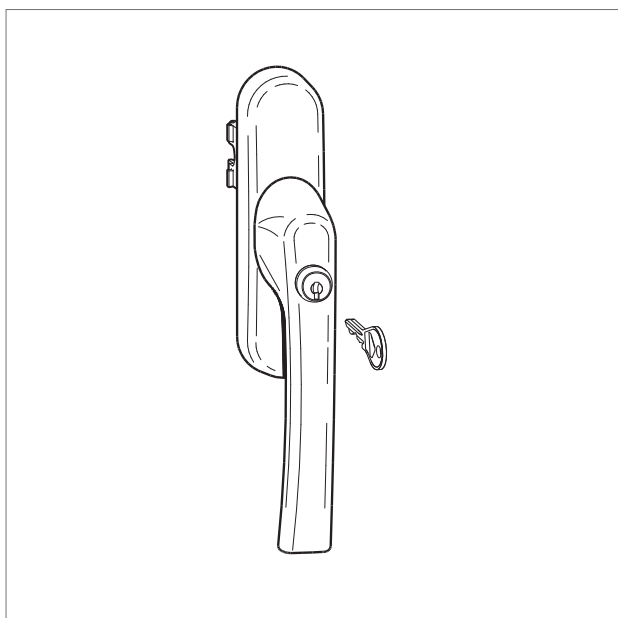
Connector set bulk packaging, parts list

Pos.	Pcs	Description	PQ	Material no.
2a	1	T connector	100	334754
3b	2	Flat-headed screw M5 x 12	100	212500
3a	2	Geared-handle support	100	331937
2b	1	Connector-bolt, insertable		
		Zn alloy	100	254601
		PVC	100	334672



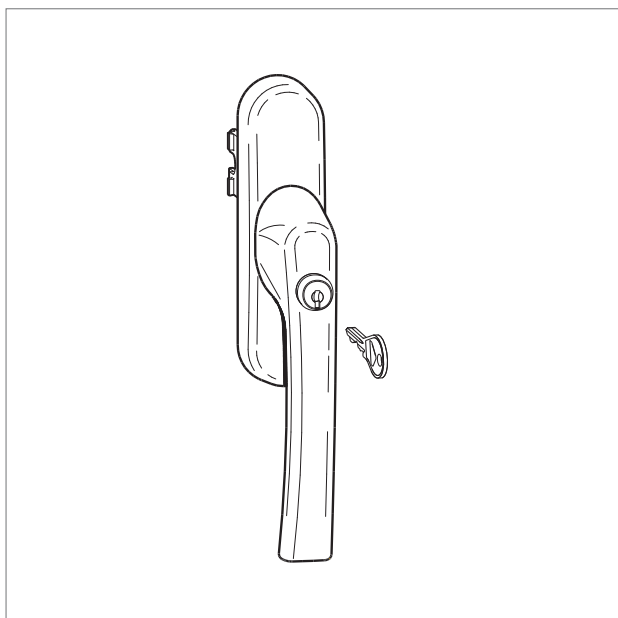
RotoLine espagnolette 26 with logo

Description	Colour	PQ	Material no.
Silver	R01.1	10	238671
Silver	R01.5	10	377474
Dark bronze	R05.4	10	377478
Jet-black	R06.2	10	377475
Traffic-white	R07.2	10	377477
Special colour	SP COL	10	377479
Unpainted, uncoated	raw	10	632981



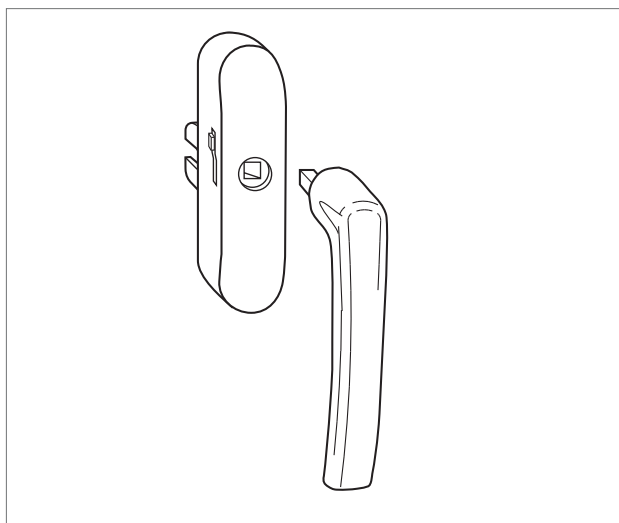
RotoLine espagnolette 26, 100 Nm, lockable, with logo

Description	Colour	PQ	Material no.
Silver	R01.1	10	238692
Silver	R01.5	10	378843
Dark bronze	R05.4	10	378917
Jet-black	R06.2	10	378844
Traffic-white	R07.2	10	378916
Special colour	SP COL	10	378918
Unpainted, uncoated	raw	10	238700



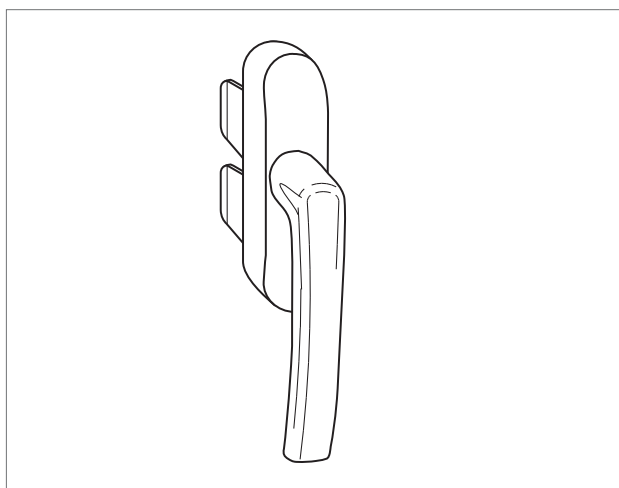
RotoLine espagnolette 26, Tilt-First, 100 Nm, lockable, with logo

Description	Colour	PQ	Material no.
Silver	R01.1	10	238708
Silver	R01.5	10	378919
Dark bronze	R05.4	10	378923
Jet-black	R06.2	10	378920
Traffic-white	R07.2	10	378922
Special colour	SP COL	10	378924
Unpainted, uncoated	raw	10	238716



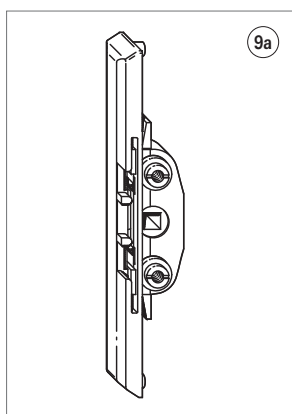
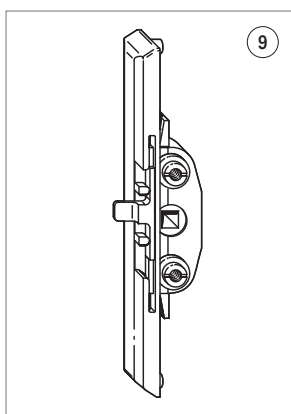
RotoLine escutcheon plate for service handle 26

Description	Colour	PQ	Material no.
Silver	R01.1	10	570458
Silver	R01.5	10	570459
Silver, powder-coated	R01.6	10	570457
Dark bronze	R05.4	10	570463
Jet-black	R06.2	10	570462
Traffic-white	R07.2	10	570460
Special colour	SP COL	10	570464
Unpainted, uncoated	raw	10	570461



RotoLine reverse-action espagnolette 26 with logo

Description	Colour	PQ	Material no.
Silver	R01.5	10	378925
Dark bronze	R05.4	10	378929
Jet-black	R06.2	10	378926
Traffic-white	R07.2	10	378928
Special colour	SP COL	10	378930
Unpainted, uncoated	raw	10	238742



Flush-en. gearbox w. integr. mishandling device f. window handles
with 24 mm spindle length / 10 mm lugs

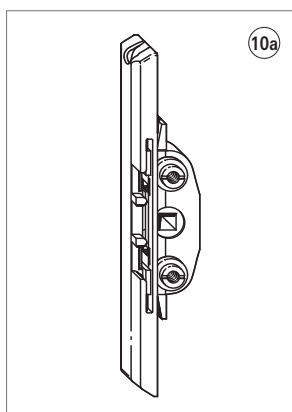
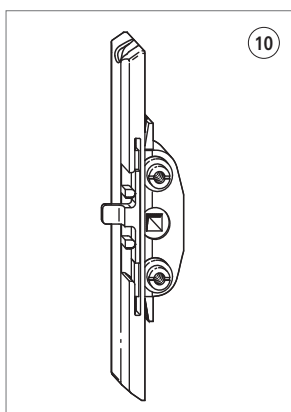
Description	PQ	Material no.
9 Flush-encased gearbox AluVision	10	378337

Flush-encased gearbox w/o mishandling device for window handles
with 24 mm spindle length / 10 mm lugs

Description	PQ	Material no.
9a Flush-encased gearbox w/o mishandling device	10	378338

Note

RotoLine window handles for flush-encased gearboxes can be found in the **Handle catalogue BK 5 EN**.
The spindle of 30 resp. 35 mm must be shortened to a length of 24 mm.



SEC flush-enc. gearbox w. integr. mishandling device f. window handles
with 24 mm spindle length / 10 mm lugs (ill. 9)

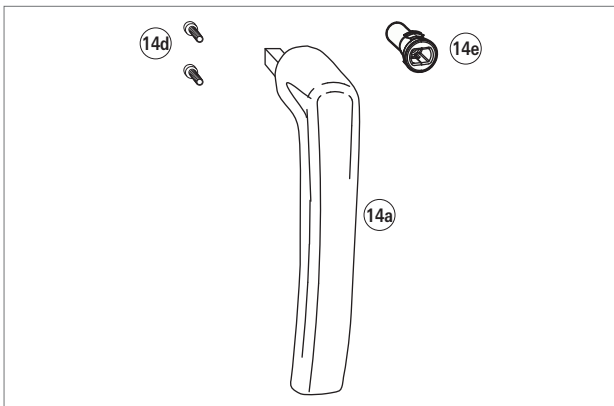
Description	PQ	Material no.
10 SEC flush-encased gearbox AluVision	10	607736

Flush-enc. gearbox w/o mishandling device f. window handles
with 24 mm spindle length / 10 mm lugs (ill. 9a)

Description	PQ	Material no.
10a SEC flush-enc. gearbox w/o mishandling device	10	457210

Note

RotoLine window handles for flush-encased gearboxes can be found in the **Handle catalogue BK 5 EN**.
The spindle of 30 resp. 35 mm must be shortened to a length of 24 mm.

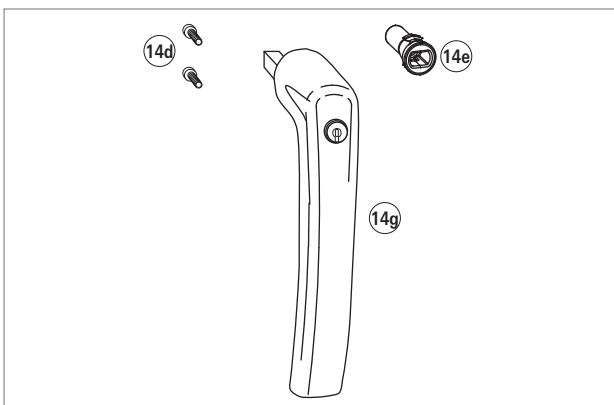


RotoLine handle, escutcheonless¹⁾

Pos.	Pcs	Description	Colour	PQ	Material no.
14a		Silver	R01.1	10	623294
		Silver	R01.5	10	377908
		Dark bronze	R05.4	10	377912
		Jet-black	R06.2	10	377909
		Traffic-white	R07.2	10	377911
		Stainless-steel design	SSD	10	619288
		Special colour	SP COL	10	377913

Packaging contains:

14d	2	Screws for escutcheonless handle
14e	1	Transport protection

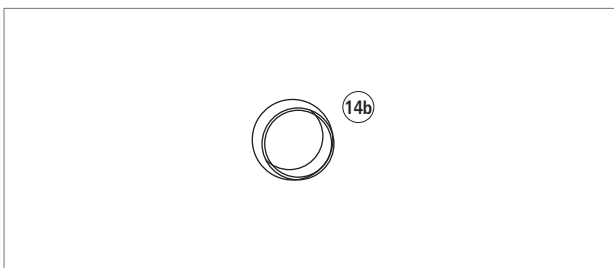


RotoLine handle, escutcheonless, lockable¹⁾

Pos.	Pcs	Description	Colour	PQ	Material no.
14g		Silver	R01.1	10	623475
		Silver	R01.5	10	377914
		Dark bronze	R05.4	10	377918
		Jet-black	R06.2	10	377915
		Traffic-white	R07.2	10	377917
		Stainless-steel design	SSD	10	619289
		Special colour	SP COL	10	377919

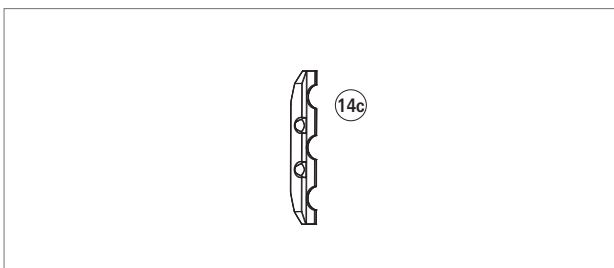
Packaging contains:

14d	2	Screws for escutcheonless handle
14e	1	Transport protection



Ring for escutcheonless handle

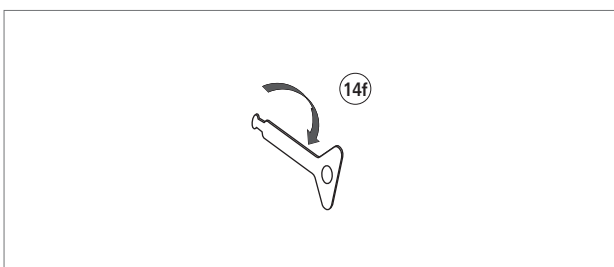
Pos.	Pcs	Description	Colour	PQ	Material no.
14b		Silver	R01.1	10	623476
		Silver	R01.5	10	377979
		Dark bronze	R05.4	10	377983
		Jet-black	R06.2	10	377980
		Traffic-white	R07.2	10	377982
		Stainless-steel design	SSD	10	619289
		Special colour	SP COL	10	377984



Mounting plate for escutcheonless handle

Pos.	Pcs	Description	Colour	PQ	Material no.
14c		Mounting plate for Escutcheonless handle	–	10	378134

not dep. **Mounting plate for overlap width > 22 mm** – 10 **374726**



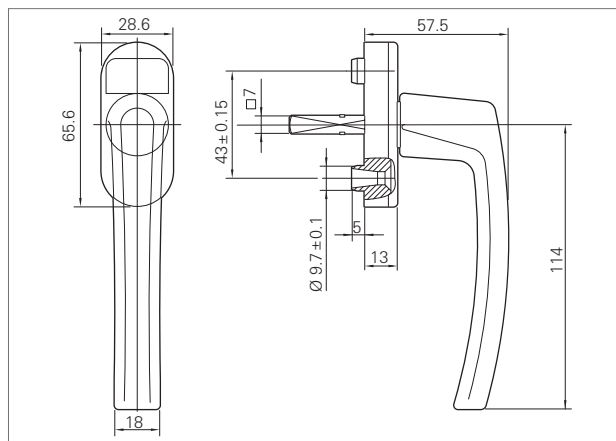
Pull key for escutcheonless handle

Pos.	Pcs	Description	Colour	PQ	Material no.
14f		Pull key for escutcheonless handle	–	10	377995

for removing the transport protection

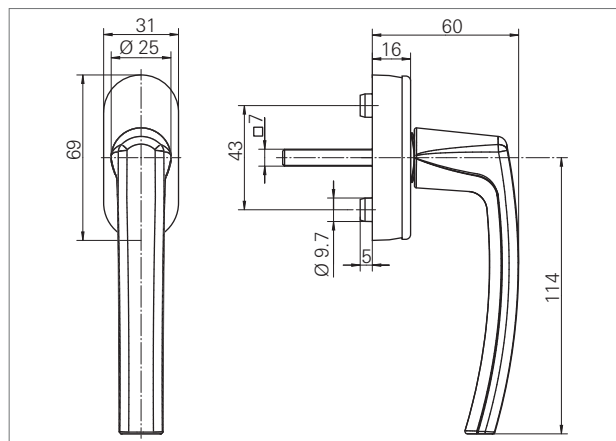
¹⁾ The escutcheonless handle can only be used with profile systems with an overlap height (OH) ≥ 10 mm.

RotoLine window handles



RotoLine window handle, 30 mm spindle length, with Ø 10 mm lugs – without Roto logo

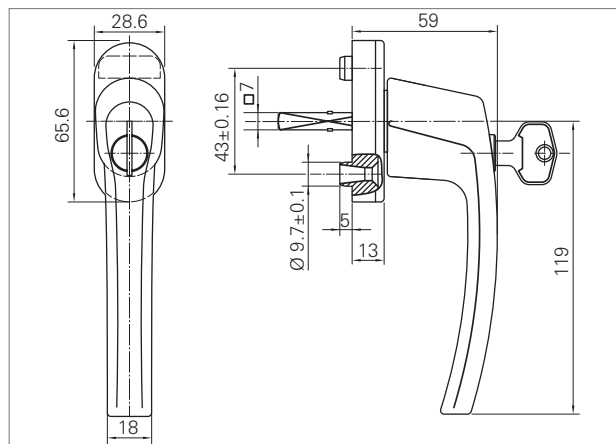
Handle and escutcheon cover colour	Roto colour no.	Base plate colour	Material group	PQ	Material no.
Silver, anodised	R01.1	Silver-grey	17	20	228079
Nickel silver, anodised	R01.2	Beige	17	20	228081
Titanium-matt, anodised	R01.3	Grey	17	20	227982
Brass matt, anodised	R03.1	Brass-coloured	17	20	228083
RAL 8019 Grey-brown	R04.1	Brown	17	20	227986
Medium bronze, anodised	R05.3	Medium bronze	17	20	228086
Bronze, anodised	R05.5	Bronze	17	20	228088
RAL 9016 Traffic-white, powder-coated	R07.2	White	17	20	227990



RotoLine window handle Secustik®, 32 mm spindle length, with Ø 10 mm lugs – without Roto logo

Handle and escutcheon cover colour	Roto colour no.	Base plate colour	Material group	PQ	Material no.
Silver, anodised	R01.1	Silver-grey	17	20	351756
Nickel silver, anodised	R01.2	Beige	17	20	351757
Titanium-matt, anodised	R01.3	Grey	17	20	351758
RAL 8019 Grey-brown	R04.1	Brown	17	20	351759
Medium bronze, anodised	R05.3	Medium bronze	17	20	351760
Bronze, anodised	R05.5	Bronze	17	20	351761
RAL 9016 Traffic-white, powder-coated	R07.2	White	17	20	351763

RotoLine window handles

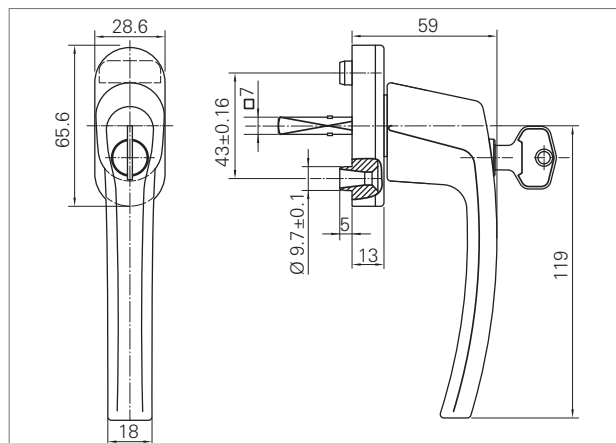


RotoLine window handle, 40 Nm, lockable, keyed-alike locking, turn cylinder

30 mm spindle length, with Ø10 mm lugs, including 1 nickel-plated turn-key – **without Roto logo**

Handle and escutcheon cover colour	Roto colour no.	Base plate colour	Material group	PQ	Material no.
Silver, anodised	R01.1	Silver-grey	17	20	228125
Nickel silver, anodised	R01.2	Beige	17	20	228126
Titanium-matt, anodised	R01.3	Grey	17	20	228035
Brass matt, anodised	R03.1	Brass-coloured	17	20	228127
RAL 8019 Grey-brown	R04.1	Brown	17	20	228037
Medium bronze, anodised	R05.3	Medium bronze	17	20	228128
Bronze, anodised	R05.5	Bronze	17	20	228129
RAL 9016 Traffic-white, powder-coated	R07.2	White	17	20	228039

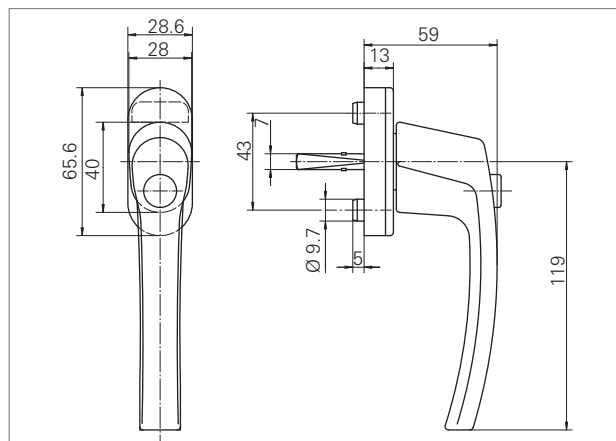
Espagnolettes, connector sets & window handles



RotoLine window handle 100 Nm, lockable in accordance with DIN V ENV 1627–1630 and DIN 18104-1, keyed-alike locking, push cylinder

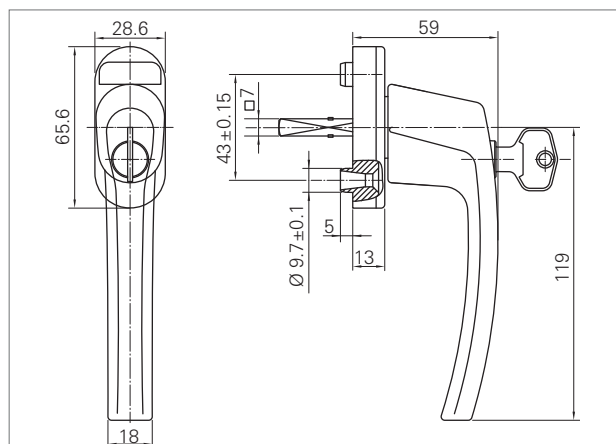
30 mm spindle length, with Ø 10 mm lugs, including 1 nickel-plated turn-key – **without Roto logo**

Handle and escutcheon cover colour	Roto colour no.	Base plate colour	Material group	PQ	Material no.
Silver, anodised	R01.1	Silver-grey	17	20	333964
Nickel silver, anodised	R01.2	Beige	17	20	333965
Titanium-matt, anodised	R01.3	Grey	17	20	333966
Brass matt, anodised	R03.1	Brass-coloured	17	20	333967
RAL 8019 Grey-brown	R04.1	Brown	17	20	333968
Medium bronze, anodised	R05.3	Medium bronze	17	20	333969
Bronze, anodised	R05.5	Bronze	17	20	333970
RAL 9016 Traffic-white, powder-coated	R07.2	White	17	20	333972



RotoLine window handle push-to-open, 30mm spindle length, with Ø 10 mm lugs – **without Roto logo**

Handle and escutcheon cover colour	Roto colour no.	Base plate colour	Material group	PQ	Material no.
Silver, anodised	R01.1	Silver-grey	17	20	228135
Nickel silver, anodised	R01.2	Beige	17	20	228136
Titanium-matt, anodised	R01.3	Grey	17	20	228045
Brass matt, anodised	R03.1	Brass-coloured	17	20	228137
RAL 8019 Grey-brown	R04.1	Brown	17	20	228047
Medium bronze, anodised	R05.3	Medium bronze	17	20	228138
Bronze, anodised	R05.5	Bronze	17	20	228139
RAL 9016 Traffic-white, powder-coated	R07.2	White	17	20	228049



RotoLine Tilt-First window handle, lockable, keyed-alike locking, **turn-cylinder**

Spindle length 32 mm, including 1 turn-key, nickel-plated, with Ø 10 mm lugs – **with Roto logo**

Handle and escutcheon cover colour	Roto colour no.	Base plate colour	Material group	PQ	Material no.
Silver, anodised	R01.1	Silver-grey	17	20	335309
Nickel silver, anodised	R01.2	Beige	17	20	335310
Titanium-matt, anodised	R01.3	Grey	17	20	335314
RAL 9016 Traffic-white, powder-coated	R07.2	White	17	20	335313

Colour schemes of the RotoSwing handles

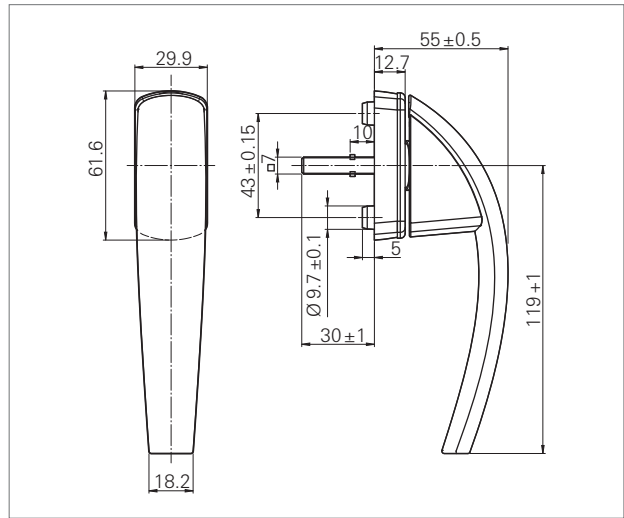
The versions are available in the colour tones R07.2 (traffic-white, powder-coated), R01.1 (silver, anodised) and R01.3 (titanium matt, anodised).

The unicoloured versions of RotoSwing are defined as standard. In order to differentiate precisely, the handle is classified into the elements: lever handle, design element, escutcheon and escutcheon cover.

The lever handle determines the colouring. The elements: design element, escutcheon cover and escutcheon are furnished with a colour-coordinated colour tone:

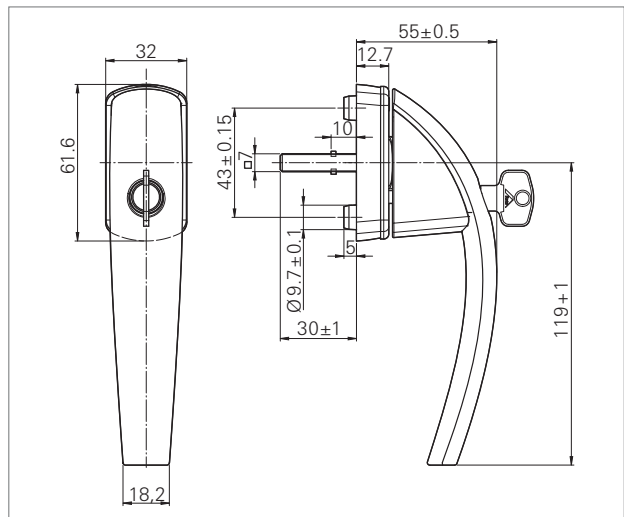
Colour description

Description	Lever handle	Design element	Escutcheon cover	Escutcheon
Silver, uni	R01.1	7503	7503	7503
Titanium-matt, uni	R01.3	7501	7501	7501
Traffic-white, uni	R07.2	9016	9016	9016



RotoSwing window handle standard, 32mm spindle length, with Ø 10mm lugs – with Roto logo

Handle and escutcheon cover colour	Roto colour no.	Base plate colour	Material group	PQ	Material no.
Silver, anodised	R01.1	Silver-grey	17	20	602348
Titanium-matt, anodised	R01.3	Grey	17	20	602349
RAL 9016 Traffic-white, powder-coated	R07.2	White	17	20	602350



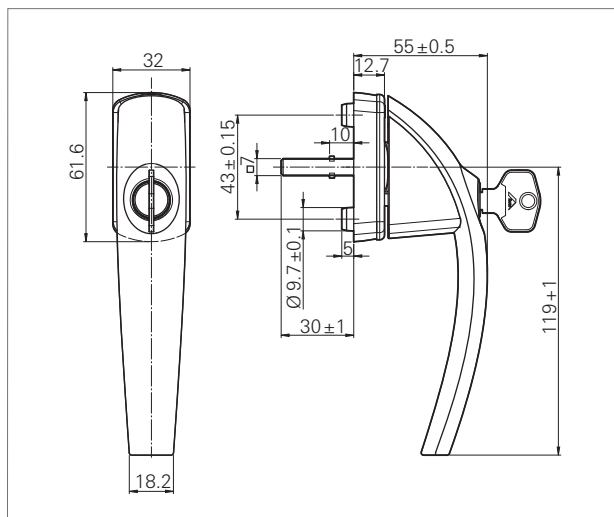
RotoSwing window handle 40 Nm, lockable, basic security (not tested), turn cylinder

32mm spindle length, with Ø 10mm lugs, including 1 nickel-plated turn-key – with Roto logo

Handle and escutcheon cover colour	Roto colour no.	Base plate colour	Material group	PQ	Material no.
Silver, anodised	R01.1	Silver-grey	17	20	602353
Titanium-matt, anodised	R01.3	Grey	17	20	602354
RAL 9016 Traffic-white, powder-coated	R07.2	White	17	20	602355

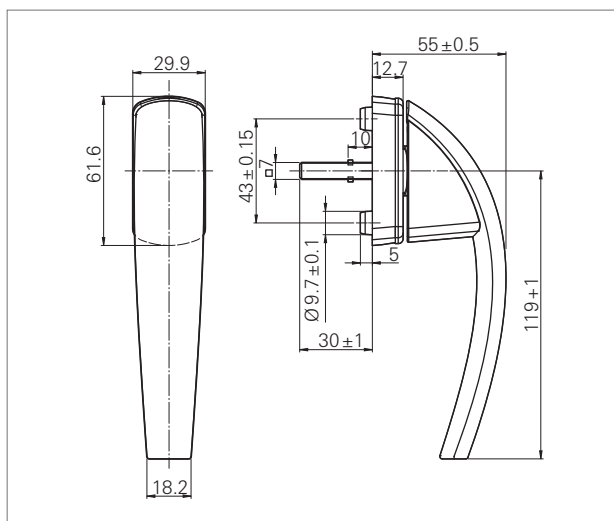
Espagnolettes, connector sets & window handles

Espagnolettes, connector sets and window handles
RotoSwing window handles with logo



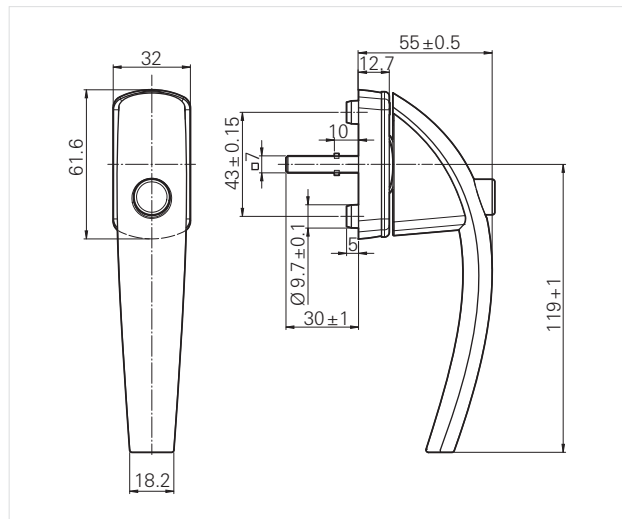
RotoSwing window handle 100 Nm, lockable, burglar-inhibiting retrofit product conforming to DIN 18104-1, **keyed-alike locking, push cylinder**
 32 mm spindle length, with Ø 10 mm lugs, including 1 nickel-plated turn-key – **with Roto logo**

Handle and escutcheon cover colour	Roto colour no.	Base plate colour	Material group	PQ	Material no.
Silver, anodised	R01.1	Silver-grey	17	20	602356
Titanium-matt, anodised	R01.3	Grey	17	20	602357
RAL 9016 Traffic-white, powder-coated	R07.2	White	17	20	602358



RotoSwing window handle Secustik®, security against manipulation from the outside, 32 mm spindle length, with Ø10 mm lugs – **with Roto logo**

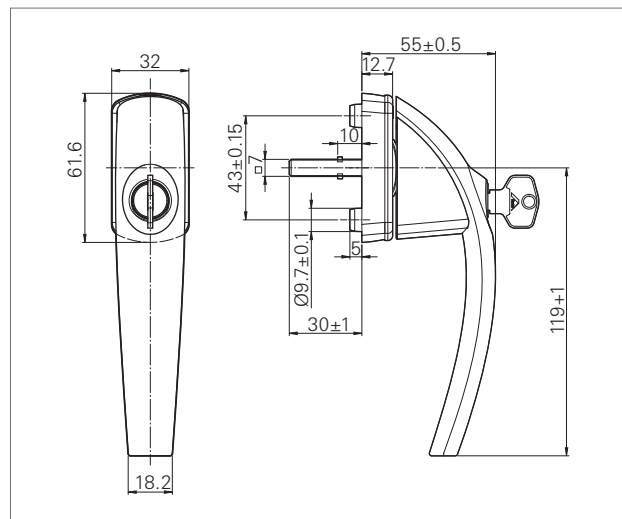
Handle and escutcheon cover colour	Roto colour no.	Base plate colour	Material group	PQ	Material no.
Silver, anodised	R01.1	Silver-grey	17	20	602362
Titanium-matt, anodised	R01.3	Grey	17	20	602363
RAL 9016 Traffic-white, powder-coated	R07.2	White	17	20	602364



RotoSwing window handle push-to-open, security against displacement of the hardware from the outside

32 mm spindle length, with Ø 10 mm lugs – **with Roto logo**

Handle and escutcheon cover colour	Roto colour no.	Base plate colour	Material group	PQ	Material no.
Silver, anodised	R01.1	Silver-grey	17	20	602359
Titanium-matt, anodised	R01.3	Grey	17	20	602360
RAL 9016 Traffic-white, powder-coated	R07.2	White	17	20	602361



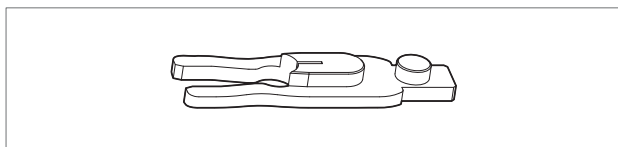
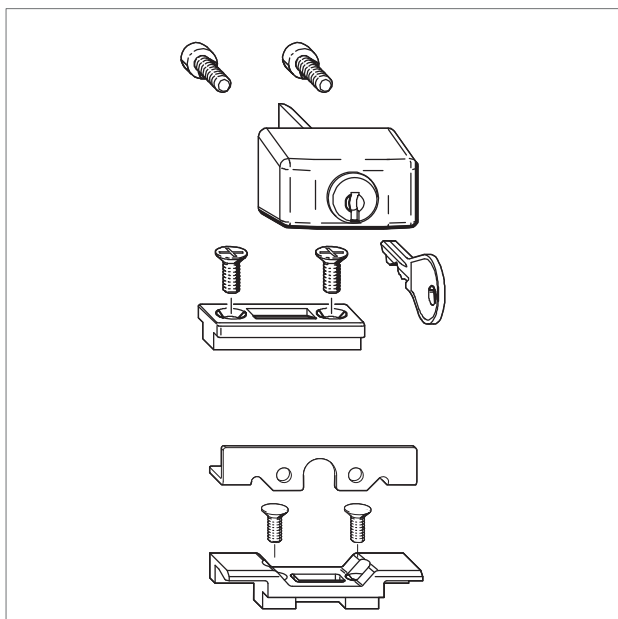
RotoSwing window handle Tilt-First, lockable with turn cylinder, Tilt before Turn in conjunction with TF sash stay and horizontal Tilt-First striker

32 mm spindle length, with Ø 10 mm lugs – **with Roto logo**

Handle and escutcheon cover colour	Roto colour no.	Base plate colour	Material group	PQ	Material no.
Silver, anodised	R01.1	Silver-grey	17	20	602365
Titanium-matt, anodised	R01.3	Grey	17	20	602366
RAL 9016 Traffic-white, powder-coated	R07.2	White	17	20	602367



Child safety lock, bullet catch, tilt-depth regulator	216
Turn-restrictor.....	217
Night-vent, CL corner drive, special corner drive	218
Striker 8 mm, transport protection, glazing accessories	219
Jigs.....	220
Cropper.....	221
Connecting-rod VTC (ECC)	221



Child safety lock

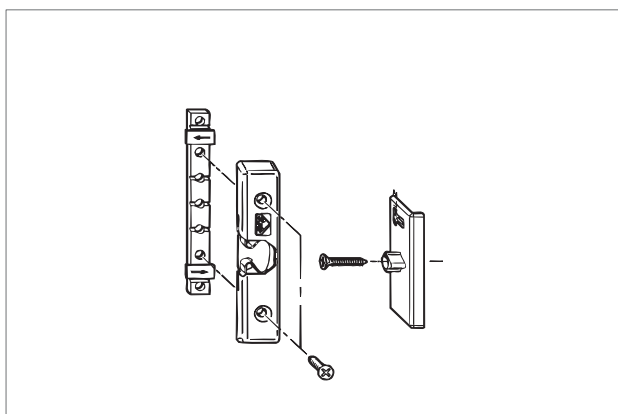
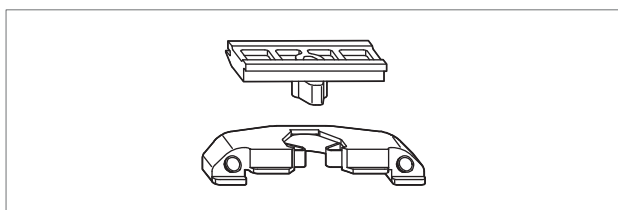
Pcs	Description	Colour	PQ	Material no.
1	Child safety lock with cylinder locking	R01.1	20	212774
		R01.5		377996
		R05.4		212775
		R07.1		212776
	(incl. 1 key, 2 flat-headed screws)	R07.2		208645
		SP COL		212777
	Striker plate (incl. 2 countersunk screws M5 x 16)			212778
	Key			208248

Additional parts bag; anti-jemmy version

Pcs	Description	PQ	Material no.
1	Striker plate, locking plate,	10	213076
	2 countersunk screws M5 x 16		
	Packer 1 mm	10	208230
	for 22 mm chamber dimension (not dep.)		

Tilt-depth regulator Roto AluVision Designo on sash heights ≤ 800 mm

Pcs	Description	PQ	Material no.
1	Night-vent set V.01	100	502834



NOTE!
The bullet catch holds the active sash (window/door) in the closed position, without locking it.

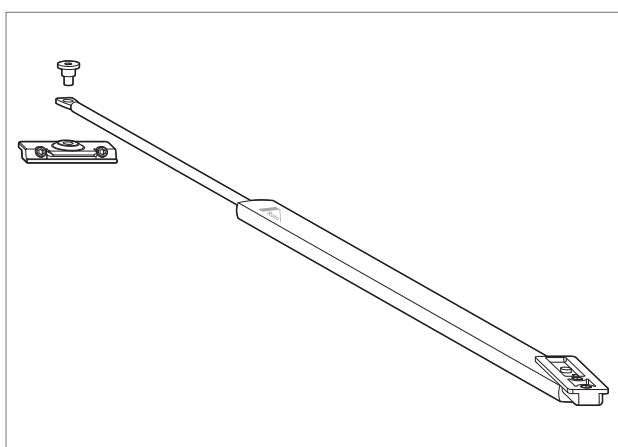
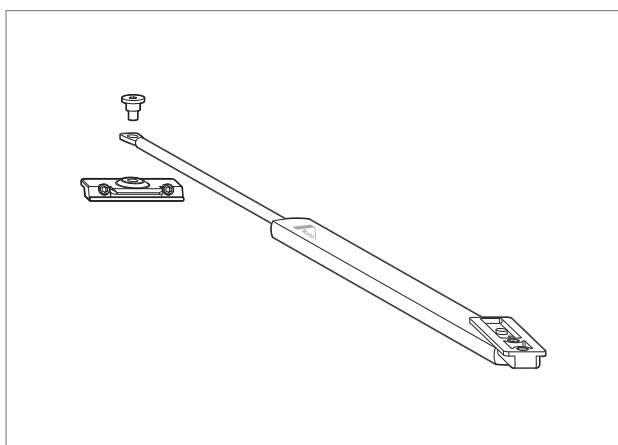
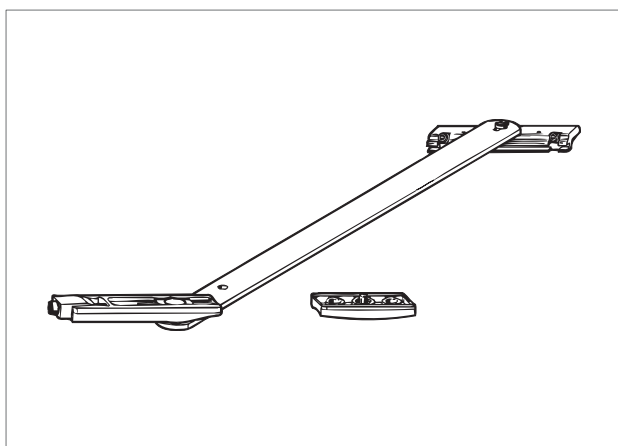
Bullet catch

Pcs	Description	PQ	Material no.
1	Bullet catch	10	334667

Bullet catch

with housing, cam, packer and 3 countersunk tapping-screws 3.9 x 25

Pcs	Description	PQ	Material no.
1	Bullet catch set	20	208249



NOTE!

The turn-restrictor is recommended,

if the sash is pressed adversatively or uncontrolled (e.g. by wind) up against window reveals or aluminium support profiles in such a way that the hardware and/or profiles can be damaged or destroyed. Adjust the brake after installation.

Turn-restrictor set with brake and stop

Pcs	Description	PQ	Material no.
AluVision T 300 and T 540			
1	Turn-restrictor set, clampable V.01	10	212151
1	Turn-restrictor set, clampable V.02	10	212152
1	Turn-restrictor set, screwable	10	212150

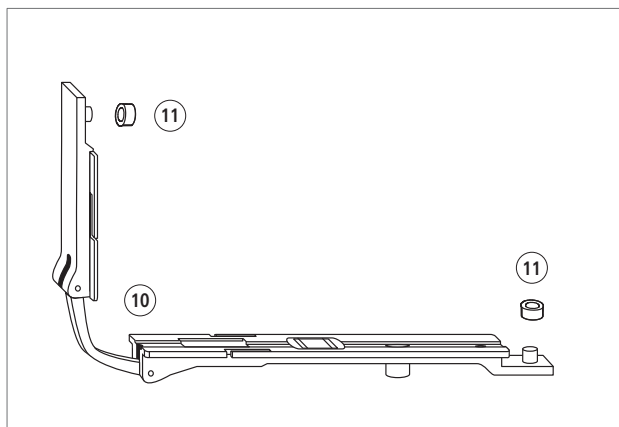
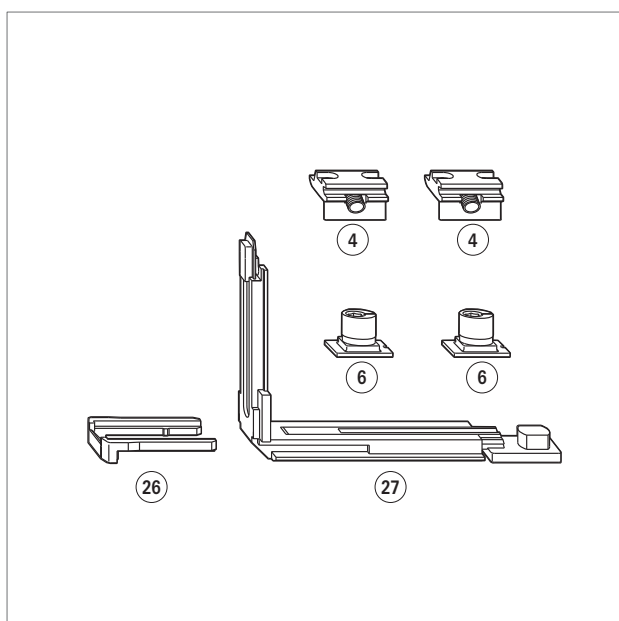
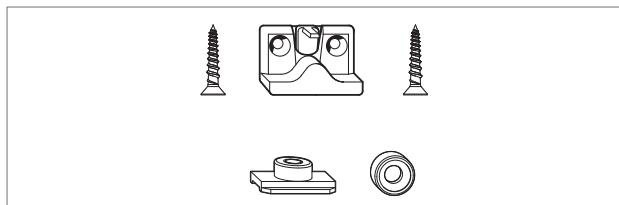
Turn-restrictor set, damped, arrestable, size 1

Pcs	Description	PQ	Material no.
AluVision Designo			
1	Turn-restrictor set V.01	10	627243
1	Turn-restrictor set V.02	10	627244
AluVision T 540			
1	Turn-restrictor set V.01	10	627685
1	Turn-restrictor set V.02	10	627686

Turn-restrictor set, damped, arrestable, size 2

Pcs	Description	PQ	Material no.
AluVision Designo			
1	Turn-restrictor set V.01	10	627245
1	Turn-restrictor set V.02	10	627246
AluVision T 540			
1	Turn-restrictor set V.01	10	627687
1	Turn-restrictor set V.02	10	627688

Additional components and accessories



NOTE!
Night-vent

By turning the window handle 45° downwards (on Tilt&Turn from the tilting position) or 45° upwards (on Turn-Only from the turning position), the sash is retracted 7 mm away from the frame.

Night-vent		
Pcs	Description	PQ Material no.
1	Night-vent set V.01	10 334666

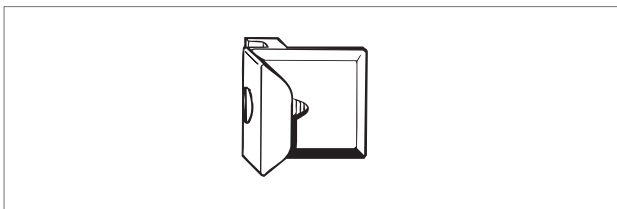
Corner drive CL set for AluVision T540-10/AluVision Designo		
Pcs	Description	PQ Material no.
1	Corner drive CL set V.01	20 334668
1	Corner drive CL set V.02	20 334669
consists of:		

Pos.	Pcs	Description	PQ Material no.
27	1	Corner drive CL	100 331013
26	1	Alignment fork	100 221772
6	2	Locking cam, insertable	100 334671
4	2	Striker V.01	100 212633
		Striker V.02	100 212634

Corner drive CL for AluVision T 300			
Pos.	Pcs	Description	PQ Material no.
27	1	Corner drive CL	100 331013
26	1	Alignment fork	100 221772
6	2	Locking cam, insertable	100 334671
4	2	Striker V.01	100 490182
		Striker V.01	100 490183

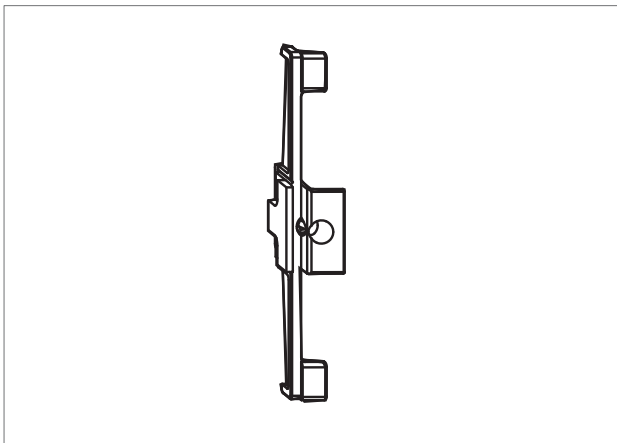
Special corner drive (for Tilt-Only sashes with central locking, not dep.)		
Pcs	Description	PQ Material no.
1	Special corner drive	50 208359
1	Tension spring for corner drive	100 208237

Corner drive for Turn-Only windows (applicable for Turn-Only and Top-Hung windows)		
Pcs	Description	PQ Material no.
1	Flex corner drive V.01	50 213833
1	Reducer-bush	100 334352



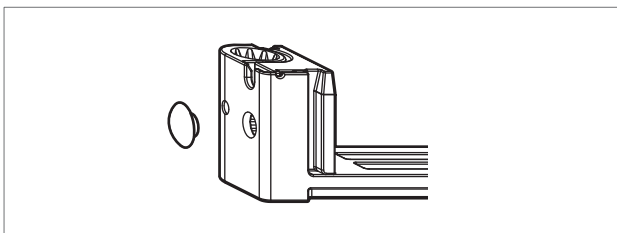
Striker, 8 mm installation height
(to be used on disadvantageous sash turning curves)

Pcs	Description	PQ	Material no.
1	Striker, 8 mm, V.01	100	212760
1	Striker, 8 mm, V.02	100	351123



Striker A, 8 mm installation height
(to be used on disadvantageous sash turning curves)

Pcs	Description	PQ	Material no.
1	Striker A, 8 mm, V.01	100	486501
1	Striker A, 8 mm, V.02	100	351124



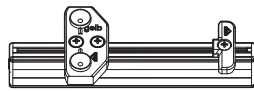
Transport protection for corner hinge AluVision Designo

Description	PQ	Material no.
Transport protection for corner hinge	100	624333



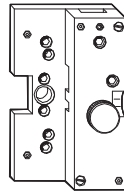
Glazing accessories

Further information on glazing procedures and corresponding products can be found in the chapter "Glazing accessories" of this catalogue, in the Glazing guide "FLY_11_EN", and in the catalogue "CTL_15_EN" from Roto Gluske-BKV.



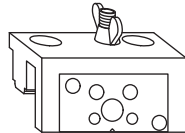
Jig for pivot rest and stay bearing

Description	Material no.
Jig for groove-base thickness > 2 mm	628534



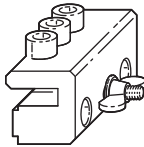
Jig for espagnolette

Description	Material no.
Jig for espagnolette, connecting-rod & child safety lock	212544



Jig for flush-encased gearbox

Description	Material no.
Jig for flush-encased gearbox and escutcheonless handle	365361



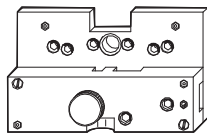
Jig for flush-encased gearbox

Description	Material no.
Jig for flush-encased gearbox and handle	212155



Jig for connecting-rod

Description	Material no.
Jig for connecting-rod	333472



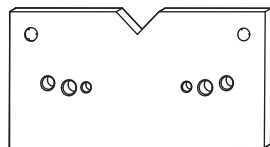
Jig for connecting-rod

Description	Material no.
Jig for connecting-rod	212753



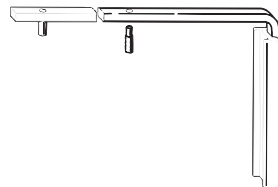
Positioning jig 695 for CL striker

Description	Material no.
Jig for flush-encased gearbox and handle	212595



Jig for geared-handle

Description	Material no.
Jig for geared-handle 130 kg	333473



Jig for sash stay

Description	Material no.
Jig for sash stay, additional scissor stay, striker AluVision T 540, AluVision Designo	333471

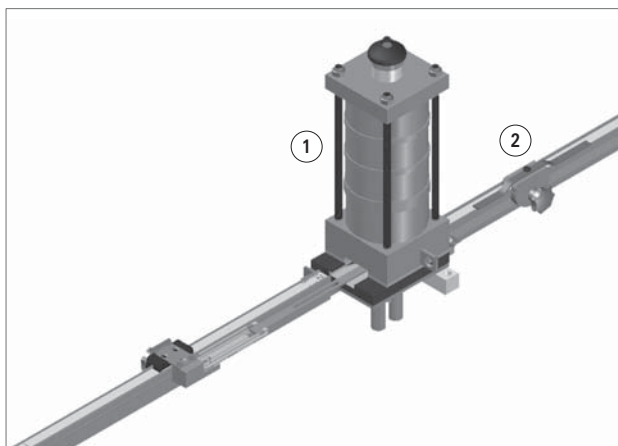


Jig for turn-restrictor

Description	Material no.
Jig for turn-restrictor	212156

Cropper

Connecting-rod VTC (ECC)



Cropper

Pneumatic cropper for cropping and hole-stamping the connecting-rod.

Pos.	Description	PQ	Material no.
①	'Comfort' cropper PS4 G Ø 10 mm	1	350309
②	Standard linear ruler	1	350314



Connecting-rod

(specific connecting-rod profile)

Description	Length	Material no.
Connecting-rod AluVision T 540-10, AluVision Designo	6 m	334665



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Roto Patio

Roto Patio Lift

Standard hardware for large Lift&Slide doors up to 300 kg

Lifts, slides, locks – opens up horizons

Large patio doors continue to be popular. They bring light into living, business and office premises, provide a clear view and direct access outside – and so create a real feel-good ambience.

Roto supplies the right high-quality hardware technology for this: the new Roto Patio Lift hardware system for aluminium profiles. The comfortable, long-lasting and economical solution for large Lift&Slide doors with heavy sash weights. Also perfect for triple-glazed sashes that provide thermal insulation and that meet the current energy-saving and thermal insulation regulations.



Strong, functional, versatile

Roto Patio Lift meets the very special demands that are placed on a Lift&Slide hardware system for aluminium profiles.

These include the lift, slide, lower and lock functions. Optional locking components also allow night ventilation.

The hardware is suitable for sash weights of up to 300 kg and for sash heights and widths of up to 3000 mm.

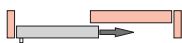
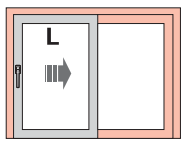


Diagram A
DIN left

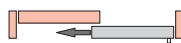
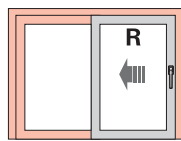


Diagram A
DIN right

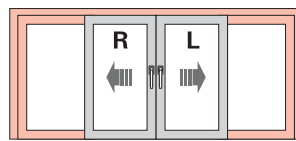


Diagram C

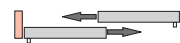
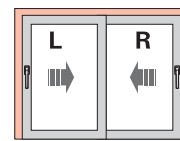


Diagram D

A free choice of sash partitioning

One or two movable sashes, stop on the frame, on the fixed glazing or on the second movable sash – everything's possible with Roto Patio Lift.

**Easy to use,
satisfyingly comfortable**

Easy to use, satisfyingly comfortable. Functional components that are precisely tailored to each other make your sliding door easy to operate. And so that you can enjoy these advantages at your leisure, the high-quality bogie technology with rollers on ball bearings ensures smooth and extremely quiet running.



Made for a long life

Roto Patio Lift is fully configured for many years of use. All components have been fabricated with care, and are made from proven and extremely robust materials.

For example, the rollers are made of resistant, high-performance PVC, while the housing of the bogies and espagnolettes is made of high-quality stainless steel or zinc diecast.



Configured for the customer

The matching handles in the attractive RotoLine Design are available in white, silver and black, as well as the "unpainted" version. In addition, Roto coats the handles to individual design requirements – in more than 200 special colours.



The Patio Lift espagnolette for balcony doors is already prepared as standard for accommodating a profile cylinder, and so fulfils various security requirements – with the minimum of logistics effort.

Hardware for success

System suppliers and window manufacturers profit from a vast range of Roto services, such as customer-specific documentation and the possibility of having their own company logo on the espagnolette. Simple, quick installation and attractive purchasing conditions are

powerful arguments in favour of Roto Patio Lift – as well as being decisive success factors for every manufacturer.



Patio S/Z: the window space-saving solution

Energy-saving multiple glazings and room-high elements are popular but with their high weight, they place special requirements on the hardware.

Roto has the right solution, especially for aluminium profiles. With Patio 160 S (self-actuating) or 200 Z (positive controlled), even heavy sliding elements can be tilted comfortably and pushed to the side – without exerting any force.

New bogie concept with maximum roll diameter

The high-quality bogies, easy-to-clean guide striker and dirt-free guide block provide for a long term perfect function and enable convenient operation of your Tilt&Slide system. New: The particularly smooth running and quiet rollers with a large diameter of 28 mm also facilitate the operation and are more durable.

New Patio Z heavy-duty bogie

The robust, quiet running heavy-duty bogies are used on sash weights from 160 kg.

Advantages for the fabricator:

- One-piece housing for particularly high sash weights up to 200 kg
- Preassembled component groups enable rapid installation

The advantages of the new Patio S and Z at a glance

- Large window areas and high sash weights up to 200 kg can be realised. This meets the trend towards high-ceiling rooms even in private residential construction
- ‘Floor-to-ceiling’ window solutions up to 2.70 m and slimline profiles create spacious and bright rooms
- Can be used with triple glazing in heavy thermal insulation windows in order to fulfil the heat insulation regulations and the laws of conservation of energy

- Convenient and quiet operation due to new bullet catches made of special PVC, which arrest the sash particularly easily in the Tilt position
- Patio Z’s integrated mishandling device as standard prevents the sash from being jemmied out

Advantages for the fabricator

- Simple installation: Height adjustment facility with safety clip enables the sash adjustment with just one tool
- Easy and flexible retrofitting for higher sash weights
- Lean logistics, for example Patio S with an easy to install reinforcement kit
- Simplified material planning, reduced stock keeping and a considerable potential for cost savings
- Reduced sagging of the sash due to a double bogie for high sash weights
- Security device of the bogie simplifies mounting the sash

Operational order for Patio Z handles

3. Disengage sash and slide
(remains disengaged upon sliding/closing)



Patio S and Z with high retracting distance enables the use of very deep sash profiles, as used on thermal insulation windows with triple glazing



New Patio Z heavy-duty bogie with integrated anti-jemmy device





Convenient, efficient and with visible space advantages: Roto Patio 160 S

**Roto Patio 6080
for Fold&Slide doors**

The system opens up rooms in a particularly elegant and efficient way. As all door elements are folded in a space-saving manner, and slid over to the side. Every room can be opened up to its full width; ideal for generous access to terraces or conservatories as well as conference, guest and business rooms.

An additional plus for enhanced comfort: thanks to the thermally broken threshold, Roto Patio 6080 ensures there are no chances of slipping or stumbling. As a result, indoor or outdoor ac-

cess is no longer a tripping hazard – an advantage, particularly in buildings used by elderly or disabled people.

Of course, optimal room ventilation has also been thought of: an integral Tilt&Turn sash that can be used independently of the folding sashes makes this possible. In daily use this sash serves as e.g. the active door leaf in the bistro around the corner – with all advantages.

Design diversity:

Powder-coated hinges in silver, white and medium bronze



**Patio 6080 with integrated
Tilt&Turn sash**

- Sash width: 720 mm – 3000 mm
- Sash height: 1000 mm – 3000 mm
- Sash weight: max. 300 kg

- Functions: Lifting, sliding, lowering, locking
- Diagram A, C, G, K
- Convenient operation due to functional components that are precisely tailored to each other

- Maximum smoothness and excellent running properties due to high-quality bogie technology:
 - Ball-bearing rollers
 - Low-noise bogies with rollers made of high-quality PVC
- Durability due to the use of extremely robust materials
 - Rollers made of top-quality PVC
 - Bogie housings made of stainless steel
- Espagnolettes designed for profile cylinders as standard
- Handles in attractive RotoLine design available in the colours white, silver and raw (for individual coating).
- Optional locking components allow night ventilation
- Accessories: Info clip for individual branding

Roto Patio Lift sliding system up to 300 kg

Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 720–3000 mm
 Sash height **SH** 1000–3000 mm
 Frame external width **FEW** max. 6000 mm
 Sash weight **S.kg** max. 300 kg

SH : SW = max. 2.5 : 1

 = Impermissible application range

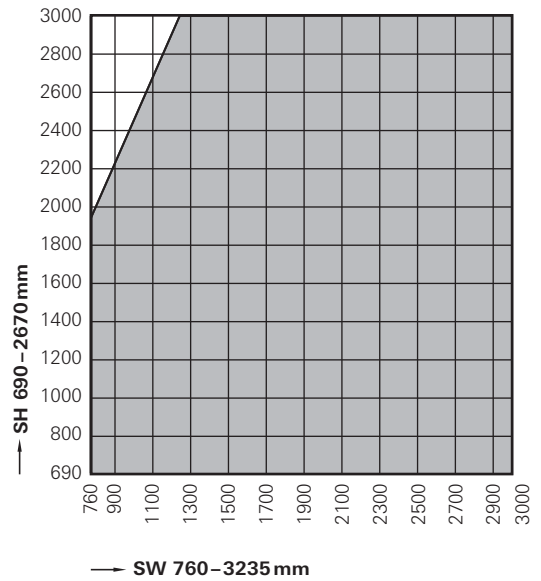


Diagram A

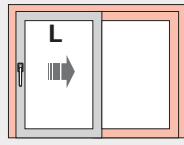


Diagram A, DIN left

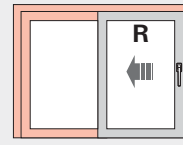


Diagram A, DIN right

Diagram C

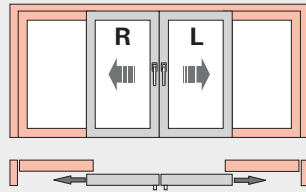


Diagram C

Diagram D

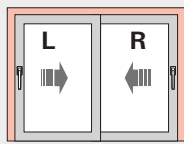
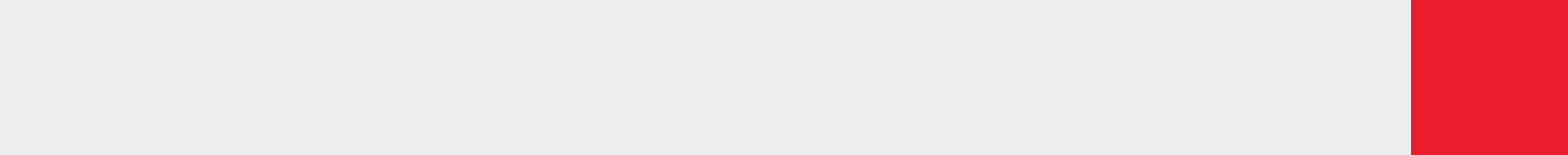


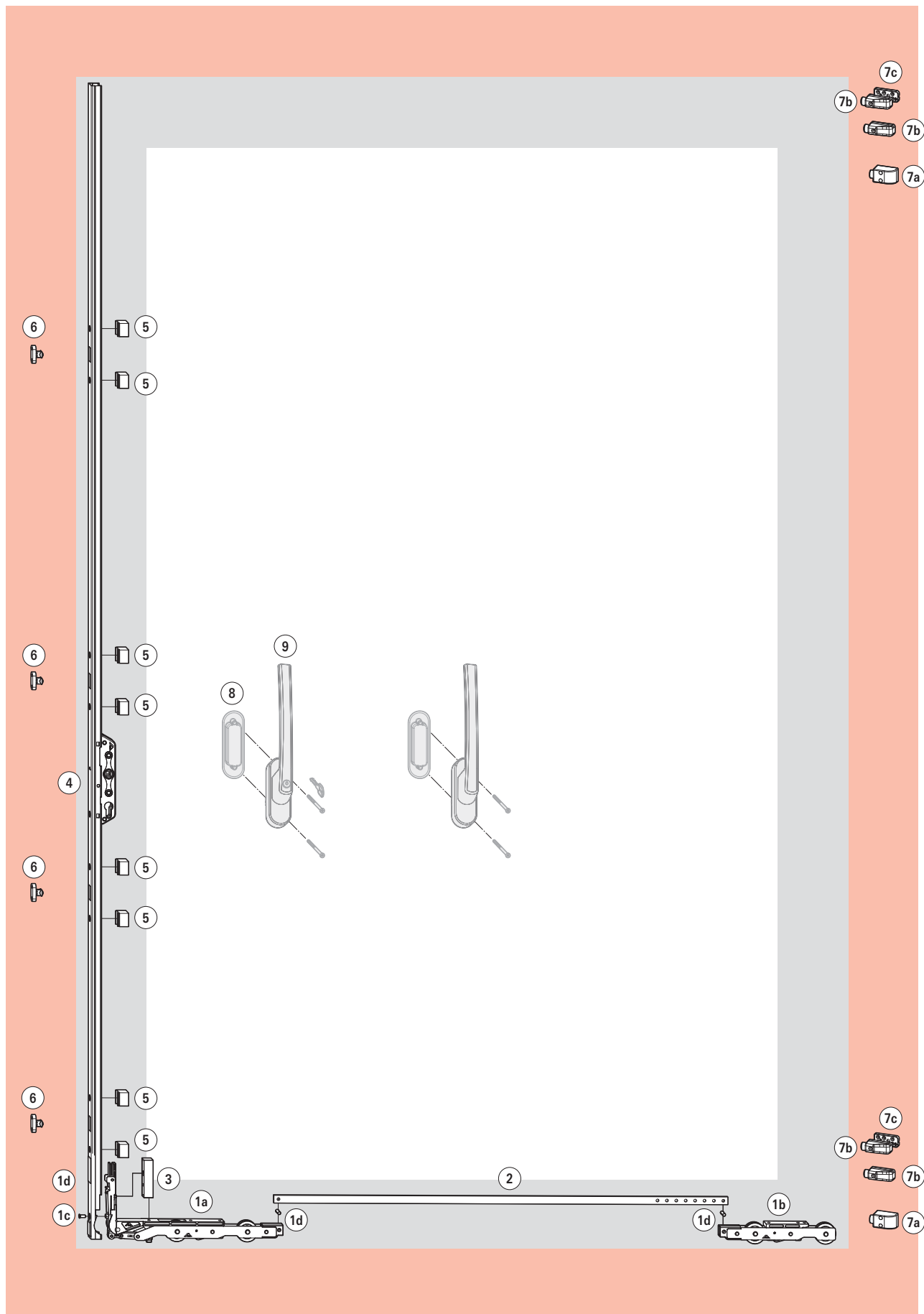
Diagram D



Roto Patio



Roto Patio
Roto Patio Lift
Diagram A – DIN left



Application range

Sash width **SW** 720–3000 mm

Sash height **SH** 1000–3000 mm

Sash weight **S.kg** max. 300 kg

1 Patio Lift basic carton

Content:

1a	1 corner bogie
1b	1 bogie
1c	Screw M5 x 13
1d	2 connecting pins
1e	Self-tapping screw 4.8 x 16

up to 300 kg
Patio Lift bogie 300 **634700**

2 Patio Lift connecting rod

Patio Lift connecting rod 895 mm SW 720–1600	634852
Patio Lift connecting rod 1200 mm SW 1601–1900	595649
Patio Lift connecting rod 1500 mm SW 1901–2200	634853
Patio Lift connecting rod 1800 mm SW 2201–2500	606712
Patio Lift connecting rod 2300 mm SW 2501–3000	634854

3 Patio Lift bogie packer

Patio Lift bogie packer 16 mm	595653
Patio Lift bogie packer 19 mm	600510
Patio Lift bogie packer 30 mm	606767

4 Patio Lift espagnolette 300

up to 300 kg

Patio Lift espagnolette 300, SH 1000–1800	635127
Patio Lift espagnolette 300 PC, SH 1801–2200	634849
Patio Lift espagnolette 300 PC, SH 2201–2600	634850
Patio Lift espagnolette 300 PC, SH 2601–3000	634851

5 Patio Lift espagnolette packer

Patio Lift espagnolette packer 16 mm	595654
Patio Lift espagnolette packer 19 mm	600513
Patio Lift espagnolette packer 30 mm	606766

6 Patio Lift locking pin

Patio Lift locking pin 15 mm	595650
Patio Lift locking pin 16 mm	635126
Patio Lift locking pin 17 mm	635128
Patio Lift locking pin 22 mm	600508
Patio Lift locking pin with night ventilation 15 mm	595651
Patio Lift locking pin 9 / 11 mm	595652

7 Patio Lift end stop

7c) Patio Lift end stop, 27	634866
7b) Patio Lift end stop bag, 29.5	349600
7c) Patio Lift end stop packer, 9.5	477263

8 Patio Lift recessed grip

Patio Lift recessed grip, angular, 7 mm

R 01.1	Eloxal EV1	635151
R 01.5	Silver	635152
R 06.2M	Black, RAL 9005 M	635150
R 07.2	White, RAL 9016	635149
–	Raw	635153

Patio Lift recessed grip, angular, 11 mm

R 01.1	Eloxal EV1	635156
R 01.5	Silver	635157
R 06.2M	Black, RAL 9005 M	635155
R 07.2	White, RAL 9016	635154
–	Raw	635158

Patio Lift recessed grip, oval, 7 mm

R 01.1	Eloxal EV1	635161
R 01.5	Silver	635162
R 06.2M	Black, RAL 9005 M	635160
R 07.2	White, RAL 9016	635159
–	Raw	635163

9 Patio Lift RotoLine handle

Patio Lift RotoLine handle, interior, for PC, WL, 150 mm

R 01.1	Eloxal EV1	635131
R 01.5	Silver	635132
R 06.2M	Black, RAL 9005 M	635130
R 07.2	White, RAL 9016	635129
–	Raw	635133

Patio Lift RotoLine handle, exterior, for PC, WL

R 01.1	Eloxal EV1	635136
R 01.5	Silver	635137
R 06.2M	Black, RAL 9005 M	635135
R 07.2	White, RAL 9016	635134
–	Raw	635138

Patio Lift RotoLine handle, interior, for PC, WL, 40 mm

R 01.1	Eloxal EV1	635141
R 01.5	Silver	635142
R 06.2M	Black, RAL 9005 M	635140
R 07.2	White, RAL 9016	635139
–	Raw	635143

Patio Lift RotoLine handle, interior, WL, 40 mm

R 01.1	Eloxal EV1	635146
R 01.5	Silver	635147
R 06.2M	Black, RAL 9005 M	635145
R 07.2	White, RAL 9016	635144
–	Raw	635148

- Spring catch in tilted position, anti-slam scissors-slider
- Concealed central locking system
- Sash arrangement according to diagram A, B, C, D, G, K
- Internal and external aesthetics like Tilt&Turn windows:
narrow profiles, no offset glazing in the facade, handle position when the door is closed “downwards”
- Retracting distance: max. 117 mm
- Sash width: max. 1680 mm
- Sash height: max. 2380 mm
- Sash weight: max. 160 kg
- Clearance 11.5–12 mm
- Minimum overlap height 7 mm
- Frame groove V.01 / V.02
- Sash groove 15/20
- Sash thickness max. 87 mm
(for sash thicknesses of more than 87 mm,
technical examination is necessary)

Roto Patio 100S Aluminium

Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 670 – 1280 mm
 Sash height **SH** 930 – 2380 mm
 Sash weight **S.kg** max. 100 kg
 Sash thickness max. 87 mm
 (for sash thicknesses of more than 87 mm,
 technical examination is necessary)

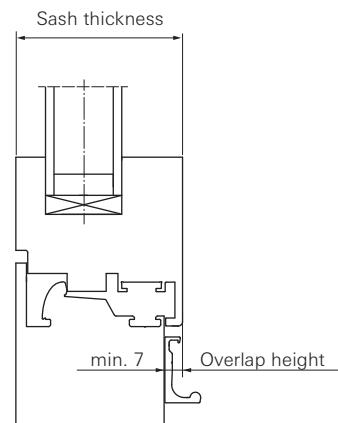
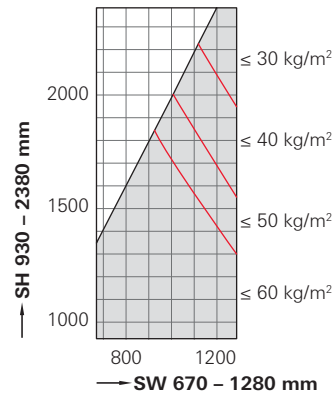
Glass weight max. 60 kg / m²

SH : SW = max. 2 : 1

The information in the application diagram refers to the glass weight in kg / m².

1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range



Roto Patio 160S Aluminium

Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 670 – 1680 mm
 Sash height **SH** 930 – 2380 mm
 Sash weight **S.kg** max. 160 kg
 Sash thickness max. 87 mm
 (for sash thicknesses of more than 87 mm, technical examination is necessary)

Glass weight max. 60 kg / m²

SH : SW = max. 2 : 1

The information in the application diagram refers to the glass weight in kg / m².

1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range

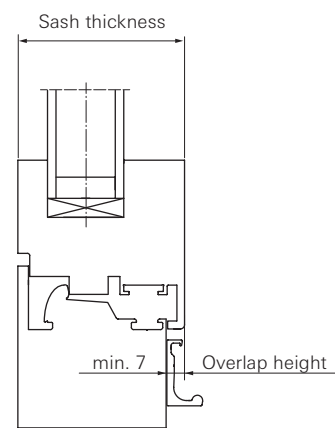
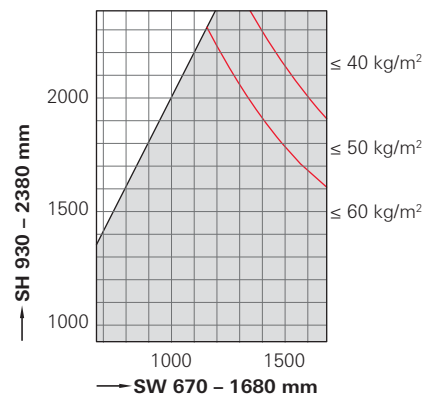


Diagram A

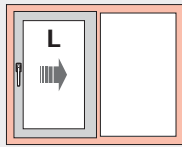


Diagram A
 1 sliding sash (L or R)
 1 fixed glazings

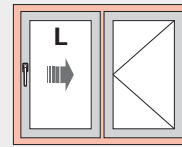


Diagram A
 1 sliding sash (L or R)
 1 Turn-Only sash

Diagram B

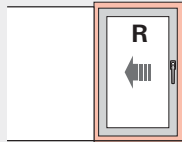


Diagram B
 1 sliding sash (L or R)
 Inside frame flush with the wall

Diagram C

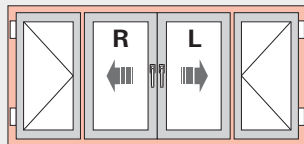


Diagram C
 2 sliding sashes (L and R) with/without centre post
 2 Turn-Only sashes (alternatively fixed glazing)

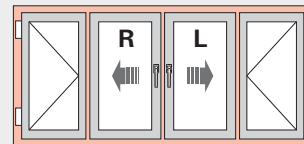


Diagram C
 2 sliding sashes (L and R) with fixed centre post
 2 Turn-Only sashes (alternatively fixed glazing)

Diagram D

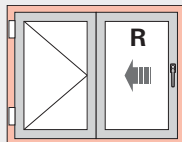


Diagram D
 1 sliding sash (L or R) with/without centre post profile, slidable guide block required
 1 Turn-Only sash

Diagram G

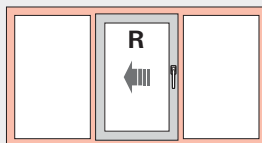


Diagram G
 1 sliding sash (L or R)
 2 fixed glazings

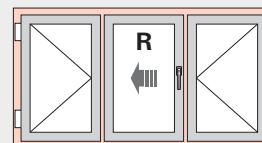
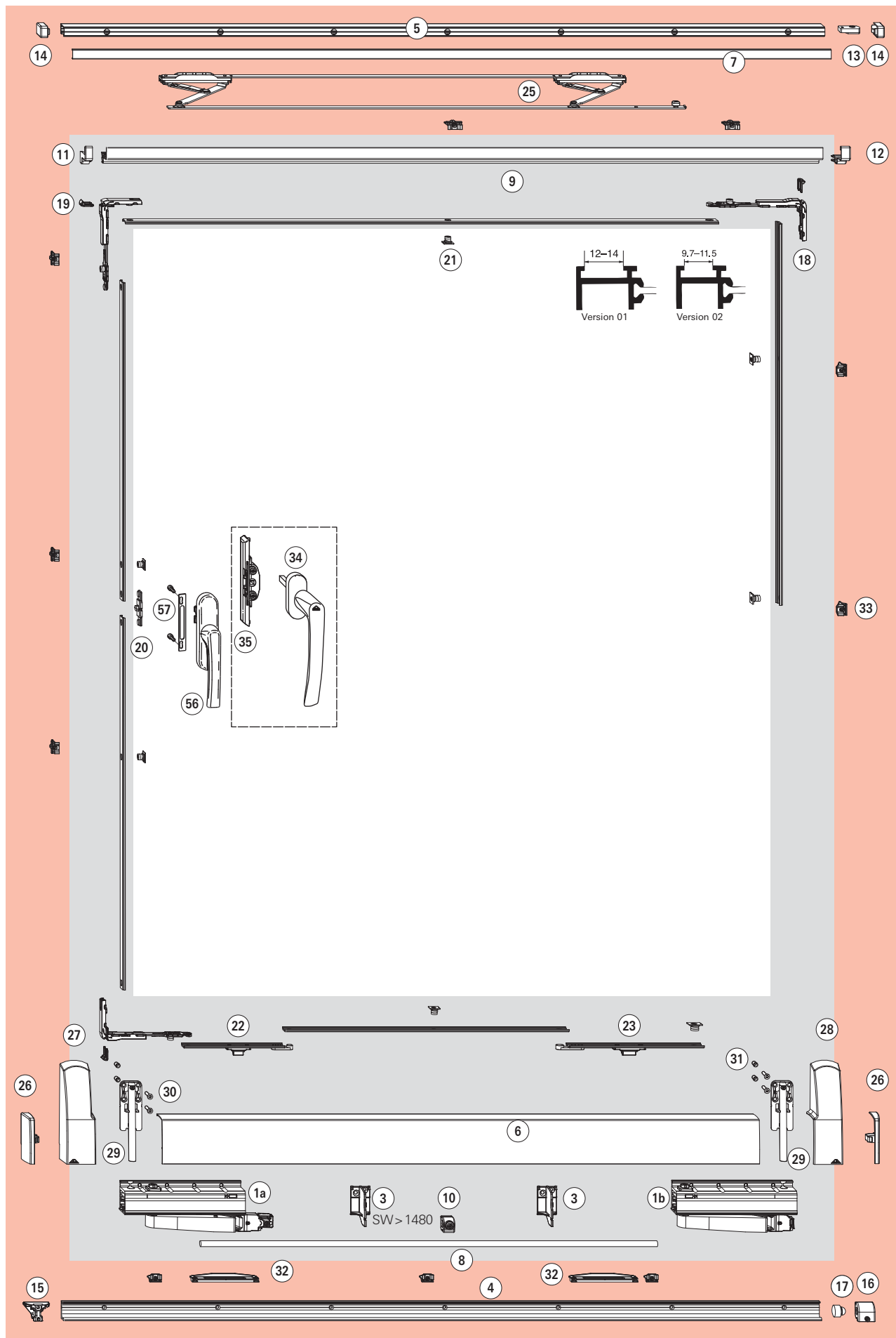


Diagram G
 1 sliding sash (L or R)
 2 Turn-Only sashes

Diagram K



Diagram K
 2 sliding sashes (L and R)
 1 fixed glazing



Application range

Sash width **SW**.....670–1680 mm
 Sash height **SH**.....930–2380 mm
 Sash weight **S.kg** max. 160 kg



Basic carton Patio 100S/160S Aluminium

Patio S Aluminium Basic carton L 625395

Content:

- ①a 1 leading bogie
- ①b 1 trailing bogie
- ③ 2 cover support brackets
12 supporting-pin countersunk tapping-screws 4.8 x 50 T25 (not dep.)

Patio S Aluminium Basic carton R 625384

Content:

- ②a 1 leading bogie (not dep.)
- ②b 1 trailing bogie (not dep.)
- ③ 2 cover support brackets
12 supporting-pin countersunk tapping-screws 4.8 x 50 T25 (not dep.)

Track set

Track set for sash and frame incl. misc. small components pack

Non-treated

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625445
931 – 1080	2230	625450
1081 – 1280	2630	625455
1281 – 1480	3030	625460
1481 – 1680	3430	625465

R01.5 Silver

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625442
931 – 1080	2230	625447
1081 – 1280	2630	625452
1281 – 1480	3030	625457
1481 – 1680	3430	625462

R05.4 Dark bronze

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625446
931 – 1080	2230	625451
1081 – 1280	2630	625456
1281 – 1480	3030	625461
1481 – 1680	3430	625466

R06.2 Jet-black

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625444
931 – 1080	2230	625449
1081 – 1280	2630	625454
1281 – 1480	3030	625459
1481 – 1680	3430	625464

R07.2 Traffic-white

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625443
931 – 1080	2230	625448
1081 – 1280	2630	625453
1281 – 1480	3030	625458
1481 – 1680	3430	625463

Content:

Track set:

- ④ 1 roller track *)
- ⑤ 1 guide track *)
- ⑥ 1 cover profile
- ⑦ 1 PVC cover profile
- ⑧ 1 connecting rod
- ⑨ 1 stay-connecting profile
- ⑩ 1 connecting-rod support-block (additionally included from SW > 1480)

Misc. small components pack:

- ⑪ 1 cover cap for stay-connecting profile, left
- ⑫ 1 cover cap for stay-connecting profile, right
- ⑬ 1 buffer stop, top
- ⑭ 2 cover caps guide track
- ⑮ 1 guide block
- ⑯ 1 buffer stop, bottom
- ⑰ 1 rubber buffer stop, bottom
- 10 pan-head tapping screws 3.9 x 9.5 T15 (not dep.)
- 40 countersunk tapping-screws 3.9 x 45 T15 (not dep.)

*) The guide track and the roller track must not be painted.

Lock S R/L D10 626523

Contents of the misc. small components pack:

- ⑱ 3 corner drives D10
- ⑲ 3 retaining forks
- ⑳ 1 locking cams, insertable

Bullet catch track S 15/20 D10 625484

Contents of the misc. small components pack:

- ㉒ 1 bullet catch track, left
- ㉓ 1 bullet catch track, right

㉔ Scissors-slider

SW / mm	Material no.
670 – 930	603930
931 – 1280	603931
1281 – 1680	603932

Cover caps

㉖ Cover caps small (pair) 100S up to 100 kg

Description	Material no.
Non-treated	625398
R01.5 Silver	625399
R05.4 Dark bronze	625402
R06.2 Jet-black	625400
R07.2 Traffic-white	625401

Cover caps large (pair) 160S up to 160 kg

Description	Material no.
Non-treated	625403
R01.5 Silver	625404
R05.4 Dark bronze	625407
R06.2 Jet-black	625405
R07.2 Traffic-white	625406

Content:

- ㉗ 1 cover cap, left
- ㉘ 1 cover cap, right
- ㉙ 2 reinforcement brackets, adjustable

Misc. small components pack:

- ㉚ 4 countersunk screws M5 x 25 T25
- ㉛ 4 blind rivet nuts M5

Guide strikers

Strikers and guide strikers D10/V.01 625495

Strikers and guide strikers D10/V.02 625497

Contents of the misc. small components pack:

- ㉜ 2 guide strikers
- ㉝ 8 strikers
- ㉞ 3 locking cams, insertable

Profile system assignment → p. 269

Guide strikers (spare part)

Guide strikers V.01 625499

Guide strikers V.02 625500

Contents of the misc. small components pack:

- ㉟ 2 guide strikers

Profile system assignment → p. 269

for SW > 1280 mm and SH > 1800 mm additionally

Strikers and guide strikers, insertable V.01 625493

Strikers and guide strikers, insertable V.02 625494

Contents of the misc. small components pack:

- ㉟ 10 strikers
- ㊱ 10 locking cams, insertable

Profile system assignment → p. 269

㊲ Locking cam, insertable 625491

Contents of the misc. small components pack:

3 locking cams, insertable

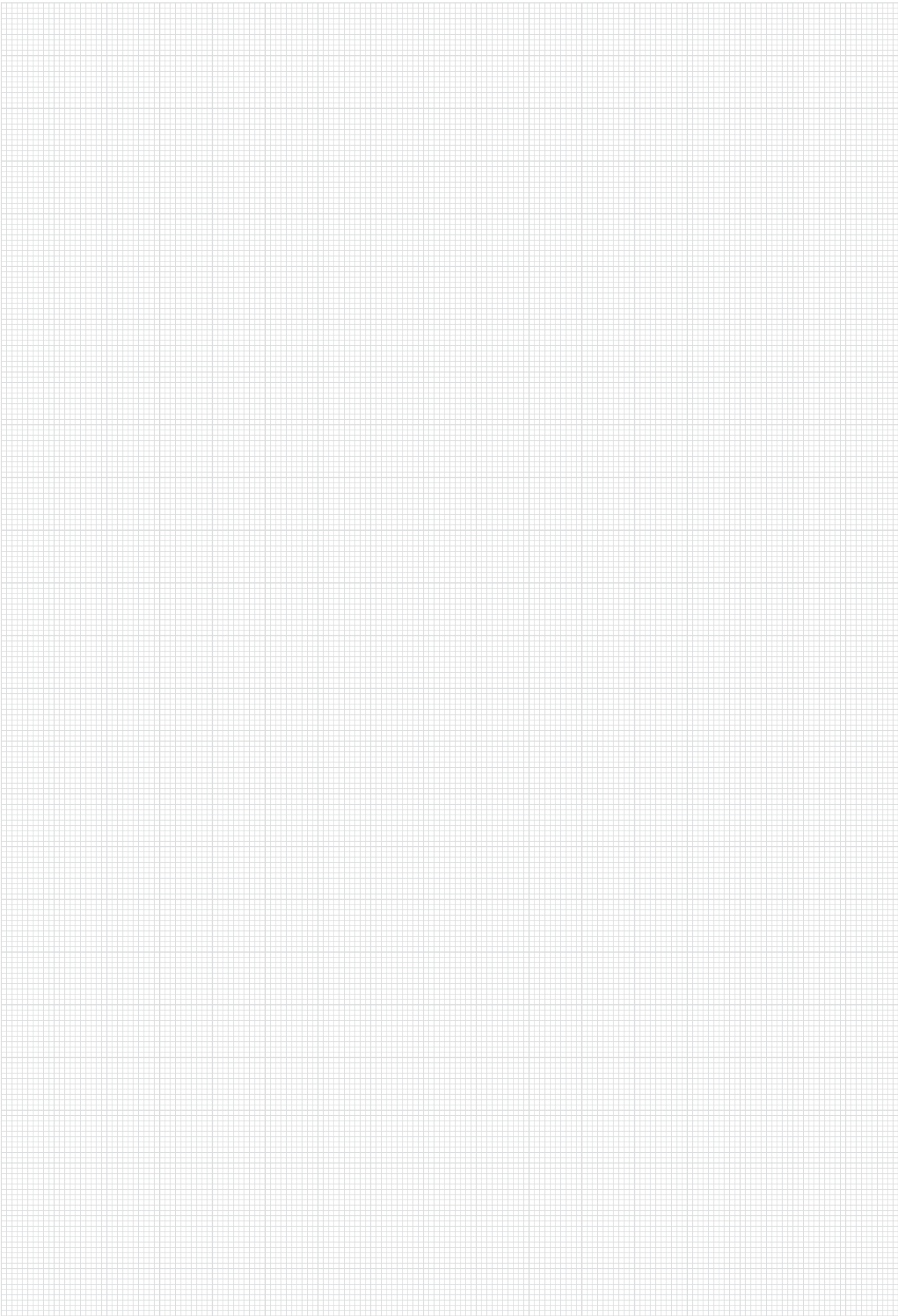
㊳ RotoLine espagnolettes → p. 258

㊴ Connector sets and accessories → p. 259

㊵

㊶ Handles → p. 260

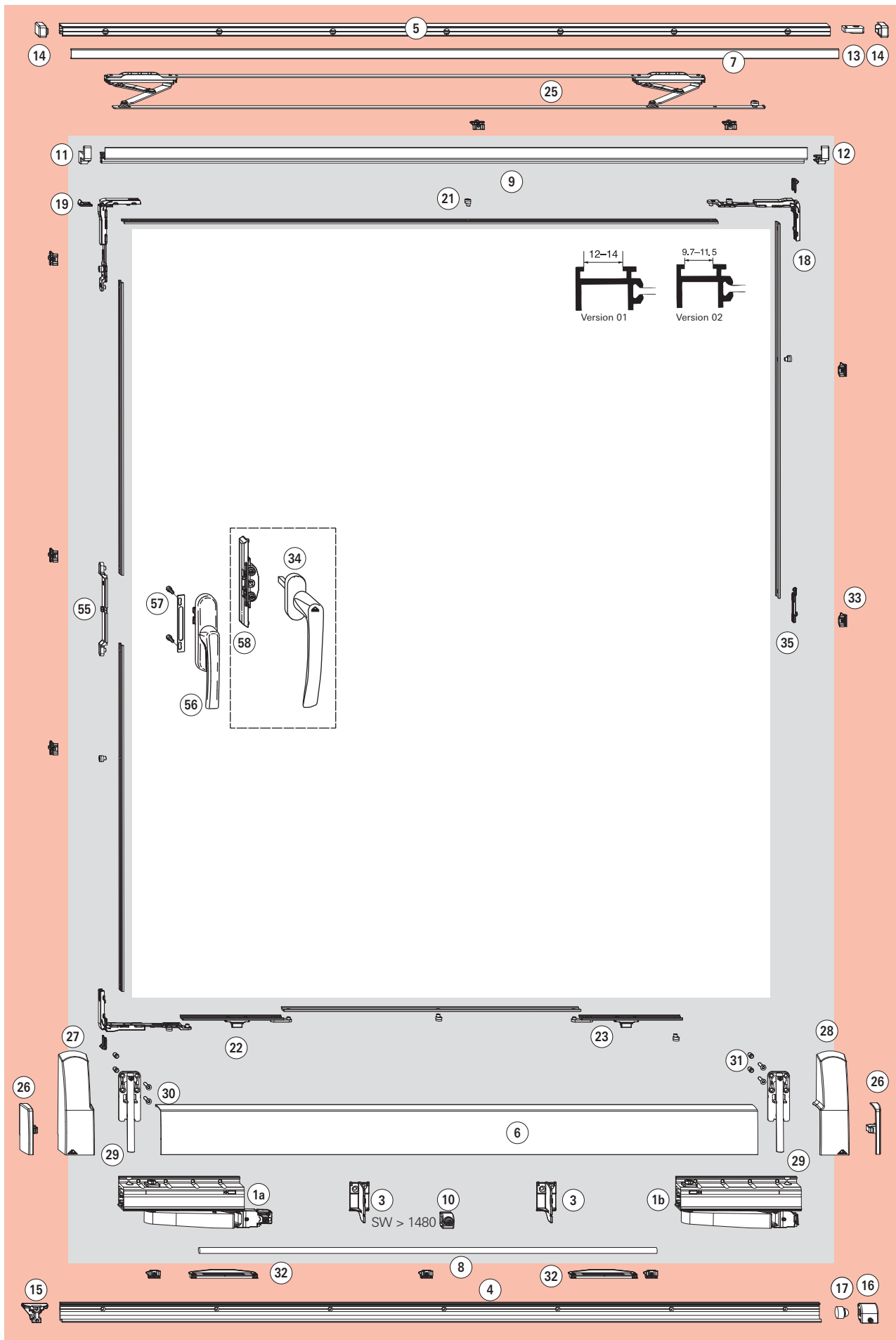
㊷ Flush-encased gearbox → p. 263



Roto Patio

Roto Patio S

Patio 100S/160S Aluminium, D6



Application range

Sash width **SW** 670 – 1680 mm
 Sash height **SH** 930 – 2380 mm
 Sash weight **S.kg** max. 160 kg



Basic carton Patio 100S/160S Aluminium

Patio S Aluminium Basic carton L 625395

Content:

- ①a 1 leading bogie
- ①b 1 trailing bogie
- ③ 2 cover support brackets
12 supporting-pin countersunk tapping-screws 4.8 x 50 T25 (not dep.)

Patio S Aluminium Basic carton R 625384

Content:

- ②a 1 leading bogie (not dep.)
- ②b 1 trailing bogie (not dep.)
- ③ 2 cover support brackets
12 supporting-pin countersunk tapping-screws 4.8 x 50 T25 (not dep.)

Track set

Track set for sash and frame incl. misc. small components pack

Non-treated

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625445
931 – 1080	2230	625450
1081 – 1280	2630	625455
1281 – 1480	3030	625460
1481 – 1680	3430	625465

R01.5 Silver

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625442
931 – 1080	2230	625447
1081 – 1280	2630	625452
1281 – 1480	3030	625457
1481 – 1680	3430	625462

R05.4 Dark bronze

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625446
931 – 1080	2230	625451
1081 – 1280	2630	625456
1281 – 1480	3030	625461
1481 – 1680	3430	625466

R06.2 Jet-black

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625444
931 – 1080	2230	625449
1081 – 1280	2630	625454
1281 – 1480	3030	625459
1481 – 1680	3430	625464

R07.2 Traffic-white

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625443
931 – 1080	2230	625448
1081 – 1280	2630	625453
1281 – 1480	3030	625458
1481 – 1680	3430	625463

Content:

Track set:

- ④ 1 roller track*)
- ⑤ 1 guide track*)
- ⑥ 1 cover profile
- ⑦ 1 PVC cover profile
- ⑧ 1 connecting rod
- ⑨ 1 stay-connecting profile
- ⑩ 1 connecting-rod support-block (additionally included from SW > 1480)

Misc. small components pack:

- ⑪ 1 cover cap for stay-connecting profile, left
- ⑫ 1 cover cap for stay-connecting profile, right
- ⑬ 1 buffer stop, top
- ⑭ 2 cover caps guide track
- ⑮ 1 guide block
- ⑯ 1 buffer stop, bottom
- ⑰ 1 rubber buffer stop, bottom
- 10 pan-head tapping screws 3.9 x 9.5 T15 (not dep.)
- 40 countersunk tapping-screws 3.9 x 45 T15 (not dep.)

*) The guide track and the roller track must not be painted.

Lock S R/L D6 626522

Contents of the misc. small components pack:

- ⑱ 3 corner drives D6
- ⑲ 3 retaining forks
- ⑳ 1 locking cam 67

Bullet catch track S 15/20 D6 625485

Contents of the misc. small components pack:

- ㉒ 1 bullet catch track, left
- ㉓ 1 bullet catch track, right

㉔ Scissors-slider

SW / mm	Material no.
670 – 930	603930
931 – 1280	603931
1281 – 1680	603932

Cover caps

㉖ Cover caps small (pair) 100S up to 100 kg

Description	Material no.
Non-treated	625398
R01.5 Silver	625399
R05.4 Dark bronze	625402
R06.2 Jet-black	625400
R07.2 Traffic-white	625401

Cover caps large (pair) 160S up to 160 kg

Description	Material no.
Non-treated	625403
R01.5 Silver	625404
R05.4 Dark bronze	625407
R06.2 Jet-black	625405
R07.2 Traffic-white	625406

Content:

- ㉗ 1 cover cap, left
- ㉘ 1 cover cap, right
- ㉙ 2 reinforcement brackets, adjustable

Misc. small components pack:

- ㉚ 4 countersunk screws M5 x 25 T25
- ㉛ 4 blind rivet nuts M5

Guide strikers

Strikers and guide strikers D6/V.01 625496

Strikers and guide strikers D6/V.02 625498

Contents of the misc. small components pack:

- ㉜ 2 guide strikers
- ㉝ 8 strikers
- ㉞ 3 CL cams

Profile system assignment → p. 269

Guide strikers (spare part)

Guide strikers V.01 625499

Guide strikers V.02 625500

Contents of the misc. small components pack:

- ㉟ 2 guide strikers

Profile system assignment → p. 269

for SW > 1280 mm and SH > 1800 mm additionally

Strikers and CL cams V.01 625800

Strikers and CL cams V.02 625801

Contents of the misc. small components pack:

- ㉟ 10 strikers
- ㊱ 10 CL cams

Profile system assignment → p. 269

㊲ CL cam 625492

Contents of the misc. small components pack:

3 CL cams

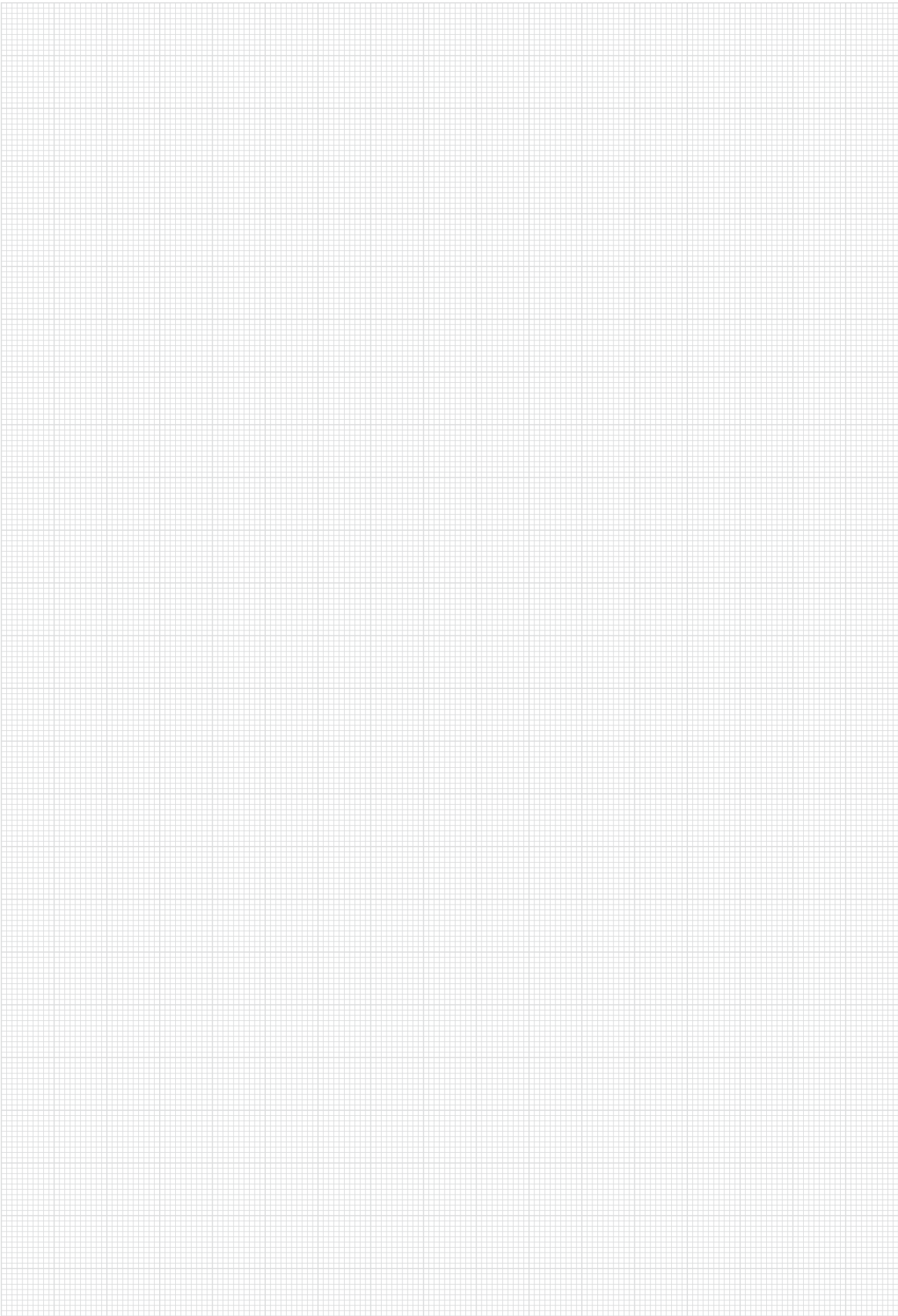
㊳ RotoLine espagnolettes → p. 258

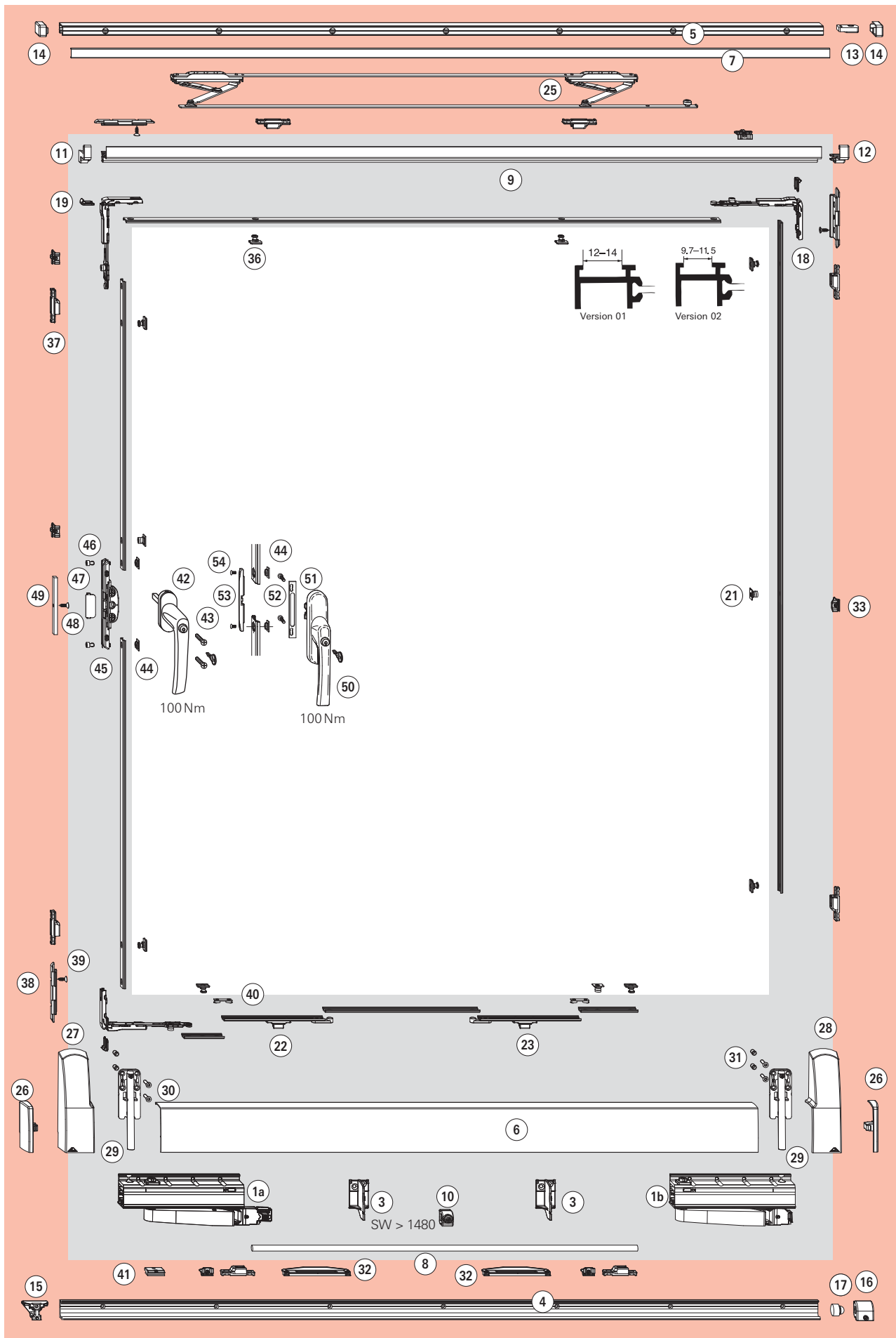
㊴ Connector sets and accessories → p. 259

㊵

㊶ Handles → p. 260

㊷ Flush-encased gearbox → p. 263





Application range

Sash width **SW** 850 – 1680 mm

Sash height **SH** 930 – 2380 mm

Sash weight **S.kg** max. 160 kg



Basic carton Patio 100S/160S Aluminium

Patio S Aluminium Basic carton L 625395

Content:

- ①a 1 leading bogie
- ①b 1 trailing bogie
- ③ 2 cover support brackets
12 supporting-pin countersunk tapping-screws 4.8 x 50 T25 (not dep.)

Patio S Aluminium Basic carton R 625384

Content:

- ②a 1 leading bogie (not dep.)
- ②b 1 trailing bogie (not dep.)
- ③ 2 cover support brackets
12 supporting-pin countersunk tapping-screws 4.8 x 50 T25 (not dep.)

Track set

Track set for sash and frame incl. misc. small components pack

Non-treated

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625445
931 – 1080	2230	625450
1081 – 1280	2630	625455
1281 – 1480	3030	625460
1481 – 1680	3430	625465

R01.5 Silver

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625442
931 – 1080	2230	625447
1081 – 1280	2630	625452
1281 – 1480	3030	625457
1481 – 1680	3430	625462

R05.4 Dark bronze

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625446
931 – 1080	2230	625451
1081 – 1280	2630	625456
1281 – 1480	3030	625461
1481 – 1680	3430	625466

R06.2 Jet-black

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625444
931 – 1080	2230	625449
1081 – 1280	2630	625454
1281 – 1480	3030	625459
1481 – 1680	3430	625464

R07.2 Traffic-white

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625443
931 – 1080	2230	625448
1081 – 1280	2630	625453
1281 – 1480	3030	625458
1481 – 1680	3430	625463

Content:

Track set:

- ④ 1 roller track*)
- ⑤ 1 guide track*)
- ⑥ 1 cover profile
- ⑦ 1 PVC cover profile
- ⑧ 1 connecting rod
- ⑨ 1 stay-connecting profile
- ⑩ 1 connecting-rod support-block (additionally included from SW > 1480)

Misc. small components pack:

- ⑪ 1 cover cap for stay-connecting profile, left
- ⑫ 1 cover cap for stay-connecting profile, right
- ⑬ 1 buffer stop, top
- ⑭ 2 cover caps guide track
- ⑮ 1 guide block
- ⑯ 1 buffer stop, bottom
- ⑰ 1 rubber buffer stop, bottom
- 10 pan-head tapping screws 3.9 x 9.5 T15 (not dep.)
- 40 countersunk tapping-screws 3.9 x 45 T15 (not dep.)

*) The guide track and the roller track must not be painted.

Lock S R/L D10 626523

Contents of the misc. small components pack:

- ⑱ 3 corner drives D10
- ⑲ 3 retaining forks
- ⑳ 1 locking cam, insertable

Bullet catch track S 15/20 625484

Contents of the misc. small components pack:

- ㉒ 1 bullet catch track, left
- ㉓ 1 bullet catch track, right

㉔ Scissors-slider

SW / mm	Material no.
670 – 930	603930
931 – 1280	603931
1281 – 1680	603932

Cover caps

㉖ Cover caps small (pair) 200Z up to 100kg

Description	Material no.
Non-treated	625398
R01.5 Silver	625399
R05.4 Dark bronze	625402
R06.2 Jet-black	625400
R07.2 Traffic-white	625401

Cover caps large (pair) 200Z up to 200kg

Description	Material no.
Non-treated	625403
R01.5 Silver	625404
R05.4 Dark bronze	625407
R06.2 Jet-black	625405
R07.2 Traffic-white	625406

Content:

- ㉗ 1 cover cap, left
- ㉘ 1 cover cap, right
- ㉙ 2 reinforcement brackets, adjustable

Misc. small components pack:

- ⑳ 4 countersunk screws M5 x 25 T25
- ㉑ 4 blind rivet nuts M5

Guide strikers

Strikers and guide strikers D10/V.01	625495
Strikers and guide strikers D10/V.02	625497

Contents of the misc. small components pack:

- ㉒ 2 guide strikers
- ㉓ 8 strikers
- ㉔ 3 locking cams, insertable

Profile system assignment → p. 269

Guide strikers (spare part)

Guide strikers V.01	625499
Guide strikers V.02	625500

Contents of the misc. small components pack:

- ㉒ 2 guide strikers

Profile system assignment → p. 269

for SW > 1280 mm and SH > 1800 mm additionally

Strikers and guide strikers, insertable V.01	625493
Strikers and guide strikers, insertable V.02	625494

Contents of the misc. small components pack:

- ㉓ 10 strikers
- ㉔ 10 locking cams, insertable

Profile system assignment → p. 269

㉔ Locking cam, insertable	625491
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Contents of the misc. small components pack:

3 locking cams, insertable

SEC hardware components

Pos.	Pieces	Description	Material no.
㉖	8-12	SEC locking cam, insertable, RC2	447245
㉗	8-12	SEC striker V.01	212637
	8-12	SEC striker V.02	212638
㉘	3	SEC rebate clearance reduction	447112
㉙	3	Screw M4.8 x 16	212754
㉚	2	SEC coupler component	348576
㉛	1	Run-up wedge V.01	212762
	1	Run-up wedge V.02	212512

SEC handles

Pos.	Pieces	Description	Material no.
㉜	1	RotoLine window handle, lockable	→ p. 260
㉝	2	Countersunk screw (stainless steel) M3x30	212501
㉞	2	SEC connector	447113
㉟	1	SEC flush-encased gearbox	457210
㊱	2	Cylinder screw M5 x 6	335249
㊲	1	SEC drilling protection	487406
㊳	1	Screw M4.8 x 16	212754
㊴	1	SEC rebate clearance reduction	334360
㊵	1	RotoLine espagnolette 26, lockable	→ p. 258
㊶	1	Geared-handle support	331937
㊷	2	Flat-headed screw M5 x 12	212500
㊸	1	SEC geared-handle protection	487407
㊹	2	Countersunk screw M5 x 10	210970
㊺	2	SEC connector	447113

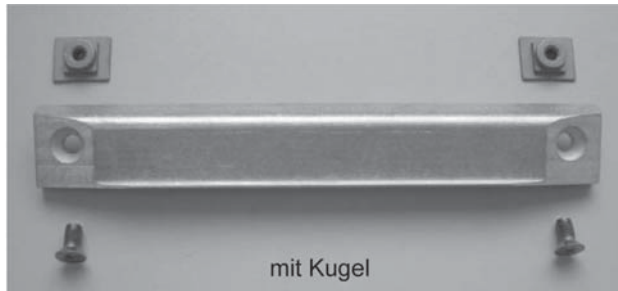


Security sets

Pos.	Pieces	Description	PQ	Material no.
		SEC flush-encased gearbox set	10	457209

Contents of the misc. small components pack:

④5	1	SEC flush-encased gearbox		
④4	2	SEC connector		
④9	1	SEC rebate clearance reduction		
④6	2	Cylinder head screw M5 x 6, blue		
④8	1	Screw M4.8 x 16		
④7	1	SEC drilling protection flush-encased gearbox		



Pos.	Pieces	Description	PQ	Material no.
		SEC geared-handle protection set	10	485768

Contents of the misc. small components pack:

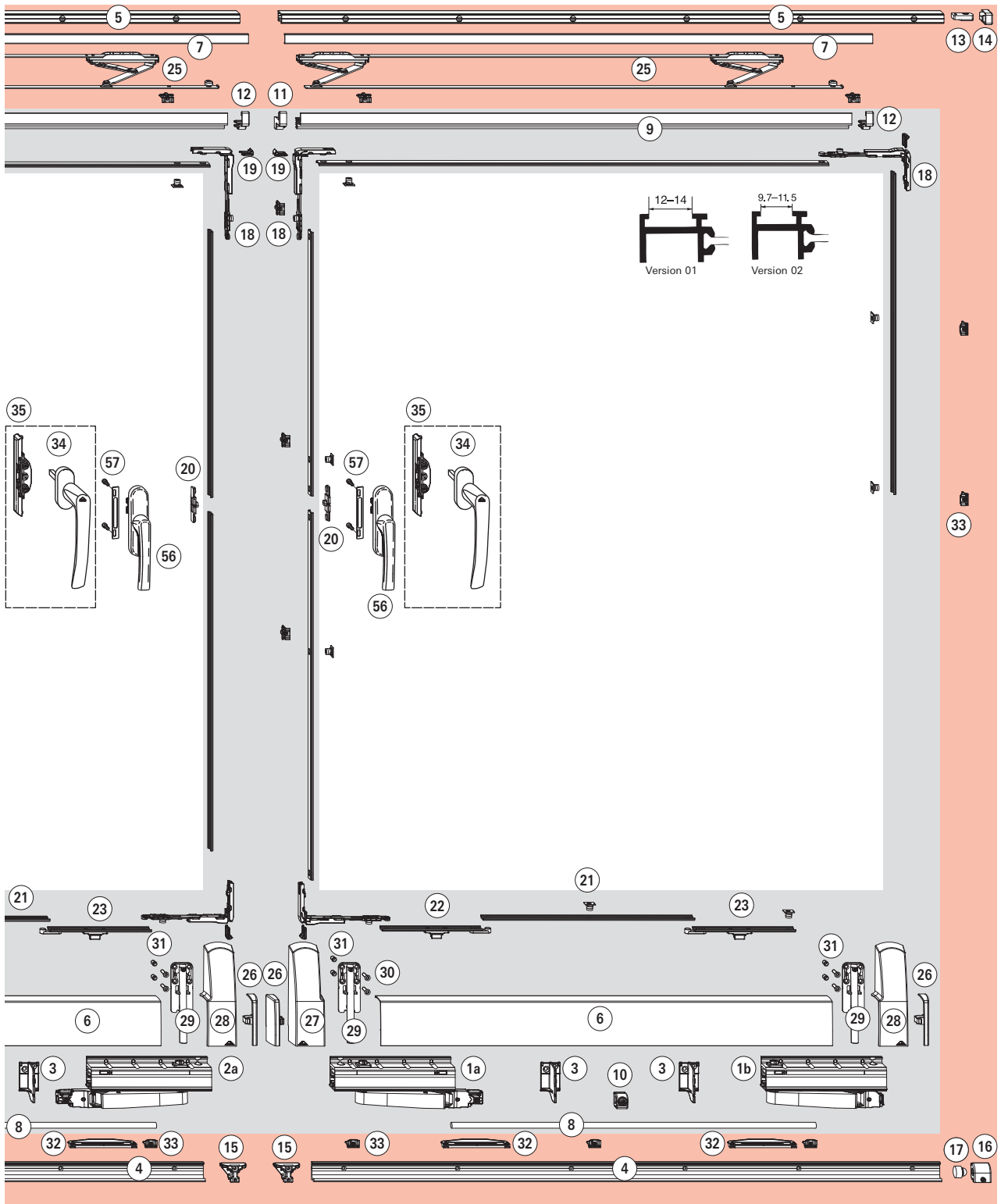
⑤3	1	SEC geared-handle protection		
④4	2	SEC connector		
⑤4	2	Countersunk screw M5 x 10, blue		



Pos.	Pieces	Description	PQ	Material no.
		SEC rebate clearance reduction corner drive set	10	335247

Contents of the misc. small components pack:

③8	1	SEC rebate clearance reduction corner drive		
③9	1	Screw M4.8 x 16		



Application range

Sash width **SW**.....670–1680 mm

Sash height **SH**.....930–2380 mm

Sash weight **S.kg** max. 160 kg

Basic carton Patio 100S / 160S Aluminium, 1 piece per sash

Patio S Aluminium Basic carton L 625395

Content:

- ①a 1 leading bogie
- ①b 1 trailing bogie
- ③ 2 cover support brackets
12 supporting-pin countersunk tapping-screws 4.8 x 50 T25 (not dep.)

Patio S Aluminium Basic carton R 625384

Content:

- ②a 1 leading bogie (not dep.)
- ②b 1 trailing bogie (not dep.)
- ③ 2 cover support brackets
12 supporting-pin countersunk tapping-screws 4.8 x 50 T25 (not dep.)

Track set, 1 piece per sash

Track set for sash and frame incl. misc. small components pack

Non-treated

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625445
931 – 1080	2230	625450
1081 – 1280	2630	625455
1281 – 1480	3030	625460
1481 – 1680	3430	625465

R01.5 Silver

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625442
931 – 1080	2230	625447
1081 – 1280	2630	625452
1281 – 1480	3030	625457
1481 – 1680	3430	625462

R05.4 Dark bronze

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625446
931 – 1080	2230	625451
1081 – 1280	2630	625456
1281 – 1480	3030	625461
1481 – 1680	3430	625466

R06.2 Jet-black

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625444
931 – 1080	2230	625449
1081 – 1280	2630	625454
1281 – 1480	3030	625459
1481 – 1680	3430	625464

R07.2 Traffic-white

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625443
931 – 1080	2230	625448
1081 – 1280	2630	625453
1281 – 1480	3030	625458
1481 – 1680	3430	625463

Content:

Track set:

- ④ 1 roller track*)
- ⑤ 1 guide track*)
- ⑥ 1 cover profile
- ⑦ 1 PVC cover profile
- ⑧ 1 connecting rod
- ⑨ 1 stay-connecting profile
- ⑩ 1 connecting-rod support-block (additionally included from SW > 1480)

Misc. small components pack:

- ⑪ 1 cover cap for stay-connecting profile, left
- ⑫ 1 cover cap for stay-connecting profile, right
- ⑬ 1 buffer stop, top
- ⑭ 2 cover caps guide track
- ⑮ 1 guide block
- ⑯ 1 buffer stop, bottom
- ⑰ 1 rubber buffer stop, bottom
- 10 pan-head tapping screws 3.9 x 9.5 T15 (not dep.)
- 40 countersunk tapping-screws 3.9 x 45 T15 (not dep.)

*) The guide track and the roller track must not be painted.

Lock S R/L D10 1 piece per sash 626523

Contents of the misc. small components pack:

- ⑱ 3 corner drives D10
- ⑲ 3 retaining forks
- ㉑ 1 locking cams, insertable

Bullet catch track S 15/20 D10, 1 piece per sash 625484

Contents of the misc. small components pack:

- ㉒ 1 bullet catch track, left
- ㉓ 1 bullet catch track, right

㉔ Scissors-slider, 1 piece per sash

SW / mm	Material no.
670– 930	603930
931– 1280	603931
1281– 1680	603932

Cover caps, 1 pair per sash

㉖ Cover caps small (pair) 100S up to 100 kg

Description	Material no.
Non-treated	625398
R01.5 Silver	625399
R05.4 Dark bronze	625402
R06.2 Jet-black	625400
R07.2 Traffic-white	625401

Cover caps large (pair) 160S up to 160 kg

Description	Material no.
Non-treated	625403
R01.5 Silver	625404
R05.4 Dark bronze	625407
R06.2 Jet-black	625405
R07.2 Traffic-white	625406

Content:

- ㉗ 1 cover cap, left
- ㉘ 1 cover cap, right
- ㉙ 2 reinforcement brackets, adjustable

Misc. small components pack:

- ⑳ 4 countersunk screws M5 x 25 T25
- ㉑ 4 blind rivet nuts M5

Misc. small components pack, 1 pair per sash

Strikers and guide strikers D10/V.01 625495

Strikers and guide strikers D10/V.02 625497

Contents of the misc. small components pack:

- ㉚ 2 guide strikers
- ㉛ 8 strikers
- ㉜ 3 locking cams, insertable

Profile system assignment → p. 269

Guide strikers (spare part)

Guide strikers V.01 625499

Guide strikers V.02 625500

Contents of the misc. small components pack:

- ㉚ 2 guide strikers

Profile system assignment → p. 269

for SW > 1280 mm and SH > 1800 mm additionally

Strikers and guide strikers, insertable V.01 625493

Strikers and guide strikers, insertable V.02 625494

Contents of the misc. small components pack:

- ㉛ 10 strikers
- ㉜ 10 locking cams, insertable

Profile system assignment → p. 269

㉝ Locking cam, insertable 625491

Contents of the misc. small components pack:

3 locking cams, insertable

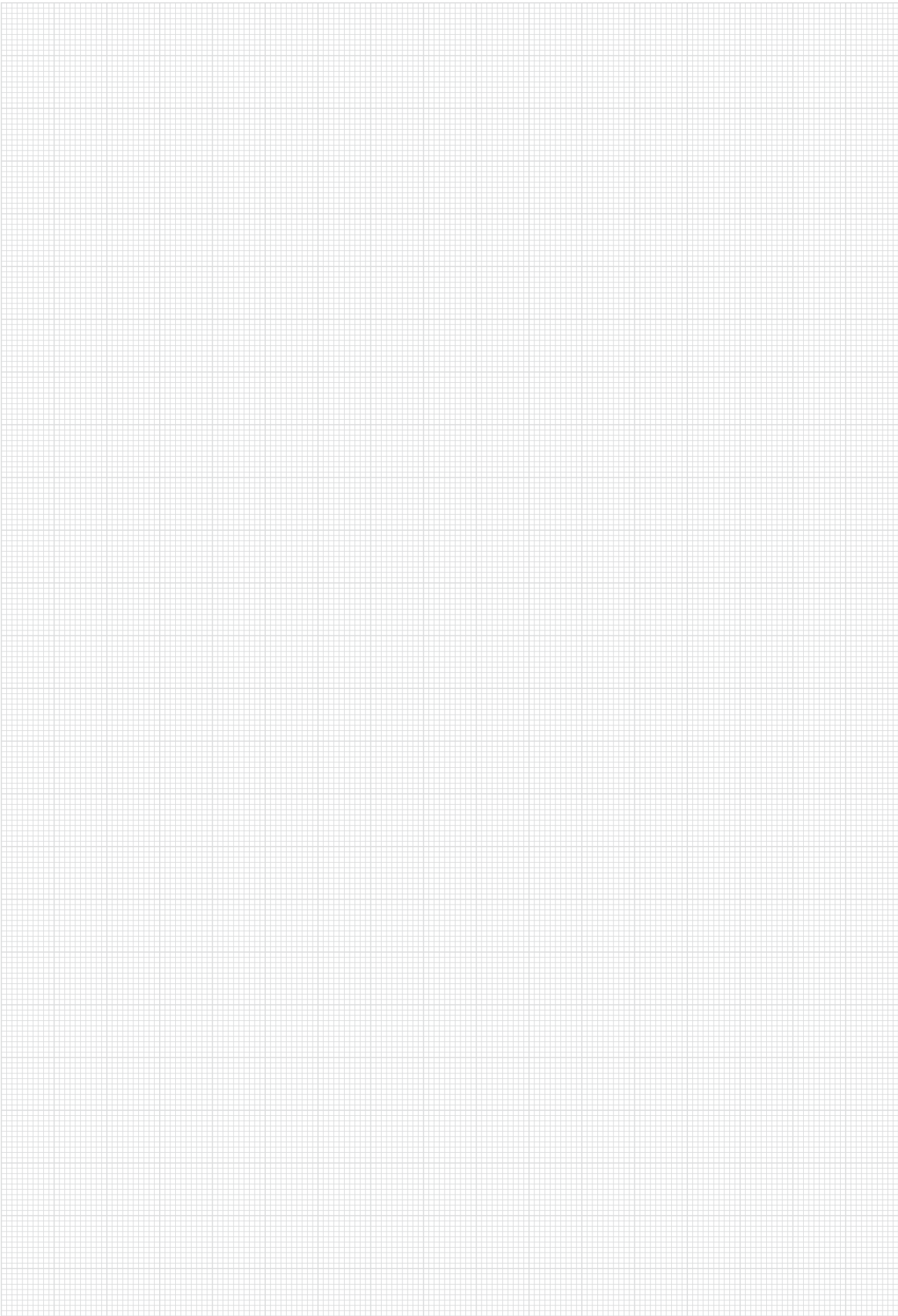
㉞ RotoLine espagnolettes → p. 258

㉟ Connector sets and accessories → p. 259

㊱

㊲ Handles → p. 260

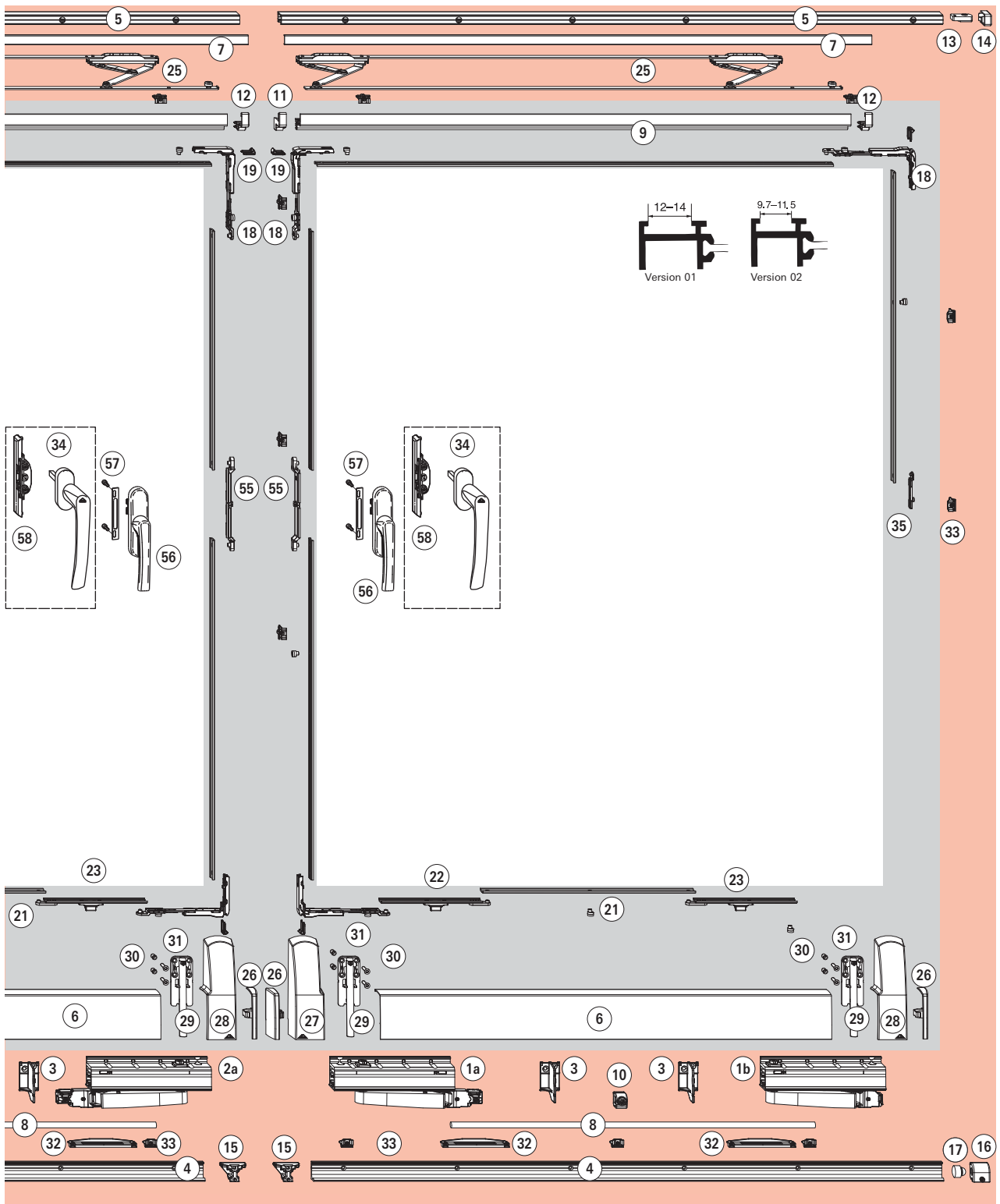
㊳ Flush-encased gearbox → p. 263



Roto Patio

Roto Patio S

Patio 100S/160S Aluminium – 2-sashed, D6



Application range

Sash width **SW**.....670–1680 mm

Sash height **SH**.....930–2380 mm

Sash weight **S.kg** max. 160 kg

Basic carton Patio 100S/160S Aluminium, 1 piece per sash

Patio S Aluminium Basic carton L 625395

Content:

- ①a) 1 leading bogie
- ①b) 1 trailing bogie
- ③) 2 cover support brackets
12 supporting-pin countersunk tapping-screws 4.8 x 50 T25 (not dep.)

Patio S Aluminium Basic carton R 625384

Content:

- ②a) 1 leading bogie (not dep.)
- ②b) 1 trailing bogie (not dep.)
- ③) 2 cover support brackets
12 supporting-pin countersunk tapping-screws 4.8 x 50 T25 (not dep.)

Track set, 1 piece per sash

Track set for sash and frame incl. misc. small components pack

Non-treated

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625445
931 – 1080	2230	625450
1081 – 1280	2630	625455
1281 – 1480	3030	625460
1481 – 1680	3430	625465

R01.5 Silver

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625442
931 – 1080	2230	625447
1081 – 1280	2630	625452
1281 – 1480	3030	625457
1481 – 1680	3430	625462

R05.4 Dark bronze

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625446
931 – 1080	2230	625451
1081 – 1280	2630	625456
1281 – 1480	3030	625461
1481 – 1680	3430	625466

R06.2 Jet-black

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625444
931 – 1080	2230	625449
1081 – 1280	2630	625454
1281 – 1480	3030	625459
1481 – 1680	3430	625464

R07.2 Traffic-white

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625443
931 – 1080	2230	625448
1081 – 1280	2630	625453
1281 – 1480	3030	625458
1481 – 1680	3430	625463

Content:

Track set:

- ④) 1 roller track*)
- ⑤) 1 guide track*)
- ⑥) 1 cover profile
- ⑦) 1 PVC cover profile
- ⑧) 1 connecting rod
- ⑨) 1 stay-connecting profile
- ⑩) 1 connecting-rod support-block (additionally included from SW > 1480)

Misc. small components pack:

- ⑪) 1 cover cap for stay-connecting profile, left
- ⑫) 1 cover cap for stay-connecting profile, right
- ⑬) 1 buffer stop, top
- ⑭) 2 cover caps guide track
- ⑮) 1 guide block
- ⑯) 1 buffer stop, bottom
- ⑰) 1 rubber buffer stop, bottom
- 10 pan-head tapping screws 3.9 x 9.5 T15 (not dep.)
- 40 countersunk tapping-screws 3.9 x 45 T15 (not dep.)

*) The guide track and the roller track must not be painted.

Lock S R/L D6 1 piece per sash 626522

Contents of the misc. small components pack:

- ⑱ 3 corner drives D6
- ⑲ 3 retaining forks
- ⑳ 1 locking cam 67

Bullet catch track S 15/20 D6, 1 piece per sash 625485

Contents of the misc. small components pack:

- ㉒ 1 bullet catch track, left
- ㉓ 1 bullet catch track, right

㉔ Scissors-slider, 1 piece per sash

SW / mm	Material no.
670 – 930	603930
931 – 1280	603931
1281 – 1680	603932

Cover caps, 1 pair per sash

㉖ Cover caps small (pair) 100S up to 100 kg

Description	Material no.
Non-treated	625398
R01.5 Silver	625399
R05.4 Dark bronze	625402
R06.2 Jet-black	625400
R07.2 Traffic-white	625401

Cover caps large (pair) 160S up to 160 kg

Description	Material no.
Non-treated	625403
R01.5 Silver	625404
R05.4 Dark bronze	625407
R06.2 Jet-black	625405
R07.2 Traffic-white	625406

Content:

- ㉗ 1 cover cap, left
- ㉘ 1 cover cap, right
- ㉙ 2 reinforcement brackets, adjustable

Misc. small components pack:

- ㉚ 4 countersunk screws M5 x 25 T25
- ㉛ 4 blind rivet nuts M5

Misc. small components pack, 1 pair per sash

Strikers and guide strikers D6/V.01	625496
Strikers and guide strikers D6/V.02	625498

Contents of the misc. small components pack:

- ㉜ 2 guide strikers
- ㉝ 8 strikers
- ㉞ 3 CL cams

Profile system assignment → p. 269

Guide strikers (spare part)

Guide strikers V.01	625499
Guide strikers V.02	625500

Contents of the misc. small components pack:

- ㉟ 2 guide strikers

Profile system assignment → p. 269

for SW > 1280 mm and SH > 1800 mm additionally

Strikers and CL cams V.01	625800
Strikers and CL cams V.02	625801

Contents of the misc. small components pack:

- ㉡ 10 strikers
- ㉢ 10 CL cams

Profile system assignment → p. 269

㉣ CL cam	625492
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Contents of the misc. small components pack:

3 CL cams

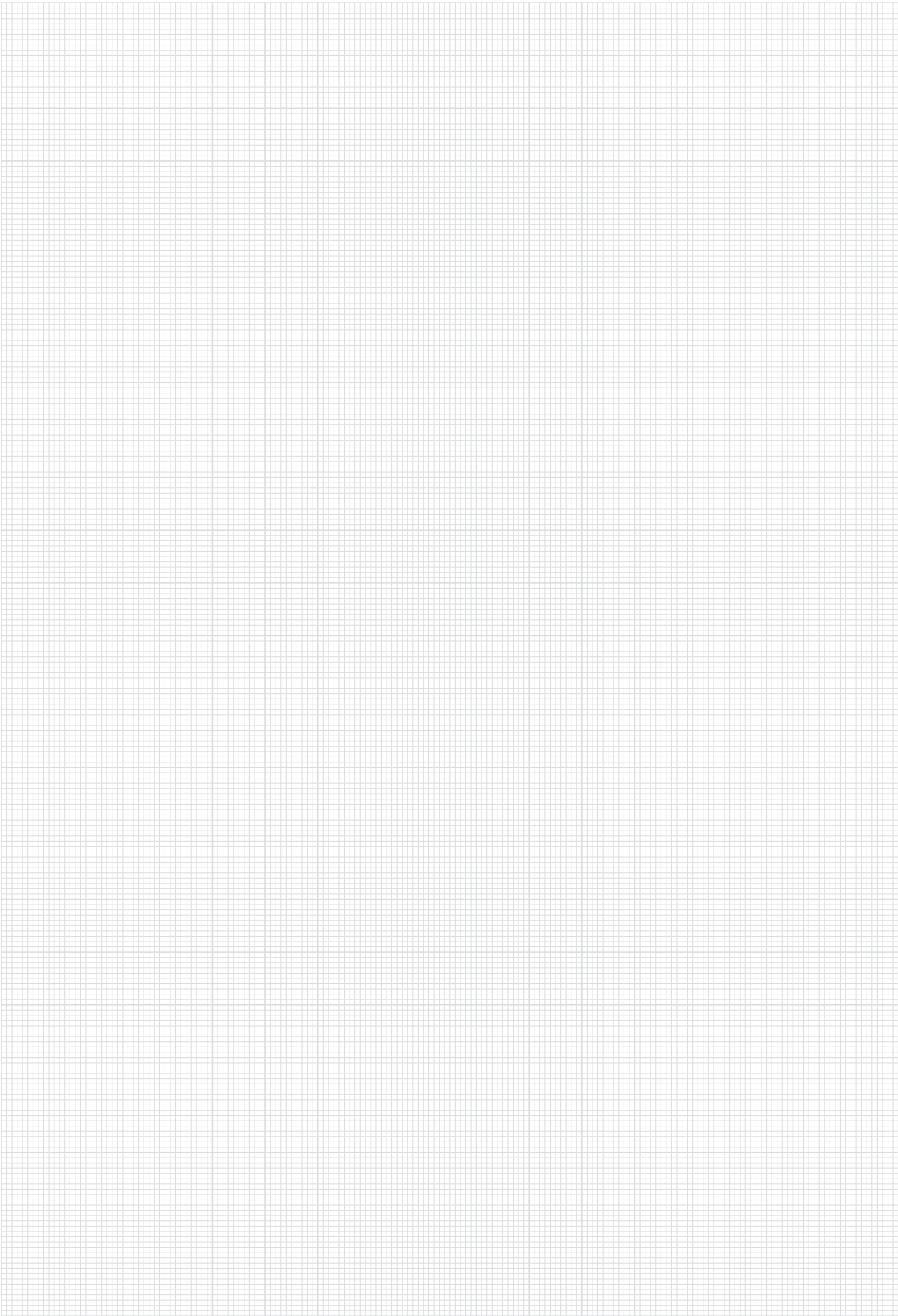
㉤ RotoLine espagnolettes	→ p. 258
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㉥ Connector sets and accessories	→ p. 259
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㉦	
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㉧ Handles	→ p. 260
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㉨ Flush-encased gearbox	→ p. 263
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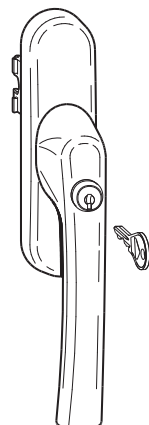
56 **RotoLine espagnolette 26, with Roto logo**

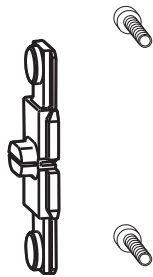
Roto colour no.	Colour	PQ	Material no.
R01.5	Silver	10	377474
R05.4	Dark bronze	10	377478
R06.2M	Jet-black, matt	10	377475
R07.2	Traffic white	10	377477



50 **RotoLine espagnolette 26, lockable, with Roto logo**

Roto colour no.	Colour	PQ	Material no.
R01.5	Silver	10	378843
R05.4	Dark bronze	10	378917
R06.2M	Jet-black, matt	10	378844
R07.2	Traffic white	10	378916



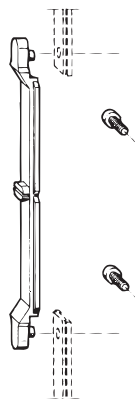


20 Connector set for RotoLine espagnolettes

Component description	PQ	Material no.
Connector set D10 AluVision contains T connector and 2 screws	10	335184

Connector set bulk packaging, parts list

Component description	PQ	Material no.
T connector	100	334754
Flat-headed screw M5 x 12	100	212500

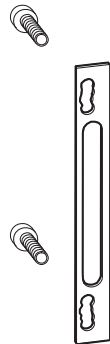


55 Connector set D6

Component description	PQ	Material no.
Connector set D6	10	490536

Connector set bulk packaging, parts list

Component description	PQ	Material no.
T connector	100	211999
Flat-headed screw M5 x 12	100	212500

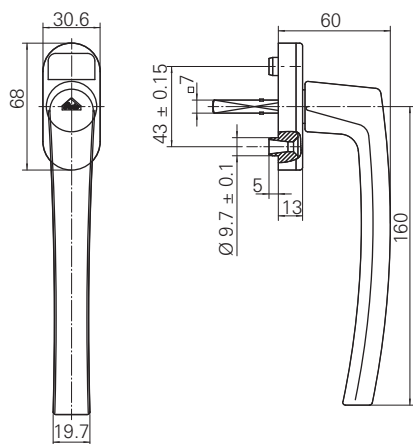


57 Espag. Accessories set AluVision

Component description	PQ	Material no.
Geared-handle support and 2 screws	10	335002

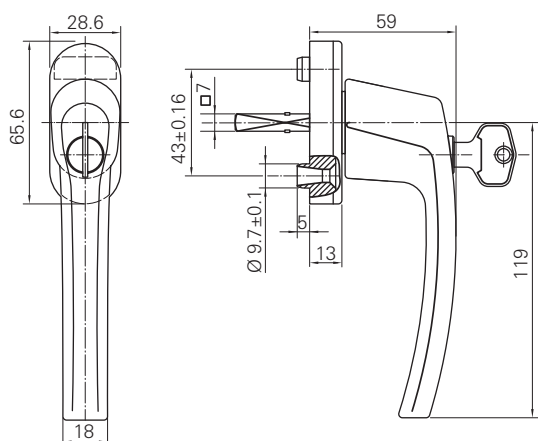
Espag. Connector set bulk packaging, parts list

Component description	PQ	Material no.
Geared-handle support	100	331937
Flat-headed screw M5 x 12	100	212500



34 RotoLine window handle Patio S with Roto logo
35 mm spindle length

Roto colour no.	Colour	PQ	Material no.
R 01.5	Silver	20	623491
R 05.4	Dark bronze	20	288727
R 06.2M	Jet-black, matt	20	626524
R 07.2	Traffic white	20	211596



42 RotoLine window handle 100 Nm, lockable, keyed-alike locking, turn cylinder, spindle length 35 mm, with Ø 10 mm lugs, including 1 nickel-plated turn-key – with Roto logo

Roto colour no.	Colour	PQ	Material no.
R 01.5	Silver	20	626525
R 05.4	Dark bronze	20	626526
R 06.2M	Jet-black, matt	20	626527
R 07.2	Traffic white	20	333981

Replacement key 1G1 257830

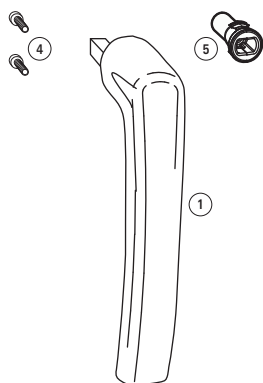
Additional components for RotoLine handles

Component description	PQ	Material no.
Countersunk screws (stainless steel) M5x30	100	212501



NOTE!

RotoLine window handles for flush-encased gear-boxes can be found in the handle catalogue BK 5 EN. Depending on the profile, the spindle of 35 mm must be shortened to a spindle length of 26-3 mm.

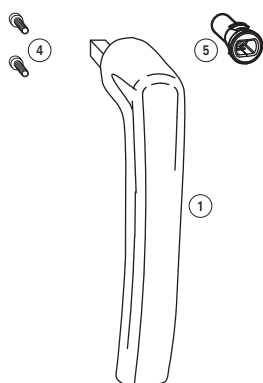


RotoLine escutcheonless handle

Pcs	Colour description	Colour	PQ	Material no.
①	Silver	R01.5	10	377908
	Jet-black	R06.2	10	377909
	Traffic-white	R07.2	10	377911
	Dark bronze	R05.4	10	377912
	Special colour	SPCOL	10	377913

Packaging contains:

- ④ 2 Screws for escutcheonless handle
- ⑤ 1 Transport protection

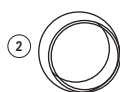


RotoLine escutcheonless handle, lockable

Pcs	Colour description	Colour	PQ	Material no.
①	Silver	R01.5	10	377914
	Jet-black	R06.2	10	377915
	Traffic-white	R07.2	10	377917
	Dark bronze	R05.4	10	377918
	Special colour	SPCOL	10	377919

Packaging contains:

- ④ 2 Screws for escutcheonless handle
- ⑤ 1 Transport protection



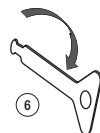
Ring for escutcheonless handle

Pcs	Colour description	Colour	PQ	Material no.
②	Silver	R01.5	10	377979
	Jet-black	R06.2	10	377980
	Traffic-white	R07.2	10	377982
	Dark bronze	R05.4	10	377983
	Special colour	SPCOL	10	377984



Mounting plate AluVision

Pcs	Component description	Colour	PQ	Material no.
③	Mounting plate escutcheonless handle	-	10	378134



Pull key

Pcs	Component description	Colour	PQ	Material no.
⑥	Pull key for escutcheonless handle	-	10	377995

for removing the transport protection



inside



outside

**55 RotoLine Door handle set for inside and outside operation
– low handle depth for roller shutter outside**

Roto colour no.	Colour	PQ	Material no.
R 01.5	Silver	20	629813
R 05.4	Dark bronze	20	629814
R 06.2M	Jet-black, matt	20	629815
R 07.2	Traffic white	20	601729

Window handle 43 mm hole distance, 114 mm length

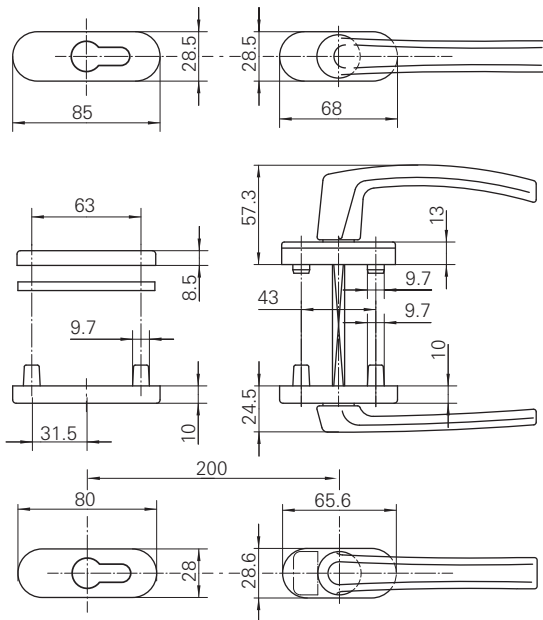
outside 30 mm high, with threaded insert
inside 58 mm high, with Ø10 mm lugs

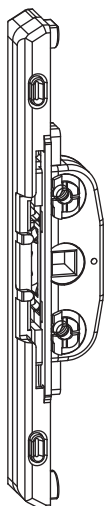
Escutcheon cover 63 mm hole distance, 31.5 mm PC distance

outside Security escutcheon cover, punched PC, with Ø10 mm screw-fixing lugs
inside Standard escutcheon cover, punched PC, without lugs

Fastening bolts M5x110 with notches for door-leaf thicknesses of 56–96 mm

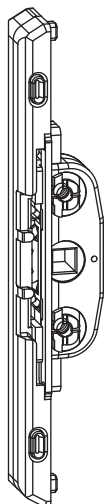
Spindle Spindle length 127 mm, for door-leaf thickness up to 96 mm included.





35 **Flush-encased gearbox without mishandling device for window handles with 24 mm spindle length / 10 mm lugs**

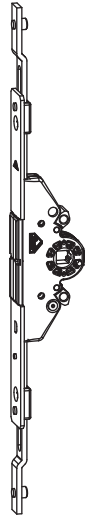
Component description	PQ	Material no.
Flush-encased gearbox w/o MD AluVision	10	378338



58 **Flush-encased gearbox without mishandling device for window handles with 24 mm spindle length / 6 mm lugs**

Component description	PQ	Material no.
Flush-encased gearbox w/o MD AluVision	10	377446

Roto Patio

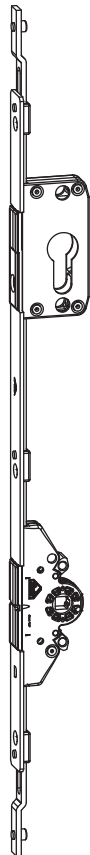


Flush-encased gearbox without profile cylinder

Backset	Cam Ø mm	Material no.
25	6	625426
30	6	625427
35	6	625428
40	6	625429

Flush-encased gearbox without profile cylinder (not dep.)

Backset	Cam Ø mm	Material no.
25	10	625430
30	10	625431
35	10	625432
40	10	625433



Flush-encased gearbox with profile cylinder

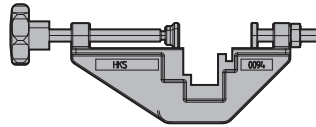
Backset	Cam Ø mm	Material no.
25	6	625434
30	6	625435
35	6	625436
40	6	625437

Flush-encased gearbox with profile cylinder (not dep.)

Backset	Cam Ø mm	Material no.
25	10	625438
30	10	625439
35	10	625440
40	10	625441



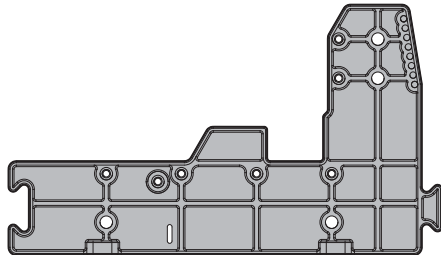
Slider-release device 562759



Jig for roller track and guide track 563967



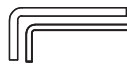
Drilling aid for roller track and guide track 207583



Drilling jig for bogie 563968



Jig for guide block 563969

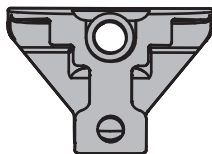


Torx key T10 625172

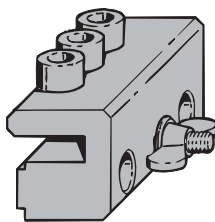
Torx key T15 625173

Torx key T25 563971

Torx key T40 563970

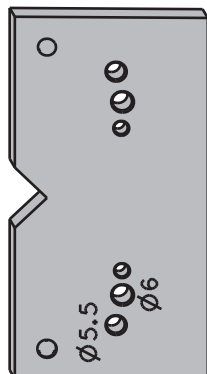


Drilling jig for guide block, adjustable 566970



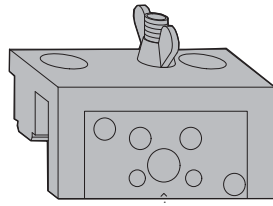
Jigs

Component description	PQ	Material no.
Jig for flush-encased gearbox	1	212155



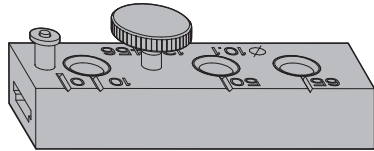
Jigs

Component description	PQ	Material no.
Jig for RotoLine espagnolette	1	333473



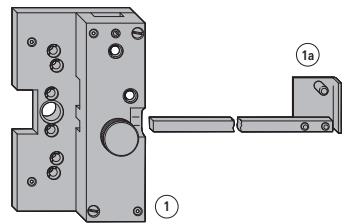
Jigs

Component description	PQ	Material no.
Jig for flush-encased gearbox and escutcheonless handle	1	365361



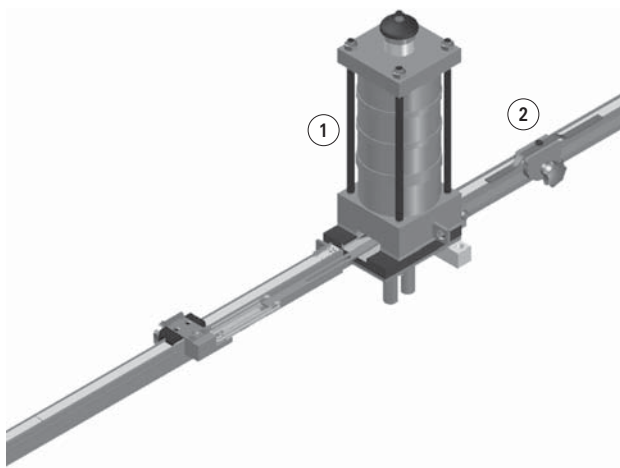
Jigs

Component description	PQ	Material no.
Jig for connecting rod Ø 10 mm	1	333472



Jigs

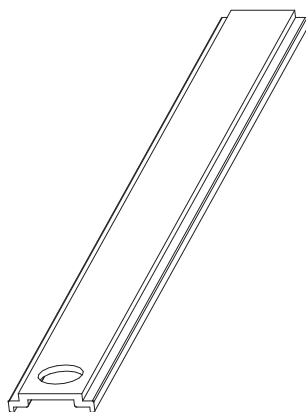
Component description	PQ	Material no.
1 Jig for gearbox and connecting rod Ø 10 mm	1	212544
1a Jig for connecting rod Ø 6 mm	1	212573



Croppers

Pos.	Component description	PQ	Material no.
①	'Comfort' cropper PS4 G Ø 10 mm	1	350309
②	Standard linear ruler	1	350314

Pneumatic cropper for cropping and hole-stamping the connecting-rod.



Connecting rod

Component description	PQ	Material no.
AluVision connecting rod	6 m	334665

Specific connecting-rod profile

Description	Colour	Comment	Length in mm	Material no.
Tracks				
Roller track	R01.5	Silver	6070	562764
Roller track	R05.4	Dark bronze	6070	562765
Roller track	R06.2	Jet-black	6070	625472
Stay-connecting profile				
Stay-connecting profile		Non-treated	5220	625473
Stay-connecting profile	R01.5	Silver	5220	625474
Stay-connecting profile	R05.4	Dark bronze	5220	628493
Stay-connecting profile	R06.2	Jet-black	5220	625475
Stay-connecting profile	R07.2	Traffic-white	5220	625476
Guide track				
Guide track	R01.5	Silver	6070	217140
Cover profiles				
Aluminium cover profile				
Aluminium cover profile		Non-treated	5190	625477
Aluminium cover profile	R01.5	Silver	5190	625478
Aluminium cover profile	R05.4	Dark bronze	5190	625481
Aluminium cover profile	R06.2	Jet-black	5190	625479
Aluminium cover profile	R07.2	Traffic white	5190	625480
PVC cover profile				
PVC cover profile	R01.5	Silver	6080	625482
PVC cover profile	R06.2	Jet-black	6080	217167
PVC cover profile	R07.2	Traffic-white	6080	562780
Connecting rod				
Connecting rod			3600	217057
Guide block, slidable (jig 566970 required)				
Guide block, slidable	R01.5	Silver	6070	563558
Connecting-rod support-block				
Connecting-rod support-block				625483

Profile system	Series	Frame groove in mm	Strikers and guide strikers		Supporting-pin guide strikers for external lock	Strikers and striker strips	
			D10	D6		D10	D6
Akotherm	AT 720/730-740	12	625495	625496	625499	625493	625800
Alcan	TC 2000	12	625495	625496	625499	625493	625800
Aliplast	Imperial Serie 800	12	625495	625496	625499	625493	625800
Alsec	Serie 3000	14	625495	625496	625499	625493	625800
Alumil	M 11000/11500/11600	14	625495	625496	625499	625493	625800
Alutherm	AT 700/800	14	625495	625496	625499	625493	625800
Bröckelmann	RG 60/75	10	625497	625498	625500	625494	625801
Domal Break	PA 63/70S	14	625495	625496	625499	625493	625800
Eural	65/75/1.0	14	625495	625496	625499	625493	625800
Graute	Therm 90	10	625497	625498	625500	625494	625801
Heroal (sash with groove 15/20)	110 ES	10	625497	625498	625500	625494	625801
	O65	10	625497	625498	625500	625494	625801
Hörmann		14	625495	625496	625499	625493	625800
Kawneer Alcoa	AA 610/630/720 HI	10	625497	625498	625500	625494	625801
Klauke	Softline	14	625495	625496	625499	625493	625800
Kubal	Serie 55/65	10	625497	625498	625500	625494	625801
Metra		12	625495	625496	625499	625493	625800
MKF	TKI 755	12	625495	625496	625499	625493	625800
Reynaers	all CS series	14	625495	625496	625499	625493	625800
SAPA	Avantis 75	14	625495	625496	625499	625493	625800
Sommer		12	625495	625496	625499	625493	625800
Sprangers		14	625495	625496	625499	625493	625800
Sun Flex		10	625497	625498	625500	625494	625801
Sykon	70/70 plus - 75/75 plus	10	625497	625498	625500	625494	625801
Technal	Soleal	10	625497	625498	625500	625494	625801
TSG	S 70/S 70V	10	625497	625498	625500	625494	625801
van Beveren	A/B/R 50	14	625495	625496	625499	625493	625800
Winsol		10	625497	625498	625500	625494	625801
Yawal	TM 77 Hi	14	625495	625496	625499	625493	625800

Further profiles are available upon request.

- Positive-controlled central locking system for automatic starting and stopping of the tilt function
- Concealed central locking system
- Integrated mishandling device
- Sash arrangement according to diagram A, B, C, D, G, K
- Internal and external aesthetics like Tilt&Turn windows:
narrow profiles, no offset glazing in the facade, handle position when the door is closed “downwards”
- Retracting distance: max. 117 mm
- Sash width: max. 2000 mm
- Sash height: max. 2700 mm
- Sash weight: max. 200 kg
- Clearance 11.5 + 0.5 mm
- Min. overlap height 7 mm
- Frame groove V.01 / V.02
- Sash groove 15/20
- Sash thickness max. 87 mm
(for sash thicknesses of more than 87 mm,
technical examination is necessary)

Roto Patio 100Z Aluminium

Limitation of sash formats depending on the glass thickness

Application range


Sash width **SW** 670–1280 mm
 Sash height **SH** 930–2380 mm
 Sash weight **S.kg** max. 100 kg
 Sash thickness max. 87 mm
 (for sash thicknesses of more than 87 mm,
 technical examination is necessary)

Glass weight max. 60 kg / m²

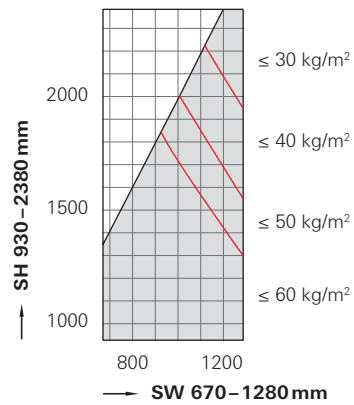
SH : SW = max. 2 : 1

The information in the application diagram
 refers to the glass weight in kg / m².

1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range

No spring scissor needed.



Roto Patio 160Z Aluminium

Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 670–2000 mm
 Sash height **SH** 930–2700 mm
 Sash weight **S.kg** max. 160 kg
 Sash thickness max. 87 mm
 (for sash thicknesses of more than 87 mm,
 technical examination is necessary)

Glass weight max. 60 kg / m²

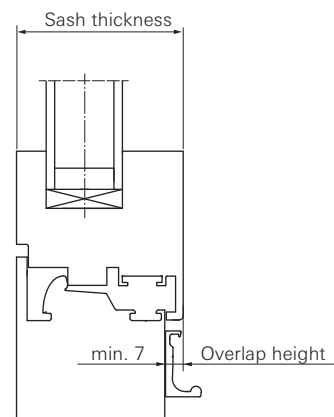
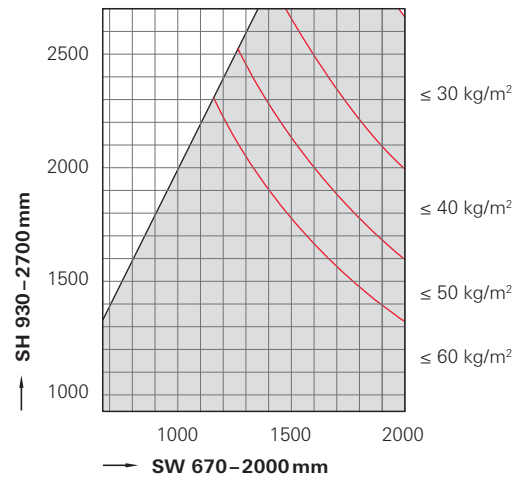
SH : SW = max. 2 : 1

The information in the application diagram refers to the glass weight in kg / m².

1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range

A spring scissor is needed for sash thicknesses between 75 mm and 87 mm.
 In this case, the minimum sash width (SW) is 830 mm.



Roto Patio 200Z Aluminium
Heavy-duty bogie from 160 kg

Limitation of sash formats depending on the glass thickness

Application range

Sash width **SW** 1080–2000 mm
 Sash height **SH** 930–2700 mm
 Sash weight **S.kg** max. 200 kg
 Sash thickness max. 87 mm
 (for sash thicknesses of more than 87 mm,
 technical examination is necessary)

Glass weight max. 60 kg / m²

SH : SW = max. 2 : 1

The information in the application diagram
 refers to the glass weight in kg / m².

1 mm/m² glass thickness = 2.5 kg

 = Impermissible application range

A spring scissor must always be used.

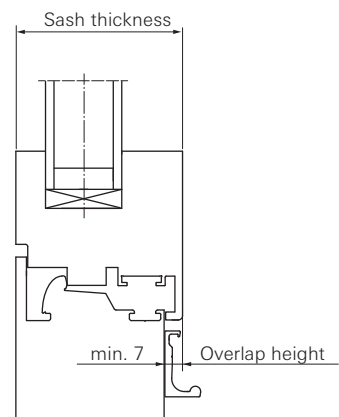
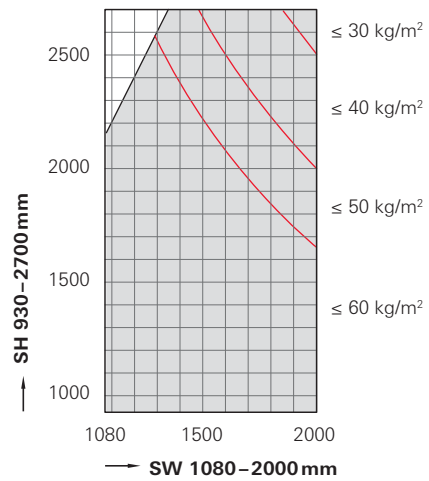


Diagram A

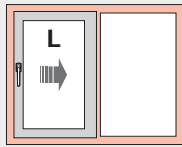


Diagram A
 1 sliding sash (L or R)
 1 fixed glazing

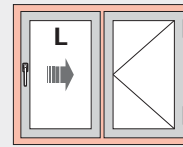


Diagram A
 1 sliding sash (L or R)
 1 Turn-Only sash

Diagram B



Diagram B
 1 sliding sash (L or R)
 Inside frame flush with the wall

Diagram C

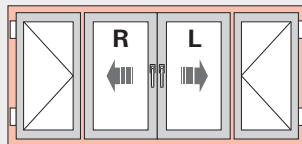


Diagram C
 2 sliding sashes (L and R) with/without centre post
 2 Turn-Only sashes (alternatively fixed glazing)

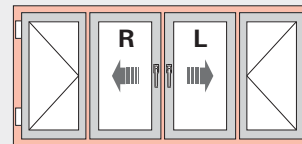


Diagram C
 2 sliding sashes (L and R) with fixed centre post
 2 Turn-Only sashes (alternatively fixed glazing)

Diagram D

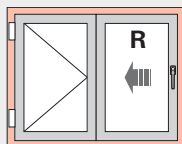


Diagram D
 1 sliding sash (L or R) with/without centre post profile, slidable guide block required
 1 Turn-Only sash

Diagram G

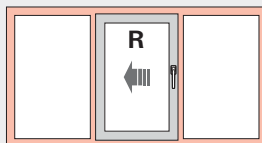


Diagram G
 1 sliding sash (L or R)
 2 fixed glazings

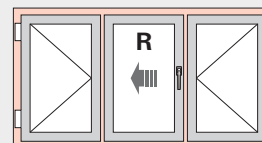
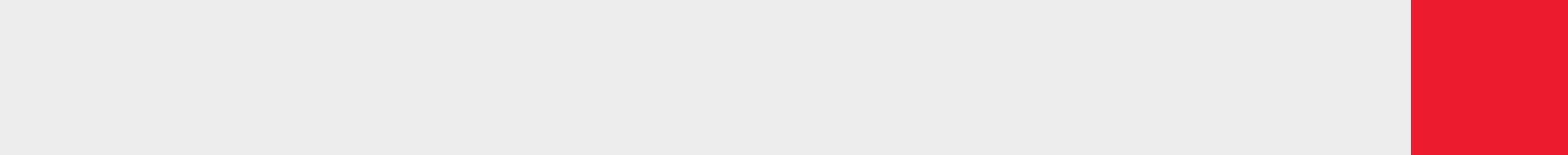


Diagram G
 1 sliding sash (L or R)
 2 Turn-Only sashes

Diagram K

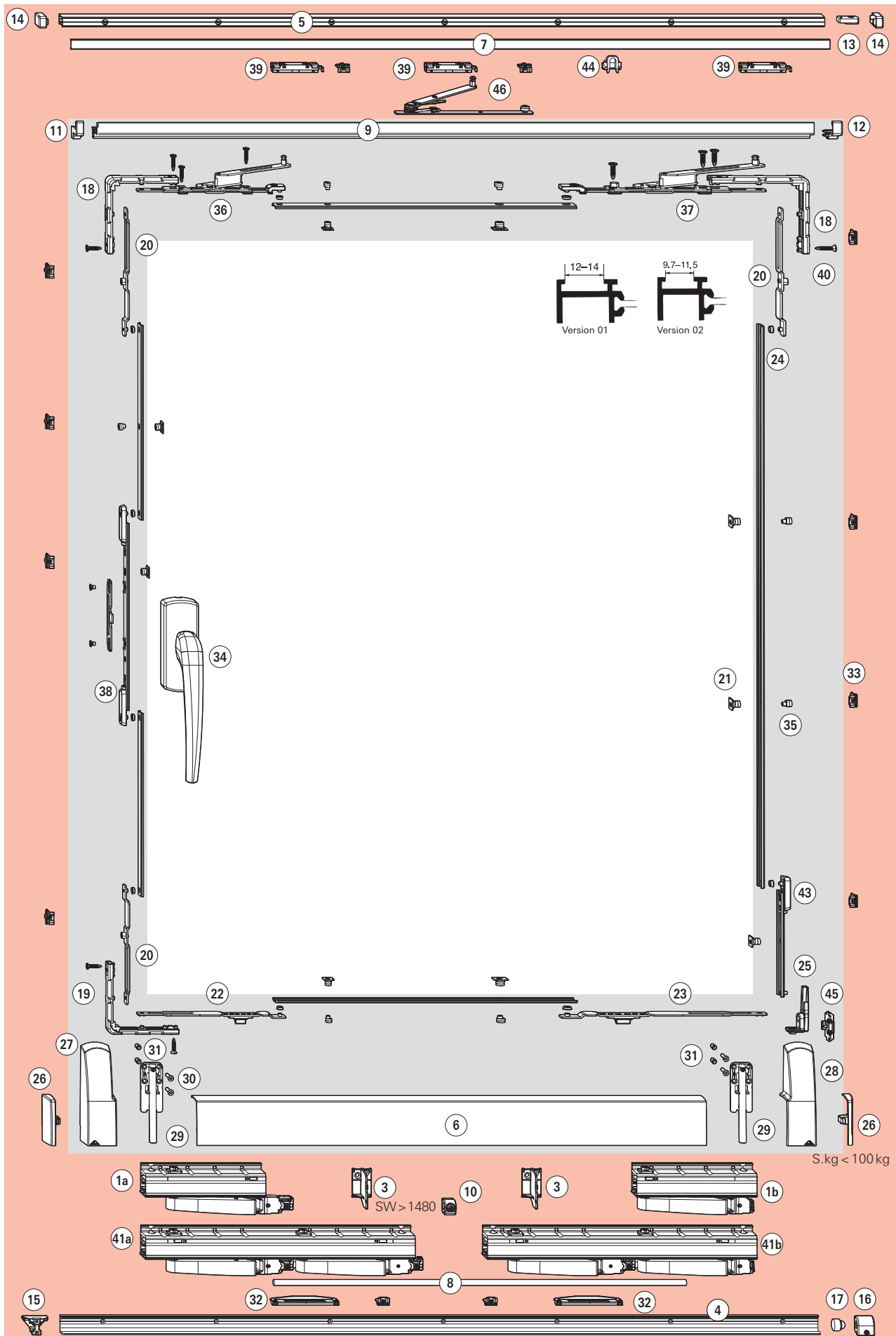


Diagram K
 2 sliding sashes (L and R)
 1 fixed glazing



Roto Patio





Application range

Sash rebate width **SW** 670–2000 mm
 Sash rebate height **SH** 930–2700 mm
 Sash weight **S.kg** max. 200 kg

Basic carton Patio Z Aluminium	
Patio Z Aluminium Basic carton	L 625394
Content:	
18	2 corner drives, top
19	1 corner drive, bottom
36	1 scissor stay, handle-sided L
37	1 scissor stay L
38	1 central hinge support, adjustable
22	1 bullet catch track L
23	1 bullet catch track R
20	3 linkages with locking cams
43	1 linkage, adjustable
Misc. small components pack:	
39	2 sliders 1 tool for slider-release device (not dep.)
Misc. small components pack:	
21	2 locking cams, insertable
25	1 mishandling device
Misc. small components pack:	
24	10 reducer-bushes 10/6
Misc. small components pack:	
40	10 countersunk screws M5x25

Patio Z Aluminium Basic carton	
	R 625382
Content:	
18	2 corner drives, top
19	1 corner drive, bottom
38	1 central hinge support, adjustable
22	1 bullet catch track L
23	1 bullet catch track R
20	3 linkages with locking cams
43	1 linkage, adjustable
	1 scissor stay, handle-sided (not dep.) R
	1 scissor stay, (not dep.) R
Misc. small components pack:	
39	2 sliders 1 tool for slider-release device (not dep.)
Misc. small components pack:	
21	2 locking cams, insertable
25	1 mishandling device
Misc. small components pack:	
24	10 reducer-bushes 10/6
Misc. small components pack:	
40	10 countersunk screws M5x25

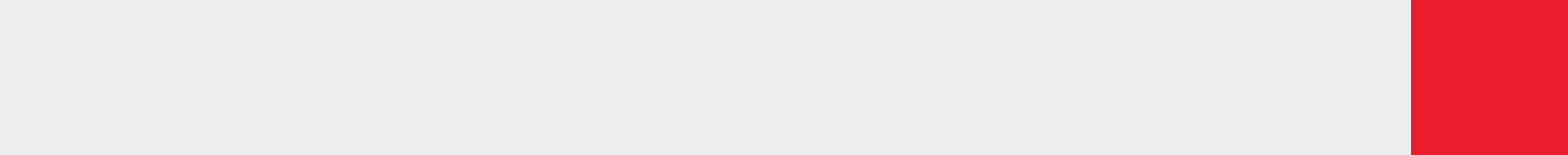
Spring scissor	
	629603
To be used in addition for:	
■ Sash weight from 160–200 kg	
■ Sash assembly depth 75–90 mm	
Contents of the misc. small components pack:	
46	1 spring scissor
39	1 sliders

Bogies	
Patio Z Aluminium bogies up to 160 kg	L 625395
Content:	
1a	1 leading bogie
1b	1 trailing bogie
3	2 cover support brackets 12 supporting-pin countersunk tapping-screws 4.8 x 45 T25 (not dep.)
Patio Z Aluminium bogies up to 160 kg	R 625384
Content:	
2a	1 leading bogie (not dep.)
2b	1 trailing bogie (not dep.)
3	2 cover support brackets 12 supporting-pin countersunk tapping-screws 4.8 x 45 T25 (not dep.)
Patio Z Aluminium heavy-duty bogies from 160 kg	L 625397
Content:	
41a	1 leading heavy-duty bogie
41b	1 trailing heavy-duty bogie
3	1 cover support bracket 2x 12 supporting-pin countersunk tapping-screws 4.8 x 45 T25 (not dep.)
Patio Z Aluminium heavy-duty bogies from 160 kg	R 625396
Content:	
42a	1 leading heavy-duty bogie (not dep.)
42b	1 trailing heavy-duty bogie (not dep.)
3	1 cover support bracket 2x 12 supporting-pin countersunk tapping-screws 4.8 x 45 T25 (not dep.)

Track set		
Track set for sash and frame incl. misc. small components pack		
Non-treated		
SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625445
931 – 1080	2230	625450
1081 – 1280	2630	625455
1281 – 1480	3030	625460
1481 – 1680	3430	625465
1681 – 2000	4130	625470
R01.5 Silver		
SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625442
931 – 1080	2230	625447
1081 – 1280	2630	625452
1281 – 1480	3030	625457
1481 – 1680	3430	625462
1681 – 2000	4130	625467
R05.4 Dark bronze		
SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625446
931 – 1080	2230	625451
1081 – 1280	2630	625456
1281 – 1480	3030	625461
1481 – 1680	3430	625466
1681 – 2000	4130	625471
R06.2 Jet-black		
SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625444
931 – 1080	2230	625449
1081 – 1280	2630	625454
1281 – 1480	3030	625459
1481 – 1680	3430	625464
1681 – 2000	4130	625469
R07.2 Traffic-white		
SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625443
931 – 1080	2230	625448
1081 – 1280	2630	625453
1281 – 1480	3030	625458
1481 – 1680	3430	625463
1681 – 2000	4130	625468
Content:		
Track set:		
④	1 roller track *)	
⑤	1 guide track *)	
⑥	1 cover profile	
⑦	1 PVC cover profile	
⑧	1 connecting rod	
⑨	1 stay-connecting profile	
⑩	1 connecting-rod support-block (additionally included from SW > 1480)	
Misc. small components pack:		
⑪	1 cover cap for stay-connecting profile	L
⑫	1 cover cap for stay-connecting profile	R
⑬	1 buffer stop, top	
⑭	2 cover caps guide track	
⑮	1 guide block	
⑯	1 buffer stop, bottom	
⑰	1 rubber buffer stop, bottom	
	10 pan-head tapping screws 3.9x9.5 T15 (not dep.)	
	40 supporting-pin countersunk tapping-screws 3.9x45 T15 (not dep.)	

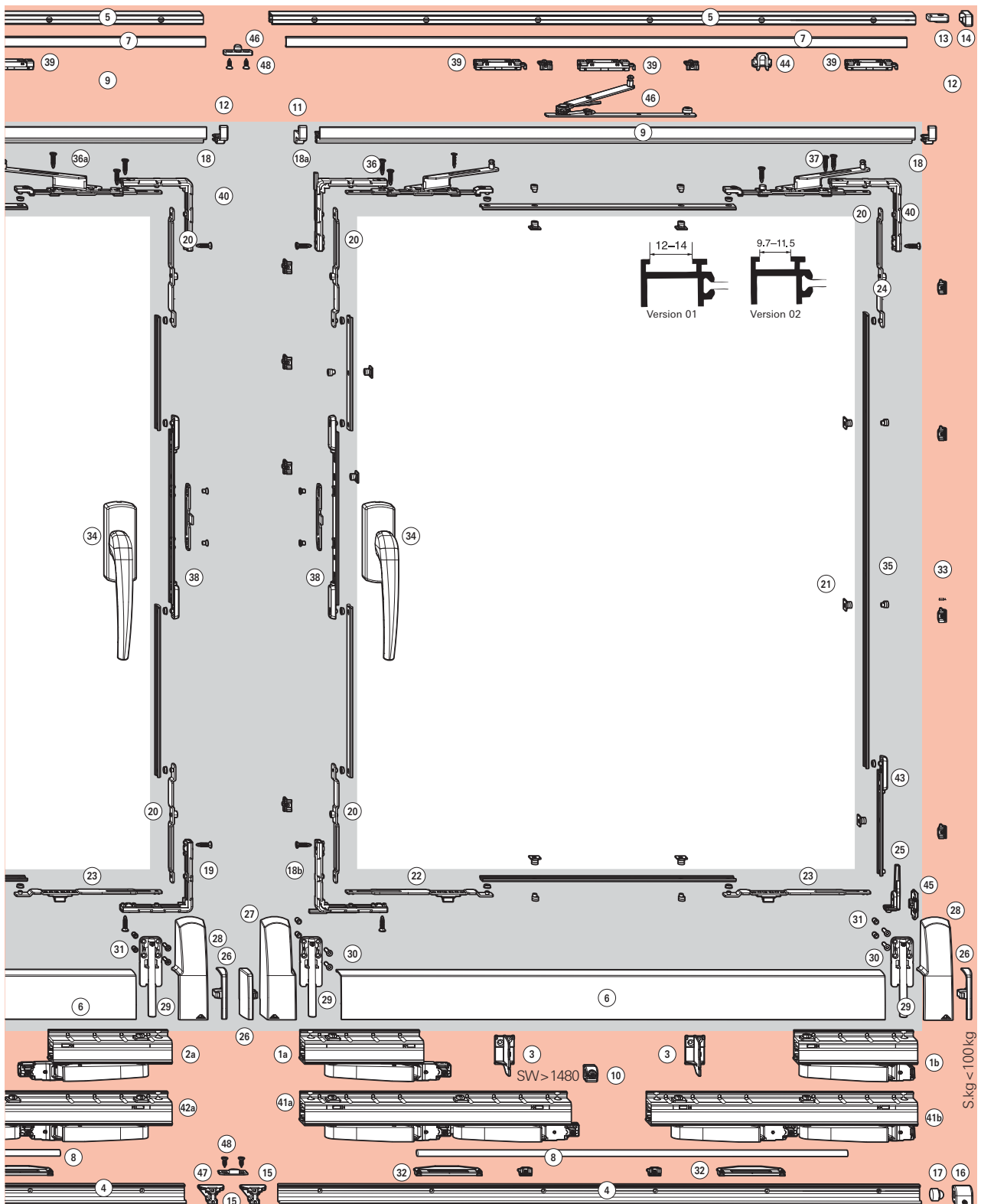
*) The guide track and the roller track must not be painted.

Cover caps	
②6 Cover caps small (pair) 200Z up to 100 kg	
Description	Material no.
Non-treated	625398
R01.5 Silver	625399
R05.4 Dark bronze	625402
R06.2 Jet-black	625400
R07.2 Traffic-white	625401
Cover caps large (pair) 200Z up to 200 kg	
Description	Material no.
Non-treated	625403
R01.5 Silver	625404
R05.4 Dark bronze	625407
R06.2 Jet-black	625405
R07.2 Traffic-white	625406
Content:	
②7	1 cover cap L
②8	1 cover cap R
②9	2 reinforcement brackets, adjustable
Misc. small components pack:	
③0	4 countersunk screws M5x25 T25
③1	4 blind rivet nuts M5
Locking plates	
Locking plates V.01	625486
Locking plates V.02	625487
Contents of the misc. small components pack:	
③2	2 guide strikers
③3	8 strikers
④4	1 guidance
④5	1 frame-striker, mishandling device
Profile system assignment → p. 290	
②1	Locking cam, insertable D10 625491
Contents of the misc. small components pack:	
3 locking cams, insertable	
③5	CL cam D6 625492
Contents of the misc. small components pack:	
3 CL cams	
Locking cam D10 V.01, complementary	625493
Locking cam D10 V.02, complementary	625494
Contents of the misc. small components pack:	
②1	10 locking cams, insertable
③3	10 strikers
Profile system assignment → p. 290	
Locking cam D6 V.01, complementary	625800
Locking cam D6 V.02, complementary	625801
Contents of the misc. small components pack:	
③5	10 CL cams
③3	10 strikers
Profile system assignment → p. 290	
Guide strikers (spare part)	
Guide strikers V.01	625499
Guide strikers V.02	625500
Contents of the misc. small components pack:	
③2	2 guide strikers
Profile system assignment → p. 290	
③4	Handles and geared-handles → p. 284
Flush-encased gearbox → p. 286	



Roto Patio





Application range

Sash rebate width **SW** 670–2000 mm
 Sash rebate height **SH** 930–2700 mm
 Sash weight **S.kg** max. 200 kg

Basic carton Patio Z Aluminium

Patio Z Aluminium Basic carton L 625394

Content:

- 18 2 corner drives, top
- 19 1 corner drive, bottom
- 36 1 scissor stay, handle-sided L
- 37 1 scissor stay L
- 38 1 central hinge support, adjustable
- 22 1 bullet catch track L
- 23 1 bullet catch track R
- 20 3 linkages with locking cams
- 43 1 linkage, adjustable

Misc. small components pack:

- 39 2 sliders
1 tool for slider-release device (not dep.)

Misc. small components pack:

- 21 2 locking cams, insertable
- 25 1 mishandling device

Misc. small components pack:

- 24 10 reducer-bushes 10/6

Misc. small components pack:

- 40 10 countersunk screws M5x25

Patio Z Aluminium Basic carton dummy mullion 625383

Content:

- 18 1 corner drive, top
- 18a 1 corner drive, top of dummy mullion
- 18b 1 corner drive, bottom of dummy mullion
- 36a 1 scissor stay, handle-sided R
- 38 1 central hinge support, adjustable
- 22 1 bullet catch track L
- 23 1 bullet catch track R
- 20 3 linkages with locking cams
- 43 1 linkage, adjustable
- 37a 1 scissor stay, (not dep.) R

Misc. small components pack:

- 39 2 sliders
1 tool for slider-release device (not dep.)

Misc. small components pack:

- 21 2 locking cams, insertable
- 25 1 mishandling device

Misc. small components pack:

- 24 10 reducer-bushes 10/6

Misc. small components pack:

- 40 10 countersunk screws M5x25

Spring scissor 629603

To be used in addition for:

- Sash weight from 160–200 kg
- Sash assembly depth 75–90 mm

Contents of the misc. small components pack:

- 46 1 spring scissor
- 39 1 sliders

Bogies

Patio Z Aluminium bogies up to 160 kg L 625395

Content:

- 1a 1 leading bogie
- 1b 1 trailing bogie
- 3 2 cover support brackets
12 supporting-pin countersunk tapping-screws 4.8x45 T25 (not dep.)

Patio Z Aluminium bogies up to 160 kg R 625384

Content:

- 2a 1 leading bogie
- 2b 1 trailing bogie (not dep.)
- 3 2 cover support brackets
12 supporting-pin countersunk tapping-screws 4.8 x 45 T25 (not dep.)

Patio Z Aluminium heavy-duty bogies from 160 kg L 625397

Content:

- 41a 1 leading heavy-duty bogie
- 41b 1 trailing heavy-duty bogie
- 3 1 cover support bracket
2x 12 supporting-pin countersunk tapping-screws 4.8 x 45 T25 (not dep.)

Patio Z Aluminium heavy-duty bogies from 160 kg R 625396

Content:

- 42a 1 leading heavy-duty bogie
- 42b 1 trailing heavy-duty bogie (not dep.)
- 3 1 cover support bracket
2x 12 supporting-pin countersunk tapping-screws 4.8 x 45 T25 (not dep.)

Track set, 1 piece per sash

Track set for sash and frame incl. misc. small components pack

Non-treated

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625445
931 – 1080	2230	625450
1081 – 1280	2630	625455
1281 – 1480	3030	625460
1481 – 1680	3430	625465
1681 – 2000	4130	625470

R01.5 Silver

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625442
931 – 1080	2230	625447
1081 – 1280	2630	625452
1281 – 1480	3030	625457
1481 – 1680	3430	625462
1681 – 2000	4130	625467

R05.4 Dark bronze

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625446
931 – 1080	2230	625451
1081 – 1280	2630	625456
1281 – 1480	3030	625461
1481 – 1680	3430	625466
1681 – 2000	4130	625471

R06.2 Jet-black

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625444
931 – 1080	2230	625449
1081 – 1280	2630	625454
1281 – 1480	3030	625459
1481 – 1680	3430	625464
1681 – 2000	4130	625469

R07.2 Traffic-white

SW / mm	Frame external width (FEW) / mm	Material no.
670 – 930	1930	625443
931 – 1080	2230	625448
1081 – 1280	2630	625453
1281 – 1480	3030	625458
1481 – 1680	3430	625463
1681 – 2000	4130	625468

Content:

Track set:

- ④ 1 roller track*)
- ⑤ 1 guide track*)
- ⑥ 1 cover profile
- ⑦ 1 PVC cover profile
- ⑧ 1 connecting rod
- ⑨ 1 stay-connecting profile
- ⑩ 1 connecting-rod support-block (additionally included from SW > 1480)

Misc. small components pack:

- ⑪ 1 cover cap for stay-connecting profile L
- ⑫ 1 cover cap for stay-connecting profile R
- ⑬ 1 buffer stop, top
- ⑭ 2 cover caps guide track
- ⑮ 1 guide block
- ⑯ 1 buffer stop, bottom
- ⑰ 1 rubber buffer stop, bottom
- 10 pan-head tapping screws 3.9 x 9.5 T15 (not dep.)
- 40 supporting-pin countersunk tapping-screws 3.9 x 45 T15 (not dep.)

*) The guide track and the roller track must not be painted.

Cover caps

②⑥ **Cover caps** small (pair) 200Z up to 100 kg

Description	Material no.
Non-treated	625398
R01.5 Silver	625399
R05.4 Dark bronze	625402
R06.2 Jet-black	625400
R07.2 Traffic-white	625401

Cover caps large (pair) 200Z up to 200 kg

Description	Material no.
Non-treated	625403
R01.5 Silver	625404
R05.4 Dark bronze	625407
R06.2 Jet-black	625405
R07.2 Traffic-white	625406

Content:

- ②⑦ 1 cover cap L
- ②⑧ 1 cover cap R
- ②⑨ 2 reinforcement brackets, adjustable

Misc. small components pack:

- ③⑩ 4 countersunk screws M5x25 T25
- ③① 4 blind rivet nuts M5

Locking plates

Locking plates V.01	625486
Locking plates V.02	625487

Contents of the misc. small components pack:

- ③② 2 guide strikers
- ③③ 8 strikers
- ④④ 1 guidance
- ④⑤ 1 frame-striker, mishandling device

Profile system assignment → p. 290

Dummy-mullion plates 10 mm groove	625488
Dummy-mullion plates 12 mm groove	625489
Dummy-mullion plates 14 mm groove	625490

Contents of the misc. small components pack:

- ④⑥ 1 dummy-mullion plate, top
- ④⑦ 1 striker, bottom
- ④⑧ 4 countersunk tapping-screws 4.8 x 25

Profile system assignment → p. 290

Locking cam, insertable D10 **625491**

Contents of the misc. small components pack:

- ②① 3 locking cams, insertable

CL cam D6 **625492**

Contents of the misc. small components pack:

- ③⑤ 3 CL cams

Locking cam D10 V.01, complementary **625493**

Locking cam D10 V.02, complementary **625494**

Contents of the misc. small components pack:

- ②① 10 locking cams, insertable
- ③③ 10 strikers

Profile system assignment → p. 290

Locking cam D6 V.01, complementary **625800**

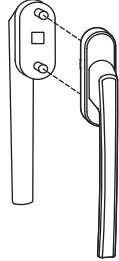
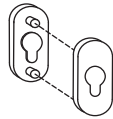
Locking cam D6 V.02, complementary **625801**

Contents of the misc. small components pack:

- ③⑤ 10 CL cams
- ③③ 10 strikers

Profile system assignment → p. 290

Guide strikers (spare part)	
Guide strikers V.01	625499
Guide strikers V.02	625500
Contents of the misc. small components pack:	
③② 2 guide strikers	
Profile system assignment	→ p. 290
③④ Handles and geared-handles	→ p. 284
Flush-encased gearbox	→ p. 286



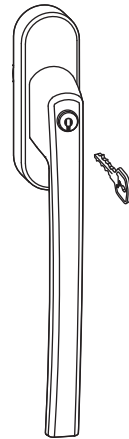
RotoLine handle, with Roto logo, inside and outside operation
 spindle length 35 mm

Roto colour no.	Colour	Material no.
R 01.5	Silver	626532
R 05.4	Dark bronze	601692
R 06.2M	Jet-black, matt	626533
R 07.2	Traffic-white	601693



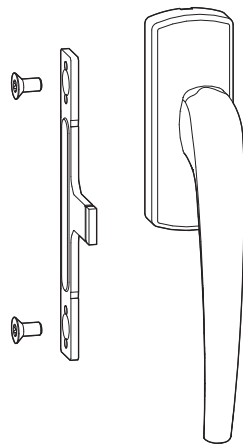
RotoLine handle, with Roto logo, spindle length 35 mm

Roto colour no.	Colour	Material no.
R01.5	Silver	626528
R05.4	Dark bronze	494479
R 06.2M	Jet-black, matt	626529
R07.2	Traffic-white	494480



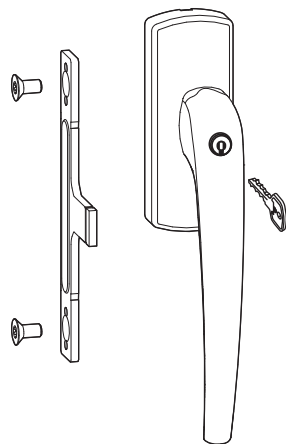
RotoLine handle, with Roto logo, lockable, spindle length 35 mm

Roto colour no.	Colour	Material no.
R01.5	Silver	626530
R05.4	Dark bronze	494485
R 06.2M	Jet-black, matt	626531
R07.2	Traffic-white	494486



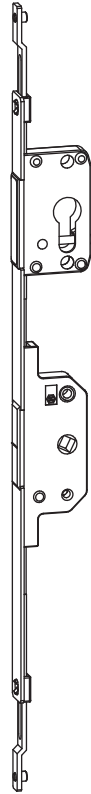
Surface mounted positive-control handle, incl. connector

Roto colour no.	Colour	Material no.
R 01.5	Silver	L 625412 R 625408
R 05.4	Dark bronze	L 625415 R 625411
R 06.2M	Jet-black, matt	L 625414 R 625410
R 07.2	Traffic-white	L 625413 R 625409



Surface mounted positive-control handle, incl. connector

Roto colour no.	Colour	Material no.
R 01.5	Silver	L 625420 R 625416
R 05.4	Dark bronze	L 625423 R 625419
R 06.2M	Jet-black, matt	L 625422 R 625418
R 07.2	Traffic white	L 625421 R 625417



Flush-encased gearbox, lockable espagnolette

Backset/mm

Material no.

30

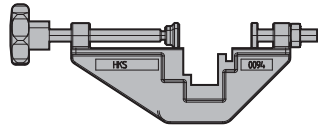
625424

40

625425



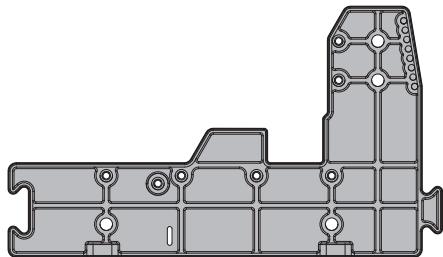
Slider-release device 562759



Jig for roller track and guide track 563967



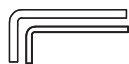
Drilling aid for roller track and guide track 207583



Drilling jig for bogie 563968



Jig for guide block 563969



Torx key T10 625172



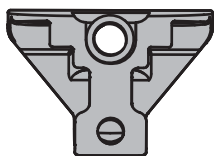
Torx key T15 625173



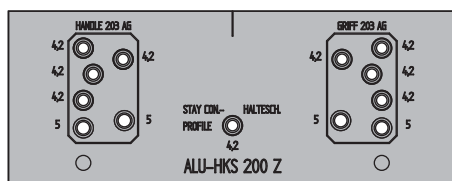
Torx key T25 563971



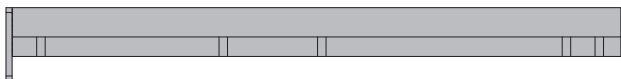
Torx key T40 563970



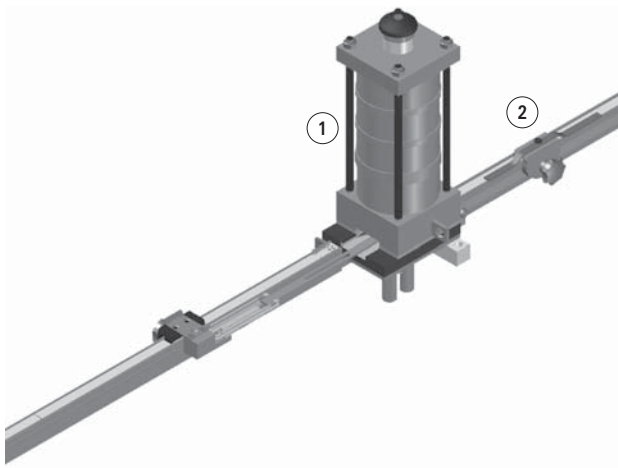
Drilling jig for guide block, adjustable 566970



Drilling jig for surface mounted positive-control handle and stay-connecting profile 623669



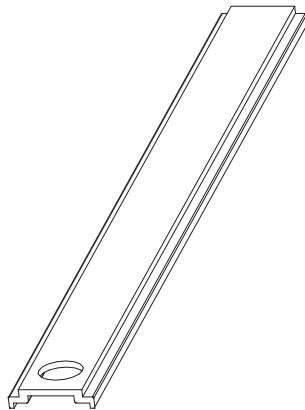
Drilling jig for corner drive and scissor stay 623668



Croppers

Pos.	Component description	PQ	Material no.
①	'Comfort' cropper PS4 G Ø 10 mm	1	350309
②	Standard linear ruler	1	350314

Pneumatic cropper for cropping and hole-stamping the connecting rod.



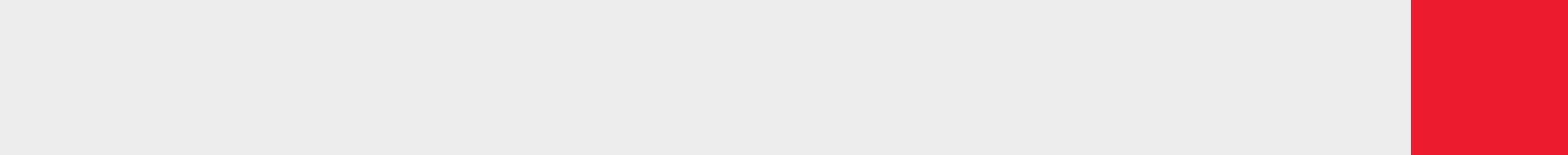
Connecting rod

Component description	PQ	Material no.
AluVision connecting rod	6 m	334665
Specific connecting-rod profile		

Description	Colour	Comment	Length in mm	Material no.
Tracks				
Roller track	R01.5	Silver	6070	562764
Roller track	R05.4	Dark bronze	6070	562765
Roller track	R06.2	Jet-black	6070	625472
Stay-connecting profile				
Stay-connecting profile		Non-treated	5220	625473
Stay-connecting profile	R01.5	Silver	5220	625474
Stay-connecting profile	R05.4	Dark bronze	5220	628493
Stay-connecting profile	R06.2	Jet-black	5220	625475
Stay-connecting profile	R07.2	Traffic-white	5220	625476
Guide track	R01.5	Silver	6070	217140
Cover profiles				
Aluminium cover profile		Non-treated	5190	625477
Aluminium cover profile	R01.5	Silver	5190	625478
Aluminium cover profile	R05.4	Dark bronze	5190	625481
Aluminium cover profile	R06.2	Jet-black	5190	625479
Aluminium cover profile	R07.2	Traffic-white	5190	625480
PVC cover profile	R01.5	Silver	6080	625482
PVC cover profile	R06.2	Jet-black	6080	217167
PVC cover profile	R07.2	Traffic-white	6080	562780
Connecting rod			3600	217057
Guide block, slidable (jig 566970 required)				
Guide block, slidable	R01.5	Silver	6070	563558
Connecting-rod support-block				625483

Profile system	Series	Frame groove in mm	Locking plates	Dummy-mul-lion plates	Guide strikers	Strikers and locking cams	
						D10	D6
Akotherm	AT 720/730-740	12	625486	625489	625499	625493	625800
Alcan	TC 2000	12	625486	625489	625499	625493	625800
Aliplast	Imperial Serie 800	12	625486	625489	625499	625493	625800
Alsec	Serie 3000	14	625486	625490	625499	625493	625800
Alumil	M 11000/11500/11600	14	625486	625490	625499	625493	625800
Alutherm	AT 700/800	14	625486	625490	625499	625493	625800
Bröckelmann	RG 60/75	10	625487	625488	625500	625494	625801
Domal Break	PA 63/70S	14	625486	625490	625499	625493	625800
Eural	65/75/1.0	14	625486	625490	625499	625493	625800
Graute	Therm 90	10	625487	625488	625500	625494	625801
Heralo (sash with groove 15/20)	110 ES	10	625487	625488	625500	625494	625801
	O65	10	625487	625488	625500	625494	625801
Hörmann		14	625486	625490	625499	625493	625800
Kawneer Alcoa	AA 610/630/720 HI	10	625487	625488	625500	625494	625801
Klauke	Softline	14	625486	625490	625499	625493	625800
Kubal	Serie 55/65	10	625487	625488	625500	625494	625801
Metra		12	625486	625489	625499	625493	625800
MKF	TKI 755	12	625486	625489	625499	625493	625800
Raico	Frame+	10	625487	625488	625500	625494	625801
Reynaers	all CS series	14	625486	625490	625499	625493	625800
SAPA	Avantis 75	14	625486	625490	625499	625493	625800
Sommer		12	625486	625489	625499	625493	625800
Sprangers		14	625486	625490	625499	625493	625800
Sun Flex		10	625487	n.a.	625500	625494	625801
Sykon	70/70 plus – 75/75 plus	10	625487	625488	625500	625494	625801
Technal	Soleal	10	625487	625488	625500	625494	625801
TSG	S 70/S 70V	10	625487	625488	625500	625494	625801
van Beveren	A/B/R 50	14	625486	625490	625499	625493	625800
Winsol		10	625487	625488	625500	625494	625801
Wipro					625499		
Yawal	TM 77 Hi	14	625486	625490	625491	625493	625800

Further profiles are available upon request.



Roto Patio



- Roto Patio 6080 (Fold&Slide door)
- Concealed central locking system for one-hand-operation.
- Optional top or bottom running door elements
- Inward or outward opening
- Silver anodised roller tracks and guide tracks
- Coloured cover strips
- Powder-coated hinges and support-brackets
- Standard colours:
 - White R07.2
 - Medium bronze R05.3
 - Silver R01.1
 - Raw (for on-site coating)

Tilt&Turn or Turn-Only sash as access sash

- Retro-adjustable components

- Additional possibilities:
 - Roto security components, MVS

- Application range:
 - Sash width SW min. 480 mm – max. 1230 mm
(access sash on the frame side)
 - Sash width SW min. 480 mm – max. 930 mm
(folding sash)
 - Sash height SH min. 630 mm – max. 2430 mm
 - Sash weight S.kg max. 80 kg
- Roller track length: max. 6 m

Explanation of the digit string in the diagrams

A mirror image of each diagram can also be implemented.

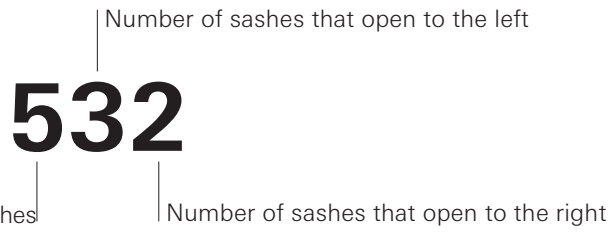


DIAGRAM 321

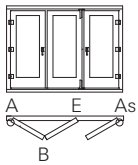


DIAGRAM 330

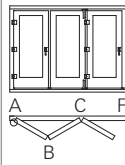


DIAGRAM 431

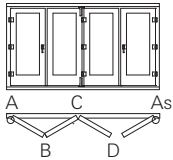


DIAGRAM 532

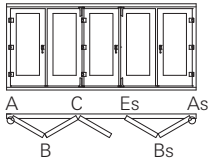


DIAGRAM 541

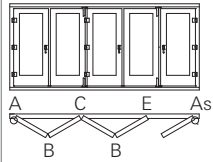


DIAGRAM 550

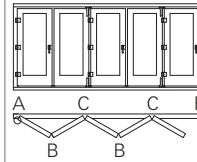


DIAGRAM 633

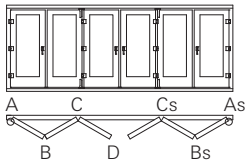


DIAGRAM 651

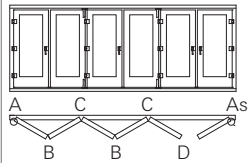


DIAGRAM 743

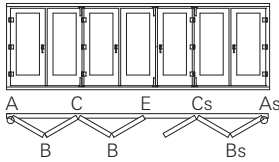


DIAGRAM 752

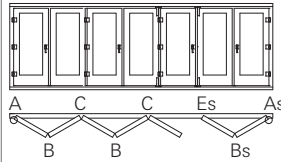


DIAGRAM 761

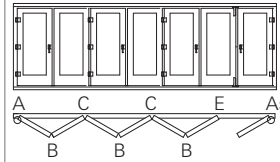


DIAGRAM 770

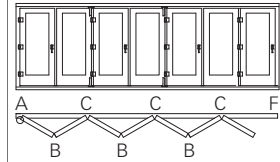
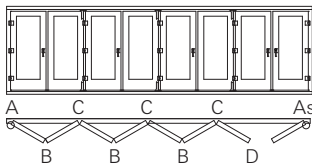
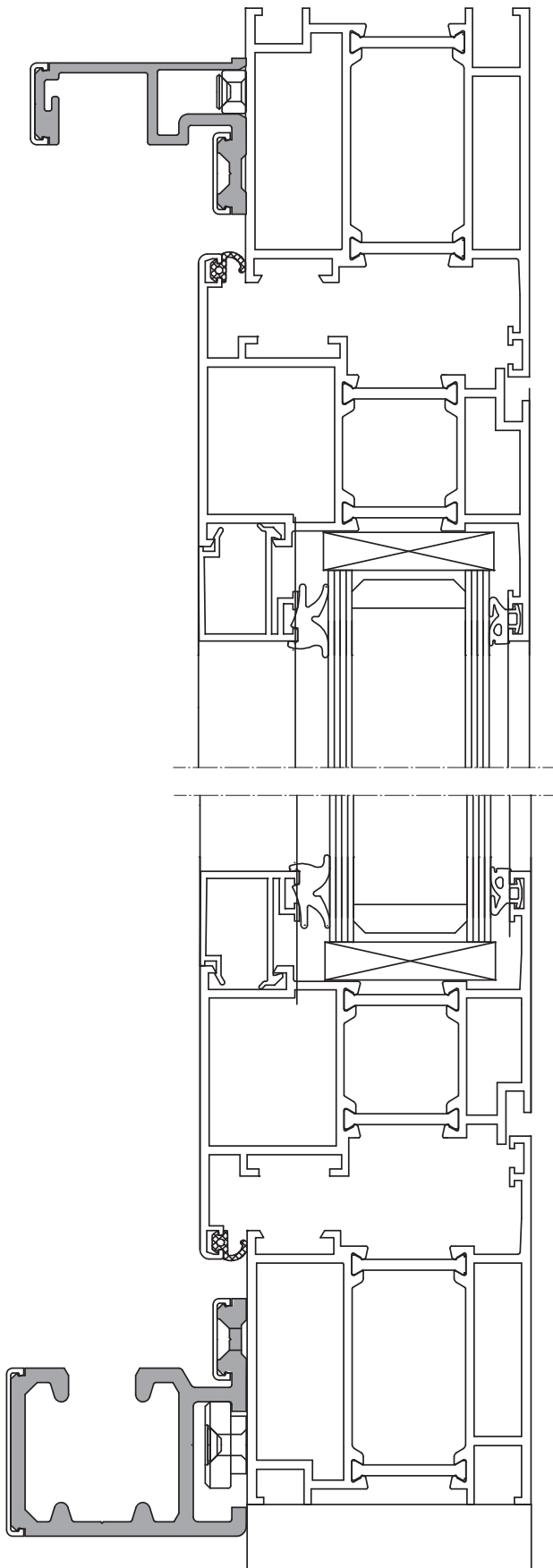


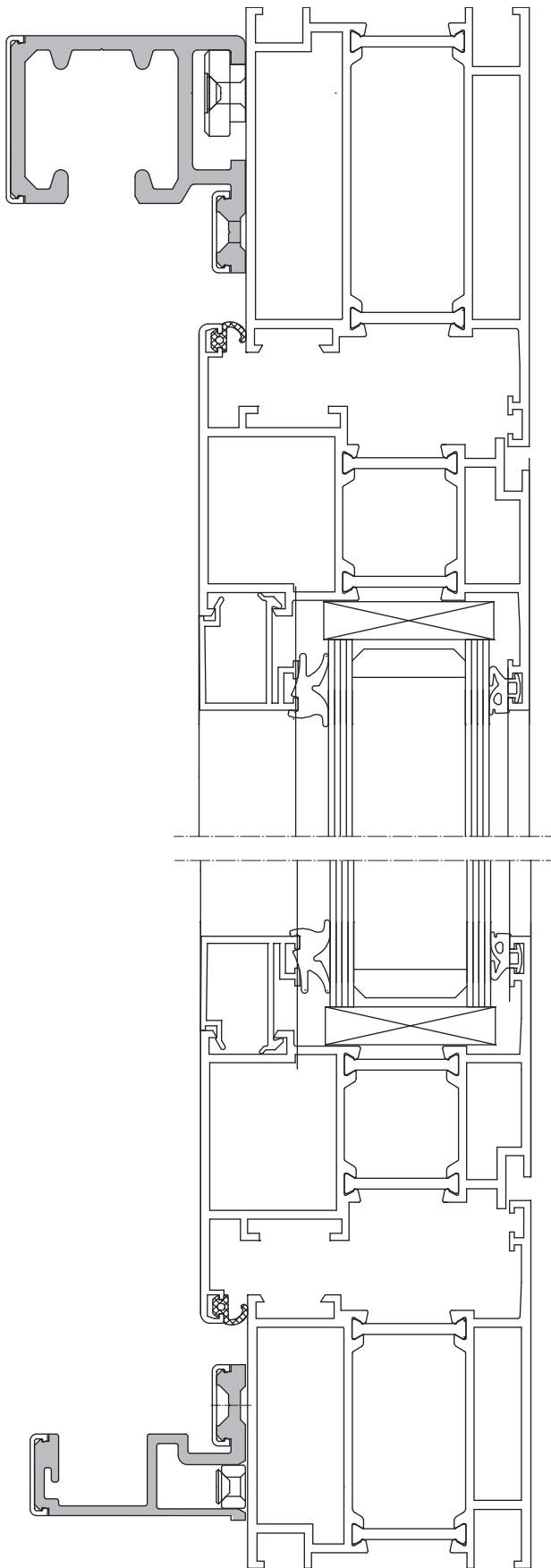
DIAGRAM 871





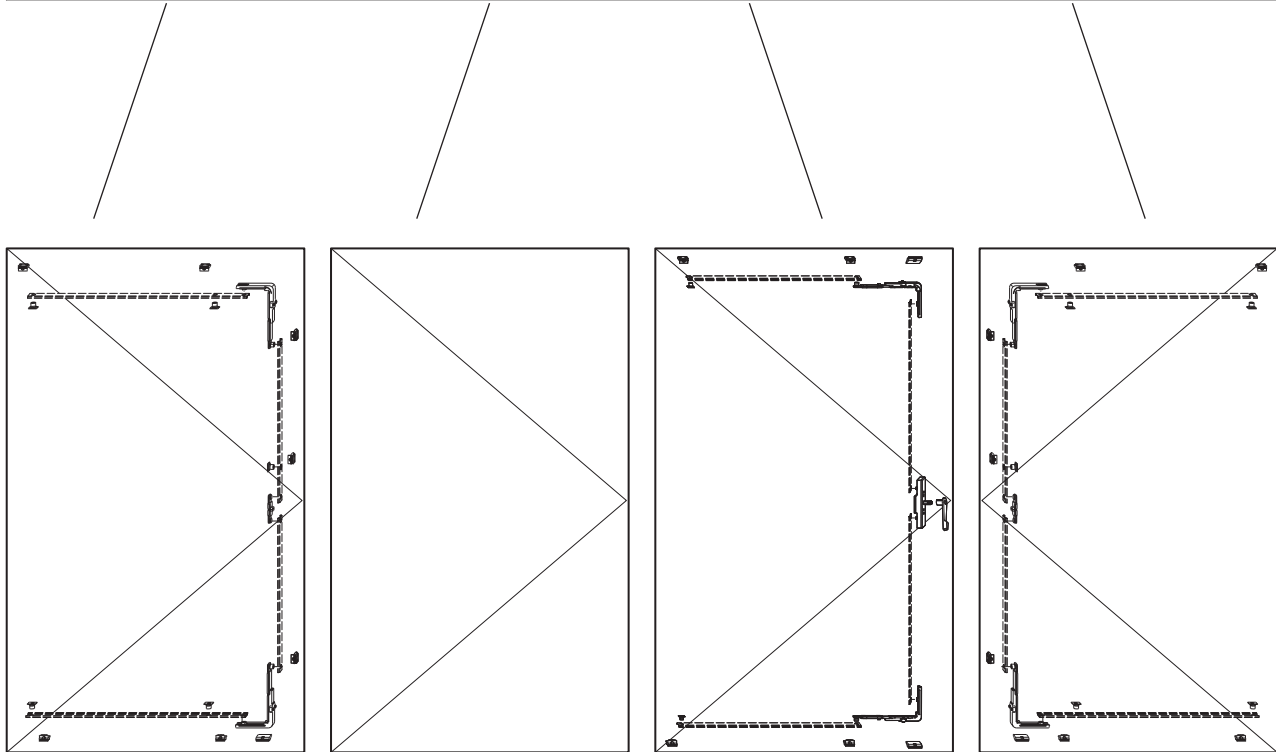
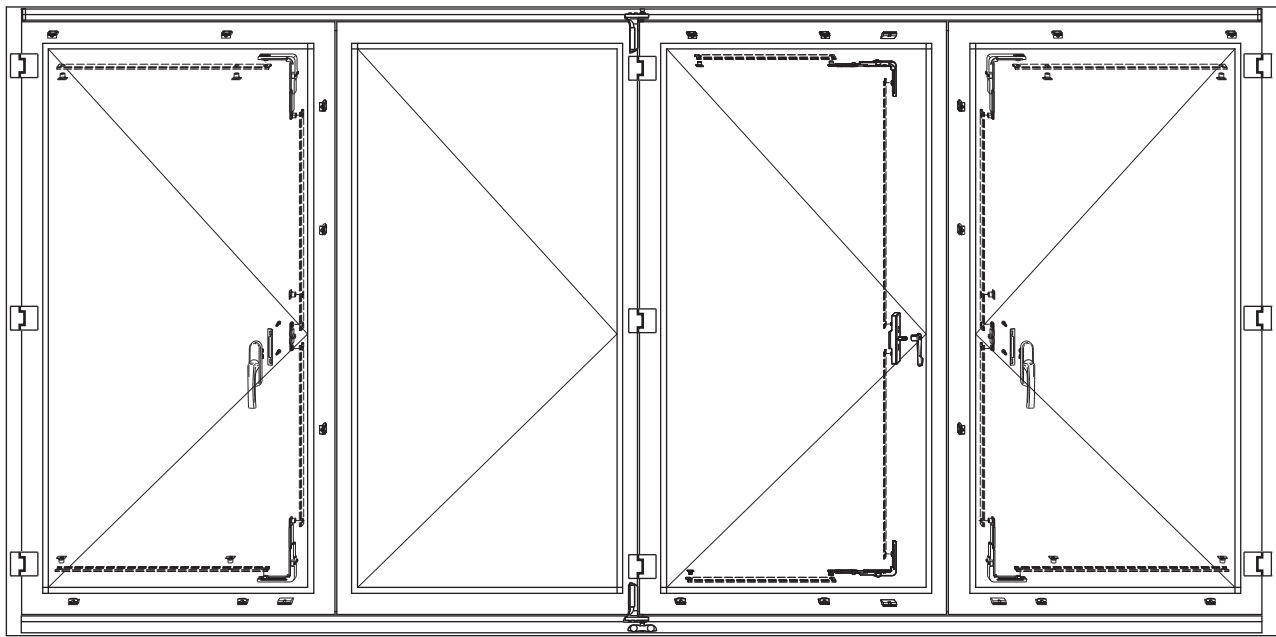
Combination possibility 1

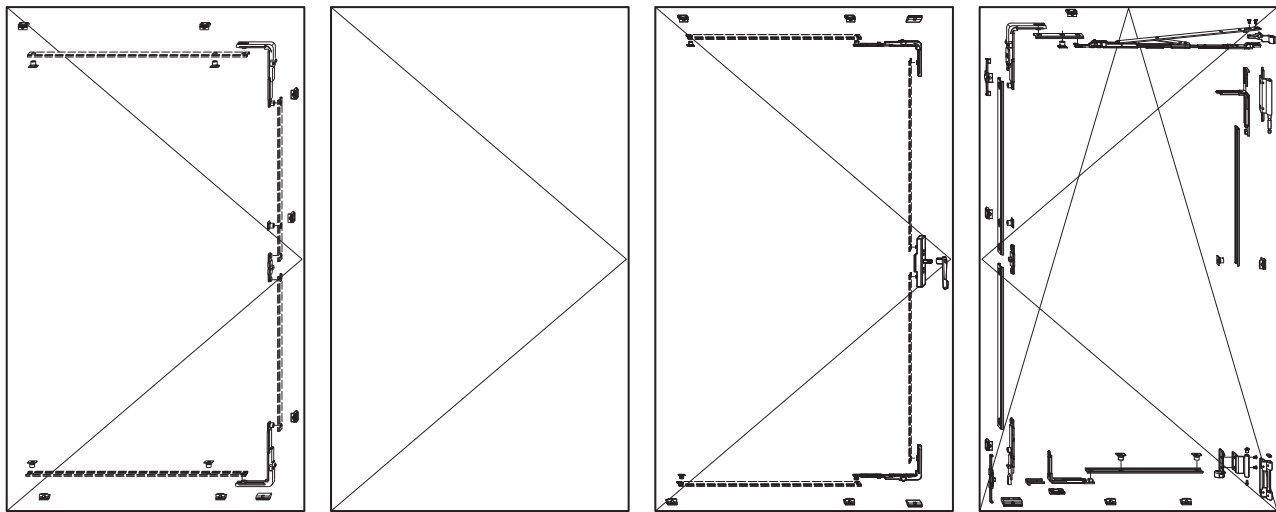
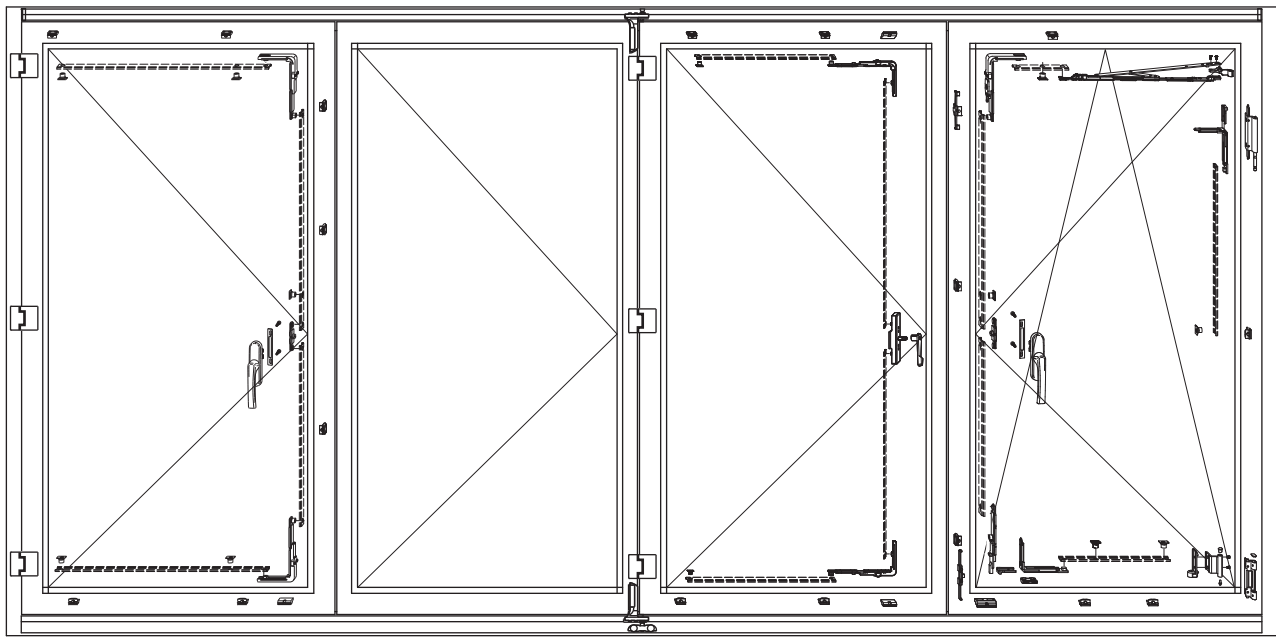
- Bottom running
- Guide track, top
- Standard roller track, bottom

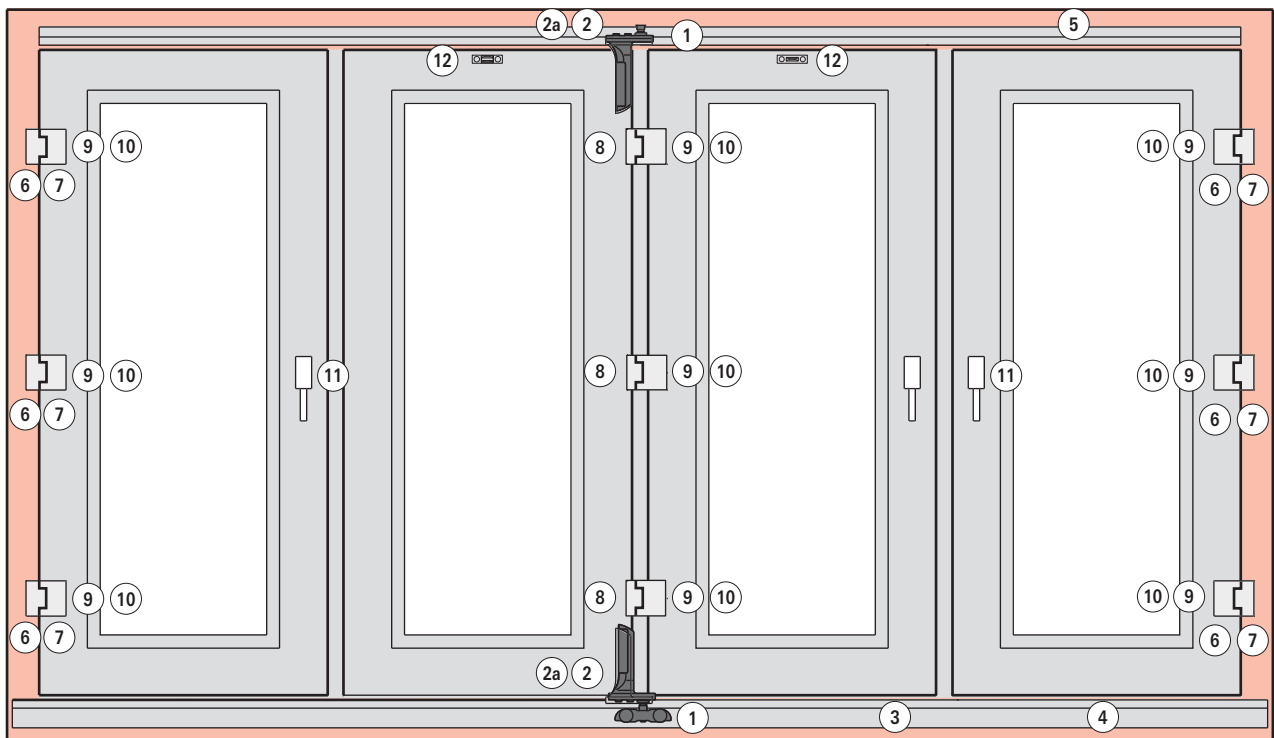


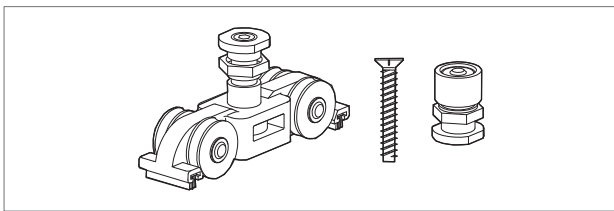
Combination possibility 2

- Top running
- Standard roller track, top
- Guide track, bottom

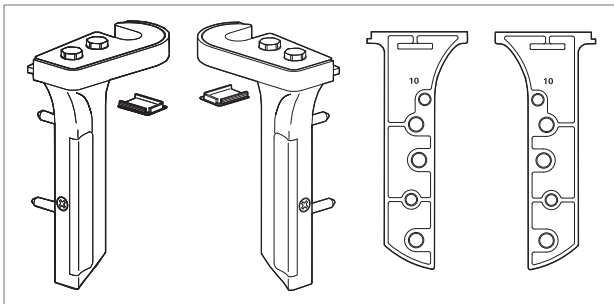




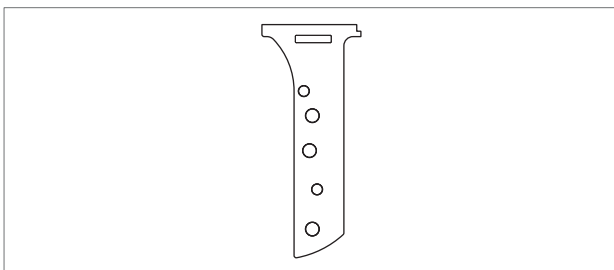




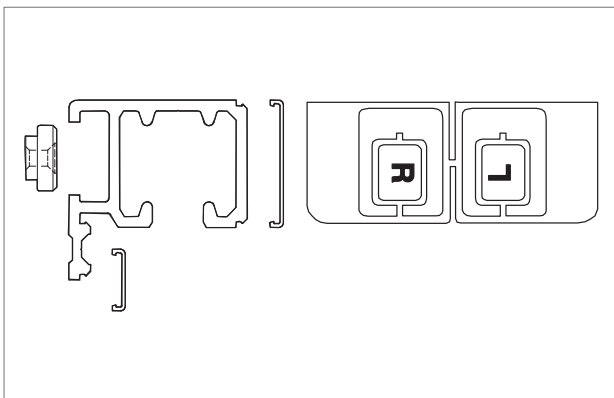
1 Bogie set with accessories		
Description	Colour	Material no.
Set	–	349596



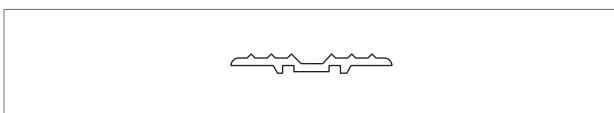
2 Support-bracket (pair) + 2 packers		
H = 6 mm, overlap height 10–14 mm		
Version	Colour	Material no.
	White R07.2	349593
	Medium bronze R05.3	349594
	EV1 R01.1	349595
	Non-treated –	338298



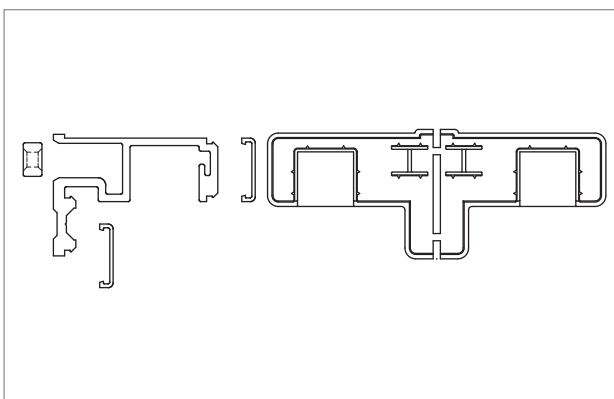
2a Packers 7 (PQ 2)		
H = 3 mm, overlap height 7–9 mm		
Version	Colour	Material no.
	White R07.2	450953
	Medium bronze R05.3	450954
	EV1 R01.1	450975
	Non-treated –	626790



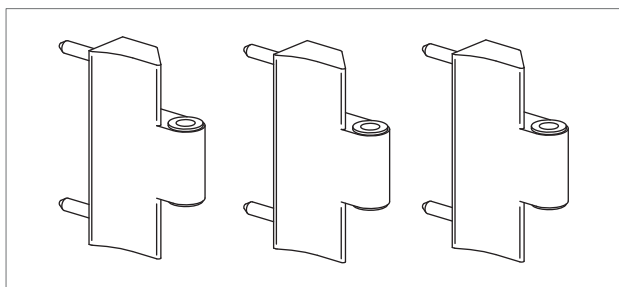
3 Roller track incl. accessories		
Version	Colour	Material no.
3000 mm	White R07.2	312570
	Medium bronze R05.3	312727
	EV1 Silver R01.1	312733
4000 mm	White R07.2	312571
	Medium bronze R05.3	312728
	EV1 Silver R01.1	312734
5000 mm	White R07.2	312583
	Medium bronze R05.3	312730
	EV1 Silver R01.1	312775
6000 mm	White R07.2	312584
	Medium bronze R05.3	312774
	EV1 Silver R01.1	312776



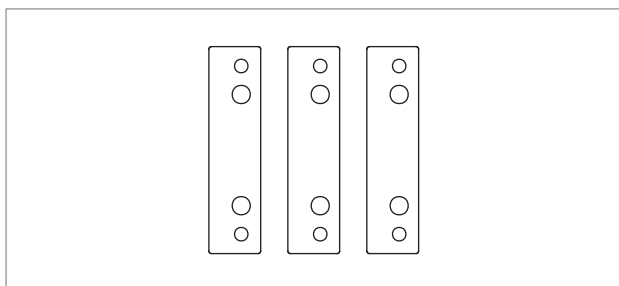
4 Cover strip for roller track		
Description	Colour	Material no.
1300 mm	EV1 Silver –	317480



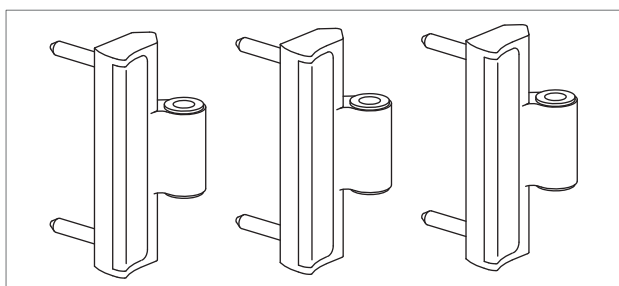
5 Guide track incl. accessories		
Version	Colour	Material no.
3000 mm	White R07.2	312797
	Medium bronze R05.3	312802
	EV1 Silver R01.1	312807
4000 mm	White R07.2	312798
	Medium bronze R05.3	312803
	EV1 Silver R01.1	312808
5000 mm	White R07.2	312799
	Medium bronze R05.3	312804
	EV1 Silver R01.1	312809
6000 mm	White R07.2	312800
	Medium bronze R05.3	312805
	EV1 Silver R01.1	312810



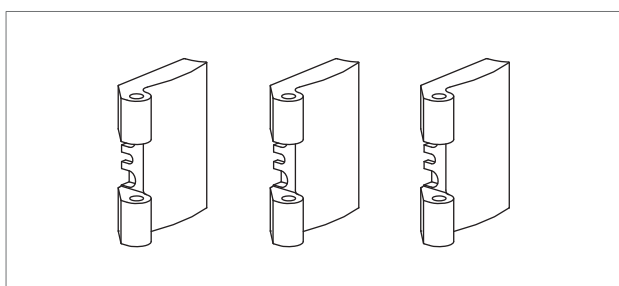
⑥ Frame hinge-bearing (PQ 3)			
Version	Colour	Material no.	
7 mm	White	R07.2	450950
	Medium bronze	R05.3	450951
	EV1 Silver	R01.1	450952
10 mm	White	R07.2	349589
	Medium bronze	R05.3	349590
	EV1 Silver	R01.1	349591
	Non-treated		349592



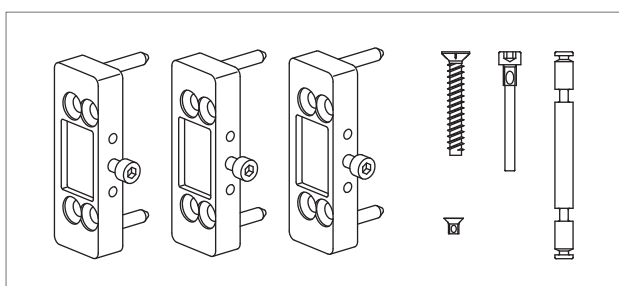
⑦ Packers frame hinge-bearing (PQ 3)			
Version	Colour	Material no.	
1 mm	White	R07.2	312831
	Medium bronze	R05.3	312832
	EV1 Silver	R01.1	312833
	Non-treated		337802
2 mm	White	R07.2	312834
	Medium bronze	R05.3	312835
	EV1 Silver	R01.1	312836
	Non-treated		337803



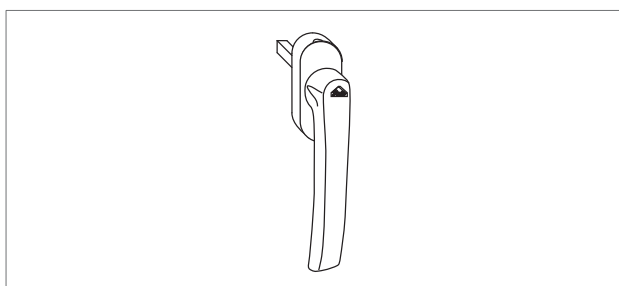
⑧ Sash hinge-bearing (PQ 3)			
Version	Colour	Material no.	
20 mm	White	R07.2	312821
	Medium bronze	R05.3	312822
	EV1 Silver	R01.1	312823
	Non-treated		340733
30 mm	White	R07.2	383354
	Medium bronze	R05.3	383405
	EV1 Silver	R01.1	383406
	Non-treated		626789



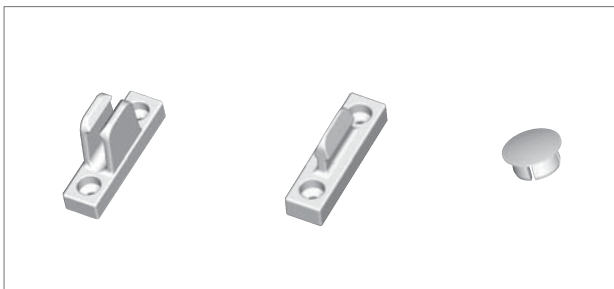
⑨ Hinge (PQ 3)			
Version	Colour	Material no.	
40 mm	White	R07.2	312824
	Medium bronze	R05.3	312825
	EV1 Silver	R01.1	312826
	Non-treated		337801
50 mm	White	R07.2	312827
	Medium bronze	R05.3	312828
	EV1 Silver	R01.1	312829
	Non-treated		338300



⑩ Hinge-fixing insert (PQ 3)			
Description	Colour	Material no.	
Fixing the hinges 40/50 mm on the sash	–		349597



⑪ RotoLine flat handle, 10 mm lugs, 35 mm spindle length			
Version	Colour	Material no.	
	White	R07.2	336110
	Medium bronze	R05.3	336111
	EV1 Silver	R01.1	336112



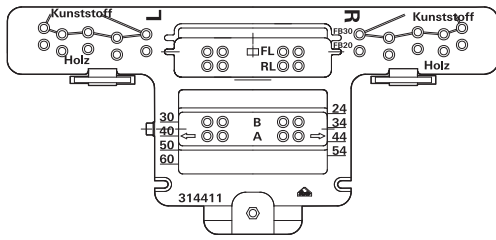
⑫ **Sash retaining device**

Version	Colour	Material no.
	White R07.2	340208
	Black R06.2	340211
	Silver R01.1	375241

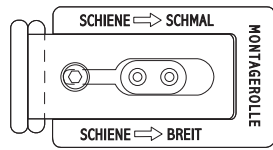


⑬ **Sash stop**

Version	Colour	Material no.
	White R07.2	444807
	Medium bronze R05.3	444808
	Silver R01.1	444809



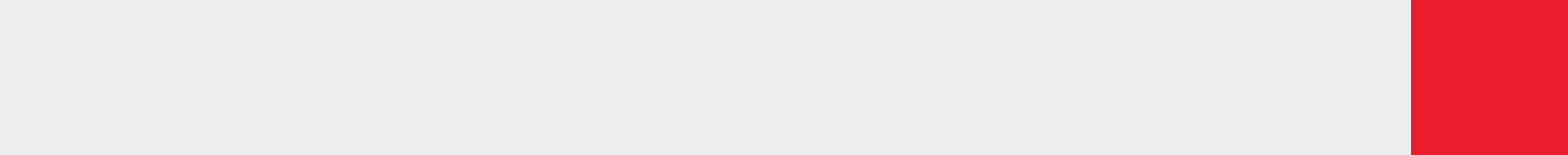
Drilling jig (hinges and support bracket) 314411



Drilling jig (roller tracks and guide tracks) 314417



Drilling jig (sash stop) 469831



Roto Patio



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Everything for great comfort and optimum room use

Sliding hardware allows optimum room use and impresses with its comfortable, practical operation. Roto In-line Sliding offers outstanding solutions for many different safety, comfort and design needs – for sash weights up to 200 kg.

Long-lasting and comfortable – the new generation of espagnolettes

Roto is the only hardware manufacturer to offer multi-point locking systems with profiled faceplates that are particularly dimensionally stable. This reduces the bending of the components and guarantees a long service life and easy use thanks to the wear-free travel of the locking points.

The RotoSil Nano surface offers maximum corrosion protection. And the centre fixing of the single-action or reverse-action espagnolettes ensures easy installation.

Large variety of products for individual requirements

Whether single-action or reverse-action, with mushroom cams, hooks or claws, lockable or not – choose the In-line Sliding multi-point locking system that best suits your security requirements. All our espagnolettes can be easily integrated in a large variety of aluminium profiles via adapter and as a result they are extremely versatile.

Bogies for every need

Robust bogies, mostly fitted with ball bearings, guarantee smooth and quiet running of the sashes – making them the basis of elegant, easy-acting sliding elements.

New handle family for sliding systems

The sliding handles in elegant Roto-Line design incorporate future-oriented technology and aesthetics. Preassembled component groups enable easy and rapid installation.

Apart from the high level of user friendliness, the new handle family convinces with its large diversity of variations: Different interior and exterior handles are available in many attractive colours and can be combined as desired.



In-line Sliding bogie up to 200 kg
Ball-bearing rollers ensure smooth movement – even with high sash weights of up to 200 kg

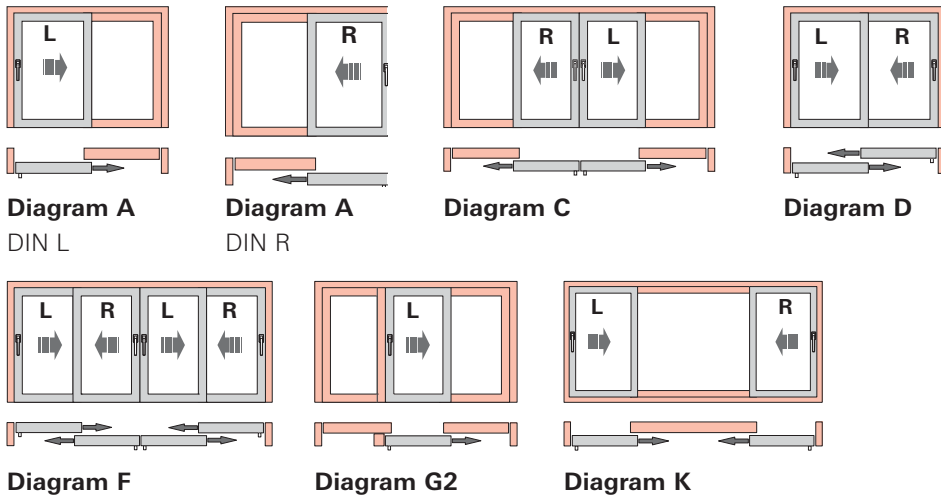


Innovations with profiled faceplate
Long-lasting smooth operation and a long service life thanks to the new Roto multi-point locking system



A free choice of sash partitioning

One or two movable sashes, stop on the frame, on the fixed glazing or on the second movable sash – everything is possible.



- All dimensions stated in mm.
- The depicted illustrations and/or technical drawings are not to scale.
- The ratio width : height of sliding sashes may be max. 1: 2.5.
- Application range: The maximum espagnolette length is depicted in the illustration.

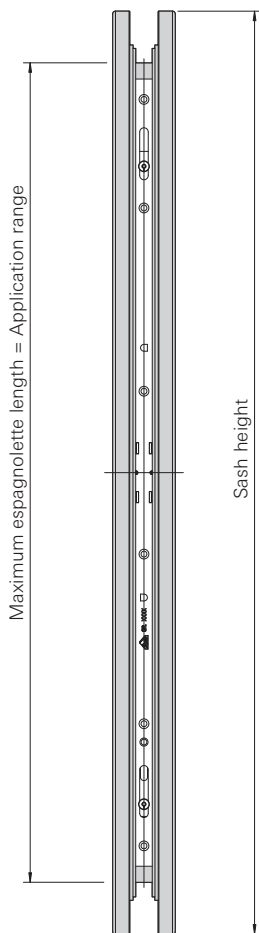
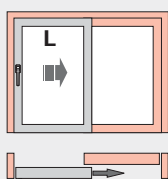
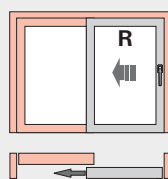


Diagram A



DIN left



DIN right

Diagram C

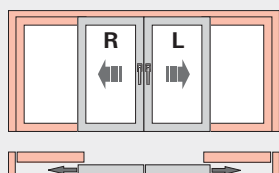


Diagram D

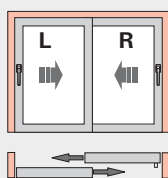


Diagram F

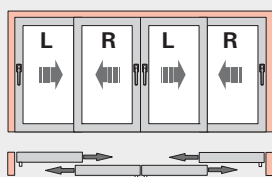


Diagram G2

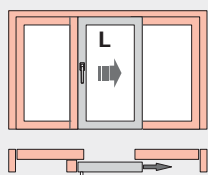
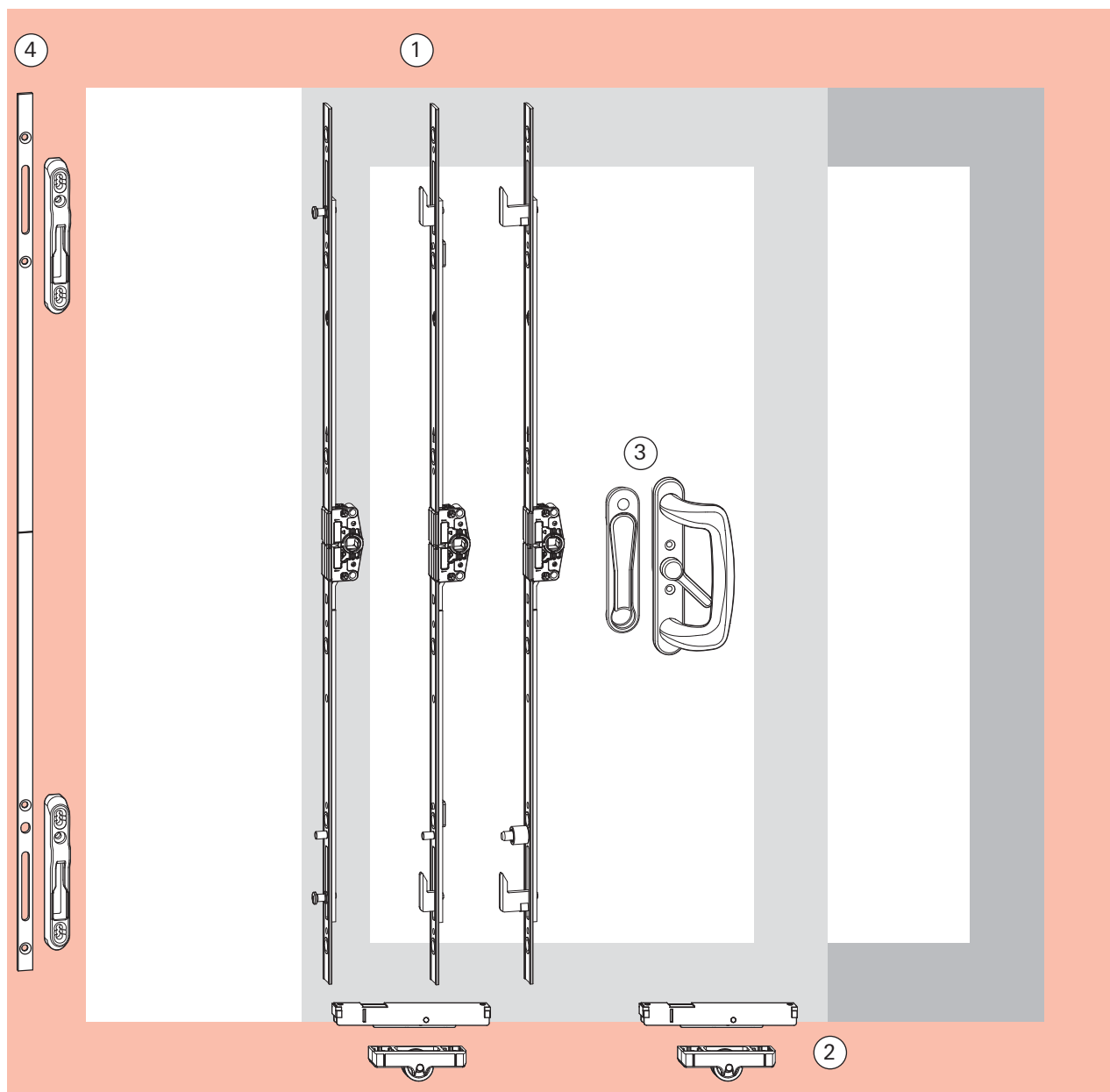


Diagram K





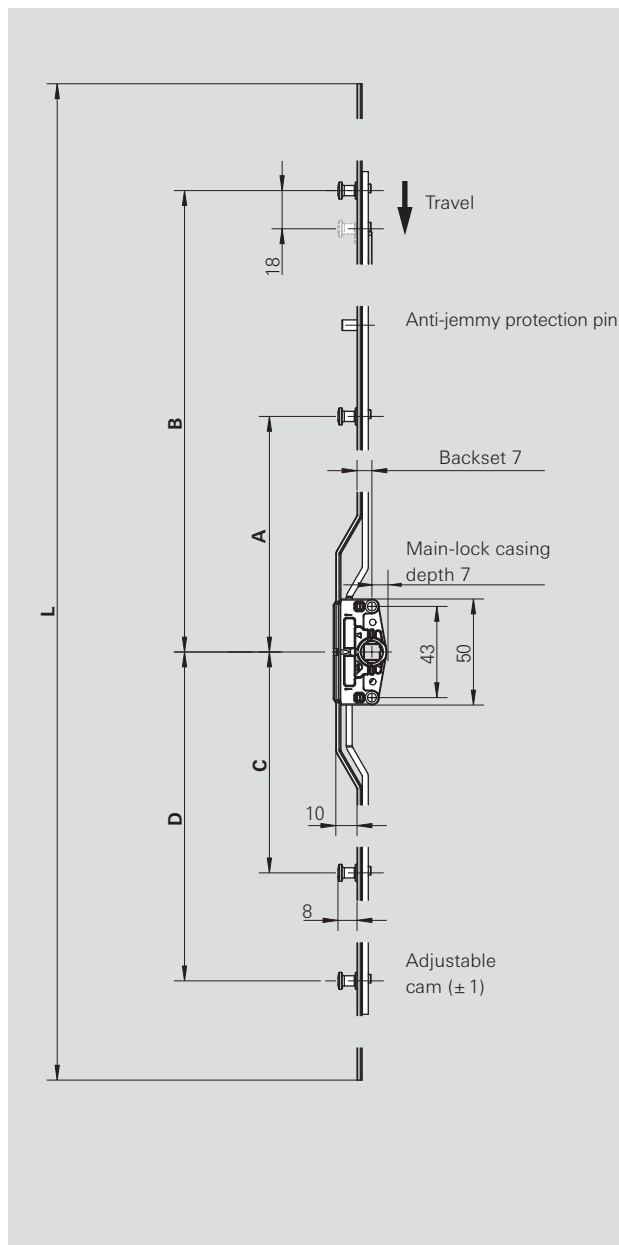
① Espagnolettes	Page 311
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③ Bogies	Page 324
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All hardware components are available in different versions; in the illustration they are depicted in the number as needed for one sliding sash.

Roto In-line Sliding

Single-action espagnolettes

Adjustable cam, 7 mm backset



Espagnolette, 7 mm backset

Application range/mm	Length/mm	Cam	Material no.
400 – 600	400	2	628429
601 – 800	600	2	628430
801 – 1000	800	2	628431
1001 – 1200	1000	3	628432
1201 – 1800	1200	3	628433
1801 – 2900	1800	4	628434

Detailed dimensions

Locking points in closed position

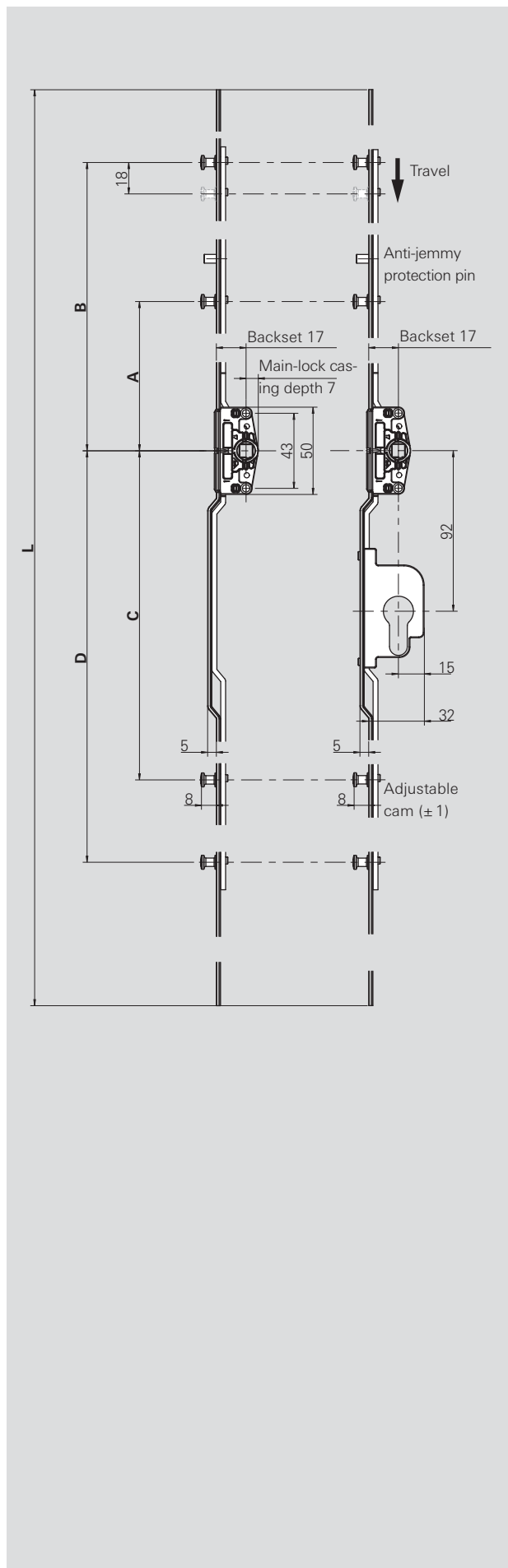
Espagnolette, 7 mm backset

L	A	B	C	D
400	–	146	–	124
600	–	246	–	224
800	–	346	–	324
1000	131	446	–	424
1200	131	546	–	524
1800	469	814	427	771

Roto In-line Sliding

Single-action espagnolettes

Adjustable cam, 17 mm backset



Espagnolette, 17 mm backset

Application range/mm	Length/mm	Cam	Material no.
240 – 400	240	2	628482
401 – 600	400	2	628483
601 – 800	600	2	628484
801 – 1000	800	2	628495
1001 – 1200	1000	3	628496
1201 – 1800	1200	3	628497
1801 – 2900	1800	4	628498

Espagnolette, 17 mm backset, lockable

Application range/mm	Length/mm	Cam	Material no.
1800 – 2900	1800	4	628499

Detailed dimensions

Locking points in closed position

Espagnolette, 17 mm backset

L	A	B	C	D
240	–	91	–	69
400	–	146	–	124
600	–	246	–	224
800	–	346	–	324
1000	131	446	–	424
1200	131	546	–	524
1800	469	814	427	771

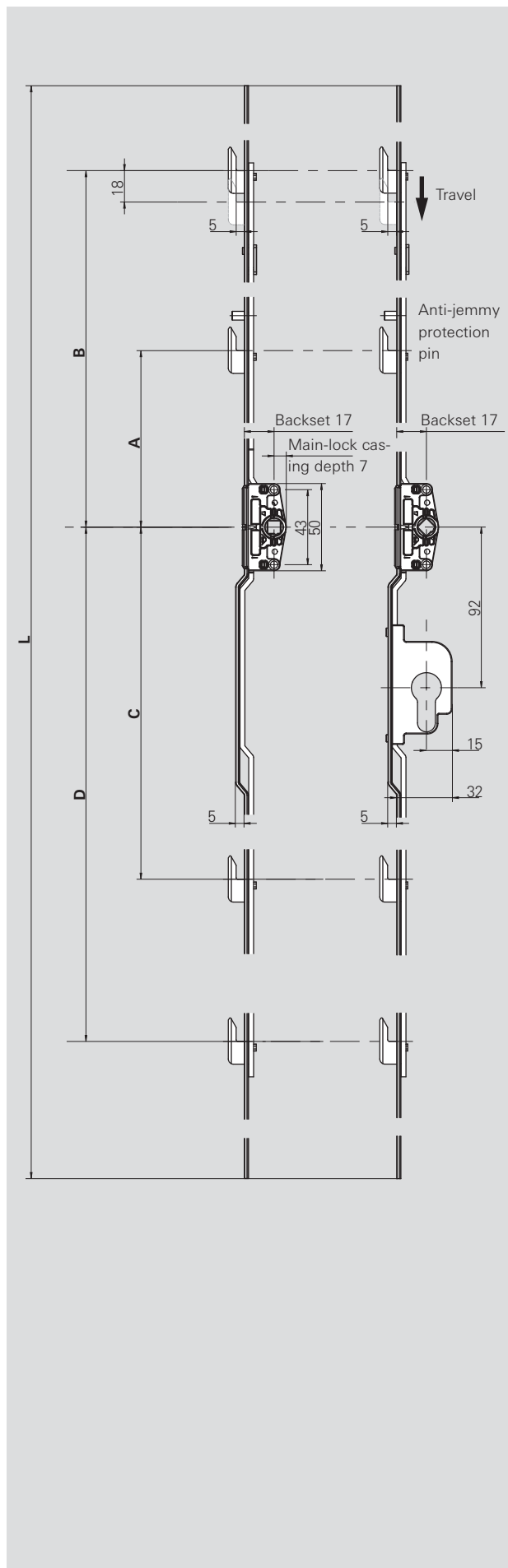
Espagnolette, 17 mm backset, lockable

L	A	B	C	D
1800	469	814	427	771

Roto In-line Sliding

Single-action espagnolettes

5 mm hook, 17 mm backset



Espagnolette, 17 mm backset

Application range/mm	Length/mm	Hook 5 mm	Material no.
600 – 1800	600	2	628500
1801 – 2900	1800	4	628501

Espagnolette, 17 mm backset, lockable

Application range/mm	Length/mm	Hook 5 mm	Material no.
1801 – 2900	1800	4	628502

Detailed dimensions

Locking points in closed position

Espagnolette, 17 mm backset

L	A	B	C	D
600	–	250	–	220
1800	473	818	423	767

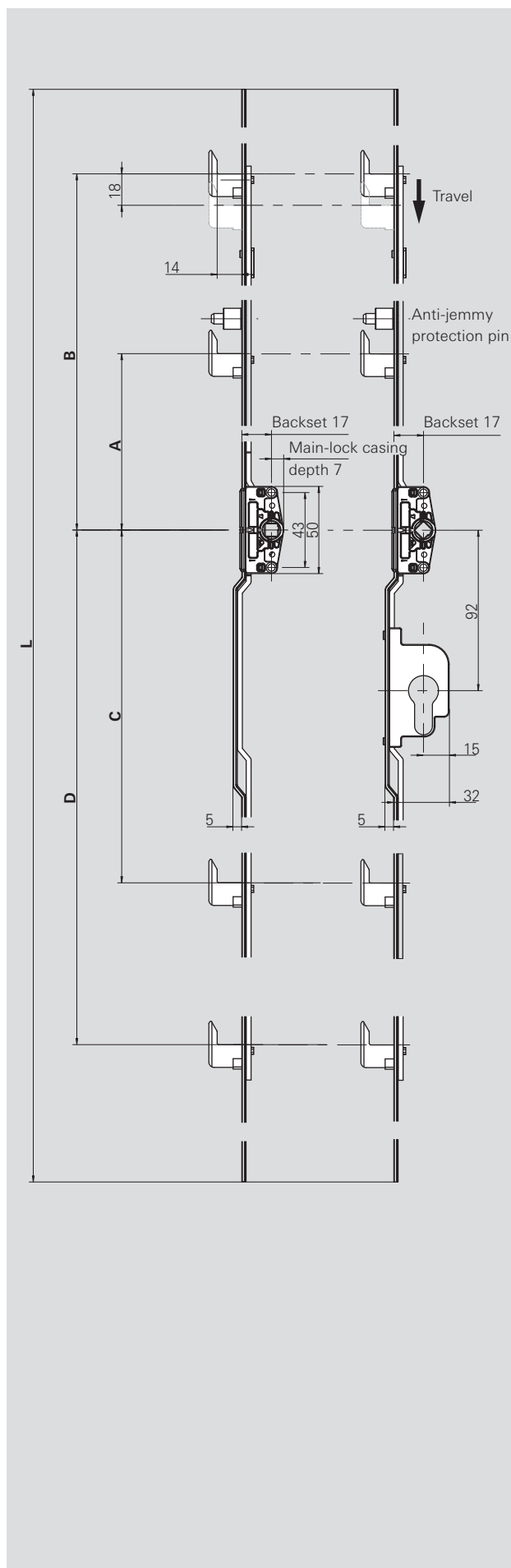
Espagnolette, 17 mm backset, lockable

L	A	B	C	D
1800	473	818	423	767

Roto In-line Sliding

Single-action espagnolettes

14 mm hook, 17 mm backset



Espagnolette, 17 mm backset

Application range/mm	Length/mm	Hook 14 mm	Material no.
600 – 1800	600	2	628503
1801 – 2900	1800	4	628504

Espagnolette, 17 mm backset, lockable

Application range/mm	Length/mm	Hook 14 mm	Material no.
1801 – 2900	1800	4	628505

Detailed dimensions

Locking points in closed position

Espagnolette, 17 mm backset

L	A	B	C	D
600	–	250	–	220
1800	473	818	423	767

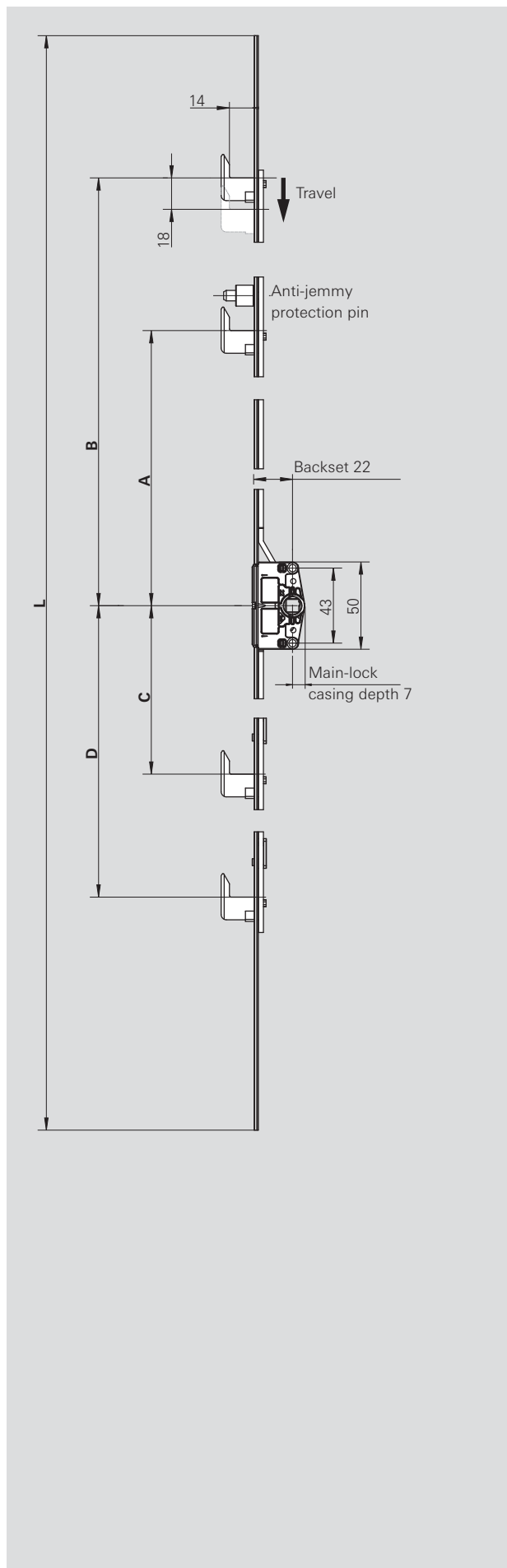
Espagnolette, 17 mm backset, lockable

L	A	B	C	D
1800	473	818	423	767

Roto In-line Sliding

Single-action espagnolettes

14 mm hook, 22 mm backset



Espagnolette, 22 mm backset

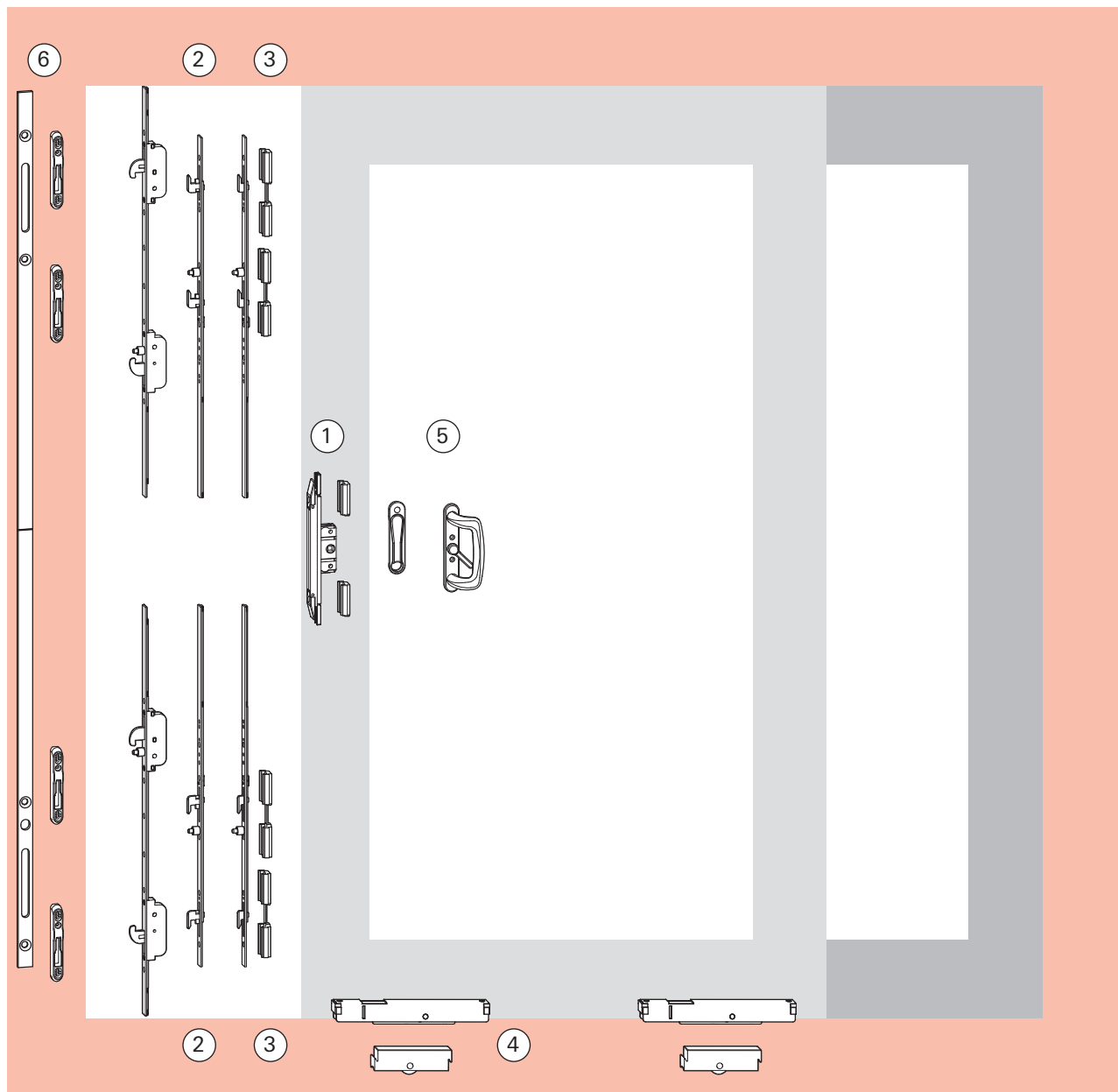
Application range/mm	Length/mm	Hook 14mm	Material no.
600 – 1800	600	2	628507
1801 – 2900	1800	4	628508

Detailed dimensions

Locking points in closed position

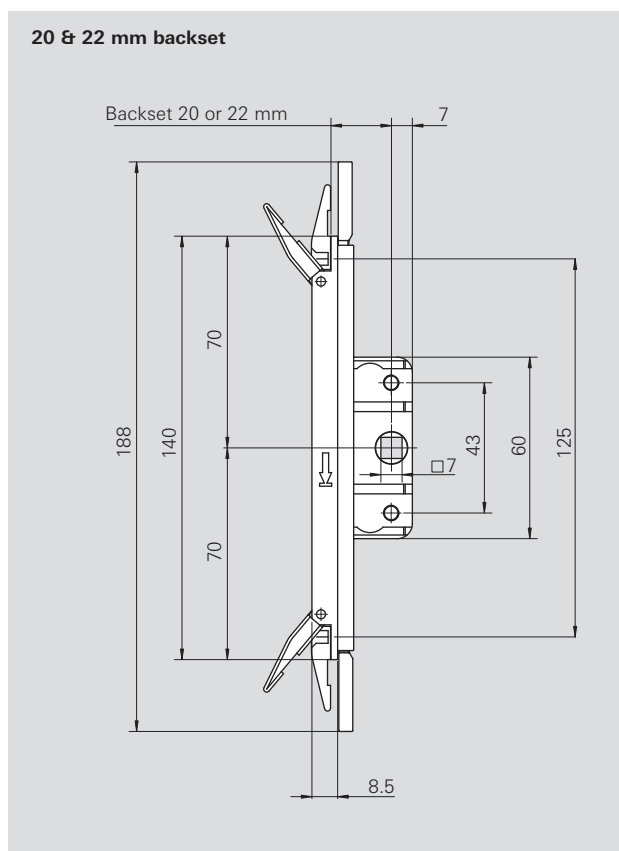
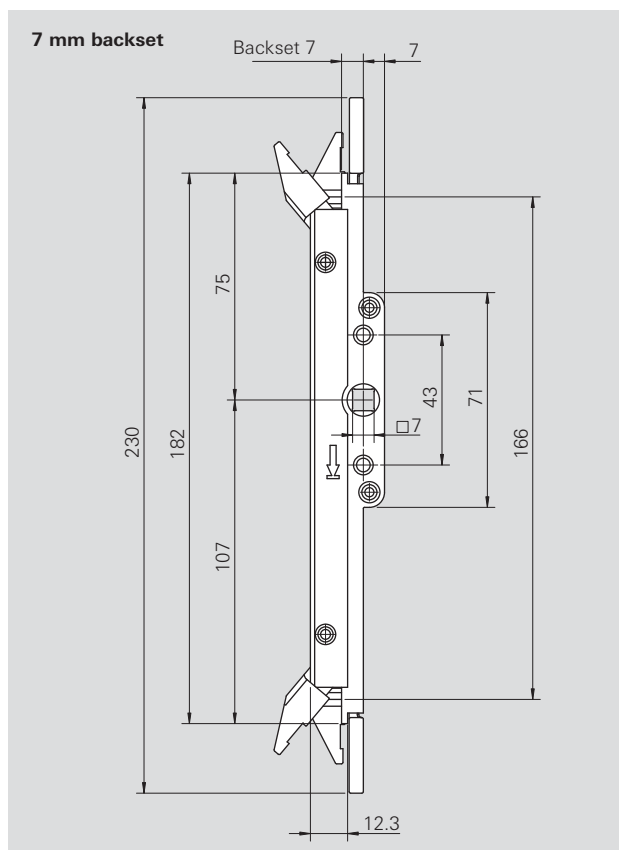
Espagnolette, 22 mm backset

L	A	B	C	D
600	–	250	–	220
1800	473	818	423	767



①	Espagnolettes	Page 317
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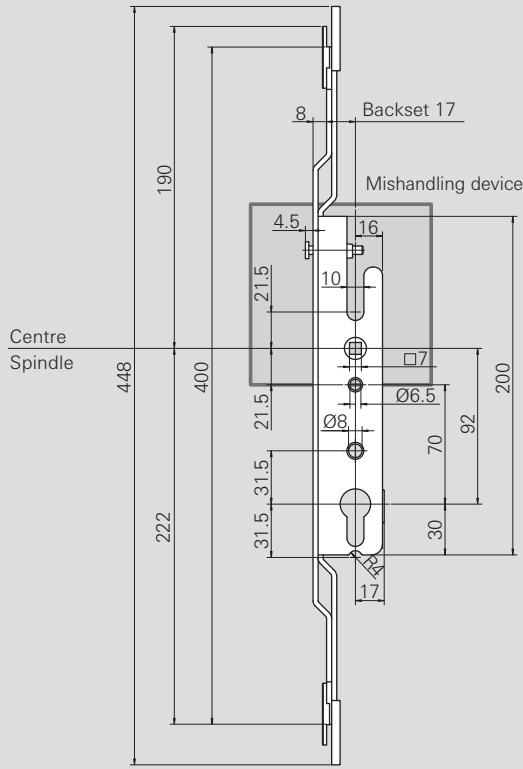
All hardware components are available in different versions; in the illustration they are depicted in the number as needed for one sliding sash.



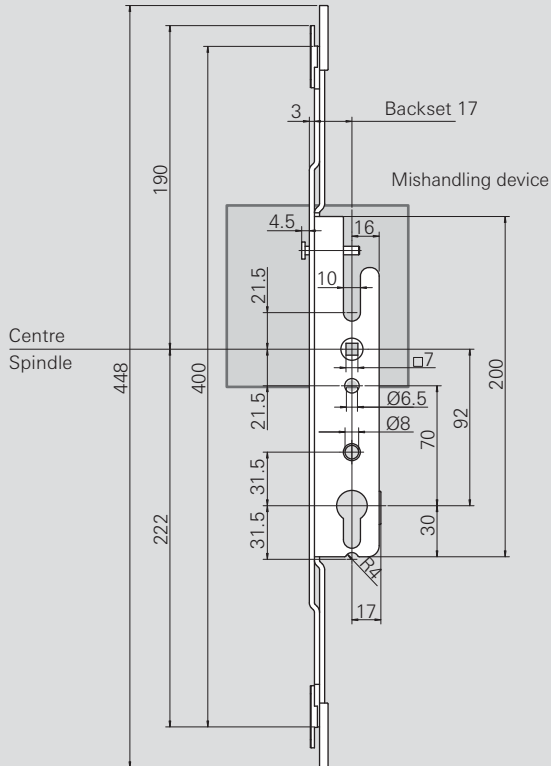
Espagnolette casing, backset 7mm	334587
Dummy mullion 182mm	
Espagnolette casing, backset 20mm	387923
Dummy mullion 140mm	
Espagnolette casing, backset 22mm	387924
Dummy mullion 140mm	

- An arrow on the espagnolette casing shows the handle direction in locking position.
- A faceplate flap holds the extensions and secures the position of the connecting-rods. These are fixed by screws which results in a better protection against burglary.
- For rapid installation, all components are preassembled in opening position. The mechanism is enabled by the first actuation of the handle.
- The travel of the locking points is 18mm.

17 mm backset



22 mm backset



Espagnolette casing, lockable, backset 17 mm 387934
Dummy mullion 400 mm, incl. mishandling device

Espagnolette casing, lockable, backset 22 mm 313930
Dummy mullion 400 mm, incl. mishandling device

- For rapid installation, all components are preassembled in opening position. The mechanism is enabled by the first actuation of the handle.
- The travel of the locking points is 20 mm.

Operation of the mishandling device

The mishandling device enables the movement of the locking points only when the door is closed. This prevents the hardware to be damaged due to a slamming door with locking points in locking position.

Two different types of screws are supplied with the espagnolette casings: Flat-headed screws and fillister head screws (silver). Depending on the use of a mishandling device, only one type should be applied to the espagnolette casing:

With mishandling device

The espagnolette is operable only with closed door

Flat-headed screw

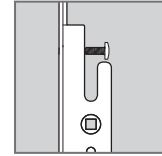
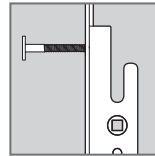
Screw the flat-headed screw into the screw-hole of the dummy mullion and adjust it to the gap between dummy mullion and frame. For this, use a 3 mm Allen key.

Without mishandling device

The espagnolette is always operable

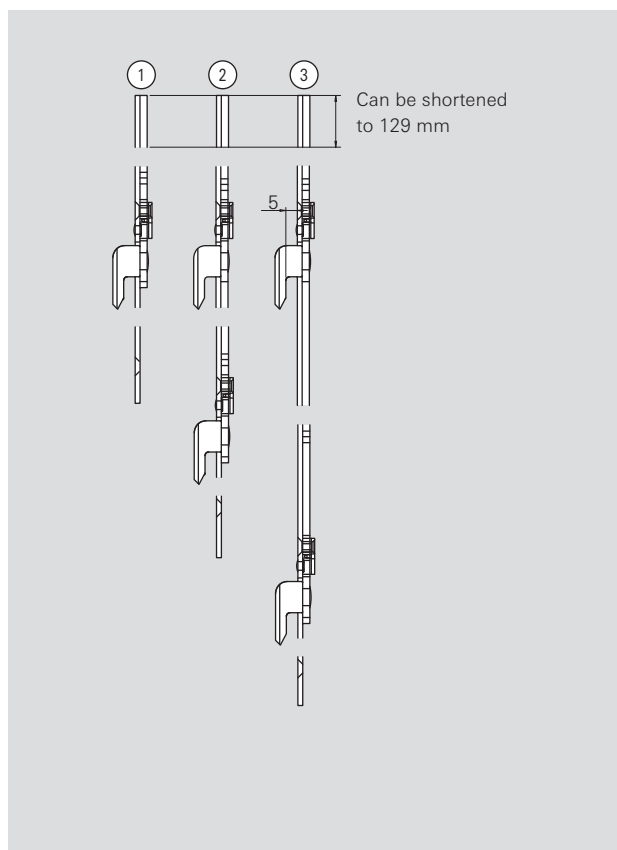
Fillister head screw

Screw the silver fillister head screw into the screw-hole on the back of the espagnolette casing and tighten it. For this, use a Phillips screwdriver.



Spacer for Euro-groove 9 mm 253341

For the application of a lockable espagnolette casing in an Euro-groove of 9 mm, each on the top and on the bottom end of the espagnolette casing a spacer has to be clipped in from behind.

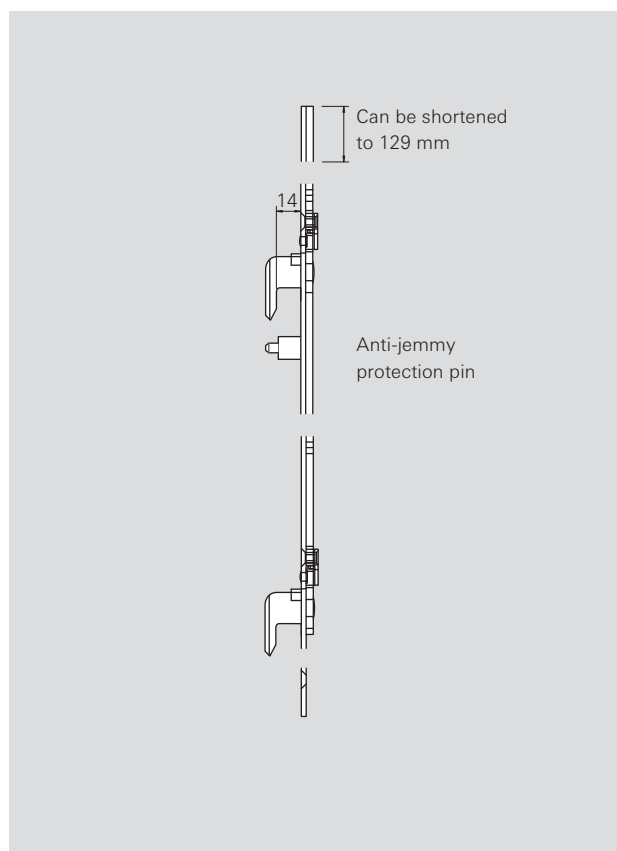


Extensions with 5 mm hooks

Can be shortened to 129 mm.

Position	Application range/mm	Dummy mullion length/mm	Hook 5 mm	Material no.
①	660 – 999 ⁽¹⁾	390	1	629346
	702 – 1041 ⁽²⁾			
	920 – 1259 ⁽³⁾			
②	1000 – 1399 ⁽¹⁾	560	2	629347
	1042 – 1441 ⁽²⁾			
	1260 – 1659 ⁽³⁾			
③	1400 – 2900 ⁽¹⁾	760	2	629348
	1442 – 2900 ⁽²⁾			
	1660 – 2900 ⁽³⁾			

- 1) Application range for dummy mullion espagnolette casing, 140 mm
- 2) Application range for dummy mullion espagnolette casing, 182 mm
- 3) Application range for dummy mullion espagnolette casing, 400 mm (lockable)

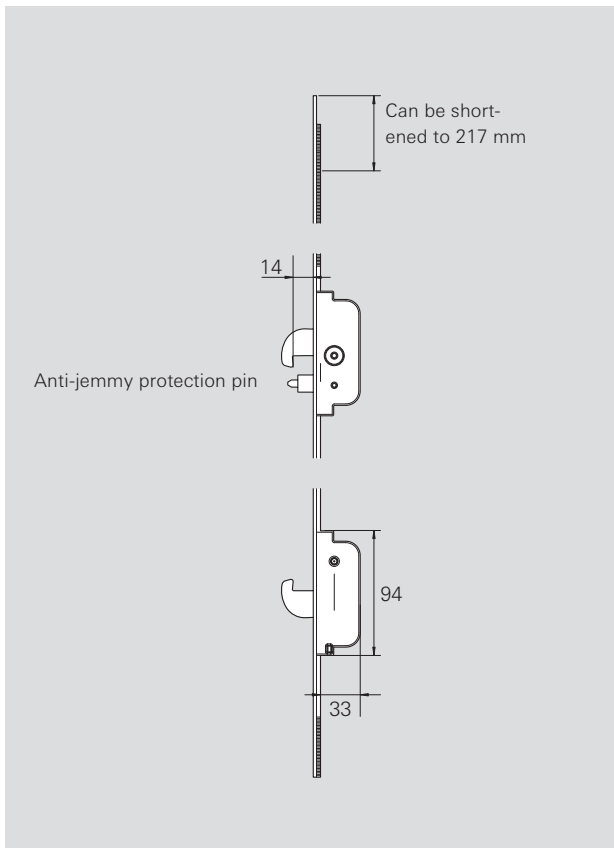


Extensions with 14 mm hooks

Can be shortened to 129 mm.

Application range/mm	Dummy mullion length/mm	Hook 14 mm	Material no.
1400 – 2900 ⁽¹⁾	760	2	629304
1442 – 2900 ⁽²⁾			
1660 – 2900 ⁽³⁾			

- 1) Application range for dummy mullion espagnolette casing, 140 mm
- 2) Application range for dummy mullion espagnolette casing, 182 mm
- 3) Application range for dummy mullion espagnolette casing, 400 mm (lockable)



Extensions with 14 mm hooks

Can be shortened to 217 mm.

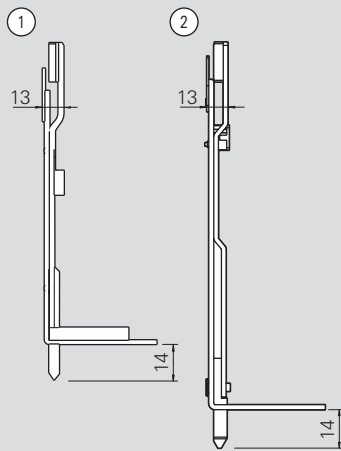
Application range/mm	Dummy mullion length/mm	Claws	Material no.
1226 – 2900 ¹⁾	760	2	629419
1486 – 2900 ²⁾			

1) Application range for dummy mullion espagnolette casing, 140 mm

2) Application range for dummy mullion espagnolette casing, 400 mm (lockable)

The shootbolts are not included in the specified application range.

Shootbolt



Shootbolt

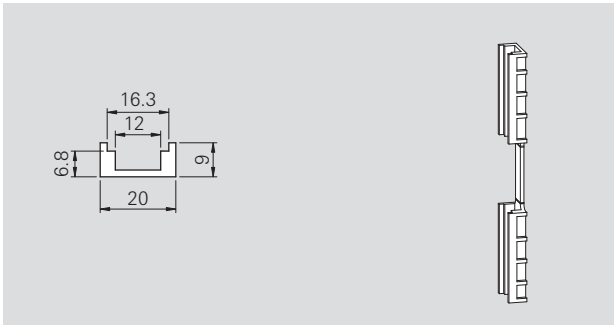
Application only with extensions with claws.

Position	Application range/mm	Dummy mullion length/mm	Material no.
①	1490 – 1930 ⁽¹⁾	135	471149
	1532 – 1972 ⁽²⁾		
	1750 – 2190 ⁽³⁾		
②	1620 – 2060 ⁽¹⁾	200	257400
	1662 – 2102 ⁽²⁾		
	1880 – 2320 ⁽³⁾		

⁽¹⁾ Application range for dummy mullion espagnolette casing, 140 mm

⁽²⁾ Application range for dummy mullion espagnolette casing, 182 mm

⁽³⁾ Application range for dummy mullion espagnolette casing, 400 mm (lockable)

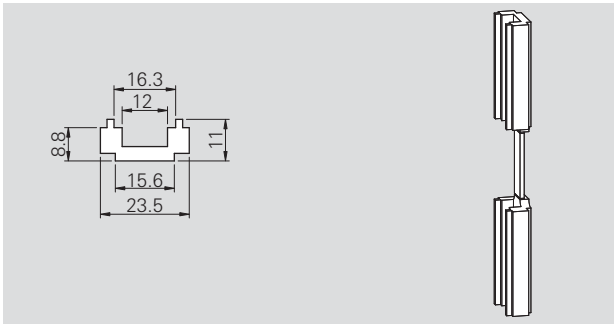


Spacer set S001

478410

Contents

- 6 spacers (3 x 2 pieces)
- 6 screws

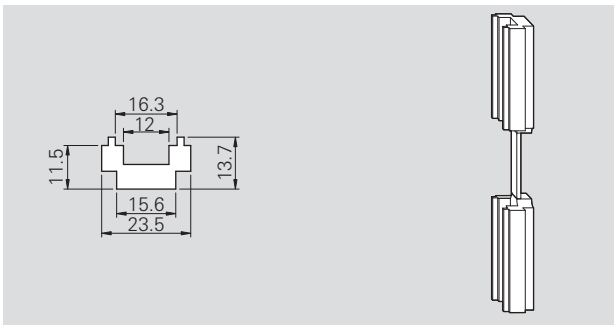


Spacer set S002

478411

Contents

- 6 spacers (3 x 2 pieces)
- 6 screws

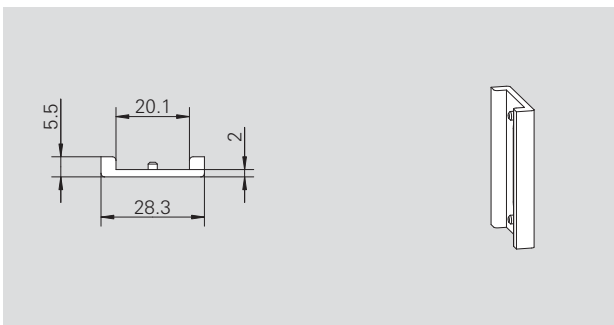


Spacer set S003

478412

Contents

- 6 spacers (3 x 2 pieces)
- 6 screws



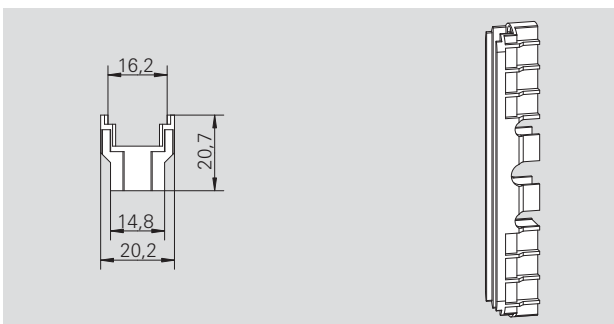
Spacer set S005

491665

To be used with S001, S002 or S003

Contents

- 6 spacers
- 6 screws

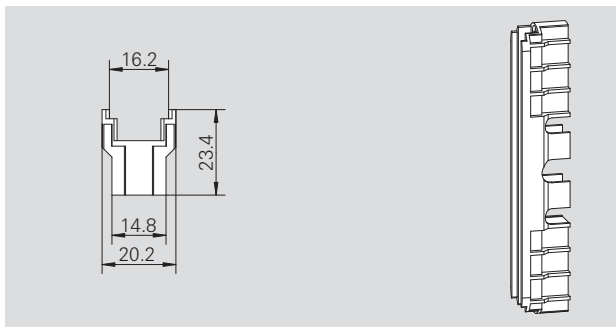


Spacer set S006

564313

Contents

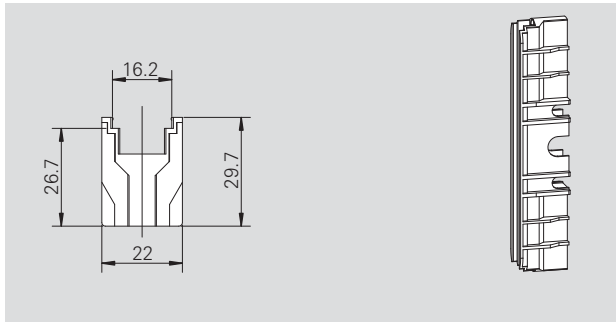
- 3 spacers
- 6 screws



Spacer set S007

564314

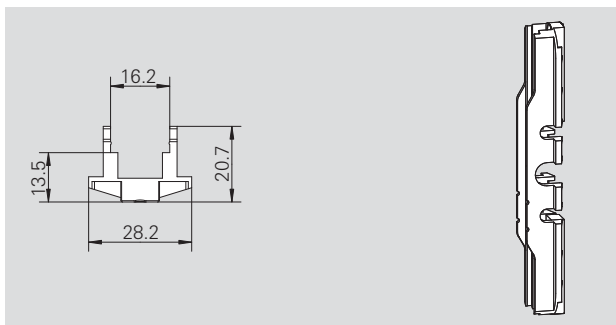
Contents
3 spacers
6 screws



Spacer set S008

600608

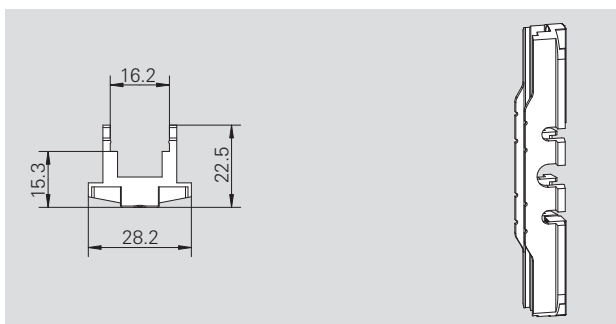
Contents
5 spacers
10 screws



Spacer set S009

604564

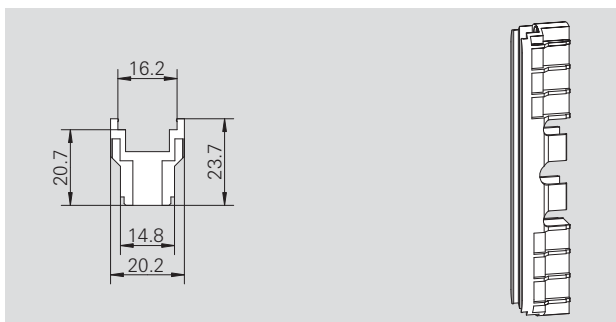
Contents
5 spacers
10 screws



Spacer set S010

604565

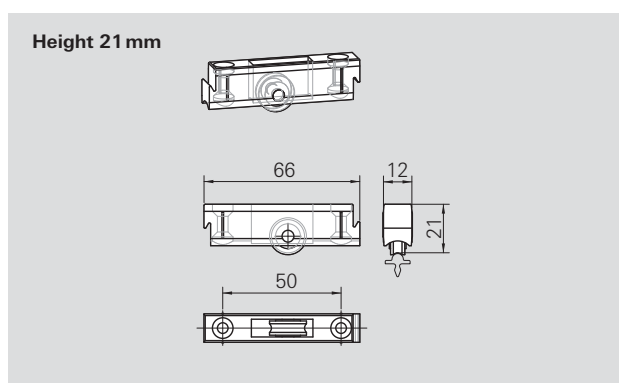
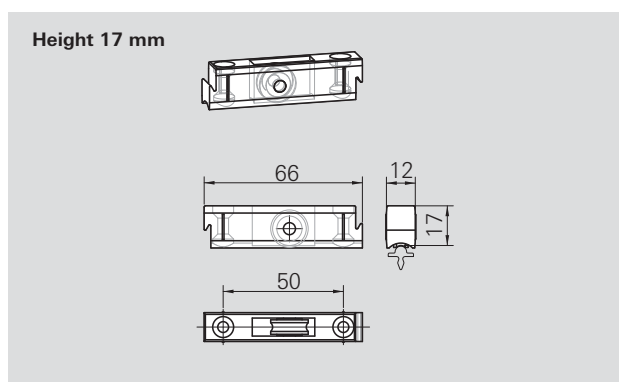
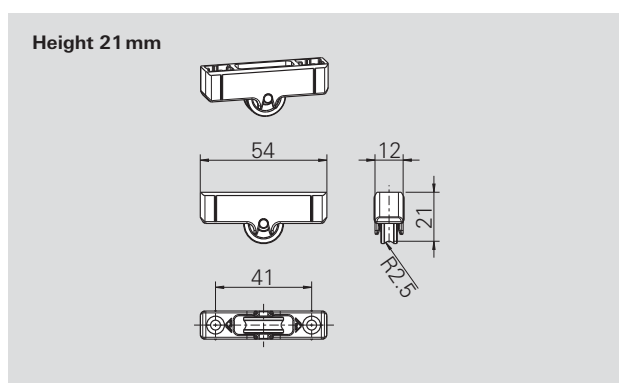
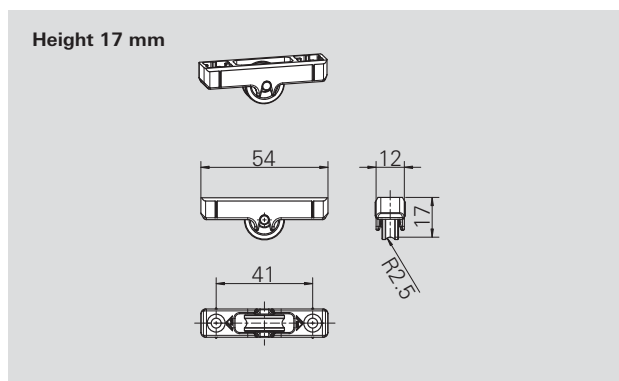
Contents
5 spacers
10 screws



Spacer set S011

604566

Contents
5 spacers
10 screws



Single bogie, non-varying, with PVC housing

- Housing made of glass-fibre reinforced PVC material
- Maximum sash weight 50 kg
- with ball bearing
- 12 mm wide for Euro-groove standard
- Available in two heights of 17 mm and 21 mm

Single bogie, with ball bearing
50 kg

Width (mm)	Height (mm)	Track	Material no.
12	17	R	622665
12	21	R	622666

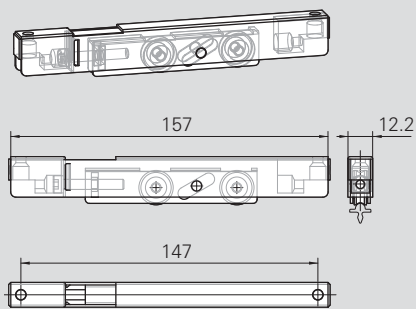
Single bogie, non-varying, with zinc diecast housing

- Maximum sash weight 50 kg
- With slide bearing
- 12 mm wide for Euro-groove standard
- Available in two heights of 17 mm and 21 mm
- Can be interconnected
- Yellow passivated surface meets the requirements of the standard DIN 50021 (salt spray test with different sodium chloride solutions)

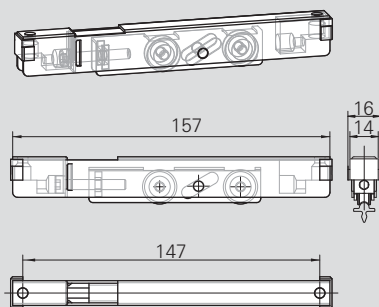
Single bogie, with slide bearing
50 kg

Width (mm)	Height (mm)	Track	Material no.
12	17	R	297217
12	21	R	297218

Width 12.2 mm





Width 14.0 mm



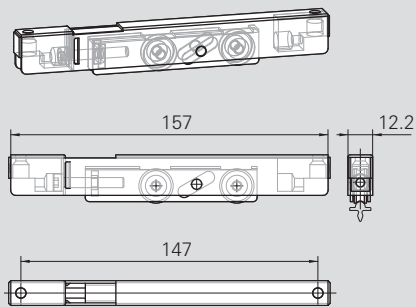
Tandem bogie standard, adjustable

- Maximum sash weight 120 kg
- with ball bearing
- Available in two widths: 12 mm for Euro-groove standard and 14 mm for Euro-groove wide
- Height adjustable from 19 mm to 26 mm
- Silver-coloured, zinc-plated surface-finish provides additional corrosion protection (EN 1670, Class 4, up to 240 hrs.)

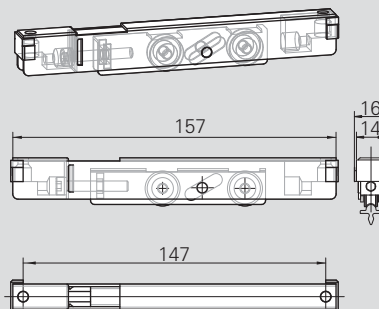
Tandem bogie, standard, with ball bearing, 120 kg

Width (mm)	Height (mm)	Track	Material no.
12.2	19 – 26	R 	615951
14.0	19 – 26	R 	622876

Width 12.2 mm





Width 14.0 mm



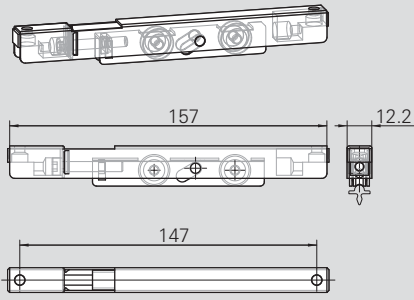
Tandem bogie standard, adjustable

- Maximum sash weight 80 kg
- With slide bearing
- Available in two widths: 12 mm for Euro-groove standard and 14 mm for Euro-groove wide
- Height adjustable from 19 mm to 26 mm
- Yellow passivated surface meets the requirements of the standard DIN 50021 (salt spray test with different sodium chloride solutions)

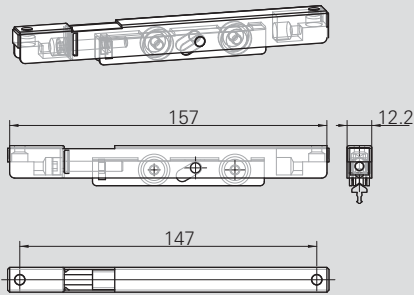
Tandem bogie, standard, with slide bearing, 80 kg

Width (mm)	Height (mm)	Track	Material no.
12.2	19 – 26	R 	280445
14.0	19 – 26	R 	312896

R track





V track

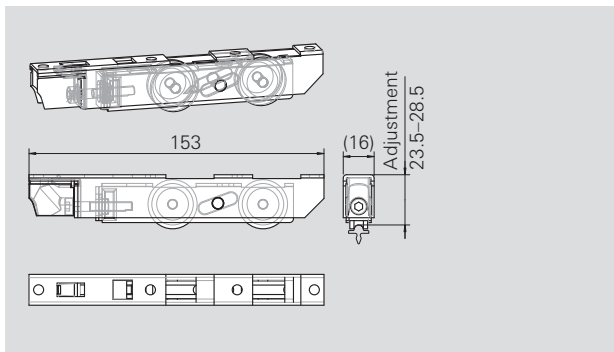


Tandem bogie, slimline, adjustable

- Maximum sash weight 100 kg
- With slide bearing
- Available in two sizes: for R track (round) and for V track
- 12 mm wide for Euro-groove standard
- Height adjustable from 15 mm to 18.5 mm
- Yellow passivated surface meets the requirements of the standard DIN 50021 (salt spray test with different sodium chloride solutions)

Tandem bogie, slimline, with slide bearing, 100 kg


Width (mm)	Height (mm)	Track	Material no.
12.2	15 – 18.5	R 	312897
12.2	15 – 18.5	V 	297216

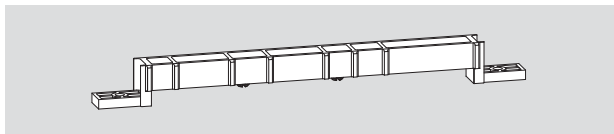


Tandem bogie standard, height adjustable

- Sash weight max. 200 kg
- With ball bearing
- 16 mm wide
- Different packers
- Height adjustable from 23.5 up to 28.5 mm

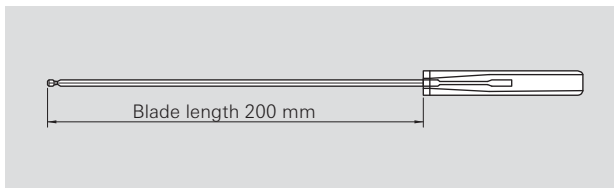
Tandem bogie, standard, height adjustable 200 kg

Width (mm)	Height (mm)	Track	Material no.
16	23.5 - 28.5	R 	603430



Packers for bogies

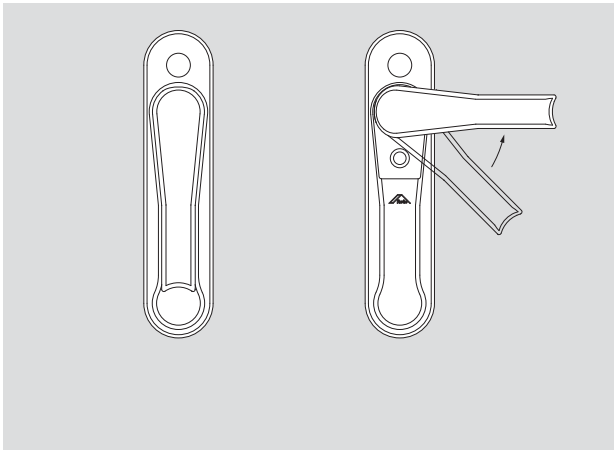
- Adapters for bogies
- Available in diverse versions for different profiles
- Other versions available upon request



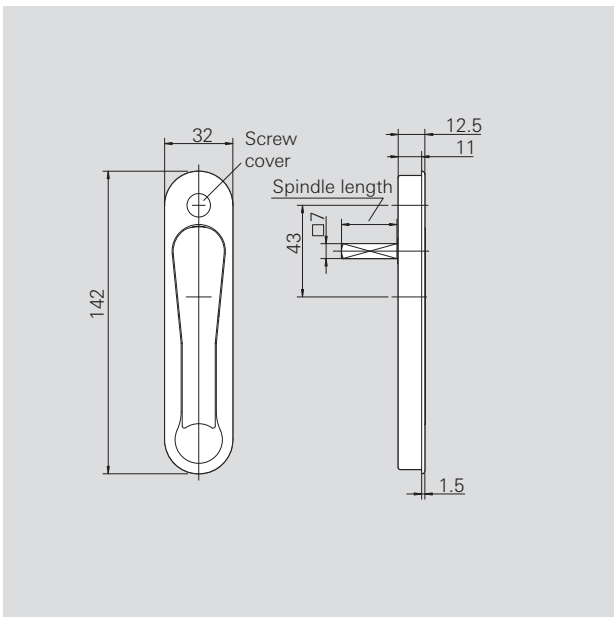
Adjusting tool for bogie height

263088

For all Tandem bogies



The Roto pop-up handle is the ideal solution for overlapping sliding sashes. The handle sits almost flush with the profile, but by simply lifting it from the back-plate and turning, operation of the gearing is made possible with minimum effort. Once completed, the handle can be placed back in its original position, allowing the sliding sashes to overlap.



Pop-up handle, spindle length 21 mm

Code	Colour	Screw cover	Material no.
R 06.2	Jet-black, RAL 9005	Black	535466
R 07.2	Traffic-white, RAL 9016	White	535465
	Light-grey, RAL 7035	Black	538246

Pop-up handle, spindle length 26 mm

Code	Colour	Screw cover	Material no.
R 04.1	Grey-brown, RAL 8019	Black	323277
R 06.2	Jet-black, RAL 9005	Black	493898
R 07.1	Pure white, RAL 9010	White	323275
R 07.2	Traffic-white, RAL 9016	White	312766
R 07.3	Cream-white, RAL 9001	Black	494495
	Gold	Black	323279
	Stainless-steel, brushed	Black	323280
	Unpainted, uncoated	Black	312769
	Special colour RAL ⁽¹⁾	Black	494670

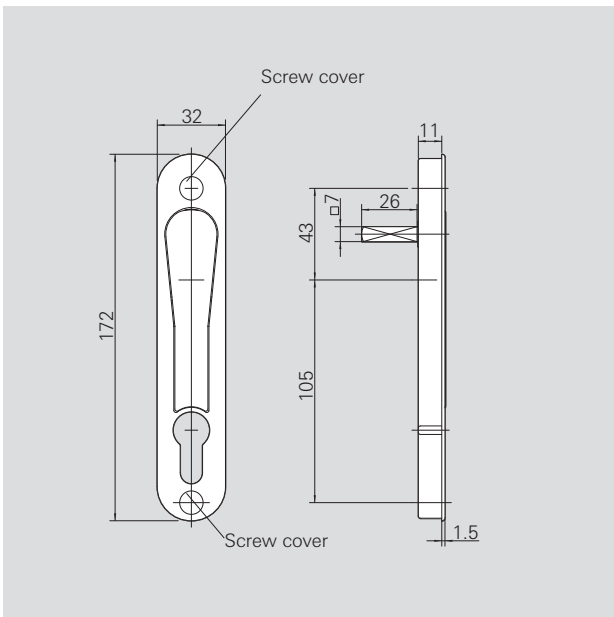
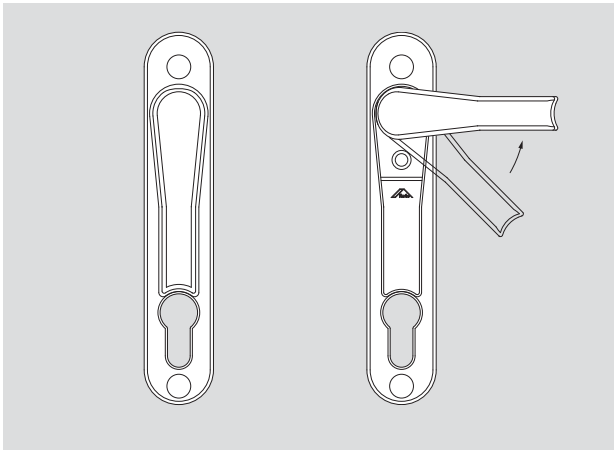
Pop-up handle, spindle length 26 mm with customer logo ⁽¹⁾

Code	Colour	Screw cover	Material no.
R 04.1	Grey-brown, RAL 8019	Black	513658
R 06.2	Jet-black, RAL 9005	Black	513642
R 07.1	Pure white, RAL 9010	White	513643
R 07.2	Traffic-white, RAL 9016	White	513644
R 07.3	Cream-white, RAL 9001	Black	513655
	Gold	Black	513656
	Stainless-steel, brushed	Black	513657
	Special colour RAL ⁽¹⁾	Black	494671

Pop-up handle, spindle length 45 mm

Code	Colour	Screw cover	Material no.
R 06.2	Jet-black, RAL 9005	Black	561198
	Gold	Black	561196
	Stainless-steel, brushed	Black	561197

⁽¹⁾ Special colours RAL (powder coating) and handles with customer logo (pad printing) are to be ordered via Roto Frank Velbert. Price and availability upon request (minimum order quantity each 30 pieces). For special colours RAL, no sample production is provided.








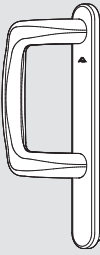
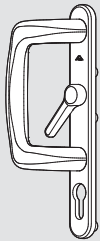
Pop-up handle, lockable, spindle length 26 mm

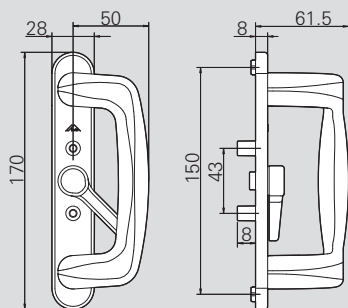
Code	Colour	Screw cover	Material no.
R 04.1	Grey-brown, RAL 8019	Black	323283
R 07.1	Pure white, RAL 9010	White	323281
R 07.2	Traffic-white, RAL 9016	Black	323282
	Gold	Black	323286
	Stainless-steel, brushed	Black	323287

Profile cylinder not included (refer to catalogue BK 18 EN)

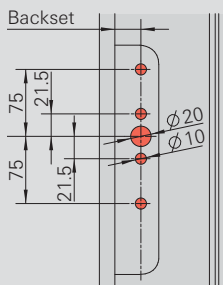
Roto In-line Sliding
RotoLine Sliding handles

Different accessory kits have to be used depending on the desired handle combination:

<p>Interior handles</p> 			
<p>Exterior handles</p> 	<p>Please use accessory kit type 1</p>	<p>Please use accessory kit type 1</p>	<p>Please use accessory kit type 1</p>
	<p>Please use accessory kit type 2</p>	<p>Please use accessory kit type 2</p>	<p>Please use accessory kit type 2</p>
	<p>Please use accessory kit type 2</p>	<p>Please use accessory kit type 2</p>	<p>Please use accessory kit type 2</p>
			<p>Please use accessory kit type 3</p>

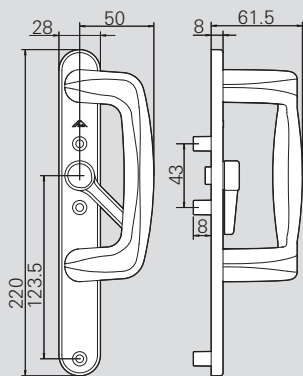


Drilling and routing hole-pattern

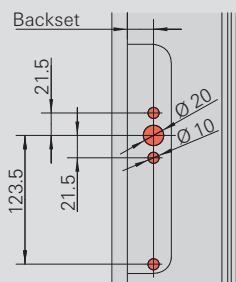


Pull handle, without cylinder, with lever

Code	Colour	Material no.
R 01.4	Chrome, polished	613220
R 01.5	Silver	613222
R 03.2	Gold	613223
R 04.1	Grey-brown, RAL 8019	613224
R 06.2	Jet-black, RAL 9005	613225
R 07.2	Traffic-white, RAL 9016	613226
R 07.3	Cream-white, RAL 9001	613227
	Unpainted, uncoated	613228

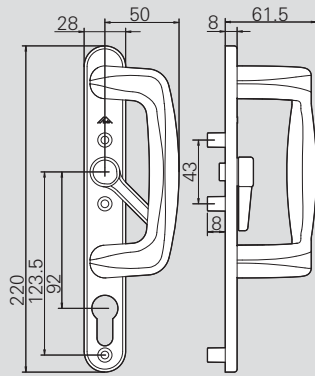


Drilling and routing hole-pattern

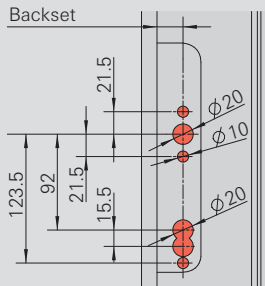


Pull handle, with long-plate and lever

Code	Colour	Material no.
R 01.4	Chrome, polished	613229
R 01.5	Silver	613230
R 03.2	Gold	613231
R 04.1	Grey-brown, RAL 8019	613232
R 06.2	Jet-black, RAL 9005	613233
R 07.2	Traffic-white, RAL 9016	613234
R 07.3	Cream-white, RAL 9001	613235
	Unpainted, uncoated	613237

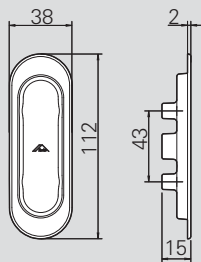


Drilling and routing hole-pattern

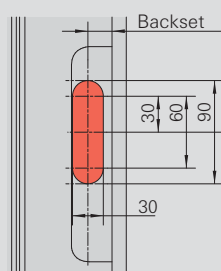


Pull handle, with cylinder, with lever

Code	Colour	Material no.
R 01.4	Chrome, polished	613238
R 01.5	Silver	613239
R 03.2	Gold	613240
R 04.1	Grey-brown, RAL 8019	613241
R 06.2	Jet-black, RAL 9005	613242
R 07.2	Traffic-white, RAL 9016	613243
R 07.3	Cream-white, RAL 9001	613244
	Unpainted, uncoated	613245

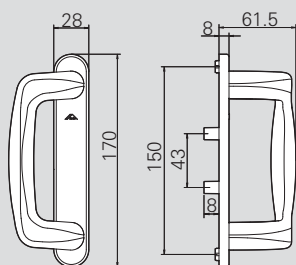


Drilling and routing hole-pattern

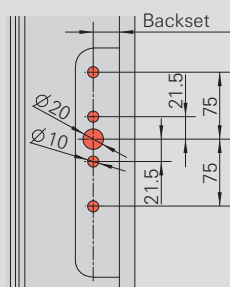


Integrated escutcheon pull-handle

Code	Colour	Material no.
R 01.4	Chrome, polished	613182
R 01.5	Silver	613183
R 03.2	Gold	613184
R 04.1	Grey-brown, RAL 8019	613185
R 06.2	Jet-black, RAL 9005	605551
R 07.2	Traffic-white, RAL 9016	605543
R 07.3	Cream-white, RAL 9001	608183
	Unpainted, uncoated	487261



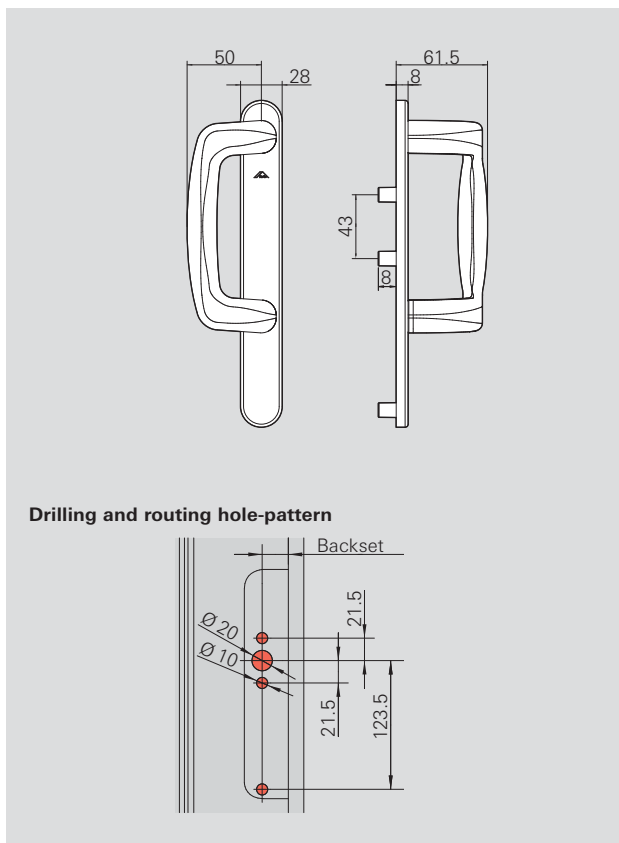
Drilling and routing hole-pattern



Pull handle, without cylinder

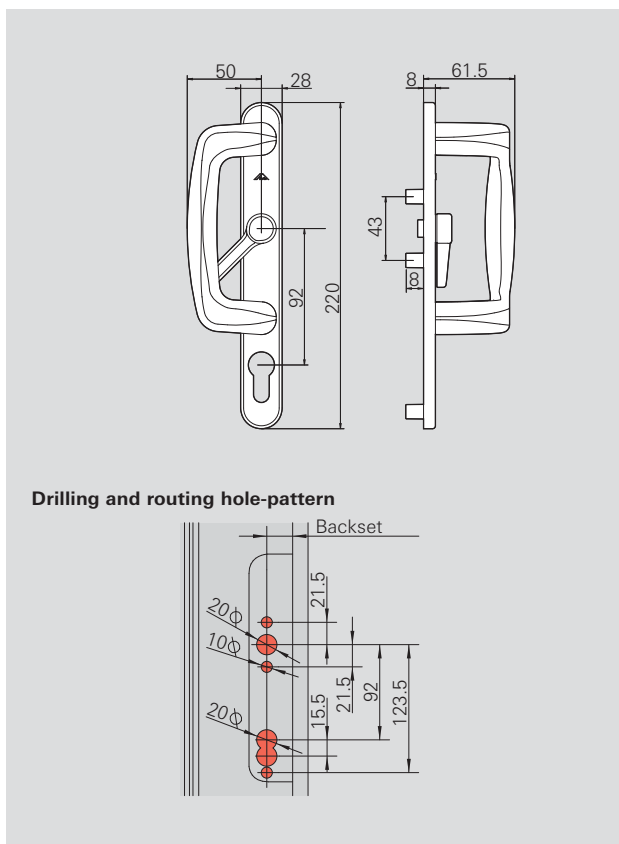
Code	Colour	Material no.
R 01.4	Chrome, polished	613186
R 01.5	Silver	613187
R 03.2	Gold	613188
R 04.1	Grey-brown, RAL 8019	613189
R 06.2	Jet-black, RAL 9005	613190
R 07.2	Traffic-white, RAL 9016	613191
R 07.3	Cream-white, RAL 9001	613192
	Unpainted, uncoated	613193

Roto In-line Sliding
RotoLine Sliding handles
 Exterior handles



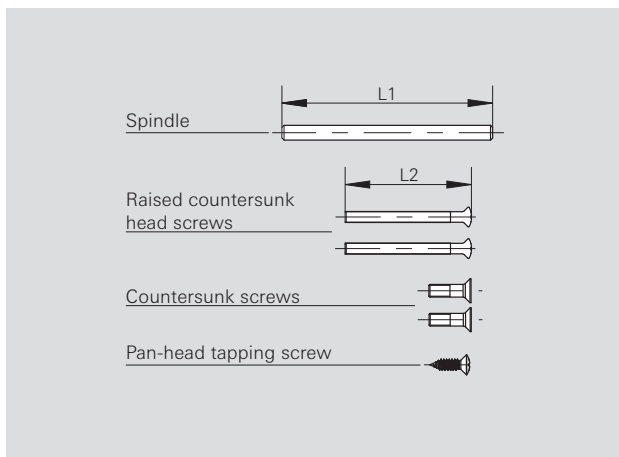
Pull handle, without cylinder, with long-plate

Code	Colour	Material no.
R 01.4	Chrome, polished	613194
R 01.5	Silver	613195
R 03.2	Gold	613196
R 04.1	Grey-brown, RAL 8019	613197
R 06.2	Jet-black, RAL 9005	613198
R 07.2	Traffic-white, RAL 9016	613199
R 07.3	Cream-white, RAL 9001	613200
	Unpainted, uncoated	613201



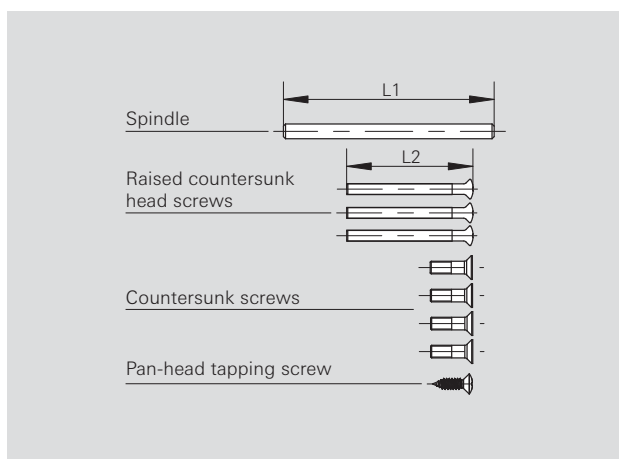
Pull handle, with cylinder, with lever

Code	Colour	Material no.
R 01.4	Chrome, polished	613202
R 01.5	Silver	613203
R 03.2	Gold	613204
R 04.1	Grey-brown, RAL 8019	613215
R 06.2	Jet-black, RAL 9005	613216
R 07.2	Traffic-white, RAL 9016	613217
R 07.3	Cream-white, RAL 9001	613218
	Unpainted, uncoated	613219



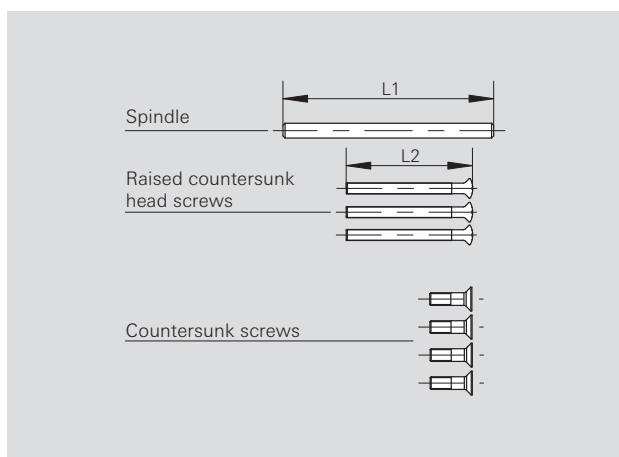
Accessories kit – type 1

Sash profile depth (mm)	L1 (mm)	L2 (mm)	Material no.
72 – 76	80	75	613168
67 – 71	70	70	613169
62 – 66	70	65	613170
57 – 61	60	60	613171
51 – 56	60	55	613172
46 – 50	50	50	613173



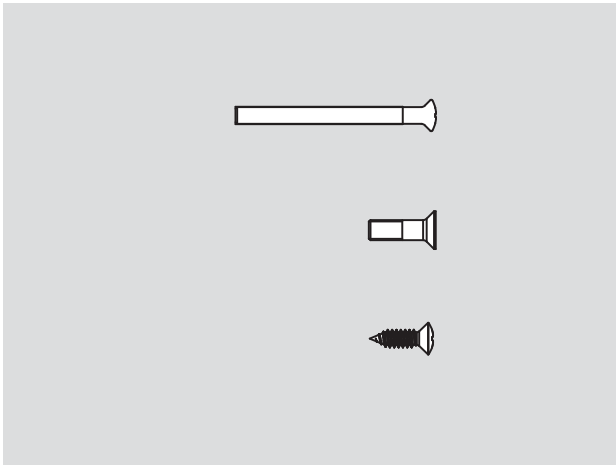
Accessories kit – type 2

Sash profile depth (mm)	L1 (mm)	L2 (mm)	Material no.
68 – 77	87	80	613174
58 – 67	77	70	613175
48 – 57	67	60	613176
38 – 47	57	50	613177



Accessories kit – type 3

Sash profile depth (mm)	L1 (mm)	L2 (mm)	Material no.
68 – 77	100	80	613178
58 – 67	90	70	613179
48 – 57	80	60	613180
38 – 47	70	50	613181



Functionality of different screw types

Raised countersunk head screws

Connecting interior handle to exterior handle.

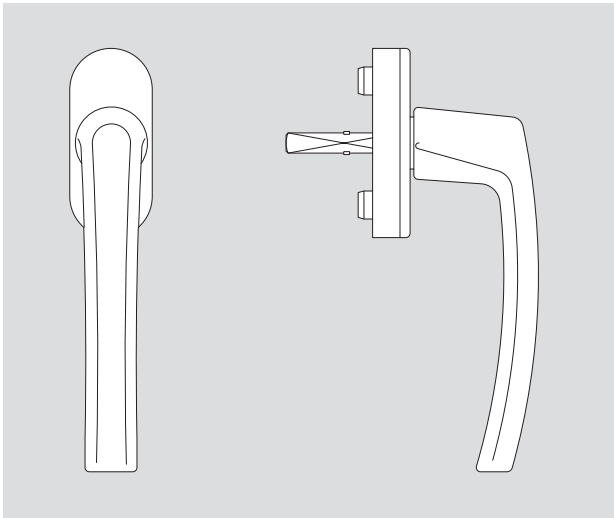
Countersunk screws

Fastening the pull handle to the plate.

Pan-head tapping screw

Bottom screw hole, if long and short handle have to be combined.

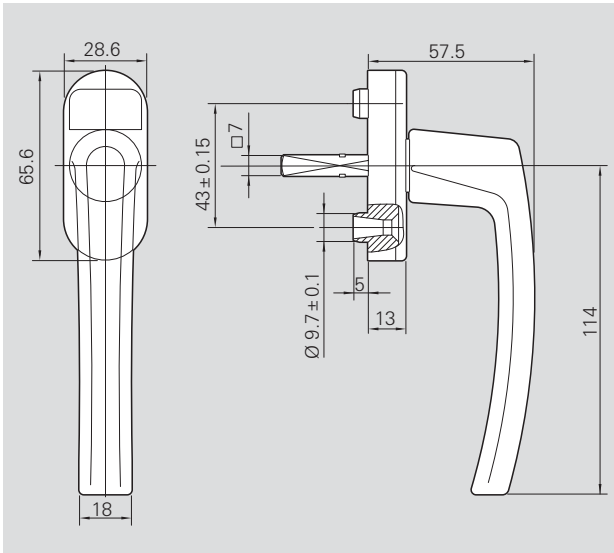
(No screw hole on the opposite side)

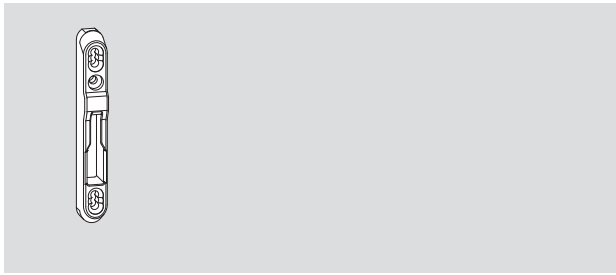


RotoLine handles, spindle length 24 mm

Code	Colour	Material no.
R 06.2M	Black, RAL 9005 matt	490546
R 07.2	Traffic-white, RAL 9016	490545

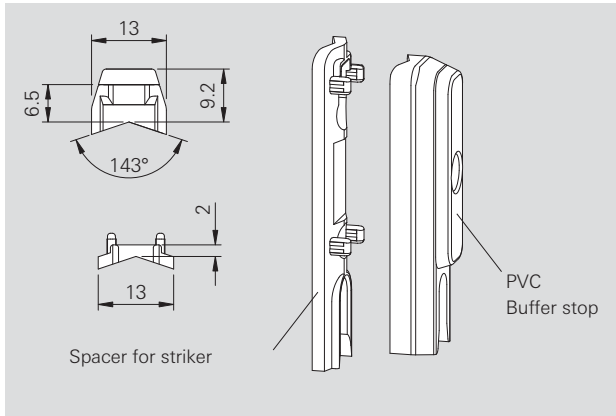
10 mm Ø lugs, Roto logo, screws M5 x 35





Striker

The universally applicable striker can be used for all locking points (regardless of whether with mushroom cams, 5 mm hooks, 14 mm hooks, 8 mm night ventilation hooks or 14 mm claws), also next to an anti-jemmy protection pin.
Refer to profile-related hardware set combinations

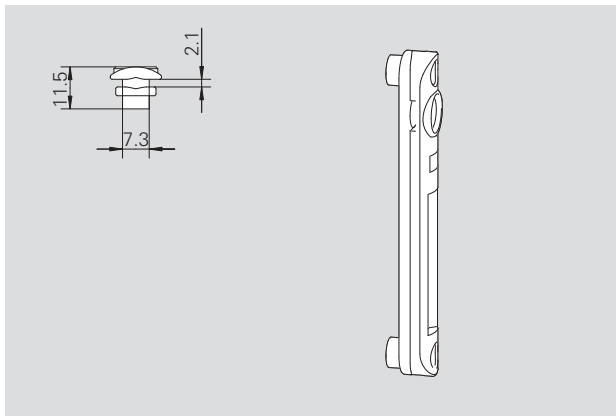


Striker set 1 for aluminium

478413

Contents

- 2 strikers
- 2 PVC buffer stops
- 2 spacers for striker 2 mm
- 4 screws

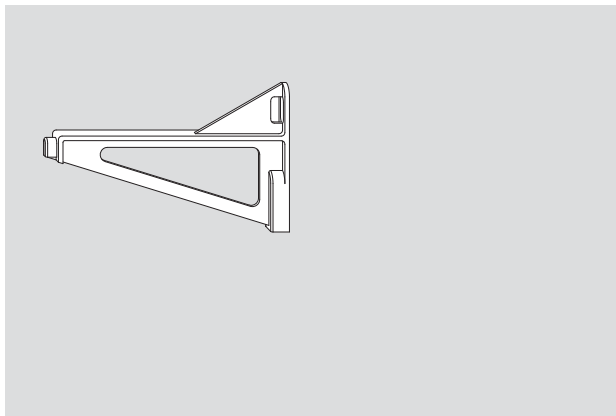


Striker set 2 for aluminium

564311

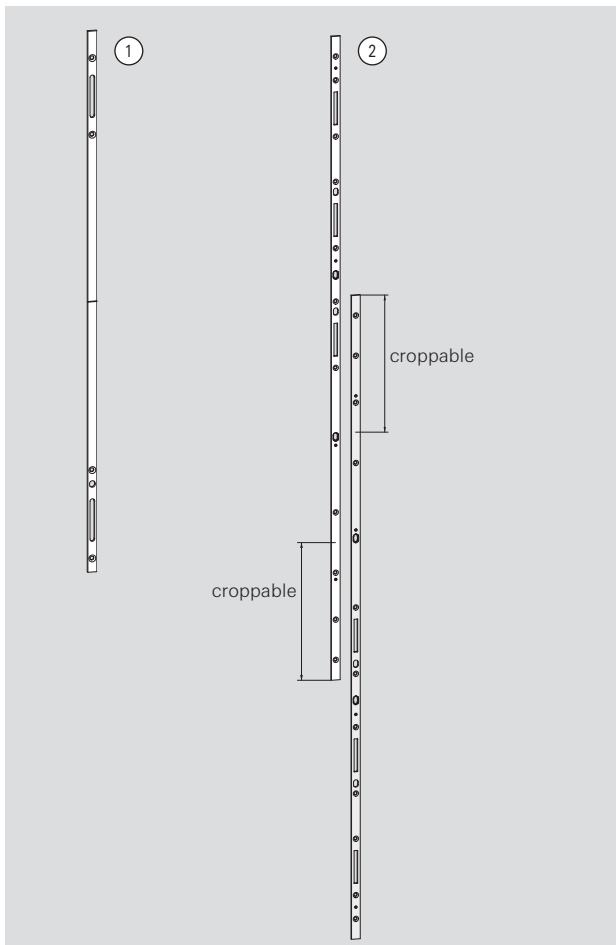
Contents

- 2 strikers
- 4 bolts



Striker 478413 positioning jig

631078



1 Strikers (one-piece)

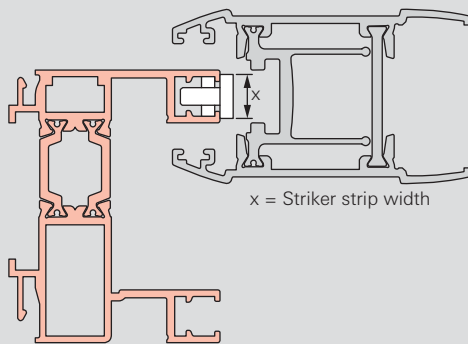
Length (mm)	Width (mm)	Typology	Material no.
600	10		629563
1800	10		629564
1800	15		629565

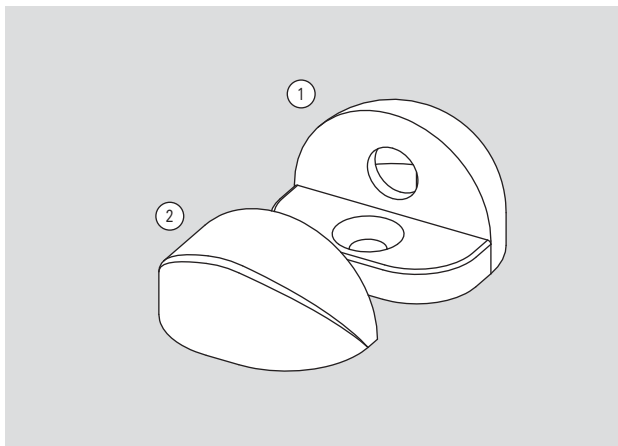
2 Striker strip (two-pieces) can be shortened (see page 68)

Length (mm)	Width (mm)	Typology	Material no.
960	13		474143
960	15		629569
960	16.2		385189

2 pieces per sash required.

Sectional view aluminium profile





The buffer stop protects the frame against damages, if the window or the door is slammed shut. When using two movable overlapping sashes (diagrams D and F) and if no pop-up handle is used on the rearward sash, the handle of the rearward sash is protected anyway.

1 + 2 Buffer stop (incl. rubber component, without screws)

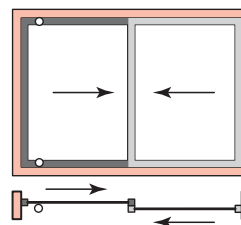
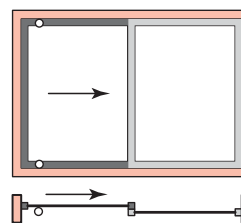
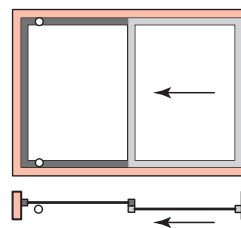
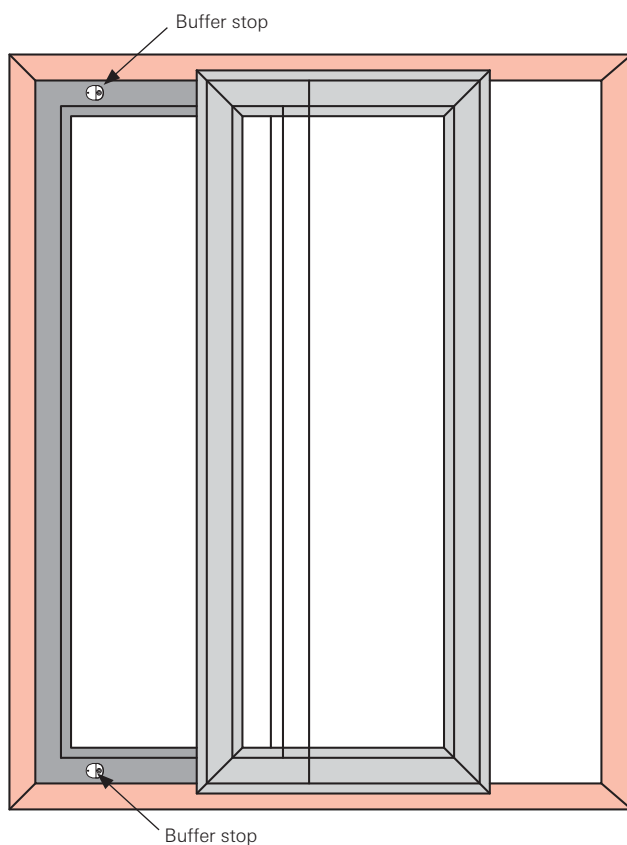
Code	Colour	Material no.
R 04.1	Grey-brown, RAL 8019	317251
R 06.2	Jet-black, RAL 9005	335555
R 07.2	Traffic-white, RAL 9016	317250
	White, aluminium, RAL 9006	449963

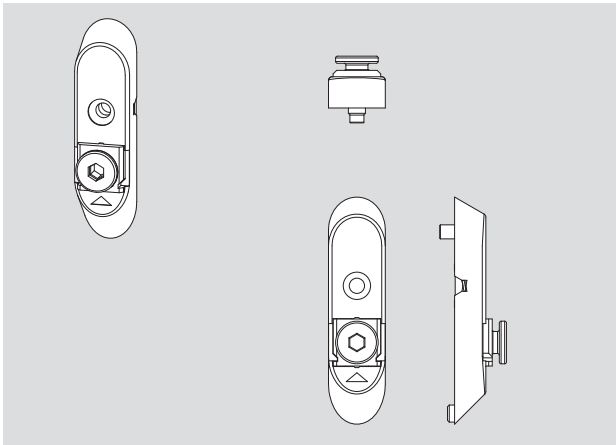
1 Buffer stop (without rubber component)

Code	Colour	Material no.
	Unpainted, uncoated	317249

2 Rubber component

Code	Colour	Material no.
R 06.2	Jet-black, RAL 9005	317252



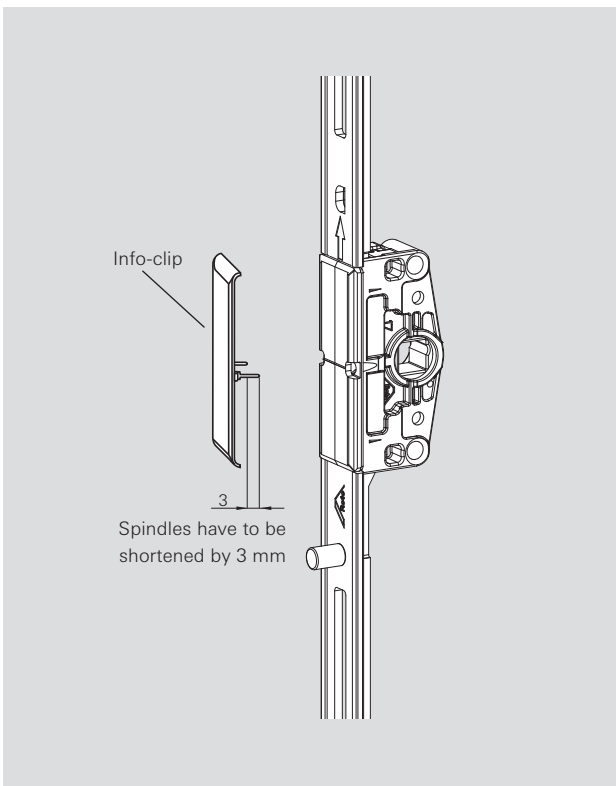


Mishandling device

343733

This component enables the movement of the locking points only with closed door, preventing the mechanism to be damaged. This prevents the hardware to be damaged due to a slamming door with locking points in locking position.

To be used with espagnolettes with 14 mm hooks or claws.



Info-clip

Display information (i.e. company logo), clipped on the espagnolette gear-casing

Print	Primary colour		
Blank	Jet-black	R06.2	230694
Blank	White	R07.1/2	230696
Unicolour printing	Jet-black	R06.2	230692
Unicolour printing	White	R07.1/2	230695
Bicolour printing	White	R07.1/2	230697

Upon submitting your order request, please enclose the artwork (format: approx. 15 x 40 mm).

Application range:

Suitable for all single-action espagnolettes.

SINGLE				SINGLE-ACTION ESPAGNOLETTES						REVERSE-ACTION ESPAGNOLETTES						
Profile				Cam 8mm		Hook 5mm		Hook 14mm		Espagnolette casing		Extensions				
				→ p. 311		→ p. 313		→ p. 314		→ p. 317		→ p. 319				
Extruder	Series	Frame	Sash	Backset 7mm	Backset 17mm	Backset 17mm, lockable	Backset 17mm	Backset 17mm, lockable	Backset 17mm	Backset 17mm, lockable	Backset 22mm	not lockable	lockable	Hook 5 mm	Hook 14 mm	Claws
Alcemar	M1			Yes												
Alcemar	M5			Yes												
Aluar	Modena 45				Yes											
Alu. Torralba	BN-670	BN-671	BN-676	Yes			Yes									
Akotherm	AT200/215	3611	2018		Yes		Yes									
Aluminco	Serie 230	230-122	230-203							Yes						
Alumil	S100	S116	S102							Yes						
Alumil	S300	S303	S301							Yes						
Alumil	M9052	M14501-1	M9052-2	Yes			Yes									
Alumil	M14000	M14383	M14250							Yes						
Alumil	M14500	M5401	M14202							Yes						
Aluval	Aluprom-18	18200	18303	Yes			Yes									
Arexco	Therm. break			Yes												
Balkan	Classic Thermo 445	AL 445-105	AL 445-253		Yes											
Europa	600	TV6 621	TV6 610	Yes			Yes									
Europa	600	TV6 620	TV6 610	Yes	Yes											
Europa	2000	TV 2217	TV 2030	Yes			Yes									
Europa	2500	TV 2516	TV 2520	Yes	Yes		Yes									
Europa	2500 Hybrid	TV 2563	TV 2570	Yes	Yes		Yes									
Europa	6000	TH 6121	TH 6025	Yes	Yes		Yes									
Exalco	Albio-225	225-02	225-06							Yes						
												387934		Yes		
												387934			Yes	
Galisur	PR-65				Yes		Yes									
Heroal	Serie 020S	6372	6351		Yes		Yes									

BOGIES			HANDLES				STRIKERS			ACCESSORIES	SPACERS
Single bogie 50 kg	Tandem bogie 120/80 kg	Tandem bogie 200 kg	Pop-up handles	ROL Sliding handle sets with ...		ROL Tilt&Turn handles	Strikers	Striker (one-piece)	Striker strip, (two-pieces) (reverse-action)	Various elements	
→ p. 324	→ p. 325	→ p. 327	→ p. 328	→ p. 330			→ p. 338	→ p. 339	→ p. 339	→ p. 340	→ p. 340
				Escutcheon pull-handle outside	Pull handle outside (* lockable from inside and outside)			600 / 1800mm	960mm		
			Spindle length (mm)	Spindle length (mm)	Spindle length (mm)	Spindle length (mm)	Striker length				
						24	630006 milled 71 mm				478411
						30	630007 milled 71 mm				478411
						24	478413				478412
						24	478413				478411
						24	478413				478411
						30	478413				478412
						30	478413				478412
			21			30	608770		Yes		564313
						24	629557 milled 86 mm		Yes		Alumil M12353
						30	629557 milled 86 mm		Yes		Alum. S345 +660.01.345.00
						24	478413				478411
						24	478413				478411
						30	629557 milled 86 mm		Yes		Alumil M12353
						30	629557 milled 86 mm		Yes		Alumil M12353
						24	478413				478411
						24	478413				478411
						24	478413				478412
						24	629557 milled 86 mm				564313
			21			30	604563_105 mm				604565
			21			30	604563_105 mm				
			21			30	604563_105 mm				604565
			21			30	478413				604564
			21			30	478413				
			21			30	478413				604564
			21			30	604563_105 mm				604565
			21			30	604563_105 mm				
			21			30	604563_105 mm				604565
			21			30	629558_86 mm				604566
			21			30	629558_86 mm				
			21			30	629558_86 mm				604566
			21			30	629558_86 mm				604566
			21			30	629558_86 mm				604566
						24	604563_105 mm				478411
						24	604563_105 mm				
						24	604563_105 mm				478411
					57	30	491666_105 mm		Yes		478410+491665
					57(70*)	30	491666_105 mm		Yes		478410+491665
					57(70*)	30	491666_105 mm		Yes		478410+491665
						24	478413				478412
						24	478413				478412
			21		57	30	629557 milled 86 mm				564313
			21		57	30	629557 milled 86 mm				564313

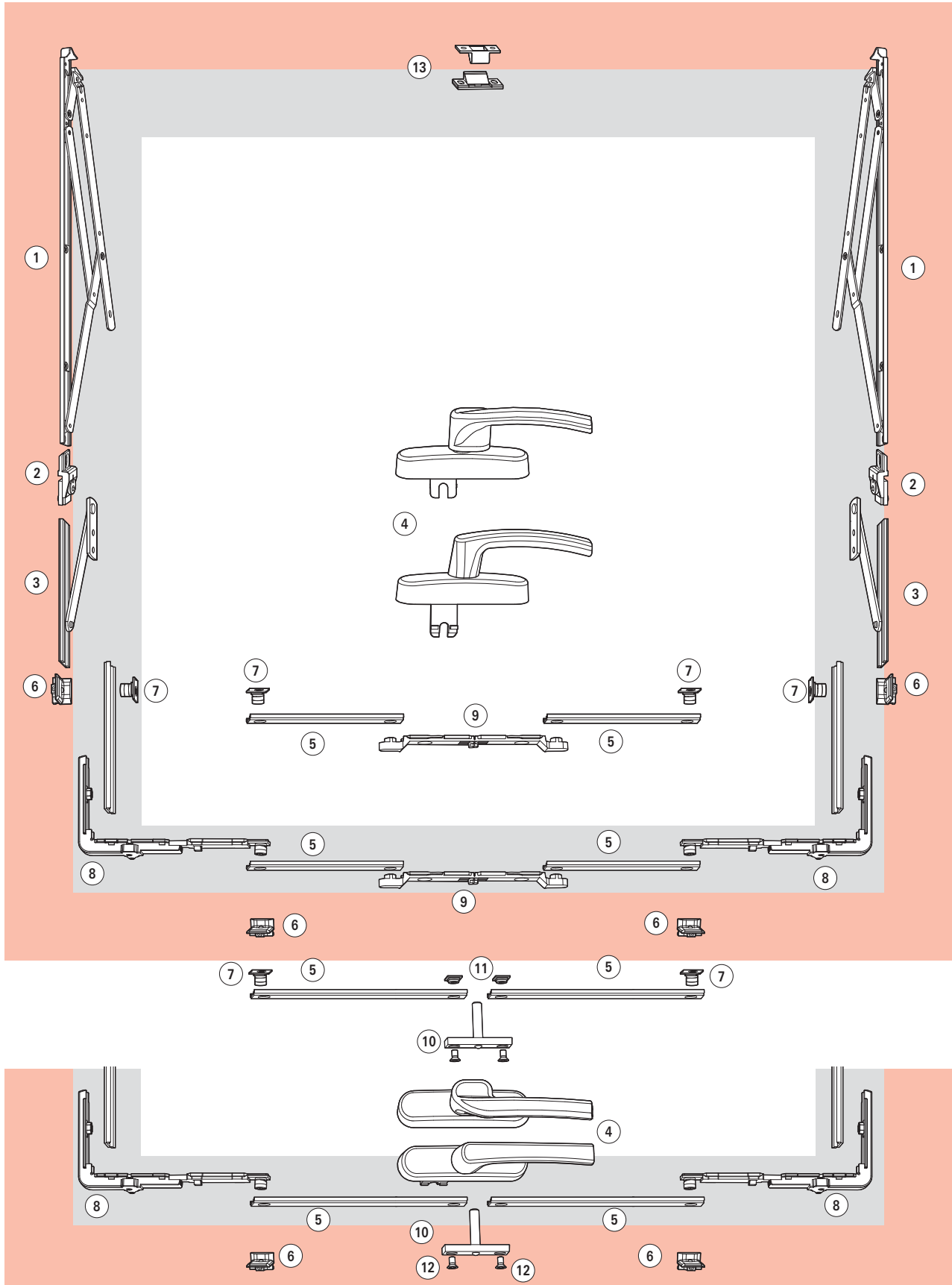
SINGLE				SINGLE-ACTION ESPAGNOLETTES						REVERSE-ACTION ESPAGNOLETTES						
Profile				Cam 8mm		Hook 5mm		Hook 14mm		Espagnolette casing		Extensions				
				→ p. 311		→ p. 313		→ p. 314		→ p. 317		→ p. 319				
Extruder	Series	Frame	Sash	Backset 7mm	Backset 17mm	Backset 17mm, lockable	Backset 17mm	Backset 17mm, lockable	Backset 17mm	Backset 17mm, lockable	Backset 22mm	not lockable	lockable	Hook 5mm	Hook 14mm	Claws
Hydro	Rotonda 700				Yes											
Hydro	Rotonda 700 RPT				Yes											
Hydro	HA110				Yes											
Hydro	HA62C				Yes											
Itesal	800				Yes											
Metales Extruidos	KLmacro CPR	19550	PR008		Yes											
						Yes										
Metales Extruidos	KLmacro CPR	21611	20636		Yes											
						Yes										
Metales del Talar	Mass						Yes									
Metales del Talar	Actual 45						Yes									
Profilco	PR-35	35-208	35-301						Yes							
Profilco	PR-35	35-208	35-303						Yes							
Profilco	PR-45	45-205	45-305						Yes							
Regicarp	Serie RE 70 RPT 100				Yes					Yes						
									Yes							
Reynaers	CP 130	006.1984.XX	006.1986.XX		Yes											
						Yes										
Sapa	Ouvrant Standard				Yes											
						Yes										
Sapa	Ouvrant forte charge				Yes											
						Yes										
Veralu								Yes								
									Yes							
													387934		Yes	
													387934			Yes

BOGIES			HANDLES				STRIKERS			ACCESSORIES	SPACERS
Single bogie 50 kg	Tandem bogie 120/80 kg	Tandem bogie 200 kg	Pop-up handles	ROL Sliding handle sets with ...	ROL Tilt&Turn handles	Strikers	Striker (one-piece)	Striker strip, (two-pieces) (reverse-action)	Various elements		
→ p. 324	→ p. 325	→ p. 327	→ p. 328	→ p. 330			→ p. 338	→ p. 339	→ p. 339	→ p. 340	
				Escutcheon pull-handle outside	Pull handle outside (* lockable from inside and outside)			600 / 1800mm	960mm		
			Spindle length (mm)	Spindle length (mm)	Spindle length (mm)	Spindle length (mm)	Striker length				
						24	478413			478412	
						24	478413			478412	
						24	478413			478412	
						24	478413			478412	
			21			24	478413			478410+491665	
						24	629557 milled 86mm				
						24	629557 milled 86mm				
						24	629557 milled 86mm				
						24	629557 milled 86mm				
			21			30	478413			478411	
						24	478413			478412	
			21			24	564311			564313	
			21			24	564311			564313	
						24	564311			564314	
						24	629551_86mm			564313	
						24	629551_86mm			564313	
			26	60	77	40	629553_86mm			600608	
			26	60	77(90*)	40	629553_86mm			600608	
			21			30	629557 milled 86mm				
			21			30	629557 milled 86mm				
			21			30	629557 milled 86mm				
			21			30	629557 milled 86mm				
		561194 + packer	21	60	67	30	629562_86mm				
			21	60	67	30	629562_86mm				
			21	60	67(80*)	30	629562_86mm				
			21	60	67(80*)	30	629562_86mm				



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Roto Outward Opening
Hardware overviews T 540 – Geared-handle
 Friction hinges – Top-Hung



Application range

Sash rebate width **SRW** ... depending on profile / weight

Sash rebate height **SRH**267 – 2500 mm

Sash weight **S.kg** max. 180 kg

1 Top-Hung friction hinge Sterling							
Life expectancy = 30,000 cycles – in accordance with the European standard							
Application range SRH / mm	Size (" / mm)	Stack height (mm)	Opening angle	Sash weight (kg max.)	Stainless steel quality	Material no.	
267 – 635	10"/262	16	50°	40	304	477268	
636 – 787	12"/313	16	50°	50	304	477269	
788 – 1090	16"/415	16	50°	65	304	477270	
600 – 1100	16"-1/415	16	30°	100	304	485601	
1091 – 1500	22"/567	16	45°	100	304	478262	
1501 – 2000	22"-1/567	16	20°	100	304	477271	
2000 – 2500	26"/680	16	20°	180	304	477272	

1a Top-Hung friction hinge Storm							
Life expectancy = 10,000 cycles – In accordance with US regulations							
Application range SRH / mm	Size (" / mm)	Stack height (mm)	Opening angle	Sash weight (kg max.)	Stainless steel quality	Material no.	
267 – 635	10"/262	16	50°	37	304	477254	
636 – 787	12"/313	16	50°	45	304	477274	
788 – 1090	16"/415	16	50°	55	304	477265	
1091 – 1500	22"/567	16	45°	75	304	477266	
1270 – 2000	26"/680	16	20°	120	304	477267	

Non balanced

280 – 762	10"/262	16	80°	50	304	485770	
457 – 1120	16"/415	16	60°	55	304	485771	
610 – 1321	22"/567	16	90°	75	304	318457	

2 Friction hinge add-on adjustment device	326815
3 Friction restrictor-stay	318475
4 RotoLine espagnolette with logo	

RotoLine espagnolette 26 with logo, lockable

Colour	Roto colour no.	Fork length (mm) in sectional view W / Y	Material no.
Silver	R01.5	26/9.5	378843
Jet-black	R06.2 (RAL 9005)	26/9.5	378844
Traffic-white	R07.2 (RAL 9016)	26/9.5	378916
Unpainted		26/9.5	238700

RotoLine espagnolette, cranked with logo

Colour	Roto colour no.	Fork length (mm) in sectional view W / Y	Material no.
Silver	R01.5	26/9.5	L 477855
			R 477856
Jet-black	R06.2 (RAL 9005)	26/9.5	L 477857
			R 477858
Traffic-white	R07.2 (RAL 9016)	26/9.5	L 477543
			R 477544
Unpainted		26/9.5	L 477859
			R 477860

Limit the espagnolette or connecting-rod to 90°!

Geared-handle fork not dep.

Description	Fork length (mm) in sectional view W / Y	Material no.
Fork 01	19/9.5	490240
Fork 02	32/9.5	482309
Fork 03	37/9.5	482310
Fork 04	37/3.5	482311
Fork 05	46/9.5	482312
Fork 06	46/3.5	482313
Fork 07	50/9.5	482314
Fork 08	53/9.5	482315
Fork 09	53/3.5	482316
Fork 10	55/9.5	482317
Fork 11	60/9.5	482318
Fork 12	67/9.5	490611

5 ALU ECC connecting-rod, 6 m	334665
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6 Striker V.01	212633
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Striker V.02	212634
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7 Locking cam, insertable	334671
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SEC locking cam, insertable, RC2	447114
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8 Corner drive without blocker	331012
---------------------------------------	---------------

9 TH connector	482264
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10 T connector	
-----------------------	--

Description	T connector length (mm) in sectional view X	Material no.
T connector 01	25	482305
T connector 02	32	482306
T connector 03	37	482307
T connector 04	47	482308

11 Security connector ECC	447113
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12 Countersunk screw M5 x 9	212751
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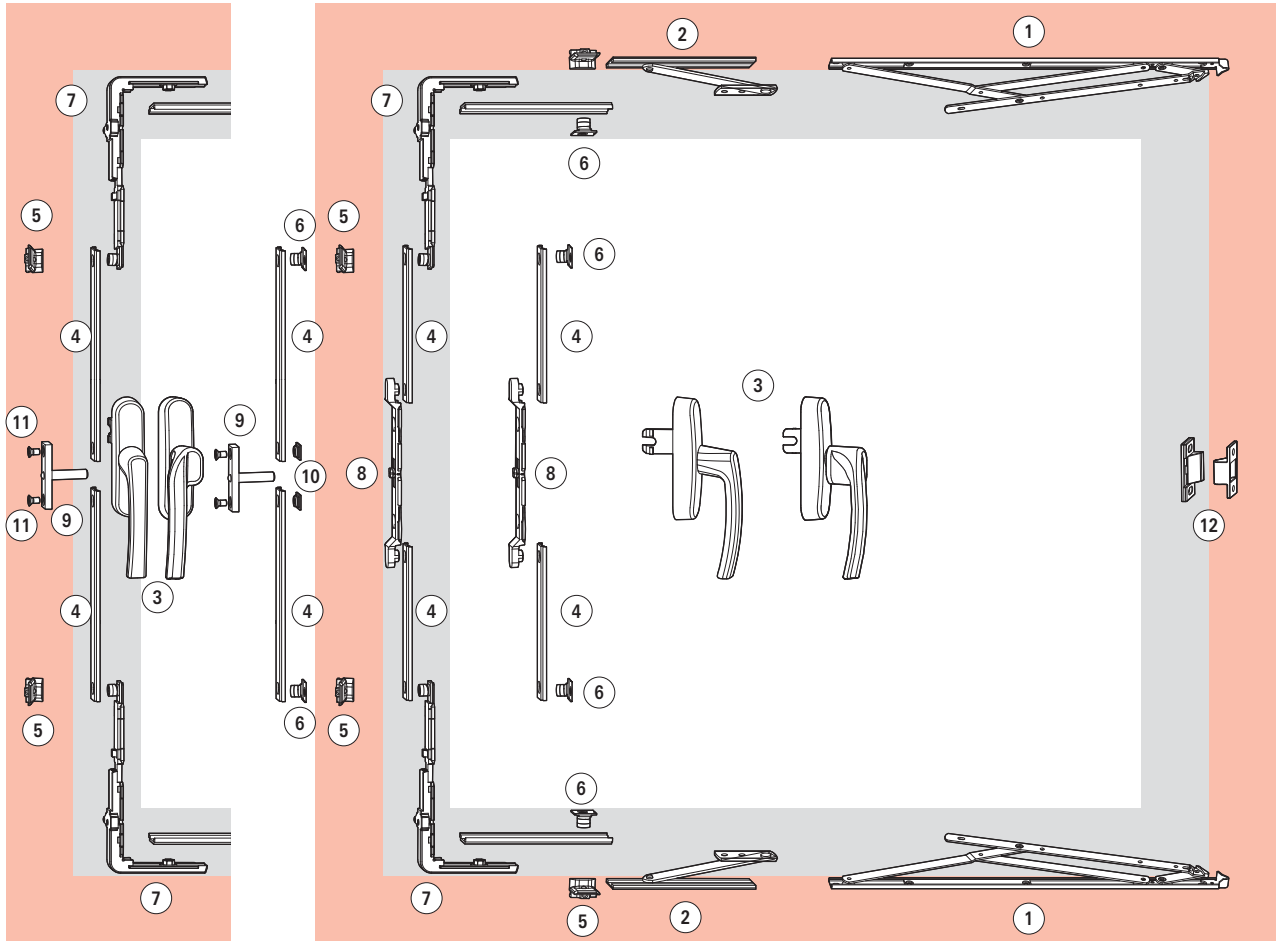
13 Centre-closer	486367
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NOTE!
For handles/espagnolettes, please refer to the chapter "Ordering advice"!

Roto Outward Opening

Hardware overviews T 540 – Geared-handle

Friction hinges – Side-Hung



Application range

Sash rebate width **SRW**300–838 mm

Sash rebate height **SRH** .. depending on profile / weight

Sash weight **S.kg** max. 55 kg

1 Side-Hung friction hinge Sterling

Life expectancy = 30,000 cycles – in accordance with the European standard

Application range SRH / mm	Size (" / mm)	Stack height (mm)	Opening angle	Sash weight (kg max.)	Stainless steel quality	Material no.
300– 660	10"/262	16	85°	38	304	477275
450– 838	16"/415	16	90°	47	304	477273

1a Side-Hung friction hinge Storm

Life expectancy = 10,000 cycles

Application range SRH / mm	Size (" / mm)	Stack height (mm)	Opening angle	Sash weight (kg max.)	Stainless steel quality	Material no.
280– 660	10"/262	16	80°	38	304	485770
450– 838	16"/415	16	60°	55	304	485771

2 Friction restrictor-stay **318475**

3 RotoLine espagnolette with logo

Colour	Roto colour no.	Fork length (mm) in sectional view W / Y	Material no.
Silver	R01.5	26/9.5	377474
Jet-black	R06.2 (RAL 9005)	26/9.5	377475
Traffic-white	R07.2 (RAL 9016)	26/9.5	377477
Unpainted		26/9.5	632981

RotoLine espagnolette 26 with logo, lockable

Colour	Roto colour no.	Fork length (mm) in sectional view W / Y	Material no.
Silver	R01.5	26/9.5	378843
Jet-black	R06.2 (RAL 9005)	26/9.5	378844
Traffic-white	R07.2 (RAL 9016)	26/9.5	378916
Unpainted		26/9.5	238700

RotoLine espagnolette, cranked with logo

Colour	Roto colour no.	Fork length (mm) in sectional view W / Y	Material no.
Silver	R01.5	26/9.5	L 477855
			R 477856
Jet-black	R06.2 (RAL 9005)	26/9.5	L 477857
			R 477858
Traffic-white	R07.2 (RAL 9016)	26/9.5	L 477543
			R 477544
Unpainted		26/9.5	L 477859
			R 477860

Limit the geared-handle or connecting-rod to 90°!

Geared-handle fork not dep.

Description	Fork length (mm) in sectional view W / Y	Material no.
Fork 01	19/9.5	490240
Fork 02	32/9.5	482309
Fork 03	37/9.5	482310
Fork 04	37/3.5	482311
Fork 05	46/9.5	482312
Fork 06	46/3.5	482313
Fork 07	50/9.5	482314
Fork 08	53/9.5	482315
Fork 09	53/3.5	482316
Fork 10	55/9.5	482317
Fork 11	60/9.5	482318
Fork 12	67/9.5	490611

4 ALU ECC connecting-rod, 6m **334665**

5 Striker V.01 **212633**

Striker V.02 **212634**

6 Locking cam, insertable **334671**

SEC locking cam, insertable, RC2 **447114**

7 Corner drive without blocker **331012**

8 TH connector **482264**

9 T connector

Description	T connector length (mm) in sectional view X	Material no.
T connector 01	25	482305
T connector 02	32	482306
T connector 03	37	482307
T connector 04	47	482308

10 Security connector ECC **447113**

11 Countersunk screw M5 x 9 **212751**

12 Centre-closer **486367**



NOTE!

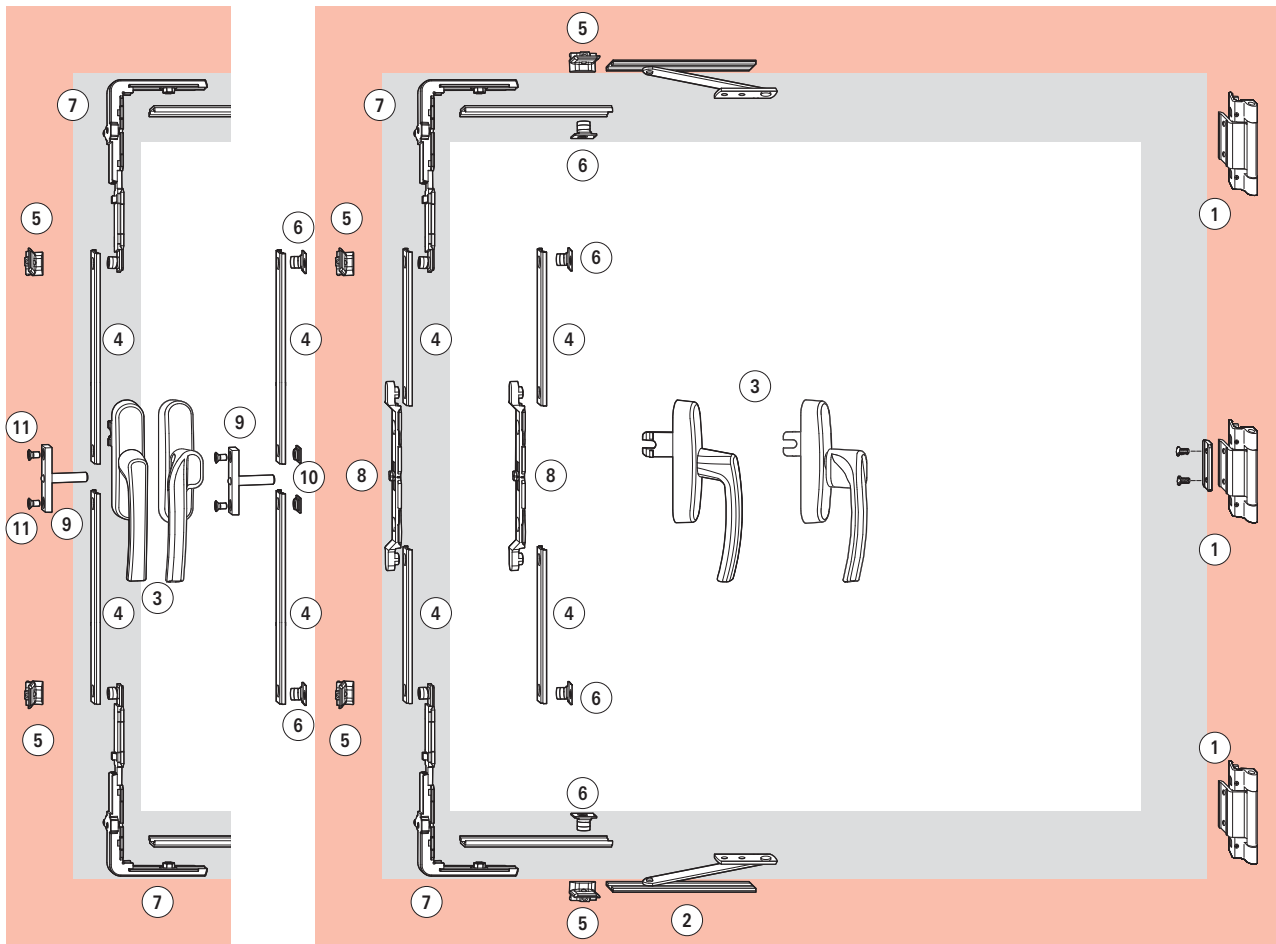
The sizes are derived from the friction hinges' specifications; in some applications also from the profile dimensions.

For handles/espagnolettes, please refer to the chapter "Ordering advice"!

Roto Outward Opening

Hardware overviews T 540 – Geared-handle

Turn-Only hinges – Side-Hung



Application range

Sash rebate width **SRW**405–1400 mm

Sash rebate height **SRH**520–2250 mm

Sash weight **S.kg** max. 70 kg

① Hinge side max. 70 kg

Description	Roto colour no.	Material no. 1	Material no. 2	Material no. 3
Clamp-strip				
Turn-Only hinge	R01.5	482321	482322	482323
Central hinge		482324	482325	482326
Clamping support-strip		212055	212055	212055
TU-ON				
Countersunk screw M5 x 9		212751	212751	212751

② Friction restrictor-stay **318475**

③ RotoLine espagnolette with logo

Colour	Roto colour no.	Fork length (mm) in sectional view W / Y	Material no.
Silver	R01.5	26/9.5	377474
Jet-black	R06.2 (RAL 9005)	26/9.5	377475
Traffic-white	R07.2 (RAL 9016)	26/9.5	377477
Unpainted		26/9.5	632981

RotoLine espagnolette 26 with logo, lockable

Colour	Roto colour no.	Fork length (mm) in sectional view W / Y	Material no.
Silver	R01.5	26/9.5	378843
Jet-black	R06.2 (RAL 9005)	26/9.5	378844
Traffic-white	R07.2 (RAL 9016)	26/9.5	378916
Unpainted		26/9.5	238700

RotoLine espagnolette, cranked with logo

Colour	Roto colour no.	Fork length (mm) in sectional view W / Y	Material no.
Silver	R01.5	26/9.5	L 477855 R 477856
Jet-black	R06.2 (RAL 9005)	26/9.5	L 477857 R 477858
Traffic-white	R07.2 (RAL 9016)	26/9.5	L 477543 R 477544
Unpainted		26/9.5	L 477859 R 477860

Limit the geared-handle or connecting-rod to 90°!

Geared-handle fork not dep.

Description	Fork length (mm) in sectional view W / Y	Material no.
Fork 01	19/9.5	490240
Fork 02	32/9.5	482309
Fork 03	37/9.5	482310
Fork 04	37/3.5	482311
Fork 05	46/9.5	482312
Fork 06	46/3.5	482313
Fork 07	50/9.5	482314
Fork 08	53/9.5	482315
Fork 09	53/3.5	482316
Fork 10	55/9.5	482317
Fork 11	60/9.5	482318
Fork 12	67/9.5	490611

④ ALU ECC connecting-rod, 6m **334665**

⑤ Striker V.01 **212633**

Striker V.02 **212634**

⑥ Locking cam, insertable **334671**

SEC locking cam, insertable, RC2 **447114**

⑦ Corner drive without blocker **331012**

⑧ TH connector **482264**

⑨ T connector

Description	T connector length (mm) in sectional view X	Material no.
T connector 01	25	482305
T connector 02	32	482306
T connector 03	37	482307
T connector 04	47	482308

⑩ Security connector ECC **447113**

⑪ Countersunk screw M5 x 9 **212751**



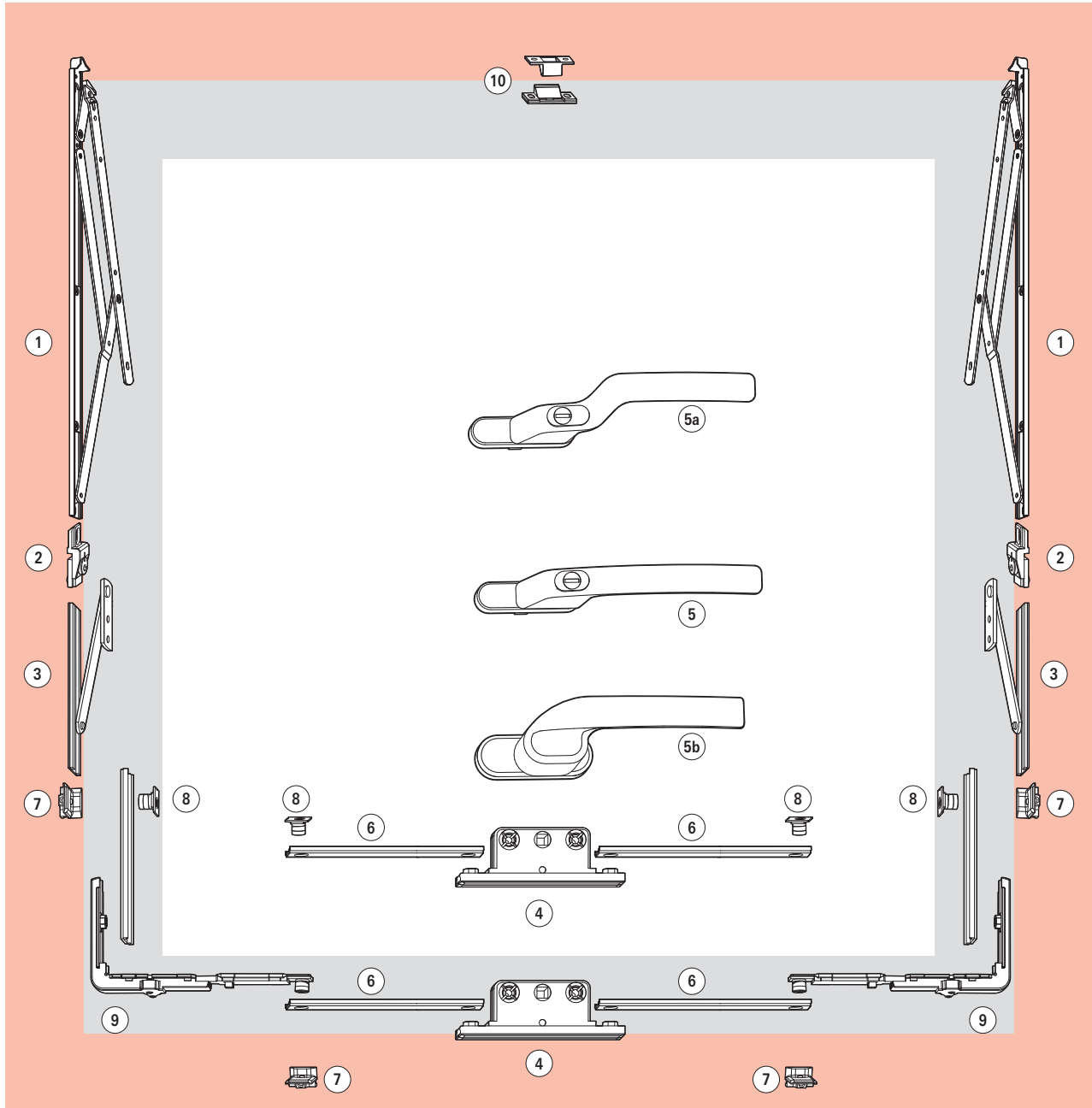
NOTE!

For handles/espagnolettes, please refer to the chapter "Ordering advice"!

Roto Outward Opening

Hardware overview T 540 – Flush-encased gearbox

Friction hinges – Top-Hung



Application range

Sash rebate width **SRW** ... depending on profile / weight

Sash rebate height **SRH**267 – 2500 mm

Sash weight **S.kg** max. 180 kg

1 Top-Hung friction hinge Sterling
Life expectancy = 30,000 cycles – in accordance with the European standard

Application range SRH / mm	Size (" / mm)	Stack height (mm)	Opening angle	Sash weight (kg max.)	Stainless steel quality	Material no.
267 – 635	10"/262	16	50°	40	304	477268
636 – 787	12"/313	16	50°	50	304	477269
788 – 1090	16"/415	16	50°	65	304	477270
600 – 1100	16"-1/415	16	30°	100	304	485601
1091 – 1500	22"/567	16	45°	100	304	478262
1501 – 2000	22"-1/567	16	20°	100	304	477271
2000 – 2500	26"/680	16	20°	180	304	477272

1a Top-Hung friction hinge Storm
Life expectancy = 10,000 cycles – In accordance with US regulations

Application range SRH / mm	Size (" / mm)	Stack height (mm)	Opening angle	Sash weight (kg max.)	Stainless steel quality	Material no.
267 – 635	10"/262	16	50°	37	304	477254
636 – 787	12"/313	16	50°	45	304	477274
788 – 1090	16"/415	16	50°	55	304	477265
1091 – 1500	22"/567	16	45°	75	304	477266
1270 – 2000	26"/680	16	20°	120	304	477267

Non balanced

280 – 762	10"/262	16	80°	50	304	485770
457 – 1120	16"/415	16	60°	55	304	485771
610 – 1321	22"/567	16	90°	75	304	318457

2 Friction hinge add-on adjustment device 326815

3 Friction restrictor-stay 318475

4 Flush-encased gearbox (reverse-action)

Description	Backset (mm)	Length (mm)	Material no.
Flush-encased gearbox	22	RA 126	487491
Flush-encased gearbox	30	RA 126	487493

Flush-encased gearbox

Description	Backset (mm)	Length (mm)	Material no.
Flush-encased gearbox	25	140	487489
Flush-encased gearbox	30	140	487490

5 Handle Outward Opening MK3

Colour	Roto colour no.	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Traffic-white	R07.2 (RAL 9016)	43	16	335284
Gold	R03.3	43	16	335288
Chrome-plated	R07.2 (RAL 9016)	43	16	355532

5a Handle Outward Opening MK2, cranked

Colour	Roto colour no.	Spindle length (mm)	Rosette (Ø in mm)	Material no.
--------	-----------------	---------------------	-------------------	--------------

5a Handle Outward Opening MK2, cranked

Traffic-white	R07.2 (RAL 9016)	43	16	L 492102 R 492103
Chrome-plated	R07.2 (RAL 9016)	43	16	L 345790 R 345792

5b Handle RotoLine, cranked

Colour	Roto colour no.	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Silver	R01.1	43	24	L 375318 R 375811
Anodised				R 375811
Titanium matt	R01.3	43	24	L 375319 R 375814
Anodised				R 375814
Traffic-white	R07.2 (RAL 9016)	43	24	L 375320 R 375816

Outward Opening handle, RotoLine cranked, not dep. lockable, SKG tested

Colour	Roto colour no.	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Silver	R01.1	43	24	L 375322 R 375819
Anodised				R 375819
Titanium matt	R01.3	43	24	L 375325 R 375820
Anodised				R 375820
Traffic-white	R07.2 (RAL 9016)	43	24	L 375330 R 375821

6 ALU ECC connecting-rod, 6 m 334665

7 Striker V.01 212633

Striker V.02 212634

8 Locking cam, insertable 334671

SEC locking cam, insertable, RC2 447114

9 Corner drive without blocker 331012

10 Centre-closer 486367



NOTE!

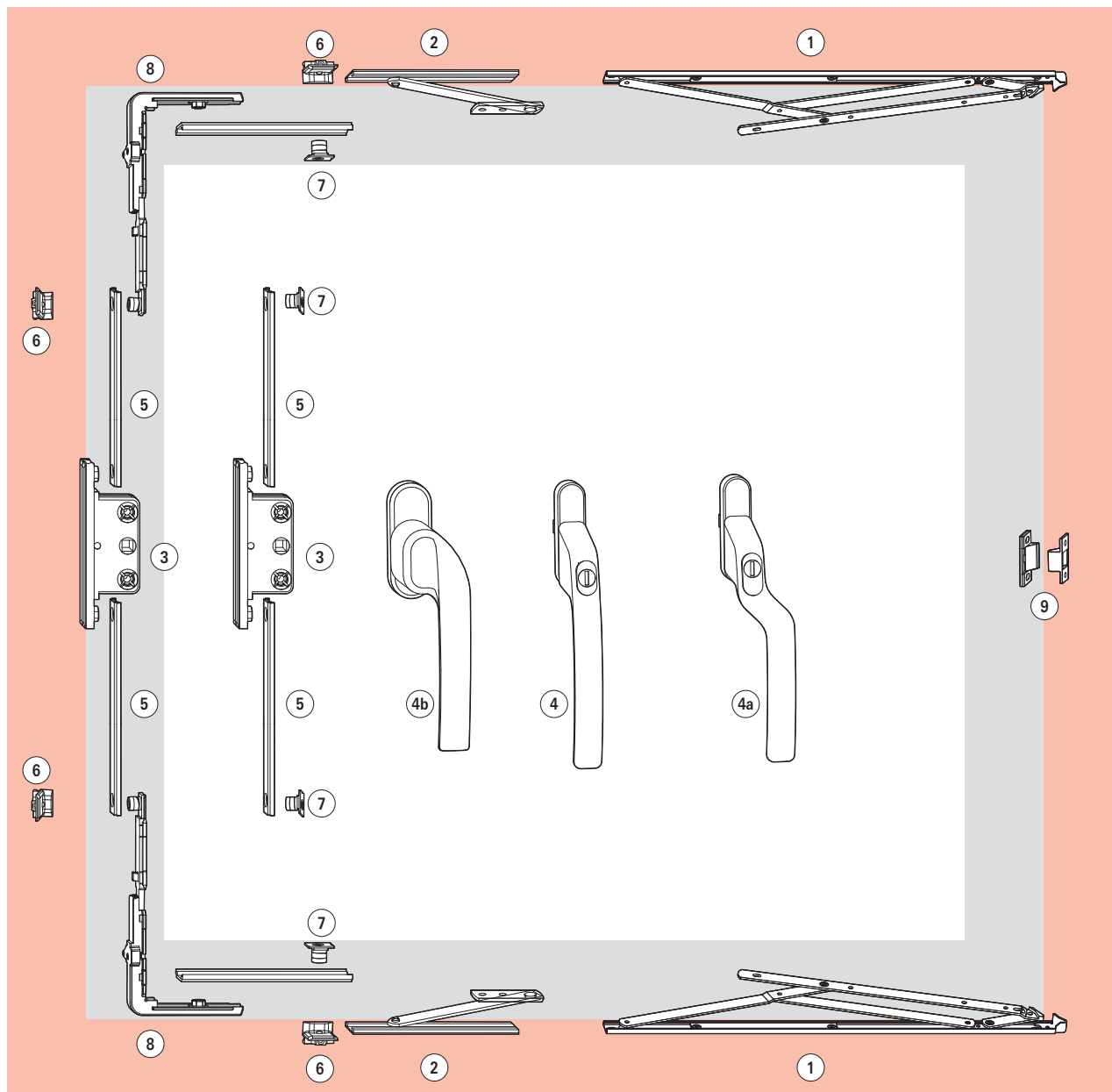
The sizes are derived from the friction hinges' specifications; in some applications also from the profile dimensions.

For handles/espagnolettes, please refer to the chapter "Ordering advice"!

Roto Outward Opening

Hardware overviews T 540 – Flush-encased gearbox

Friction hinges – Side-Hung



Application range

Sash rebate width **SRW**300–838 mm

Sash rebate height **SRH** .. depending on profile / weight

Sash weight **S.kg** max. 55 kg

1 Top-Hung friction hinge Sterling

Life expectancy = 30,000 cycles – in accordance with the European standard

Application range SRH / mm	Size (" / mm)	Stack height (mm)	Opening angle	Sash weight (kg max.)	Stainless steel quality	Material no.
300– 660	10"/262	16	85°	38	304	477275
450– 838	16"/415	16	90°	47	304	477273

1a Side-Hung friction hinge Storm

Life expectancy = 10,000 cycles

Application range SRH / mm	Size (" / mm)	Stack height (mm)	Opening angle	Sash weight (kg max.)	Stainless steel quality	Material no.
280– 660	10"/262	16	80°	38	304	485770
450– 838	16"/415	16	60°	55	304	485771

2 Friction restrictor-stay **318475**

3 Flush-encased gearbox (reverse-action)

Description	Backset (mm)	Length (mm)	Material no.
Flush-encased gearbox	22	RA 126	487491
Flush-encased gearbox	30	RA 126	487493

Flush-encased gearbox

Description	Backset (mm)	Length (mm)	Material no.
Flush-encased gearbox	25	140	487489
Flush-encased gearbox	30	140	487490

Flush-encased gearbox NIRO Alu

Description	Backset (mm)	Length (mm)	Material no.
Flush-encased gearbox	30	280	625431
Flush-encased gearbox	35	280	625432
Flush-encased gearbox	40	280	625433

Flush-encased gearbox NIRO Alu lockable

Description	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Flush-encased lockable gearbox	25	480	625438
Flush-encased lockable gearbox	30	480	625439
Flush-encased lockable gearbox	35	480	625440
Flush-encased lockable gearbox	40	480	625441

4 Handle Outward Opening MK3

Colour	Roto colour no.	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Traffic-white	R07.2 (RAL 9016)	43	16	335284
Gold	R03.3	43	16	335288
Chrome-plated	R07.2 (RAL 9016)	43	16	355532

4a Handle Outward Opening MK2, cranked

Colour	Roto colour no.	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Traffic-white	R07.2 (RAL 9016)	43	16	L 492102 R 492103
Chrome-plated	R07.2 (RAL 9016)	43	16	L 345790 R 345792

4b Handle Outward Opening RotoLine, cranked

Colour	Roto colour no.	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Silver	R01.1	43	24	L 375318 R 375811
Anodised				
Titanium matt	R01.3	43	24	L 375319 R 375814
Anodised				
Traffic-white	R07.2 (RAL 9016)	43	24	L 375320 R 375816

Outward Opening handle, RotoLine cranked, not dep. lockable, SKG tested

Colour	Roto colour no.	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Silver	R01.1	43	24	L 375322 R 375819
Anodised				
Titanium matt	R01.3	43	24	L 375325 R 375820
Anodised				
Traffic-white	R07.2 (RAL 9016)	43	24	L 375330 R 375821

5 ALU ECC connecting-rod, 6m **334665**

6 Striker V.01 **212633**

Striker V.02 **212634**

7 Locking cam, insertable **334671**

SEC locking cam, insertable, RC2 **447114**

8 Corner drive without blocker **331012**

9 Centre-closer **486367**



NOTE!

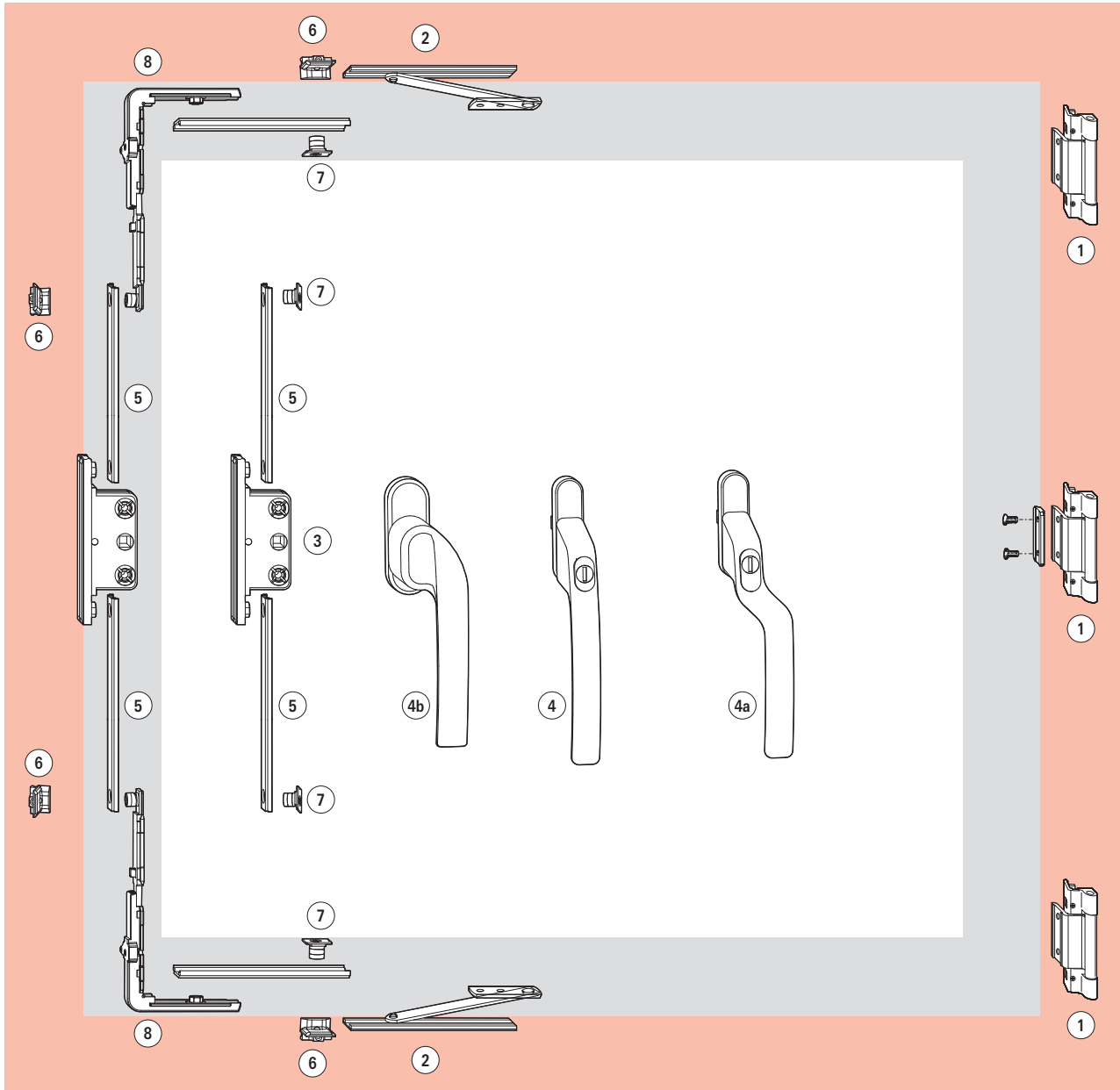
The sizes are derived from the friction hinges' specifications; in some applications also from the profile dimensions.

For handles/espagnolettes, please refer to the chapter "Ordering advice"!

Roto Outward Opening

Hardware overviews T 540 – Flush-encased gearbox

Turn-Only hinges – Side-Hung



Application range

Sash rebate width **SRW**405–1400 mm

Sash rebate height **SRH**520–2250 mm

Sash weight **S.kg** max. 70 kg

① Hinge side max. 70 kg

Description	Roto colour no.	Material no. 1	Material no. 2	Material no. 3
Clamp-strip				
Turn-Only hinge	R01.5	482321	482322	482323
Central hinge		482324	482325	482326
Clamping support-strip TU-ON		212055	212055	212055
Countersunk screw M5 x 9		212751	212751	212751

② Friction restrictor-stay **318475**

③ Flush-encased gearbox (reverse-action)

Description	Backset (mm)	Length (mm)	Material no.
Flush-encased gearbox	22	RA 126	487491
Flush-encased gearbox	30	RA 126	487493

Flush-encased gearbox

Description	Backset (mm)	Length (mm)	Material no.
Flush-encased gearbox	25	140	487489
Flush-encased gearbox	30	140	487490

Flush-encased gearbox NIRO Alu

Description	Backset (mm)	Length (mm)	Material no.
Flush-encased gearbox	30	280	625431
Flush-encased gearbox	35	280	625432
Flush-encased gearbox	40	280	625433

Flush-encased gearbox NIRO Alu lockable

Description	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Flush-encased lockable gearbox	25	480	625438
Flush-encased lockable gearbox	30	480	625439
Flush-encased lockable gearbox	35	480	625440
Flush-encased lockable gearbox	40	480	625441

④ Handle Outward Opening MK3

Colour	Roto colour no.	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Traffic-white	R07.2 (RAL 9016)	43	16	335284
Gold	R03.3	43	16	335288
Chrome-plated	R07.2 (RAL 9016)	43	16	355532

④a Handle Outward Opening MK2, cranked

Colour	Roto colour no.	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Traffic-white	R07.2 (RAL 9016)	43	16	L 492102 R 492103
Chrome-plated	R07.2 (RAL 9016)	43	16	L 345790 R 345792

④b Handle Outward Opening RotoLine, cranked

Colour	Roto colour no.	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Silver	R01.1	43	24	L 375318 R 375811
Titanium matt	R01.3	43	24	L 375319 R 375814
Traffic-white	R07.2 (RAL 9016)	43	24	L 375320 R 375816

Outward Opening handle, RotoLine cranked, not dep. lockable, SKG tested

Colour	Roto colour no.	Spindle length (mm)	Rosette (Ø in mm)	Material no.
Silver	R01.1	43	24	L 375322 R 375819
Titanium matt	R01.3	43	24	L 375325 R 375820
Traffic-white	R07.2 (RAL 9016)	43	24	L 375330 R 375821

⑤ ALU ECC connecting-rod, 6 m **334665**

⑥ Striker V.01 **212633**

Striker V.02 **212634**

⑦ Locking cam, insertable **334671**

SEC locking cam, insertable, RC2 **447114**

⑧ Corner drive without blocker **331012**



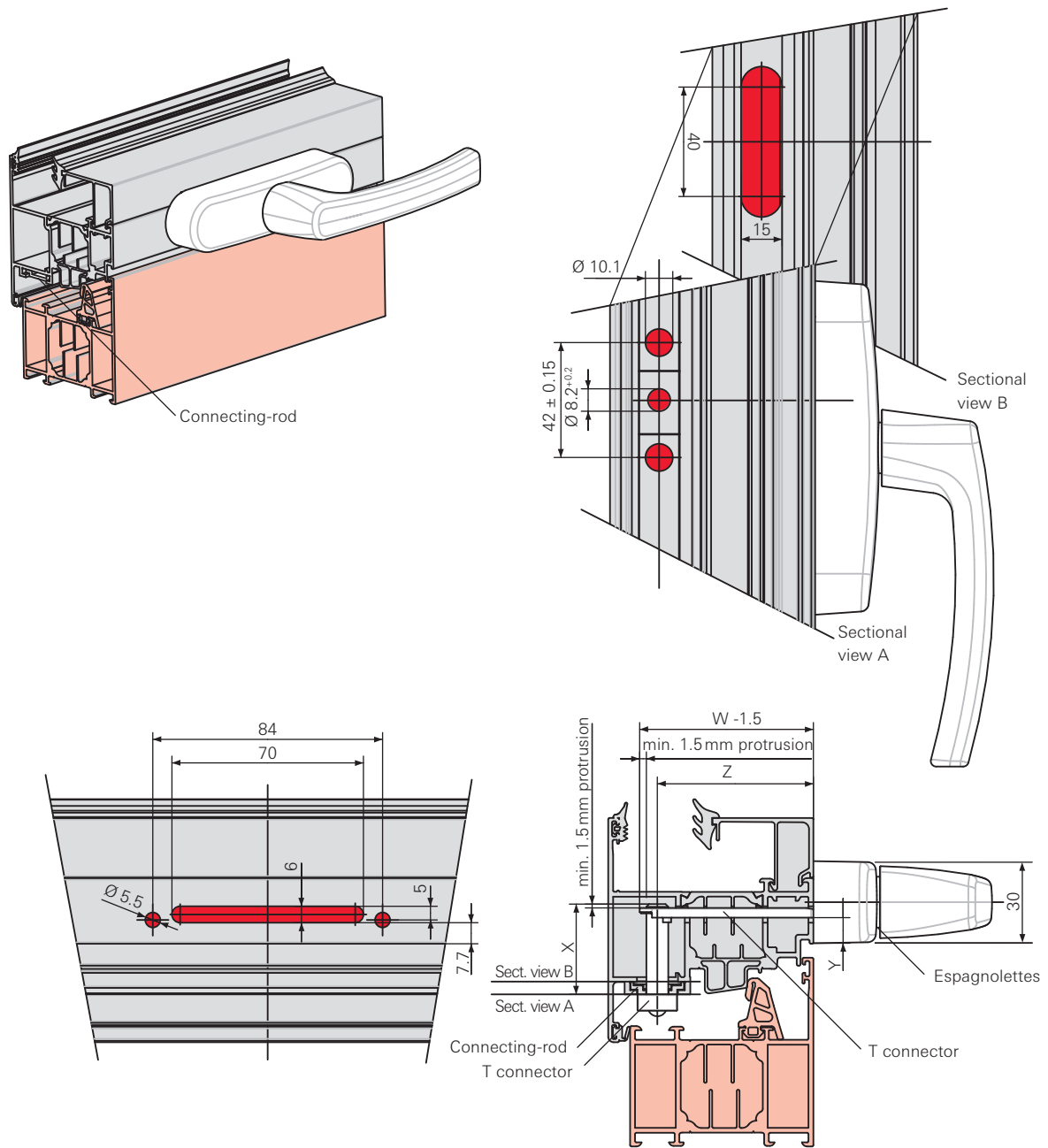
NOTE!

For handles/espagnolettes, please refer to the chapter "Ordering advice"!

Roto Outward Opening

Parts geared-handle

Operation from the front



Geared-handle fork

Description	Fork length (mm) in sectional view W / Y	Material no.
Fork 01	19/9.5	490240
Fork 02	32/9.5	482309
Fork 03	37/9.5	482310
Fork 04	37/3.5	482311
Fork 05	46/9.5	482312
Fork 06	46/3.5	482313
Fork 07	50/9.5	482314
Fork 08	53/9.5	482315
Fork 09	53/3.5	482316
Fork 10	55/9.5	482317
Fork 11	60/9.5	482318
Fork 12	67/9.5	490611

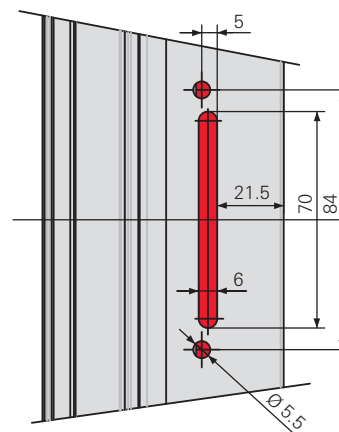
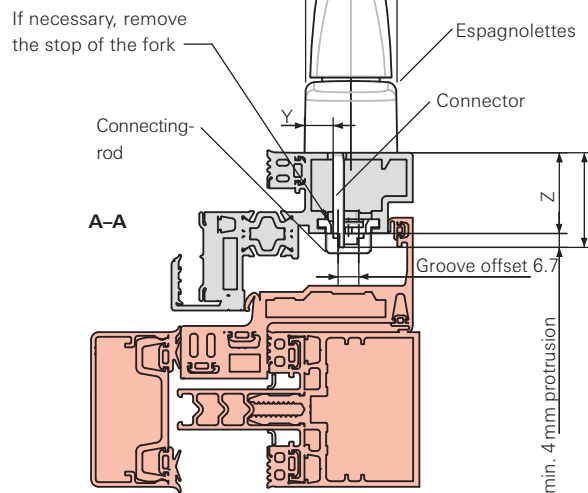
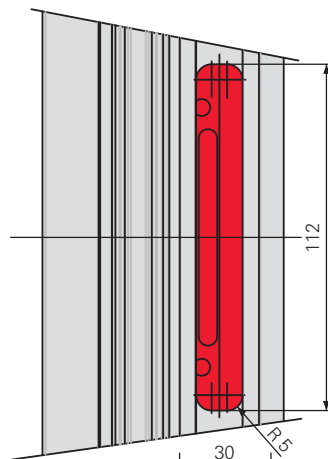
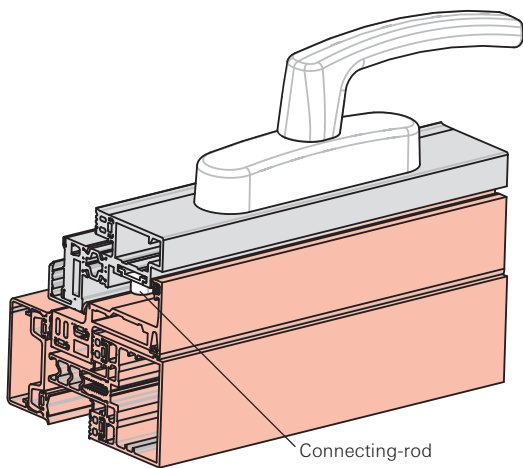
T connector

Description	T connector length (mm) in sectional view X	Material no.
T connector 01	25	482305
T connector 02	32	482306
T connector 03	37	482307
T connector 04	47	482308

Roto Outward Opening

Parts geared-handle

Operation from the top



Geared-handle fork

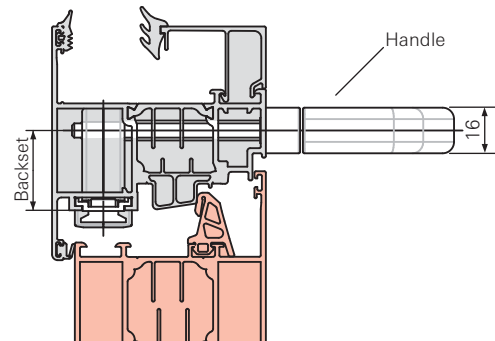
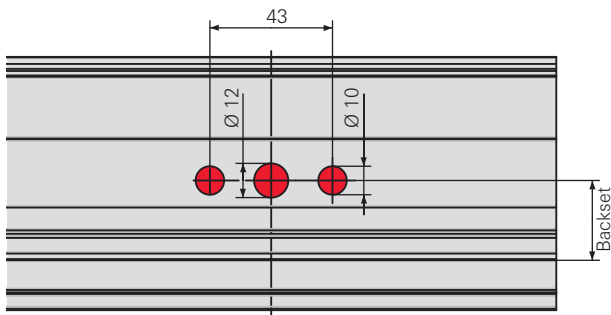
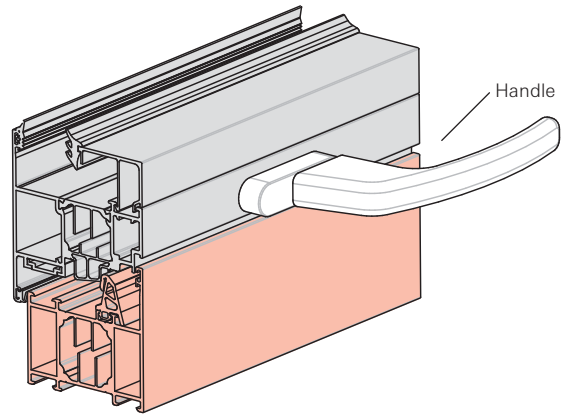
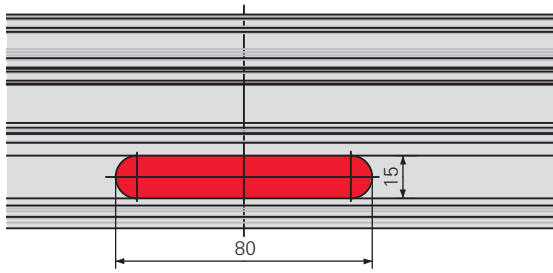
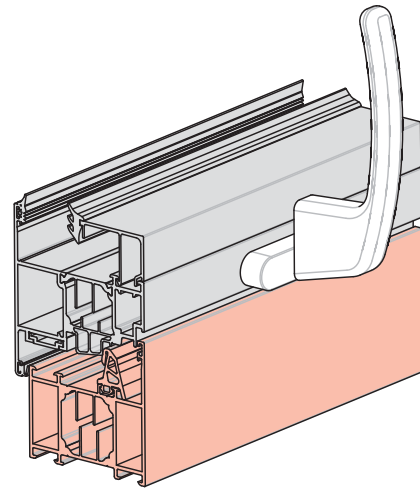
Description	Fork length (mm) in sectional view W / Y	Material no.
Fork 01	19/9.5	490240
Fork 02	32/9.5	482309
Fork 03	37/9.5	482310
Fork 04	37/3.5	482311
Fork 05	46/9.5	482312
Fork 06	46/3.5	482313
Fork 07	50/9.5	482314
Fork 08	53/9.5	482315
Fork 09	53/3.5	482316
Fork 10	55/9.5	482317
Fork 11	60/9.5	482318
Fork 12	67/9.5	490611

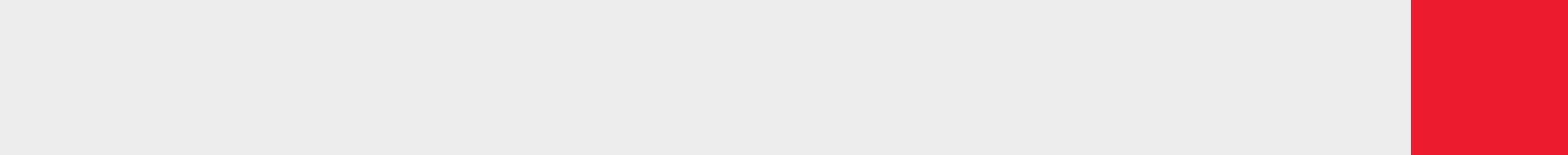
Roto Outward Opening

Roto Outward Opening

Installation advice

Window handle standard – Operation from the front

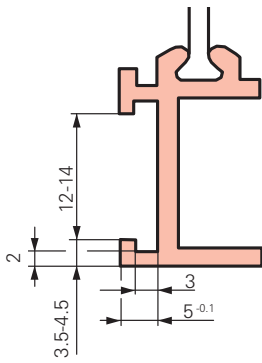




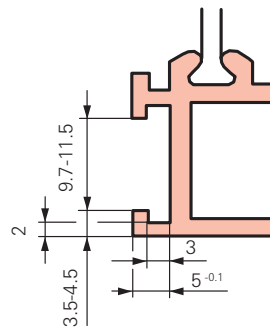
Roto Outward
Opening



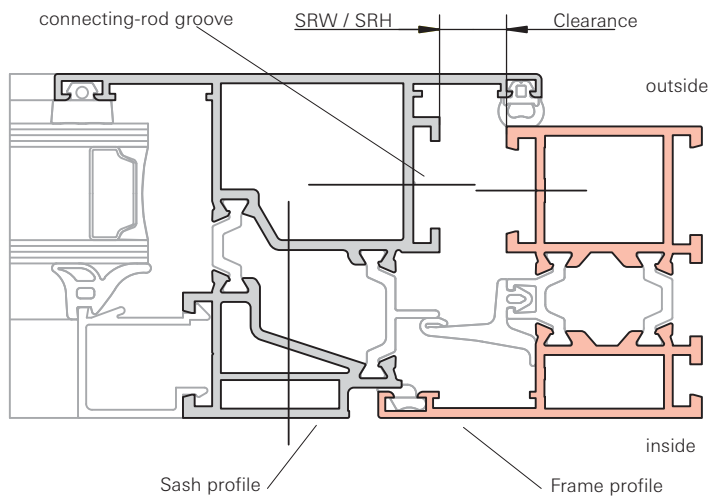
Groove version V.01



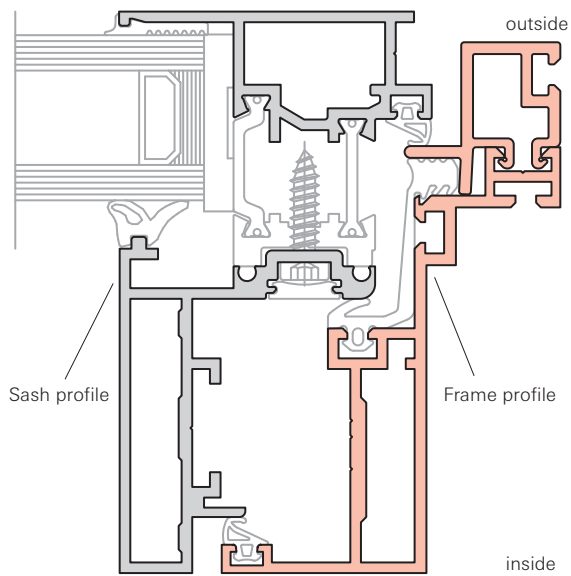
Groove version V.01



Standard profile for outward opening windows



Typical facade profile (handle from the top)



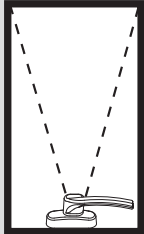
Roto Outward Opening

Ordering advice

RotoLine espagnolette, cranked – Outward Opening handle MK2 cranked

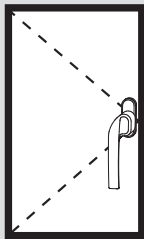
Left-hand version

(Espagnolette depicted in closed position.)

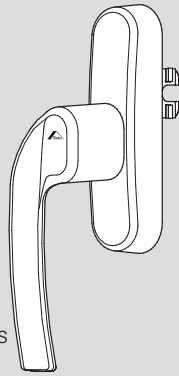


Application

- Top-Hung windows
- Outward opening
- Operation from the top
- Operation right-handed

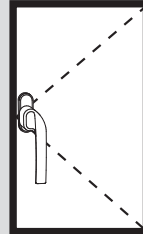


- Turn-Only sash DIN left
- Outward opening
- Operation laterally
- Operation left-handed



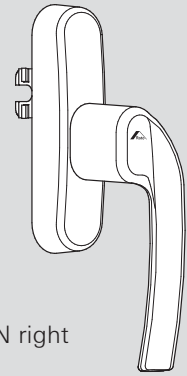
Right-hand version

(Espagnolette depicted in closed position.)



Application

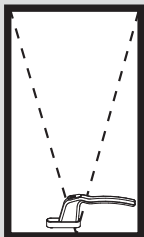
- Turn-Only sash DIN right
- Outward opening
- Operation laterally
- Operation right-handed



Handle Outward Opening MK2, cranked

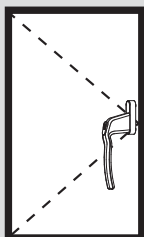
Left-hand version

(Espagnolette depicted in closed position.)

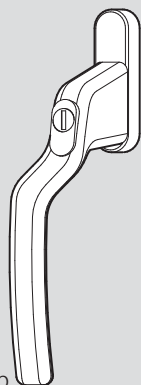


Application

- Top-Hung windows
- Outward opening
- Operation from the top
- Operation right-handed

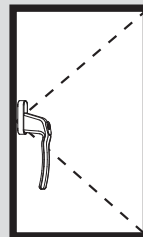


- Turn-Only sash DIN left
- Outward opening
- Operation laterally
- Operation left-handed



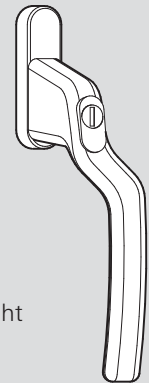
Right-hand version

(Espagnolette depicted in closed position.)



Application

- Turn-Only sash DIN right
- Outward opening
- Operation laterally
- Operation right-handed



Roto E-Tec: Automatically more convenience	368
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Roto E-Tec



The universal, concealed window tilt drive unit

A lot of things are controlled automatically in the everyday office life – from the heating control to the blinds. Only windows are often still operated manually. The Roto E-Tec Drive is a concealed window tilt drive unit driven by an electric motor for unlocking, tilting and locking a sash. It directly accesses the hardware via adapter. This is released following locking, so that the sash still can be operated manually.

Roto E-Tec Drive for your project.

Projects need intelligent, low-maintenance ventilation systems. Wherever the temperature behind glass facades rises due to solar radiation, the Roto E-Tec Drive concealed opening and locking system provides an extremely quiet and inconspicuous solution. Gain control over the whole building shell by integrating this in the facility management system.

The Roto E-Tec Drive in use

- Easy operation of hard-to-reach windows
- Tilt&Turn, Tilt-First and Tilt-Only windows up to 100 kg
- Can be integrated in Roto AluVision T 540-10 and Designo

Roto E-Tec Drive: Simply intelligently made.

The drive unit operates the hardware's central locking system. Programming in the final position is carried out automatically. The hardware creates an even, circumferential gasket-compression and optimally seals the window in the locked position. Roto's E-Tec Drive provides you with extensive burglary protection in conjunction with all passive and active hardware safety components. By means of the optional MTS window contacts, the drive unit can be easily linked to the facility management system. Protection grade 3 can be implemented without any additional measures.

You can depend on Roto E-Tec Drive.

- Straightforward design and high-quality components provide reliable and quiet operation
- Compact and distinct maintenance- and service-friendly design
- Manual operation of the window is possible, as Roto E-Tec Drive is automatically decoupled from the central locking system in the locked-position
- Can be reset to factory setting without qualified personnel

Better air quality
thanks to 'made-to-measure' and steplessly adjustable tilt ventilation



Small space requirements
thanks to the slim drive unit silhouette.



The Roto E-Tec Drive can be very easily connected up to facility management systems

The Roto E-Tec Drive can be controlled with sensors, time switches or bus systems. In summer, climate control costs can be considerably reduced with specific night cooling. In winter, the heating can be controlled in correlation to the opening-mode of the window. The controlled air exchange prevents mould formation.

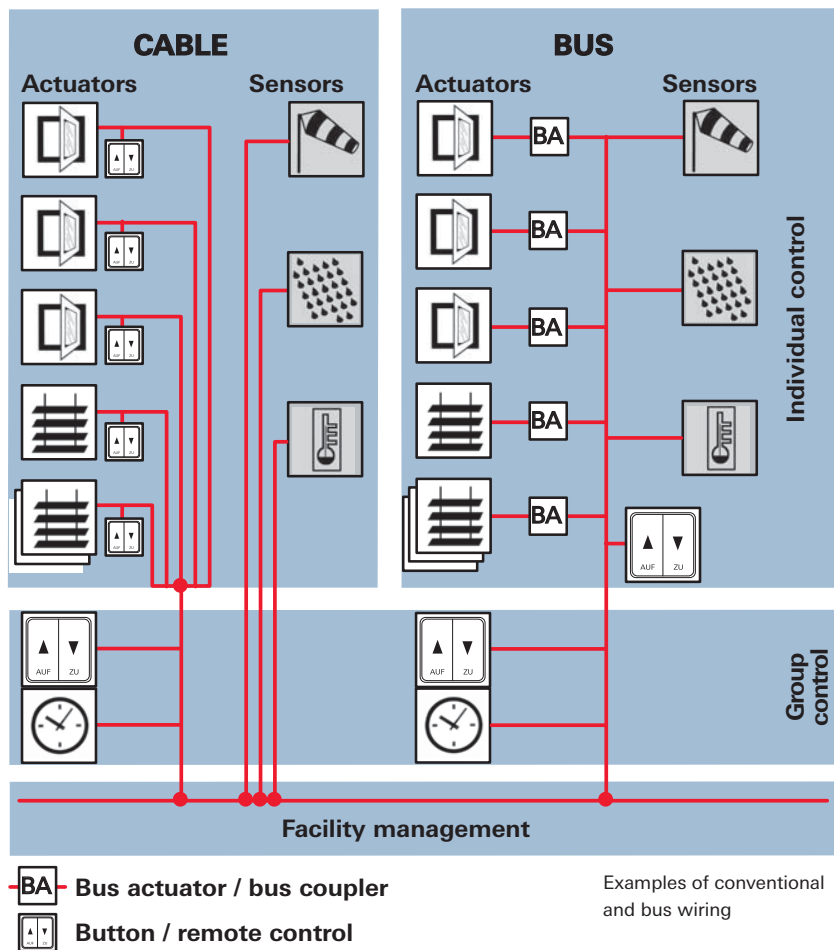
Easy and convenient ventilation

With a simple press of button or via remote control, single windows or even window groups can be tilted. For example for handicapped persons or inaccessible windows, this is a convenient solution: for fanlights, conservatories, stairwells etc.

The combination of automatic night cooling and individual manual day operation is an interesting solution for example in rooms used for business purposes.

No compromises with regard to security

The E-Tec Drive accesses the hardware directly and moves all cams during unlocking and locking. And as a result, all locking positions are active with the window closed, as though the window had been operated manually.

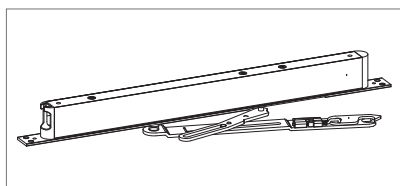


Stipulated use

- Concealed horizontal installation at top in the frame
- For Tilt-First and Tilt-Only opening types
- With the hardware systems Roto AluVision T540-10 or Designo, adapters and accessories
- In tested profile cross sections
- 1 Roto E-Tec Drive per window

The Roto E-Tec Drive is not suitable for:

- Arched, segmental and pitched windows
- The use in conjunction with natural smoke and heat exhaust devices (NSHE)
- In windows and balcony doors, which are posted as escape routes



Application ranges		
	Tilt-First	Tilt-Only
T 540-10 SW (mm)	from 740 up to 1600	from 680 ¹⁾ / from 1008 ²⁾ up to 1600
Designo SW (mm)	from 825 up to 1600	from 680 ¹⁾ / from 1008 ²⁾ up to 1600
SH (mm)	from 635 up to 2200	from 635 up to 1300
		¹⁾ non-centred espagnolette ²⁾ centred espagnolette
Max. sash weight:	100 kg	on SH ≤ 700 mm: 70 kg
Max. sash area (SH x SW):	1.44 m ²	without wind sensor up to 10 m/s
Clearance	11.5 mm	

Specific application ranges for sash stay and scissor-stay guide

Parts	AluVision T 540-10		AluVision Designo	
	SW < 915	SW ≥ 915	SW < 1035 (DIN R/L)	SW < 1035 (DIN R/L)
Sash stay	377450	377453	No. 1* 624944/-5	624946/-7
			No. 3* 624950/-1	624952/-3
			No. 4* 624956/-7	624958/-9
Scissor-stay guide			625025	626999

* clamp-strip version

Parts and Accessories

Description	Add. designation/Info	Material no.
Roto E-Tec Drive	Left	601169
Roto E-Tec Drive	Right	601170
Misc. small comp. pack	Standard accessories	477455
SEC coupler component	Connecting-rod connector	348576
Run-up block		212008
Run-up block TF	V.01	212762
Run-up wedge	V.02	212512
Rebate clearance reduction	T 540	477408
Horizontal Tilt&Turn striker	V.01 / V.02	212122
Power supply unit	24V/0.5A (standard installation)	387876
Cable	6 m, black (8 x 0.14 mm ²)	387877
Cable	Special length, on request	382833
Manual control unit	Testing set	479681
Group control unit	GS1-M	482186
Hand-held transmitter	1 channel black	594424
Hand-held transmitter	5 channel black	594436
Radio receiver	24V	365329

Technical specifications

Description	Add. designation/Info
Power supply	24VDC ±5%, stabilised
Current consumption	No-load operation: ~ 15 mA Unlocking/locking: max. 400 mA
Connection	RJ45, telephone cable, 8 x 0.14 mm ² cable length: max. 10 m
Temperature range	Operating-mode: 0°C to +60°C Storage: -20°C to +85°C
Humidity	90% relative, non-condensing
Drive dimensions	335 x 18 x 30 mm (L x W x H)
Opening distance	~ 120 mm
Movement time	Opening: slowly / quickly ~ 110 / 70 s Closing: slowly / quickly ~ 130 / 80 s
Unlocking/locking force	750 N
Test mark	CE
IP rating	IP20 in accordance with DIN EN 60 529
Standards and laws	EN 14351-1, EN 60335-2-103, EN 50090-2-2, EN 60730-1, RoHS

Description

With different contact elements, corresponding magnets and receiver modules, a variety of functions in the areas of security technology, ventilation and temperature regulation can be achieved.

The product range can be installed in windows and balcony doors with the hardware systems Roto AluVision T 540 and Designo as well as in sliding doors with the hardware Roto AluVision S 4150 S.



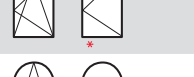


Selection of contacts depending on application			
	Burglar alarm system with VdS	Heating and air conditioning	Extractor fan control system
wired	MVS-B MVS-B LSN MVS-C	MTS MVS without VdS	MTS
Radio contr.		MVS radio contr.	

VdS certification grade of the Roto MVS contacts for burglar alarm systems according to the surveillance type:		
Surveillance type	VdS grade B	VdS grade C
Combined locking and opening monitoring	MVS-B MVS-B LSN	MVS-C
Locking monitoring		MVS-B MVS-B LSN MVS-C
Opening monitoring	MVS-B MVS-B LSN	MVS-C

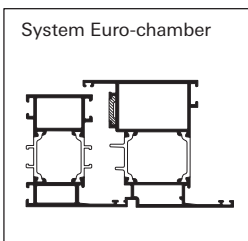


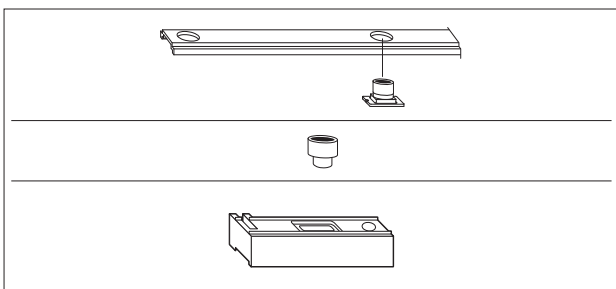
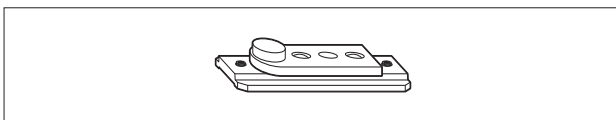
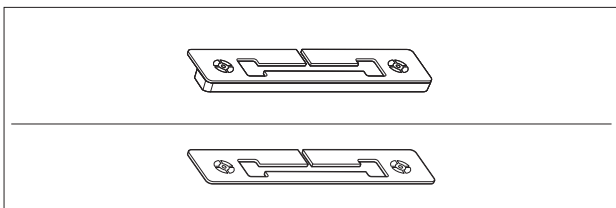
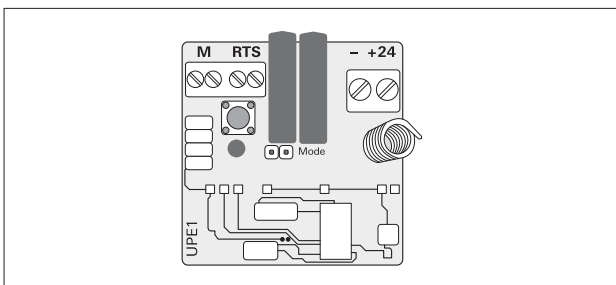
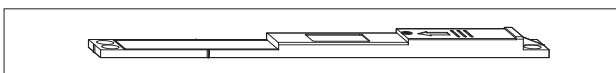
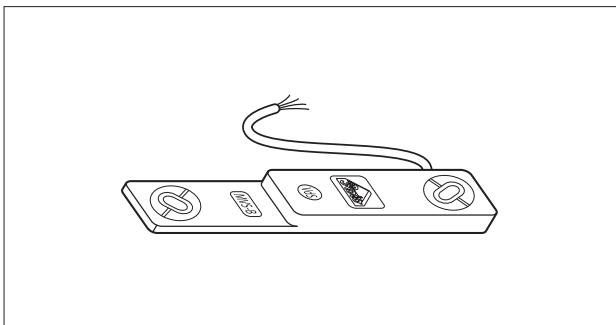
Depending on the individual case and the surveillance type, a rebate magnet or a hardware coupled magnet is be used.

Combined locking and opening monitoring/locking monitoring		AluVision T 540	AluVision Designo	Patio S
	MVS contact & hardware coupled magnet (—)	X	X	
	Active sash: MVS contact & hardware coupled magnet (—)	X	X	
	French window sash: MVS / MTS contact & rebate magnet (*)			
	MVS contact & hardware coupled magnet (—)	X		
	MVS contact & hardware coupled magnet (—)	X		
	MVS contact & hardware coupled magnet (—)			X

Opening monitoring		AluVision T 540	AluVision Designo	Patio S
	MVS contact & rebate magnet (*)	X	X	
	Active sash: MVS contact & rebate magnet (*)	X	X	
	MVS contact & rebate magnet (*)	X		
	MVS contact & rebate magnet (*)	X		
	MVS contact & rebate magnet (*)			X

Profile systems:





Contacts

Description	Material no.
MTS contact element	6m cable 292118
MTS contact element	10m cable 335077
MVS contact VdS B	6m cable 292101
MVS contact VdS B	10m cable 335078
MVS contact VdS B LSN	6m cable 336318
MVS contact VdS C	6m cable 292114
MVS contact VdS C	10m cable 335079
MTS/MVS contact element (VdS B, VdS B LSN, VdS C)	Cable in special length on request

The VdS grade is valid for a cable length each up to 10m.

Radio-control contact element

Description	Material no.
Window contact MVS radio (battery-operated)	293944

Radio receiver

Description	Material no.
MTS radio receiver 1	563194
MTS radio receiver 2	613114

Packers

Description	Material no.
MVS packer V.01 + V.02 (also for MTS contact element)	311441
Packer / alignment packer for clearance adjustment, 0.5mm high, stackable on MVS packer 311441	309245

Rebate magnet

Description	Material no.
MVS rebate magnet complete (also for MTS contact element)	311431

Hardware coupled magnets and accessories

Description	Material no.
MVS insertable magnet Alu for hole of 10 (also for MTS contact element)	337767
MVS adhesive magnet Alu (T 540-6) (also for MTS contact element)	311430
MVS drilling jig for MVS adhesive magnet	318573

Hardware coupled magnet

Performs a functional entity with the contact element and is to be fastened on the connecting-rod of the sash. It is necessary for the locking monitoring and the combined locking and opening monitoring.

Bus

A transmission medium (mostly 2 wires), to which many devices for data and signal transmission can be connected.

Bus compatible / bus compliant

In many invitations to tender, "bus compatible" is required for the central building control system, but the specification of the bus system is missing. In this case, standard contact elements are to be used as a rule. The corresponding coupling elements are to be installed by an electrician.

Rebate magnet

Performs a functional entity with the contact element and is to be fixed on the sash. The rebate magnet is necessary for the opening monitoring.

KNX (formerly EIB)

A widespread bus system in the central building control system.

Combined locking and opening monitoring

MVS contact element and hardware coupled magnet are monitoring the locking and opening status of a sash.

Note: In terms of insurances and the VdS, tilted windows are open.

LSN / LSNi

Local Security Network / LSN i improved module. Bus system for alarm systems VdS-certified alarm systems. For this, the MVS-B LSN contact element is used.

MTS

Magnet-Thermostat-Steuerung (control) for the central building control system. Is used for the control of heating and air conditioning systems.

Note: The MTS contact element is a switch and therefore universally applicable.

MVS

Magnet-Verriegelungs- (locking) System. For controlling burglar alarm systems, certified according to VdS-B and VdS-C.

Opening monitoring

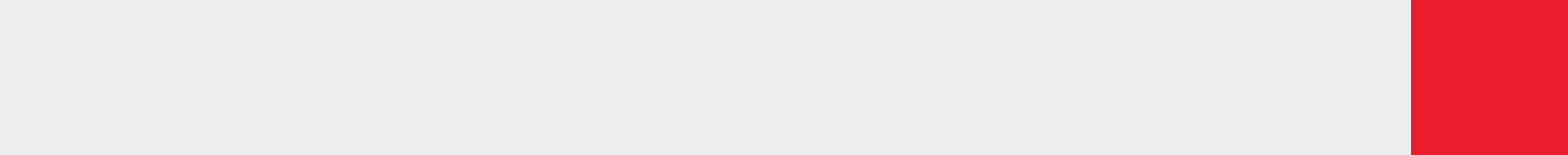
Check, whether the sash meets the frame.

VdS grades

The VdS (german association of property insurers) defines the minimum classification requirements made on burglar alarm systems; these must be stringently adhered in order to be approved.

Locking monitoring

Check, whether the sash is locked.



Roto E-Tec





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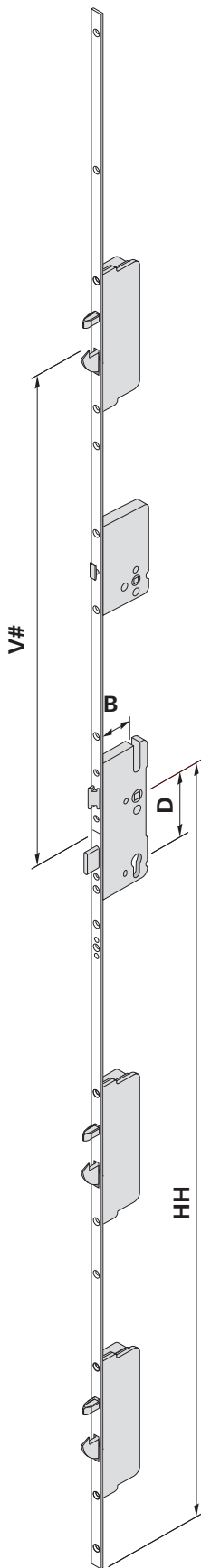
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General abbreviations

C500/C600	=	Cylinder-operated multi-point locking system
H600	=	Lever-handle operated multi-point locking system
E500/E600	=	Electromechanical multi-point locking system
P600	=	Emergency exit locking system
P650	=	Panic door locking system
16/2 (15.8/2.25)	=	Faceplate width/thickness in mm
16/3, 20/3, 24/3	=	in mm
U6/24, U7/24	=	Faceplate height/width of the U-profile in mm
SRH	=	Sash rebate height
V#	=	Striker location pattern

Abbreviations in the tables

B	=	Backset
D	=	Distance
HH	=	Handle height
⊕	=	Spindle-receiver (hole)
SF	=	Surface finish
SL	=	RotoSil Nano
STS	=	Stainless steel
BL	=	Black, RAL 9005
W	=	White, RAL 9016
BR	=	Brown, RAL 8014
PQ	=	Packaging quantity

Abbreviations in the illustrations:

B	=	Backset
D	=	Distance
HH	=	Handle height
RW	=	Routing width
SHC	=	Spindle-hole centre
CGC	=	Centre of gear casing
	=	croppable

Convincing arguments

A quality door is one that still reliably closes leak-tight even after many years. A very important factor here: the choice of the right hardware. Roto is the experienced specialist for door locks, thresholds, hinges and all other components which securely connect the sash and frame of a door to each other.

Even better – even tighter

The new 600 lock generation is the most efficient Roto DoorSafe has ever offered. With the unique combination lock consisting of a power wedge and bolt closes any door reliably and permanently: Against heat, against wind and cold. And against unauthorised access. In this way, all you do not want inside, must stay outside.

Turns every main door into an energy-saving door

With the new 600 door lock generation, what's long been the trend for windows is now also possible for main doors: the highest level of energy efficiency. Doors close tightly and energy-saving due to the high efficiency of the new combination lock. Besides preventing penetrating cold and draughts, the environmental emission level is significantly improved. That's satisfying for the building owner on two counts.

More flexibility for the door manufacturer

For door manufacturers too, the new lock generation offers considerable improvements. The well thought-out platform strategy reduces the number of parts and dimensions used and simplifies production and stock keeping. Uniform routing dimensions, a height coupling for door heights up to 3 m and the latch conversion from dummy mullion side make the production more efficient and profitable. No matter whether it's for the main entrance door of a private residential building or a commercial or public building: Roto DoorSafe makes installation a breeze for fabricators, and their customers are content afterwards – that's sustainability.

The lock with twice the hold

What keeps doors tightly shut? A perfect fit, a powerful, durable locking system and a strong espagnolette that allows simple operation with little exertion. To achieve this, the bolt and the strongest power wedge currently available on the market impressively join forces in the Roto DoorSafe combination lock.

Permanent functional reliability

While locking, first the power wedge is activated, followed by the bolt. And after that – nothing: No wind. No noise. No odour. Just cosiness and comfort. In both winter and summer. The constantly high gasket-compression prevents the door from warping over time. But also, if the door is warped a little, it still closes tightly and securely.





Roto DoorSafe 600:

For cylinder and handle-operated locks

Fits well into your hand

The newly developed 600 lock generation not only very efficient, but also particularly smooth running. The optimised drive from cylinder or handle to the lock makes it possible. Single-handed operation is therefore not a problem. And the whisper latch as standard in the 600 lock generation saves your nerves.

Safeguarded against manipulation after just one key turn

Easy access to security: The new door locks of the Roto DoorSafe 600 lock generation are safeguarded against manipulation after just one key turn and fulfil in completely locked state the particularly demanding security

requirements of Burglary Resistance Grade 3, depending on the model.

The advantages at a glance

- Maximum gasket-compression for outstanding impermeability
- Security in all applications: for cylinder and handle-operated locks from a backset of 25 mm
- Permanent functional reliability even with warped doors
- Energy-efficient, secure, durable
- For main, back, escape and panic doors

Escape and panic doors – tight, when they should be tight

Roto DoorSafe now also offers reliable locks for panic doors (as per DIN EN 1125) and emergency exits (as per DIN EN 179). There as well, the new combination lock keeps doors tightly shut.





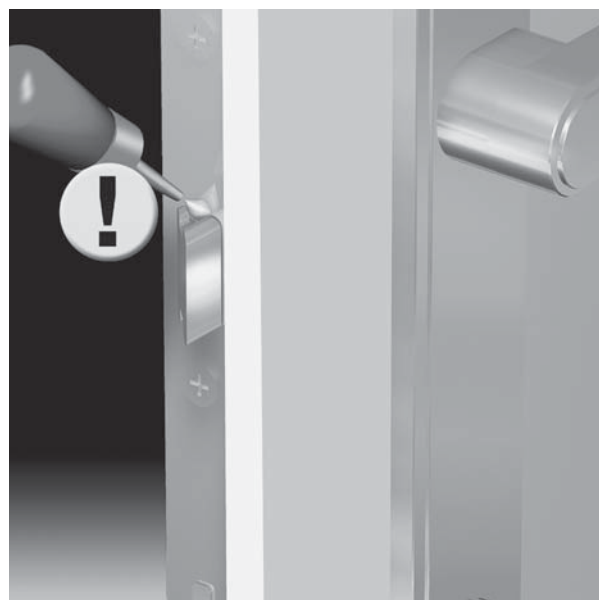
Do not protrude the locking points on an open door and press these against the frame.



Do not paint over the lock respectively the locking components (deadbolt, latch etc.).



Various impurities on the top area of the door leaf (i.e. plaster residue) may not be wiped in the lock direction (or floating mullion) – impurities can reach in behind the locks' faceplate and block the locking points' mechanisms.



Lubricate the locking points (latch, deadbolt & additional locking points) at least once annually.



During transport and handling, the door leaf must be braced to the frame with suitable packers (sash-support components, wedges etc.). Remove the cylinder fixing (transportation lock) just before installing the cylinder!



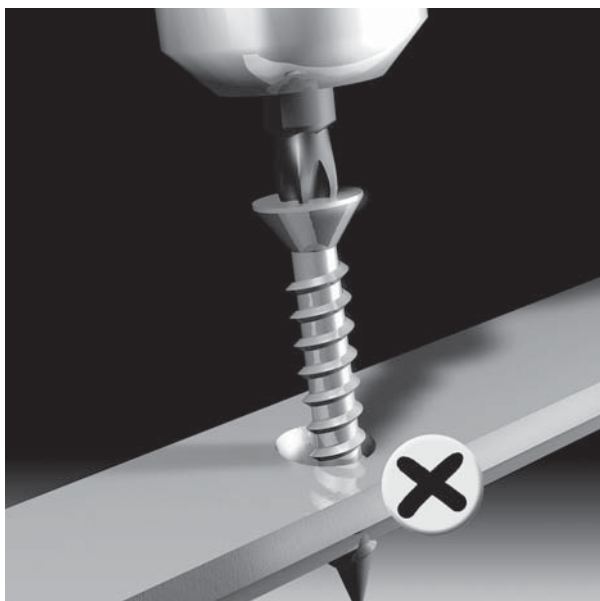
The door leaf may not be drilled through in the lock area if the lock is installed (for example for protective hardware).



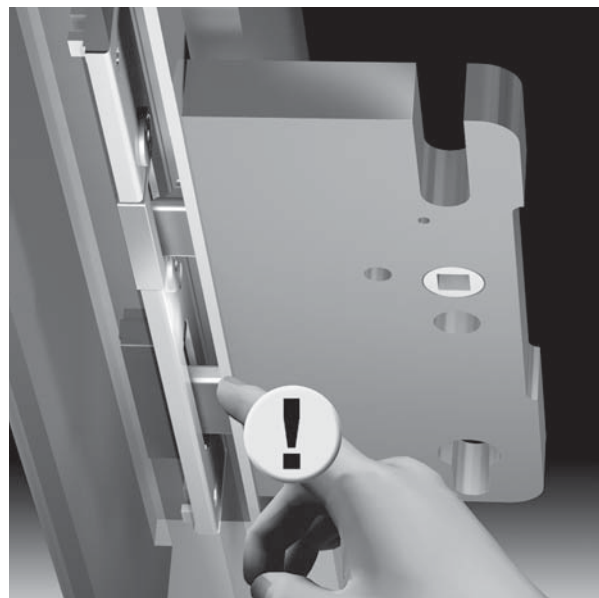
Install cylinders stress-free respectively aligned at a 90 degree angle to the door leaf.



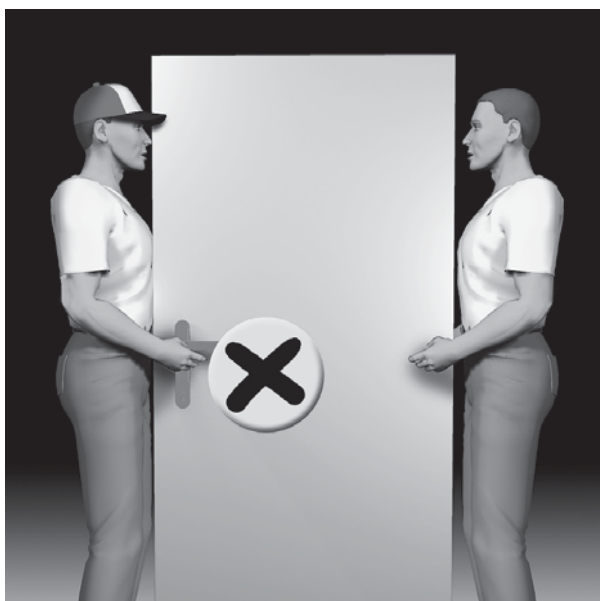
Mount long-plate handles and rosettes stress-free.



Screw in screws straight so that no tension can occur.



Produce the door with the designated axis dimension so that perfect operation of the locking points can always be warranted.

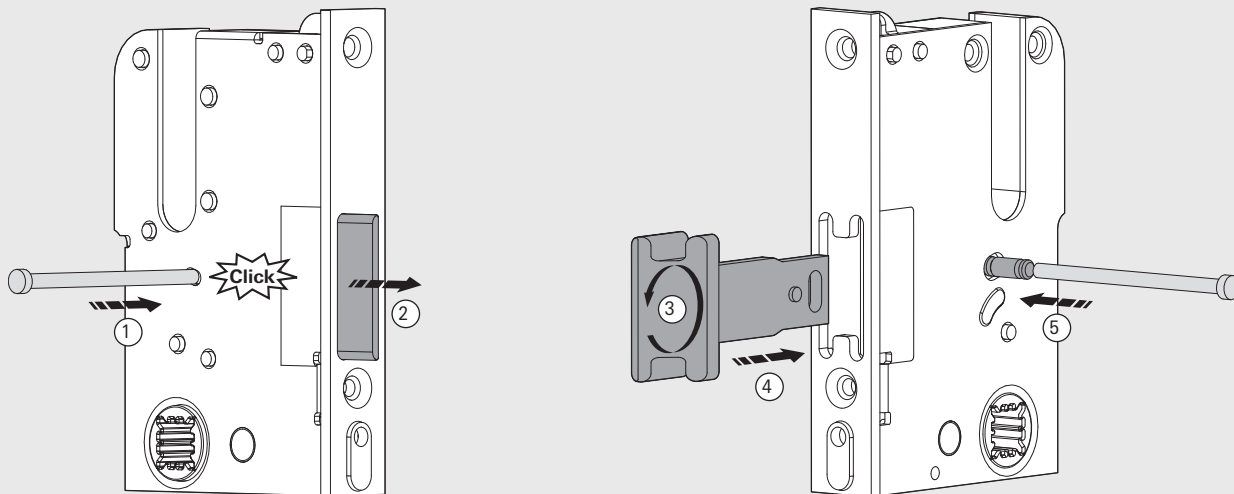


The door or the door leaf should not be carried by the lever handle.



When the original cylinder is not installed, lock or unlock the door only with the Roto installation key.

Latch reverse C500 / P600 / P650

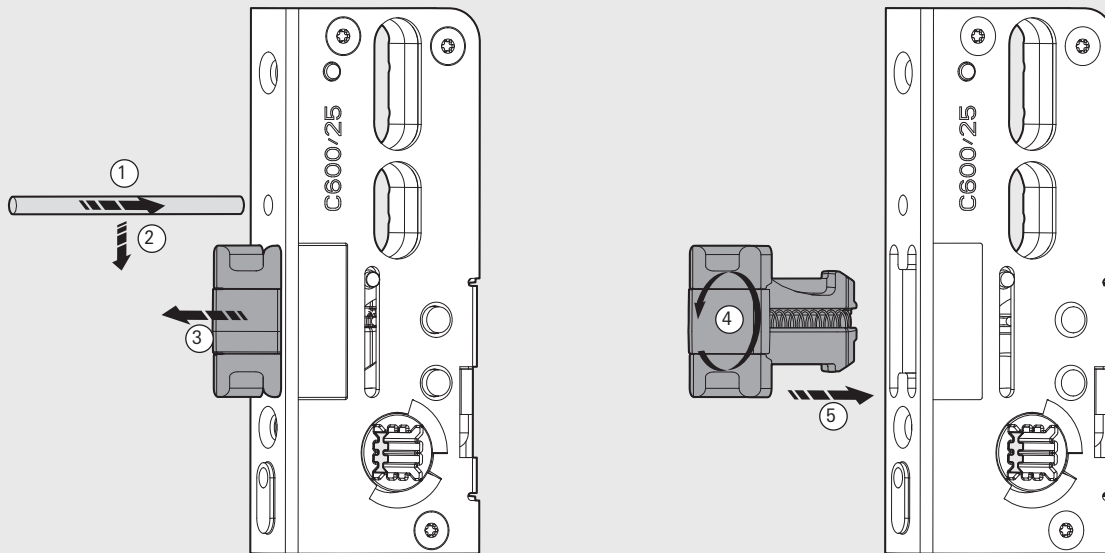


Single steps of latch reverse C500 / P600 / P650

- ① Press the pin (Ø max. 2.5 mm) into the revision gap until you hear a click.
Please note: Do not knock out the locking pin!
- ② Pull out the latch.

- ③ Turn the latch.
- ④ Push the latch straight into the shaft and press in.
- ⑤ Push in the locking pin.

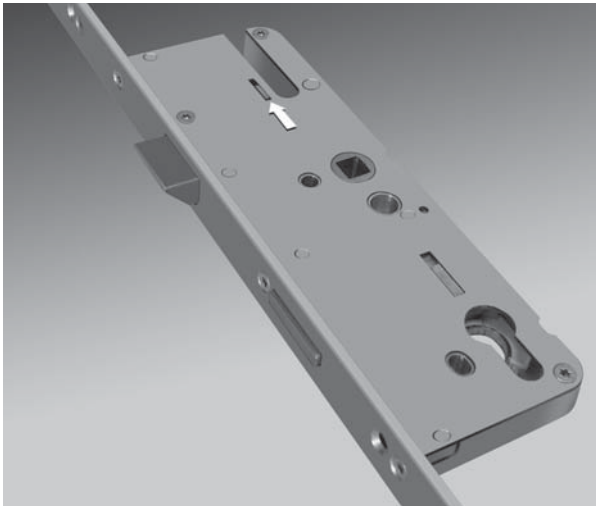
Latch reverse C600 / H600



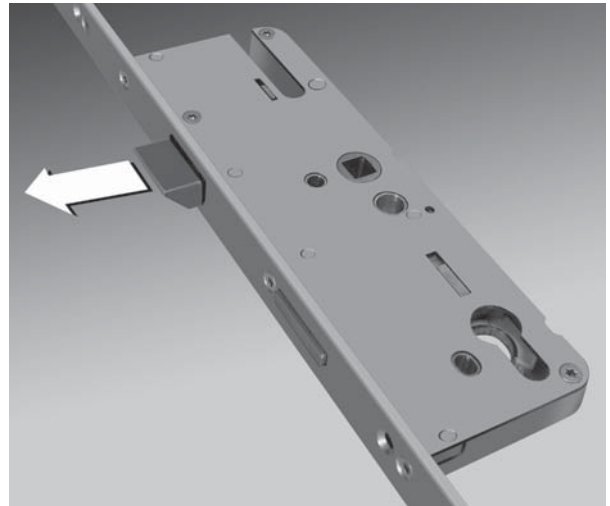
Single steps of latch reverse C600 / H600

- ① Press the pin (Ø max. 3 mm) into the revision gap
Please note: The latch reverse may only be carried out with the lock unlocked in vertical position. Do not actuate the spindle hole!
- ② Press the pin down slightly.
- ③ The latch is released and can be removed.

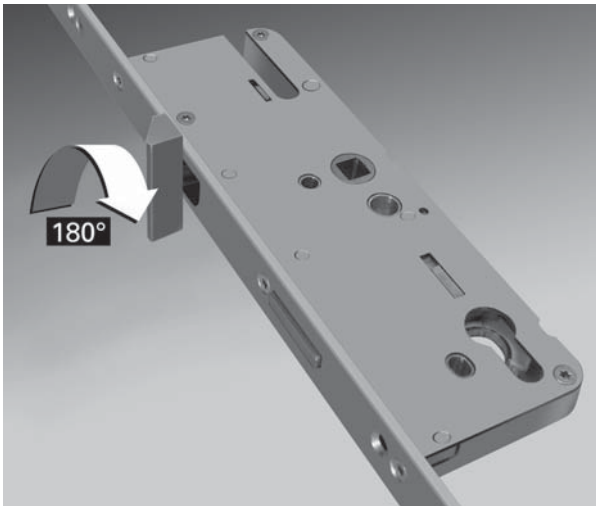
- ④ Turn the latch.
- ⑤ Push the latch straight into the shaft and press in.



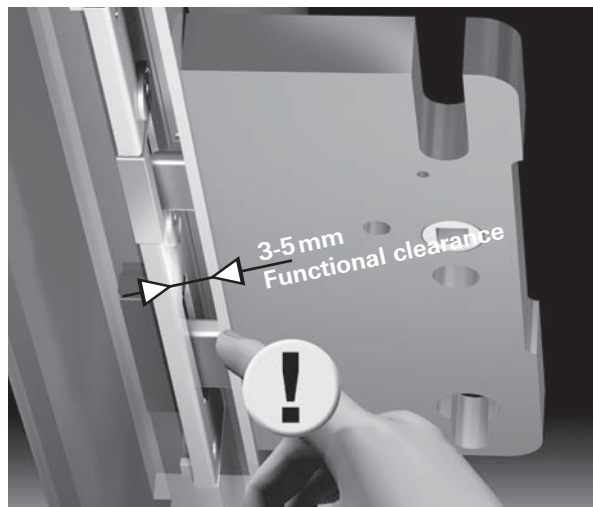
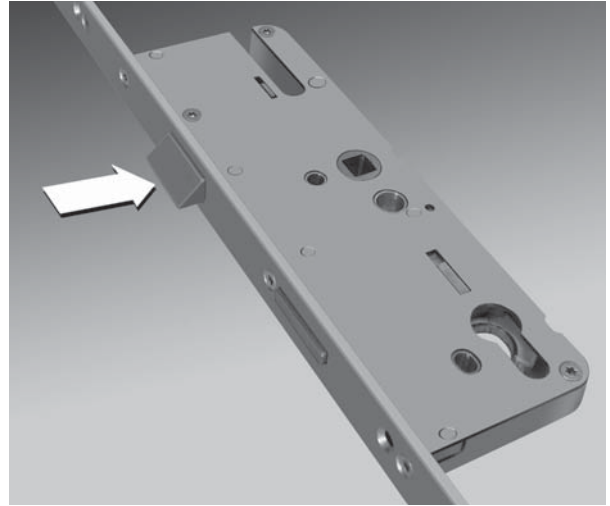
Move the slider upwards.



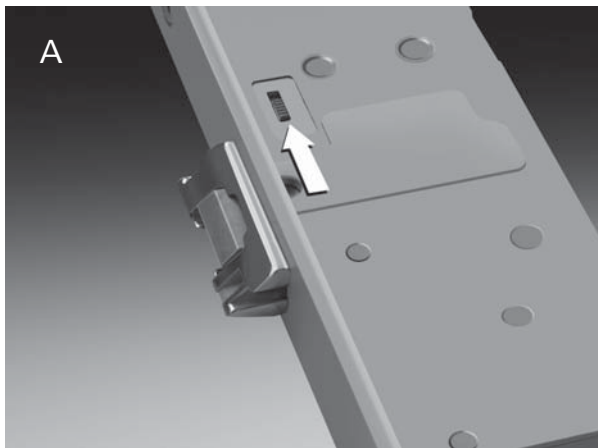
Latch is released.



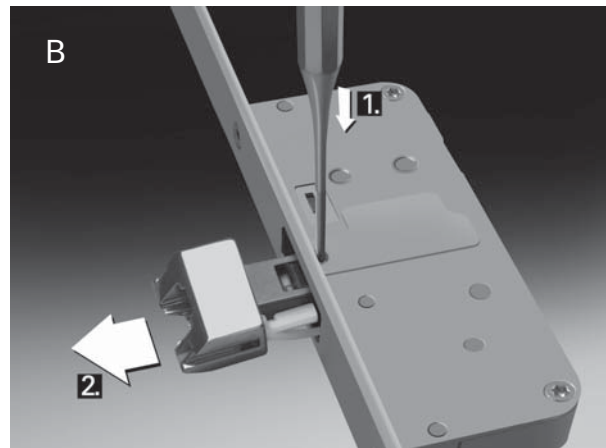
Turn the latch 180°.



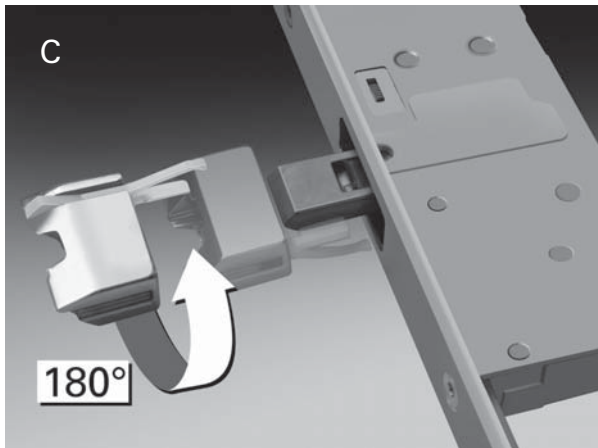
The deadbolt must be able to travel freely into the latch/deadbolt striker!



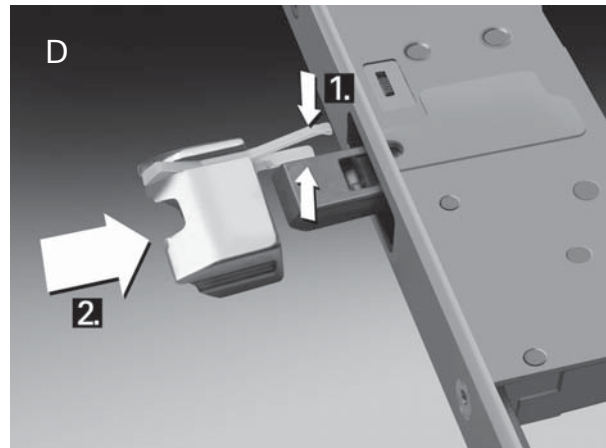
Move the slider upwards.



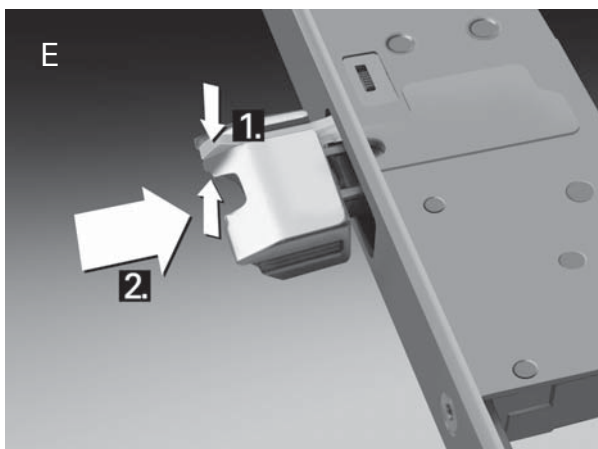
1. Insert the installation tool as far as it will go.
2. Pull out the latch.



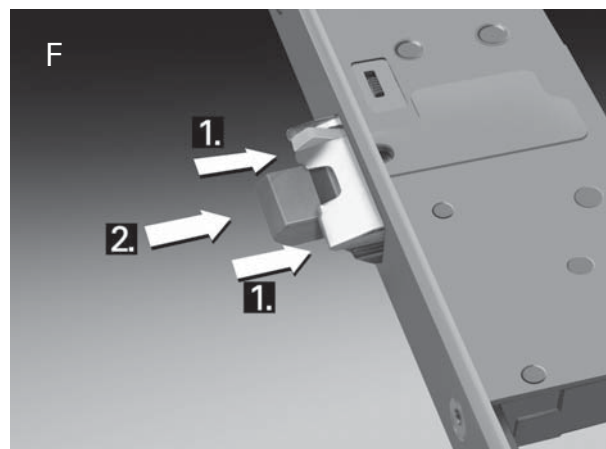
Turn the latch 180°.
Note: Do not lubricate the automatic bolt!



1. Insert the spring element in the faceplate opening.
2. Slide in the latch over the deadbolt.



1. Hold the trigger mechanism pressed.
2. Push in the latch completely.



1. Push in the latch completely.
2. Push in the deadbolt afterwards.

V02/03, SRH 1900mm – 2200mm

C600 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
25	92	8	1020	STS	611413	5
25	92	10	1020	STS	611419	5
30	92	8	1020	STS	611425	5
30	92	10	1020	STS	611431	5

C500 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	611346	5
40	92	8	1020	STS	611350	5
45	92	8	1020	STS	611354	5
45	92	10	1020	STS	611358	5
55	92	8	1020	STS	611374	5
55	92	10	1020	STS	611378	5
65	92	10	1020	STS	611382	5

C500 – Faceplate 20 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	8	1020	STS	611362	5
45	92	10	1020	STS	611366	5
65	92	10	1020	STS	611386	5
55	92	8	1020	STS	611398	5

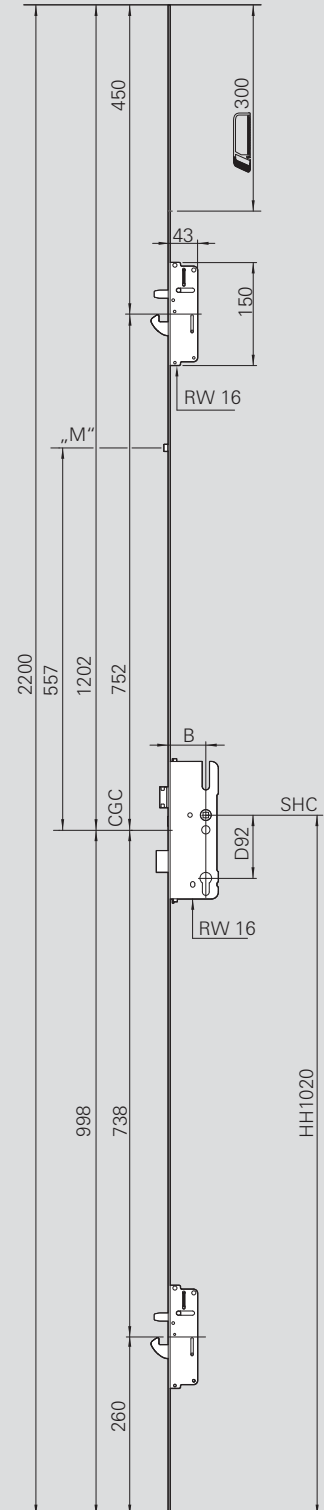
C500 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	628149	5
40	92	8	1020	STS	628152	5
45	92	8	1020	STS	611370	5



"M" = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)

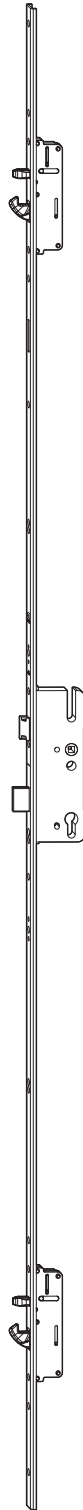


For strikers, refer to "frame components"

V02 / 03, SRH 1983 mm

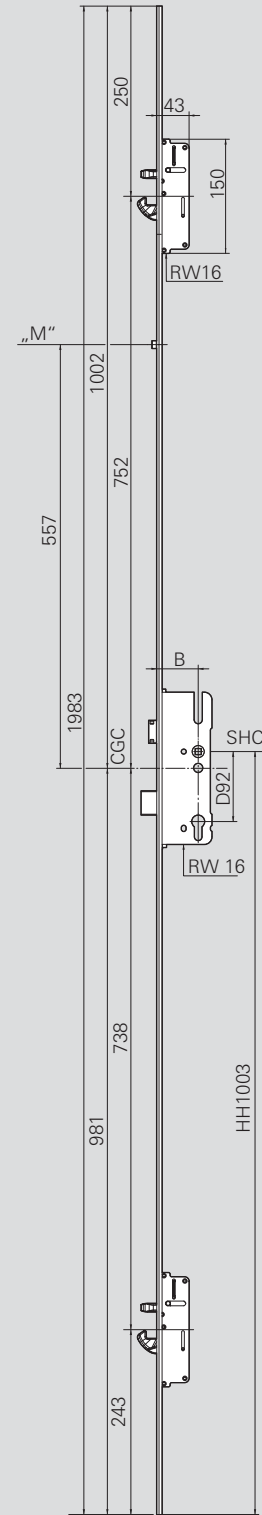
C500 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	629786	5



“M” = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



For strikers, refer to “frame components”

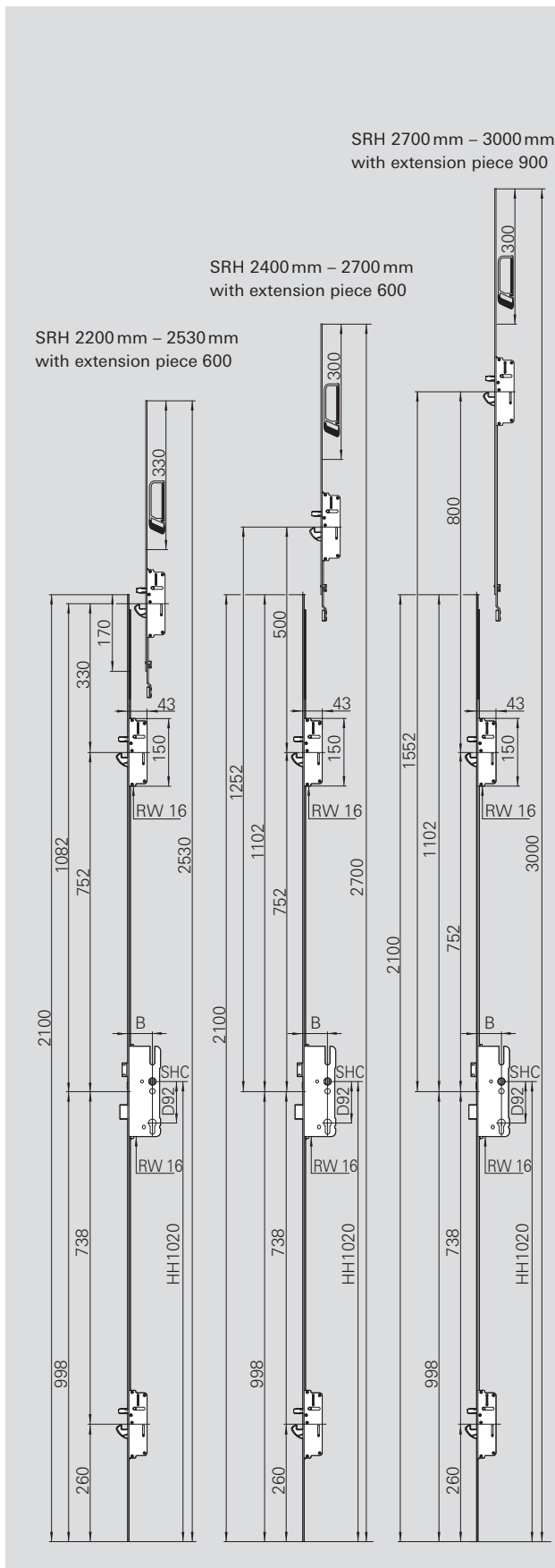
V02/03, SRH 1930 mm – 3000 mm

C500 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	8	1020	STS	633349	5

Extension piece – Faceplate U6x24

Length	Locking system	SF	Mat. no.	PQ
600	Comb. lock	STS	633351	5
900	Comb. lock	STS	633352	5



V02 / 03, SRH 2200 mm

C600 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
25	92	8	1020	STS	611 412	5
25	92	10	1020	STS	611 418	5
30	92	8	1020	STS	611 424	5
30	92	10	1020	STS	611 430	5

C500 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	611 345	5
40	92	8	1020	STS	611 349	5
45	92	8	1020	STS	611 353	5
45	92	10	1020	STS	611 357	5
55	92	8	1020	STS	611 373	5
55	92	10	1020	STS	611 377	5
65	92	10	1020	STS	611 381	5

C500 – Faceplate 20 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	8	1020	STS	611 361	5
45	92	10	1020	STS	611 365	5
65	92	10	1020	STS	611 385	5

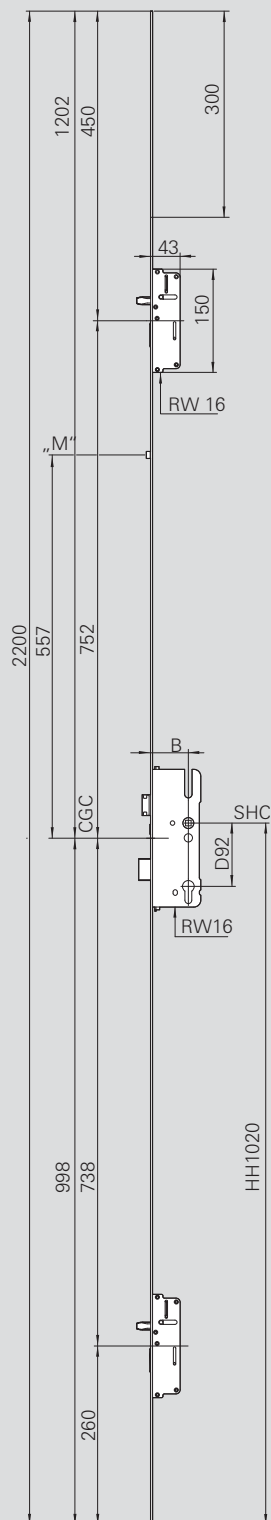
C500 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	8	1020	STS	611 369	5



"M" = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



For strikers, refer to "frame components"

Available from April 2011

V02/03, SRH 1900mm – 2200mm

C600 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
25	92	8	1020	STS	611412	5
25	92	10	1020	STS	611418	5
30	92	8	1020	STS	611424	5
30	92	10	1020	STS	611430	5

C500 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	611345	5
40	92	8	1020	STS	611349	5
45	92	8	1020	STS	611353	5
45	92	10	1020	STS	611357	5
55	92	8	1020	STS	611373	5
55	92	10	1020	STS	611377	5
65	92	10	1020	STS	611381	5

C500 – Faceplate 20 / 2

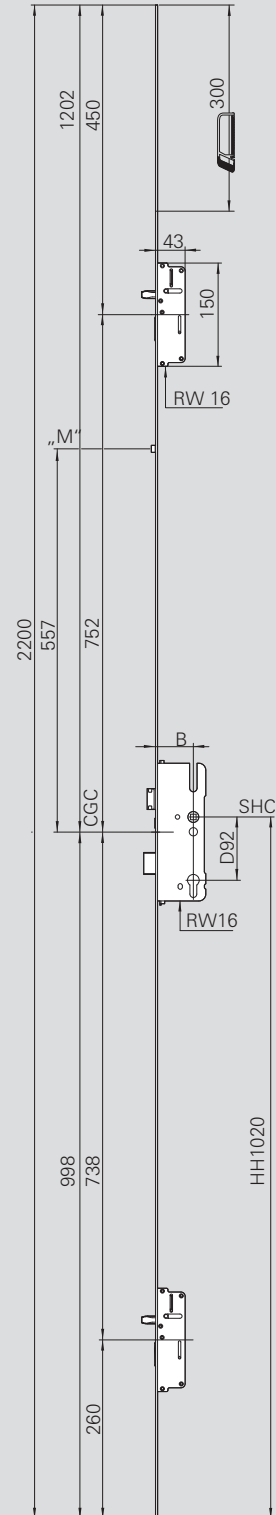
B	D	⊙	HH	SF	Mat. no.	PQ
45	92	8	1020	STS	611361	5
45	92	10	1020	STS	611365	5
65	92	10	1020	STS	611385	5

C500 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	628147	5
40	92	8	1020	STS	628150	5
45	92	8	1020	STS	611369	5



“M” = version with MVS cams (dimension is centre MVS cam in the locked position)



For strikers, refer to “frame components”

V02/03, SRH 1900 mm – 2200 mm

C600 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
25	92	8	1020	STS	611411	5
25	92	10	1020	STS	611417	5
30	92	8	1020	STS	611423	5
30	92	10	1020	STS	611429	5

C500 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	611390	5
40	92	8	1020	STS	611392	5
45	92	8	1020	STS	611394	5

C500 – Faceplate 20 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
55	92	8	1020	STS	611397	5
65	92	10	1020	STS	611400	5

C600 – Faceplate U6x24

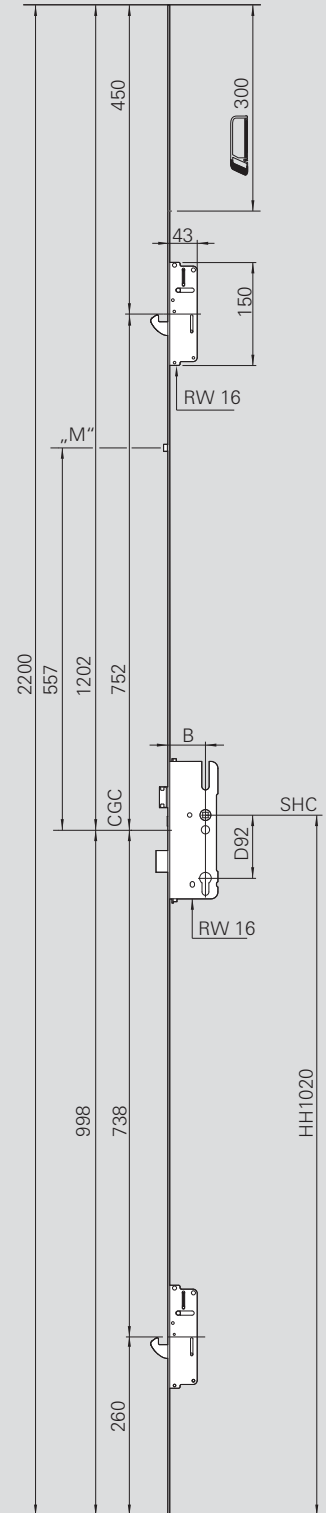
B	D	⊙	HH	SF	Mat. no.	PQ
30	92	8	1020	STS	632553	5

C500 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	628148	5
40	92	8	1020	STS	628151	5



"M" = version with MVS cams (dimension is centre MVS cam in the locked position)



For strikers, refer to "frame components"

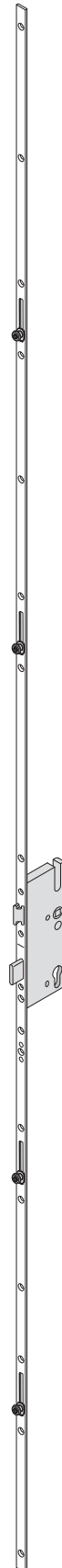
V22/27, SRH 2200–2500 mm

C500 – Faceplate 16/2

B	D	⊙	HH	SF	Mat. no.	PQ
35	85	8	1013	SL	392443	5
35	92	8	1020	SL	392451	5
40	85	8	1013	SL	392444	5
40	92	8	1020	SL	392452	5
45	85	8	1013	SL	392445	5
45	88	8.5	1016	SL	392442	5
45	92	8	1020	SL	392453	5
45	92	10	1020	SL	392454	5
50	85	8	1013	SL	392446	5
50	92	8	1020	SL	392449	5
50	92	10	1020	SL	392455	5
55	85	8	1013	SL	392447	5
55	92	8	1020	SL	392456	5
55	92	10	1020	SL	392457	5
65	85	8	1013	SL	392448	5
65	92	10	1020	SL	392450	5

C500 – Faceplate 20/2

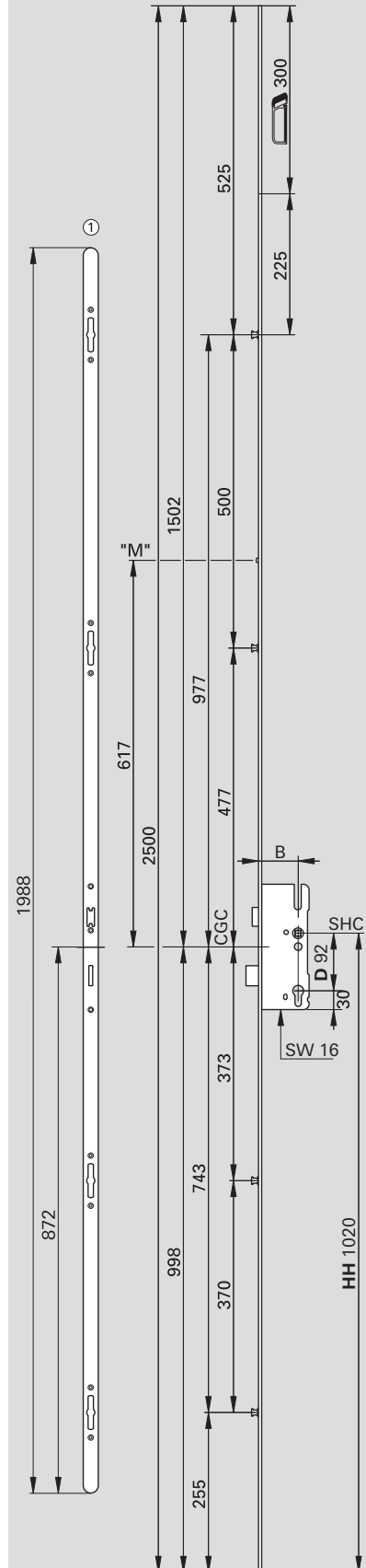
B	D	⊙	HH	SF	Mat. no.	PQ
55	92	10	1020	SL	488387	5
65	92	10	1020	SL	493535	5



For strikers, refer to "frame components"

"M" = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



V22/25, SRH 1900mm – 2200mm

C500 – Faceplate 16/2 (E cam)

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	SL	624497	5
35	92	8	1020	SL	624498	100

C600 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
25	92	8	1020	SL	609344	5
25	92	10	1020	SL	611401	5
30	92	8	1020	SL	611402	5
30	92	10	1020	SL	611403	5

C500 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	85	8	1030	SL	392406	5
35	88	8.5	1016	SL	392426	5
35	92	8	1020	SL	392380	5
35	92	8	1020	SL	392438	100
35	92	10	1020	SL	392427	5
40	85	8	1013	SL	392407	5
40	92	8	1020	SL	392428	5
40	92	10	1020	SL	392429	5
45	85	8	1013	SL	392408	5
45	88	8.5	1016	SL	392430	5
45	92	8	1020	SL	392381	5
45	92	8	1020	SL	392439	100
45	92	10	1020	SL	392431	5
50	85	8	1013	SL	392409	5
50	88	8.5	1016	SL	392432	5
50	92	8	1020	SL	392384	5
50	92	10	1020	SL	392433	5
55	72	8	1000	SL	392434	5
55	85	8	1013	SL	392378	5
55	92	8	1020	SL	392382	5
55	92	10	1020	SL	392435	5
65	85	8	1013	SL	392379	5
65	88	8.5	1016	SL	392436	5
65	92	10	1020	SL	392425	5

C600 – Faceplate 16/2 w/o deadbolt

B	D	⊙	HH	SF	Mat. no.	PQ
25	92	8	1020	SL	611404	5
25	92	10	1020	SL	611405	5
30	92	8	1020	SL	611406	5
30	92	10	1020	SL	611407	5

**C500 – Faceplate 16/2
Round cylinder**

B	D	⊙	HH	SF	Mat. no.	PQ
35	94	8	1020	SL	392437	5
45	94	8	1020	SL	392164	5
55	94	8	1020	SL	392405	5

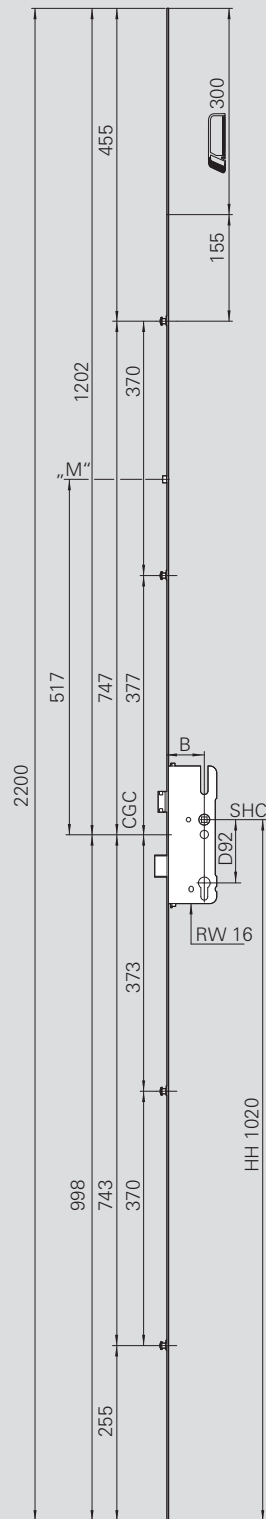
C500 – Faceplate 20/2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	SL	392458	5
45	92	8	1020	SL	392459	5
50	92	10	1020	SL	495135	5
55	88	8.5	1016	SL	392460	5
55	92	8	1020	SL	392461	5
55	92	10	1020	SL	488386	5
65	92	10	1020	SL	392462	5

For strikers, refer to "frame components"



"M" = version with MVS cams (dimension is centre MVS cam in the locked position)



V02 / 03, SRH 1900–2200 mm

C600 – Faceplate 16 / 3

B	D	⊙	HH	SF	Mat. no.	PQ
35	85	8	1013	SL	378897	5
35	92	8	1020	SL	378878	5
				SL	493981	100
35	92	10	1020	SL	378879	5
40	85	8	1013	SL	378898	5
40	92	8	1020	SL	378880	5
45	85	8	1013	SL	378899	5
45	92	8	1020	SL	378863	5
				SL	493979	100
45	92	10	1020	SL	378864	5
50	85	8	1013	SL	613101	5
50	92	8	1020	SL	623878	5
50	92	10	1020	SL	448581	5
55	85	8	1013	SL	378900	5
55	92	8	1020	SL	378885	5
55	92	10	1020	SL	378886	5
65	85	8	1013	SL	378901	5
65	92	10	1020	SL	378887	5

C600 – Faceplate 20 / 3

B	D	⊙	HH	SF	Mat. no.	PQ
45	85	8	1013	SL	378902	5
45	92	8	1020	SL	378888	5
				SL	493980	100
45	92	10	1020	SL	378889	5
50	85	8	1013	SL	378903	5
55	85	8	1013	SL	378904	5
55	92	8	1020	SL	378890	5
55	92	10	1020	SL	493089	5
65	92	10	1020	SL	378891	5

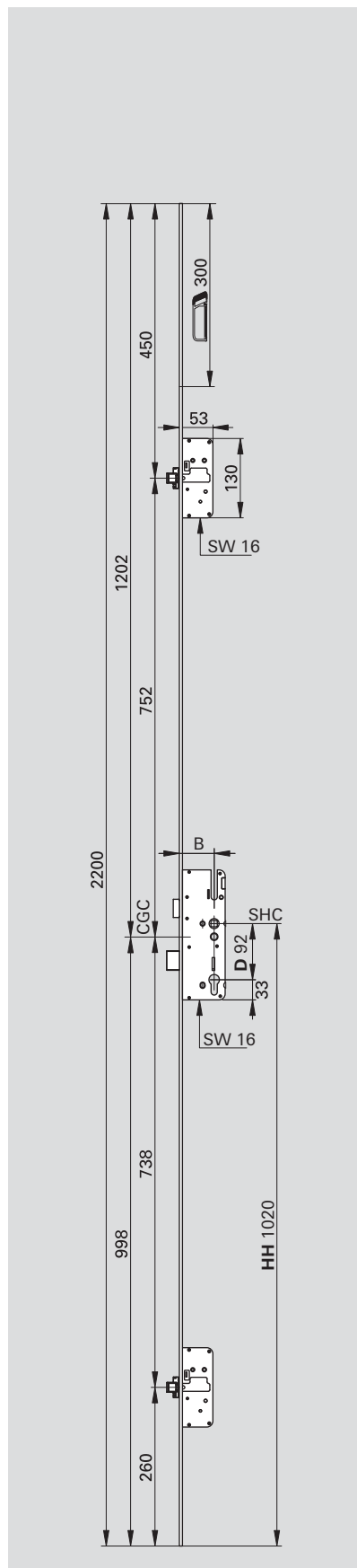
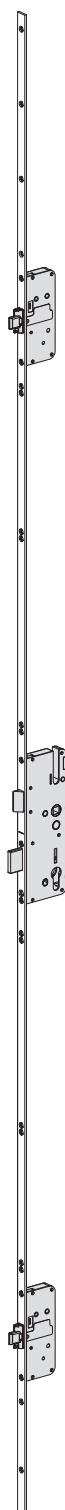
C600 – Faceplate 24 / 3

B	D	⊙	HH	SF	Mat. no.	PQ
40	92	8	1020	SL	378895	5
40	92	10	1020	SL	450108	5
45	92	8	1020	SL	450439	5
45	92	10	1020	SL	378896	5
65	92	10	1020	SL	626796	5

C600 – Faceplate U7x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	SL	478482	5
45	92	8	1020	SL	378892	5
45	92	10	1020	SL	378893	5
50	92	8	1020	SL	378894	5

For strikers, refer to "frame components"



V02 / 05, SRH 1500–1900 mm

C600 – Faceplate 16 / 3

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	SL	499158	5
35	92	10	1020	SL	486823	5
40	92	8	1020	SL	477107	5
45	92	8	1020	SL	477108	5
45	92	10	1020	SL	451235	5
55	92	8	1020	SL	477109	5

C600 – Faceplate 24 / 3

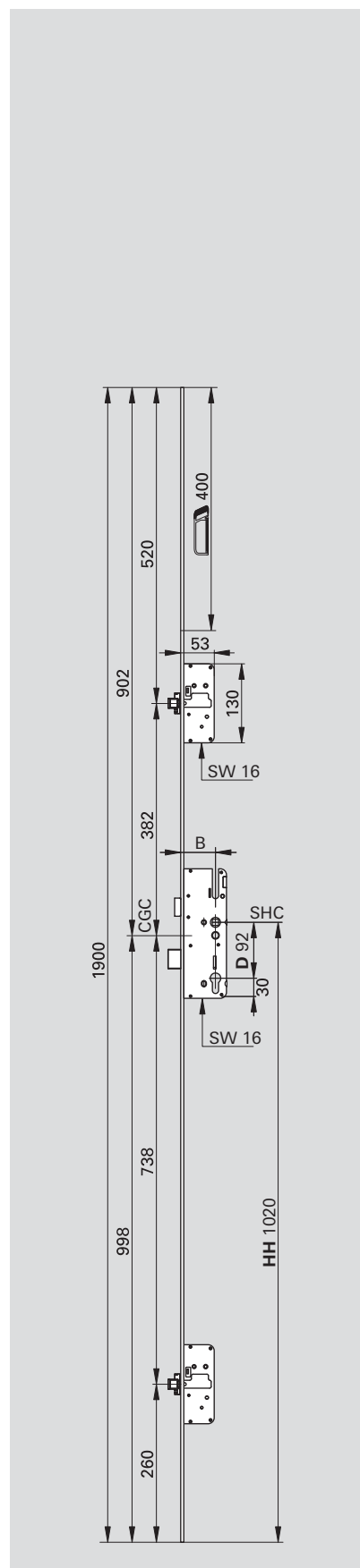
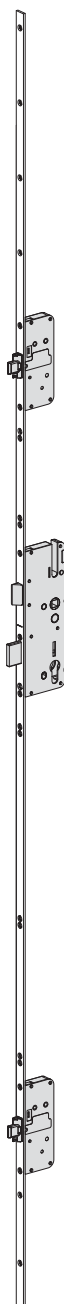
B	D	⊙	HH	SF	Mat. no.	PQ
45	92	8	1020	SL	633450	5
45	92	10	1020	SL	486822	5

C600 – Faceplate 20 / 3

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	10	1020	SL	600475	5

C600 – Faceplate U7x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	SL	627136	5
45	92	8	1020	SL	499160	5
45	92	10	1020	SL	633248	5



For strikers, refer to "frame components"

Roto Door

V02 / 07, SRH 2200–2400 mm

C600 – Faceplate 16 / 3

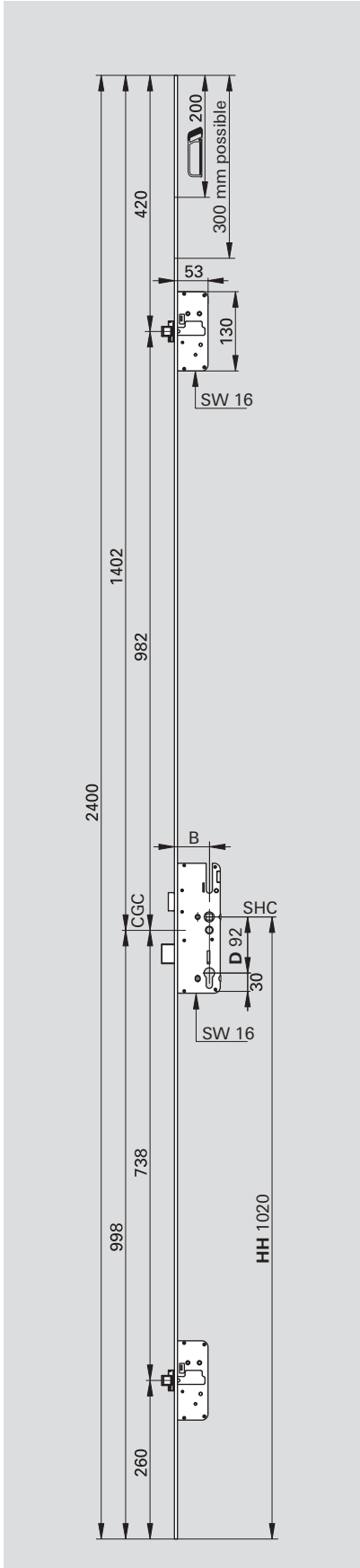
B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	SL	623877	5
40	92	8	1020	SL	477113	5
45	92	8	1020	SL	477117	5
50	92	8	1020	SL	623879	5
50	92	10	1020	SL	631957	5
65	92	10	1020	SL	634539	5

C600 – Faceplate 20 / 3

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	10	1020	SL	600476	5
55	92	8	1020	SL	633519	5
55	92	10	1020	SL	502051	5
65	92	10	1020	SL	502052	5

C600 – Faceplate U7x24

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	8	1020	SL	631956	5
45	92	10	1020	SL	633247	5



For strikers, refer to "frame components"

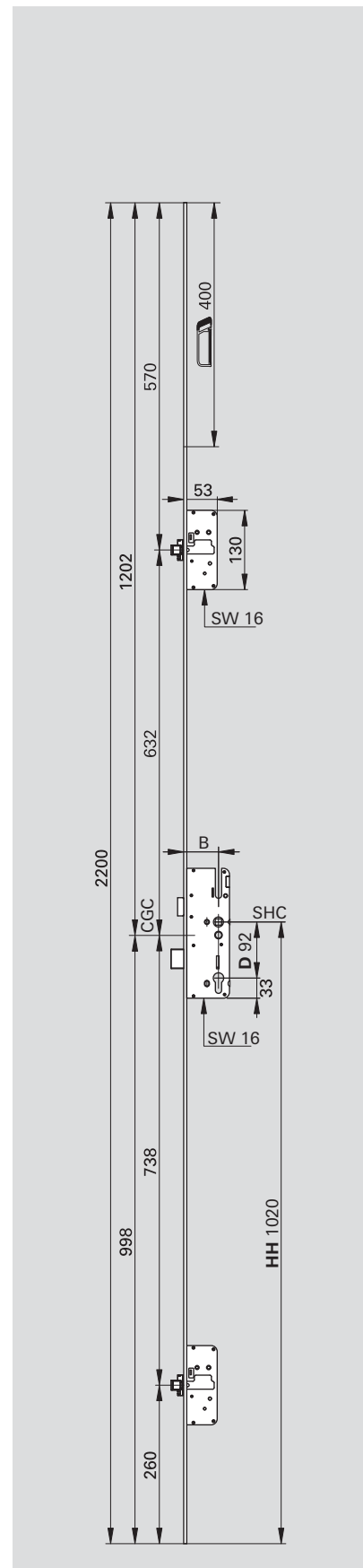
V02 / 01, SRH 1800–2200 mm

C600 – Faceplate 16 / 3

B	D	⊙	HH	SF	Mat. no.	PQ
40	92	8	1020	SL	477110	5
45	92	8	1020	SL	477111	5
55	92	8	1020	SL	477112	5

C600 – Faceplate U7x24

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	10	1020	SL	633246	5



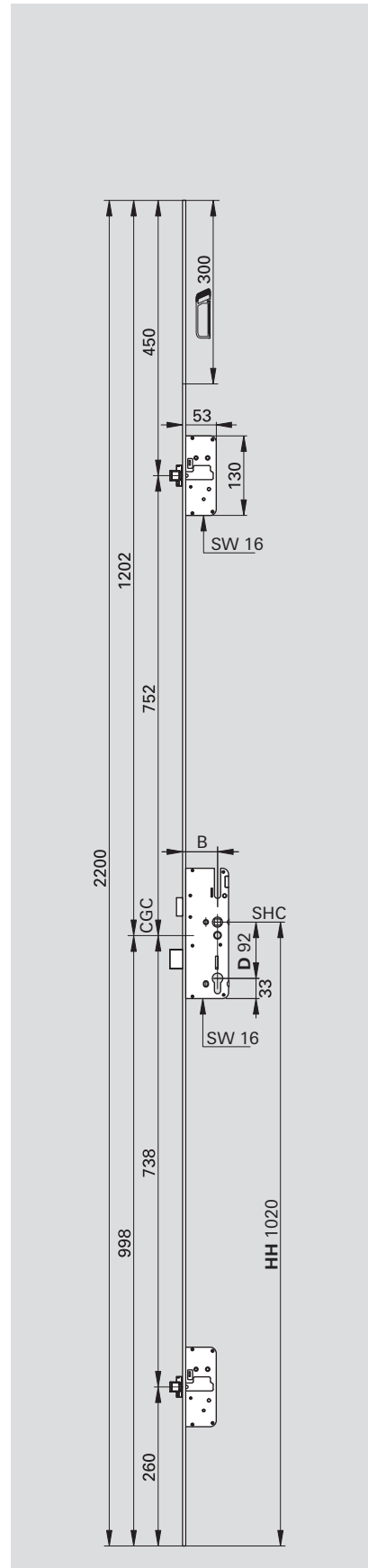
For strikers, refer to "frame components"

Roto Door

V02 / 03, SRH 1900–2200 mm

C600 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	633452	5



For strikers, refer to "frame components"

V02/03, SRH 1900mm – 2200mm

H600 – Faceplate 16/2

B	D	⊙	HH	SF	Mat. no.	PQ
25	92	8	1020	STS	611309	5
28	92	8	1020	STS	611315	5
35	92	8	1020	STS	611324	5
40	92	8	1020	STS	611328	5
45	92	8	1020	STS	611336	5
55	92	8	1020	STS	611340	5

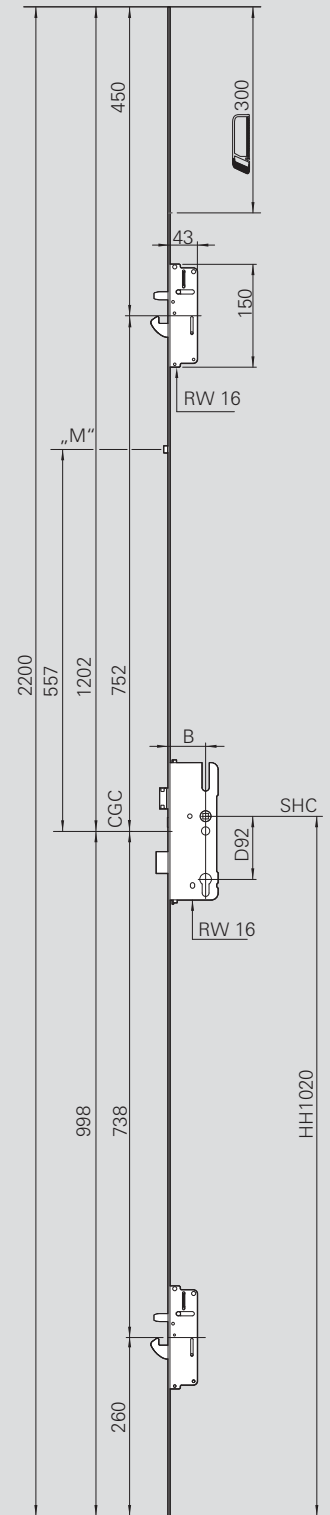
H600 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	628169	5
45	92	8	1020	STS	611332	5



"M" = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



For strikers, refer to "frame components"

V02/03, SRH 1900mm – 2200mm

H600 – Faceplate 16/2

B	D	⊙	HH	SF	Mat. no.	PQ
25	92	8	1020	STS	611310	5
28	92	8	1020	STS	611316	5
35	92	8	1020	STS	611323	5
40	92	8	1020	STS	611327	5
45	92	8	1020	STS	611335	5
55	92	8	1020	STS	611339	5

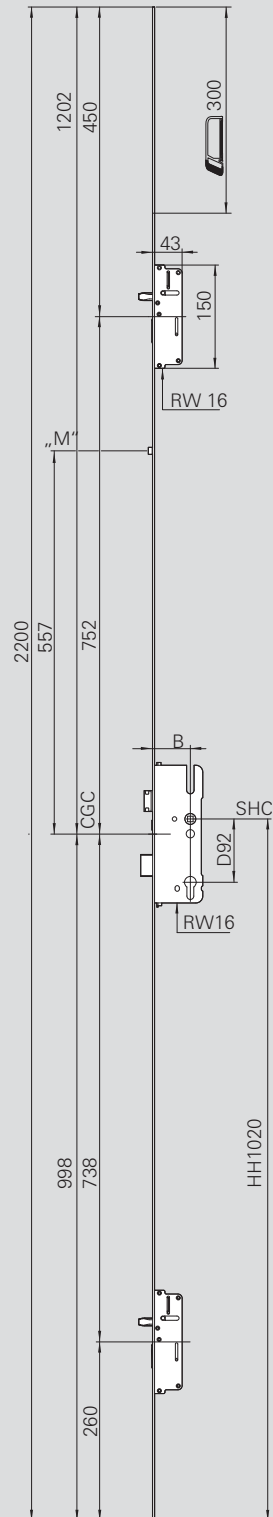
H600 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	628170	5
45	92	8	1020	STS	611331	5



"M" = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



For strikers, refer to "frame components"

V02/03, SRH 1900mm – 2200mm

H600 – Faceplate 16/2

B	D	⊙	HH	SF	Mat. no.	PQ
25	92	8	1020	STS	611308	5
28	92	8	1020	STS	611314	5
35	92	8	1020	STS	611342	5

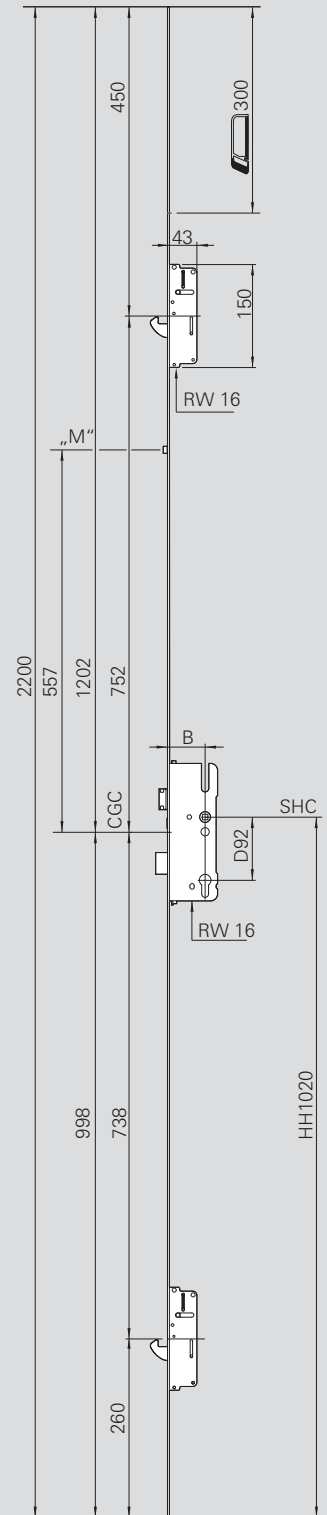
H600 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	628171	5



"M" = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



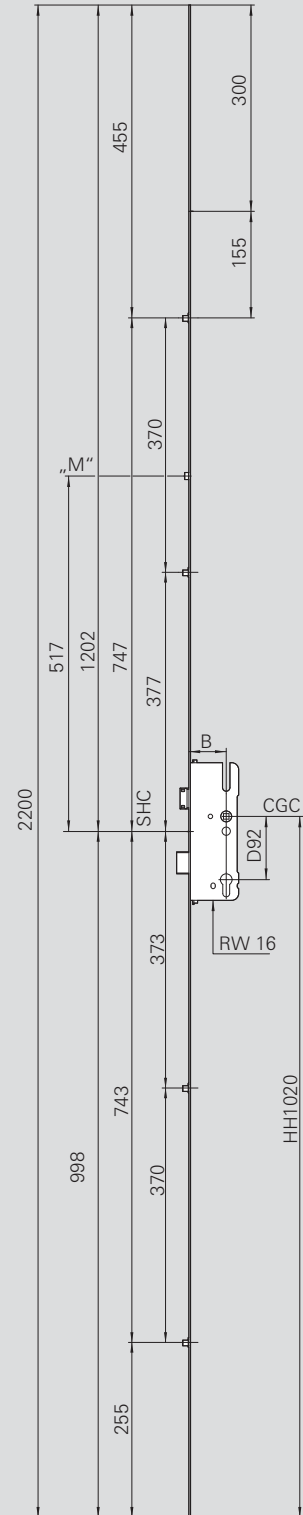
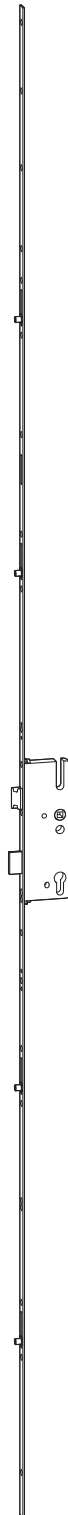
For strikers, refer to "frame components"

V22/25, SRH 2200 mm

H600 – Faceplate 16/2						
B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	SL	611 320	100
45	92	8	1020	SL	611 321	100
55	92	8	1020	SL	611 322	100

"M" = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



For strikers, refer to "frame components"

V22/25, SRH 1900mm – 2200mm

H600 – Faceplate 16/2

B	D	⊙	HH	SF	Mat. no.	PQ
25	92	8	1020	SL	609163	5
28	92	8	1020	SL	609153	100
28	92	8	1020	SL	611317	5
35	92	8	1020	SL	609159	100
35	92	8	1020	SL	611318	5
40	92	8	1020	SL	609162	100
40	92	8	1020	SL	611319	5
45	92	8	1020	SL	609158	100
45	92	8	1020	SL	611712	5

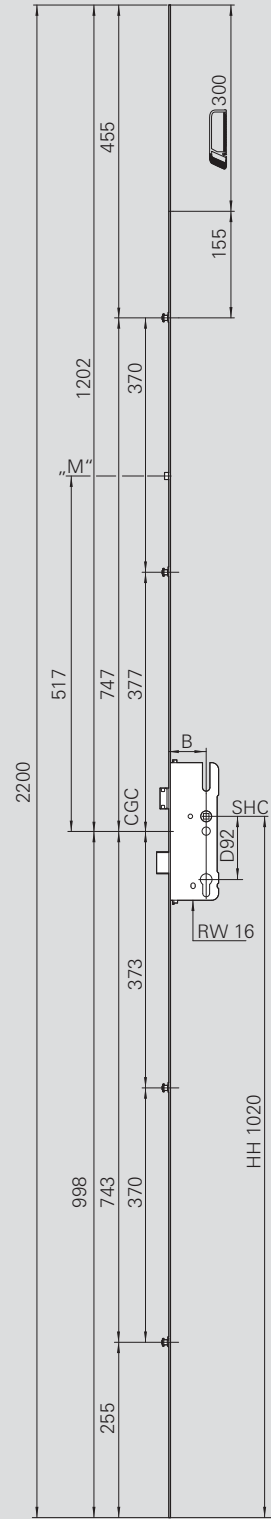
**H600 – Faceplate 16 / 2
Round cylinder**

B	D	⊙	HH	SF	Mat. no.	PQ
65	94	8	1020	SL	627340	5



"M" = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



For strikers, refer to "frame components"

V02 / 03, SRH 2000–2270 mm

Lever-operated espagnolette for aluminium doors

Description Axis in mm Series Profile (U) SF Mat. no. PQ

① 2 combination locks Faceplate length 2230

LOE-2C-0203 / L+DB / left 13 AS 927 U24 SL **630200** 5

LOE-2C-0203 / L+DB / right SL **630201** 5

2 automatic bolts Faceplate length 2230

LOE-2A-0203 / L+DB / left 13 AS 927 U24 SL **630035** 5

LOE-2A-0203 / L+DB / right SL **630036** 5

2 combination locks Faceplate length 2230

LOE-2C-0203 / L+DB / left 13 AS 930 U24 STS **633347** 5

LOE-2C-0203 / L+DB / right STS **633348** 5

2 automatic bolts Faceplate length 2230

LOE-2A-0203 / L+DB / left 13 AS 930 U24 STS **633388** 5

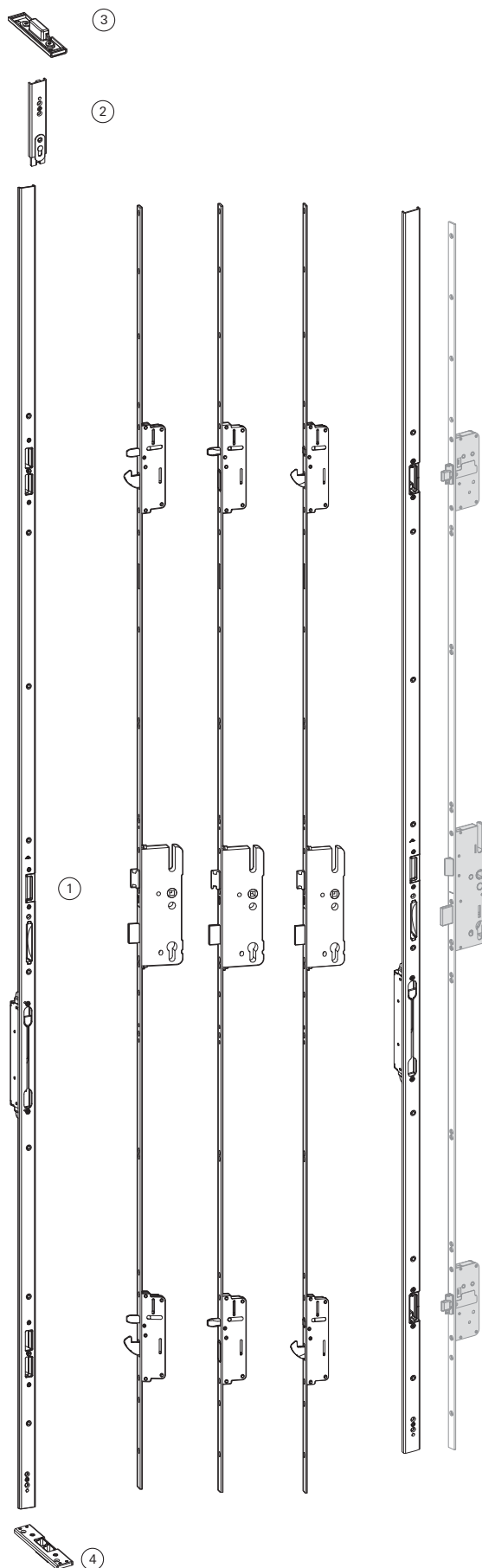
LOE-2A-0203 / L+DB / right STS **633389** 5

② Extension pieces, top for aluminium doors

Description Axis in mm Series Profile (U) SF Mat. no. PQ

LOE extension piece 132 / left & right 13 AS 927 U24 SL **630039** 50

LOE extension piece 132 / left & right 13 AS 930 U24 STS **633381** 50



For strikers, refer to "frame components"

V02 / 03, SRH 2000–2270 mm

Lever-operated espagnolette for aluminium doors

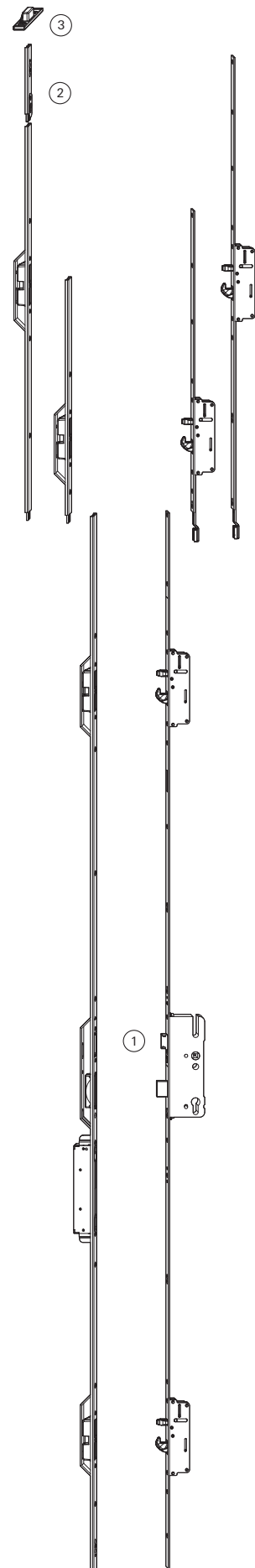
Description	Axis in mm	Series	Profile (U)	SF	Mat. no.	PQ
① 2 combination locks Faceplate length 2100						
LOE-2C-0203 / L+DB / left	13	AS 932	U24	STS	633377	5
LOE-2C-0203 / L+DB / right					STS 633378	5

② Extension piece, top for aluminium doors

Description	Axis in mm	Series	Profile (U)	SF	Mat. no.	PQ
LOE extension piece 132 / left & right	13	AS 930	U24	STS	633381	50

③ Extension for lever-operated espagnolette

Description	Axis in mm	Series	Profile (U)	SF	Mat. no.	PQ
LOE extension 600 U6x24	13	AS 930	U24	STS	633379	50
LOE extension 900 U6x24	13	AS 930	U24	STS	633380	50



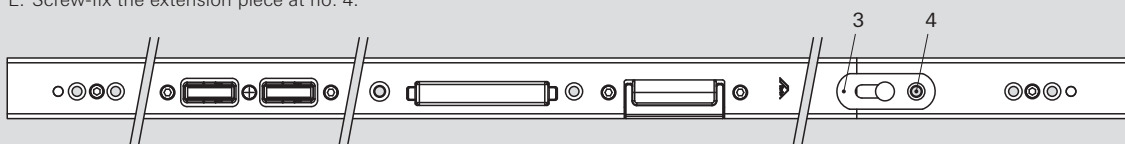
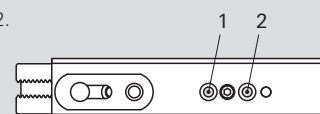
For strikers, refer to "frame components"

Version for aluminium doors					
Profile system Frame • Sash	Axis dimension profile (Axis dimension lever-operated espagnolette)	Profile (U)	Striker loca- tion pattern	Series Lever-operat- ed espagno- lette	Series Extension piece top
Alumil 95012 • 95004	12 (24.5)	U24	V02/03	AS 932	AS 930
Alumil 95012 • 95006	12 (24.5)	U24	V02/03	AS 932	AS 930
Alumil 95012 • 95028	12 (24.5)	U24	V02/03	AS 932	AS 930
Alumil 95012 • 95030	12 (24.5)	U24	V02/03	AS 932	AS 930
Alumil 95012 • 95032	12 (24.5)	U24	V02/03	AS 932	AS 930

Further versions for aluminium doors on request.

Installation instructions

- Position the extension piece to the top edge of the sash rebate and screw-fix at no. 1 and 2.
- Cut the lever-operated espagnolette to the necessary length.
- Put the lever-operated espagnolette in place and screw-fix 8 or 9 times, depending on the version (minimum screw length 40 mm).
- Move the shroud (part no. 3) longitudinally.
- Screw-fix the extension piece at no. 4.



1. General description

The DoorSafe P600 emergency exit lock is only to be used in conjunction with Roto frame components and lever handle sets certified in accordance with DIN EN 179.

DoorSafe P600 can be used on emergency exit doors where panic scenarios are not expected, as well as on apartment entrance doors and main entrance doors in single-family houses and apartment buildings and is suitable for all door materials (timber, PVC and aluminium). Even existing doors can be retrofitted with the appropriate modification work on the door.

2. Operation and function

Unlocking the door from the outside

Unlocking and opening of the door is only possible with the key.

Unlocking the door from the inside

The door can be opened at any time via the lever handle. The latch and all locking points are withdrawn automatically.

Locking the door from the outside or from the inside

Locking is effected by turning the key 720° (2 x 360°).

In order to avoid malfunctions of the emergency exit lock, always remove the key!

3. Installation instructions



Caution! If the free cam cylinder is not suitable, the lock or the key of the emergency exit lock can be blocked.

A suitable free cam cylinder has to be

- equipped with a free rotating locking nose
- approved for the use of emergency exit locks
- free rotatable after the key withdrawal position.

It is compulsory to use a suitable free cam cylinder.

For further questions, please contact the manufacturer of the free cam cylinder. FZG certified cylinders are suitable.

Check as to whether the door sash meets the frame and check the hardware and locking parts' smooth operation. Check the functional clearance (4 mm). Manually check the closing and opening function via both the lever handle and the key.

4. Application range

DoorSafe P600 is designed for emergency exit doors with one door leaf with lever handle according to DIN EN 179, e.g. for offices. Only lever-handle sets, listed in the EC certificate of conformity No. 0432-CPT 0158, tested according to DIN EN 179, may be applied.

Max. door height = 2520 mm, max. door width = 1320 mm

The multi-point lock DoorSafe E601 Eneo AF is a certified emergency exit lock according to DIN EN 179.

General

The actual standard DIN EN 179 "Emergency exit locks with lever handles or stop plate for doors along escape routes" is from 2008. It defines the requirements for locks to allow a safe escape in an emergency situation by means of escape routes.

Emergency exit locks in accordance with DIN EN 179

The standard stipulates that an escape door lock according to DIN EN 179 is designed for emergency situations, in which a panic situation is not probable; the door lock enables a safe and effective escape through a door with only a single operation to release the emergency exit lock, even if knowledge of the functioning of the lock may be required. This means that emergency exit locks are intended for buildings with no public traffic and whose visitors are familiar with the functions of the escape doors.

The multi-point locking system DoorSafe E601 Eneo AF is designed for the application range of the "split spindle function E". This means that it is designed for doors with knob or pull handle on the outside. Opening the door from the outside opposed to the escape direction is only possible with the key (split spindle function).

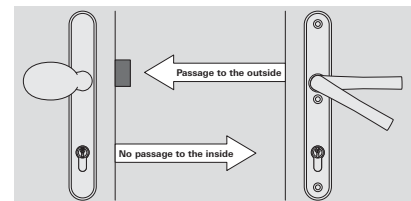
Application note

For doors, for which unauthorised opening from the outside generally must be prevented. The door can not accidentally remain unlocked, because after closing and removing the key it can be opened again only with the key.

The split spindle function E enables the opening of the door from the inside at any time (escape door function). However, the lock is applicable for inside opening as well as for outside opening doors.

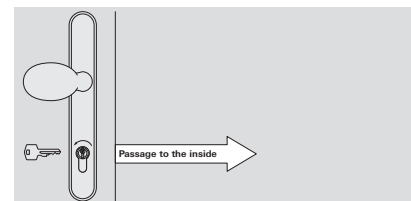
Original position:

Function from inside: Exit. The lever handle actuates the latch.
Function from outside: Only an escutcheon with a stationary button may be used as hardware. The latch is actuated only with the key via the split spindle.



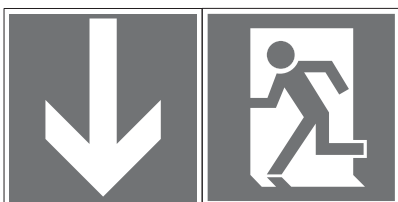
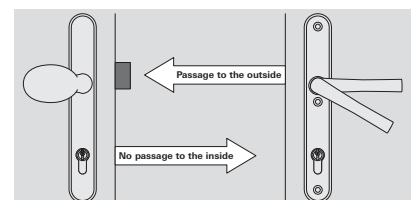
Opening position:

Key turned as far as possible in the opening direction and held secure when the door is opened (split spindle function). Original position assumed automatically after the key is removed.



Locking:

Function from inside: Escape door function. The lever handle actuates the latch.
Function from outside: As a result of using the button hardware, opening is only possible with the key.



V02/03, SRH 1900mm – 2200mm

P600 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
40	92	9	1020	STS	611453	1
45	92	9	1020	STS	611477	1

P600 – Faceplate 20 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611435	1
40	92	9	1020	STS	611459	1
45	92	9	1020	STS	611483	1

P600 – Faceplate 24 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611441	1
40	92	9	1020	STS	611465	1
45	92	9	1020	STS	611489	1

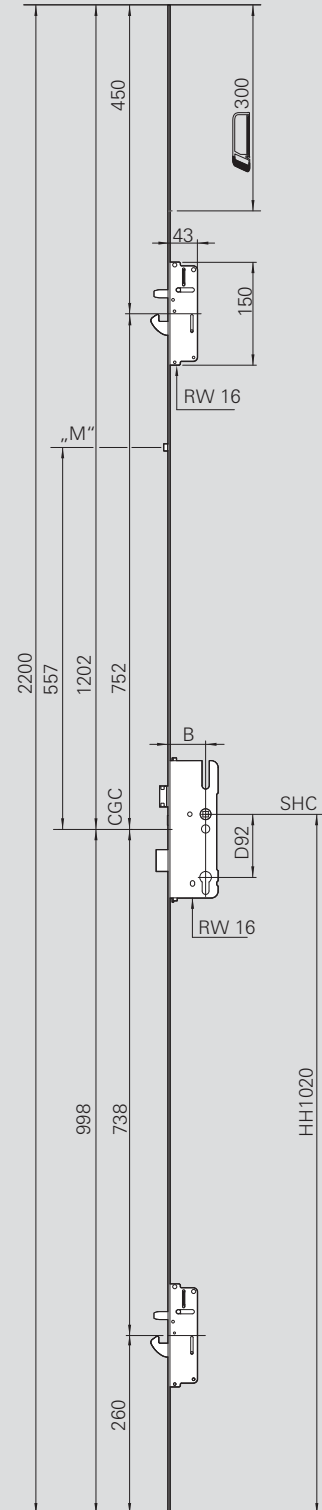
P600 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611447	1
40	92	9	1020	STS	611471	1
45	92	9	1020	STS	611495	1



“M” = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



Please observe the installation and maintenance instructions which are supplied with the product.

For strikers, refer to “frame components”

V02 / 03, SRH 2200 mm

P600 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
40	92	9	1020	STS	611 452	1
45	92	9	1020	STS	611 476	1

P600 – Faceplate 20 / 2

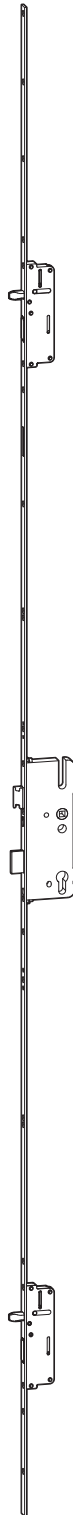
B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611 434	1
40	92	9	1020	STS	611 458	1
45	92	9	1020	STS	611 482	1

P600 – Faceplate 24 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611 440	1
40	92	9	1020	STS	611 464	1
45	92	9	1020	STS	611 488	1

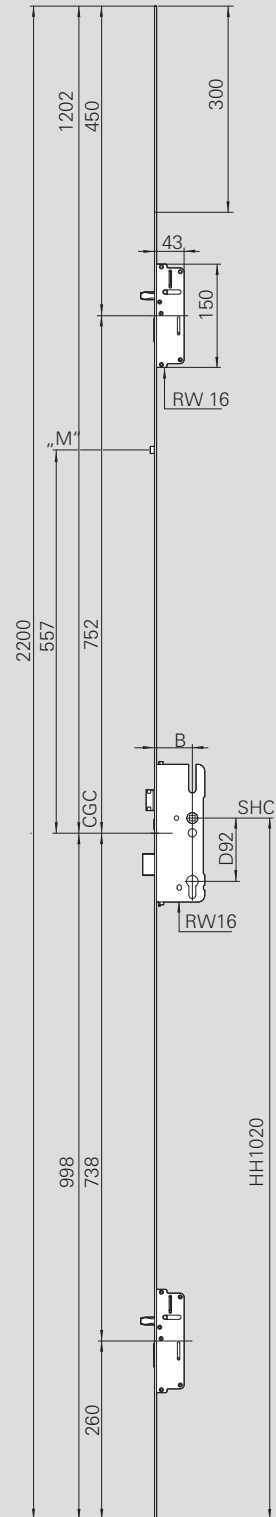
P600 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611 446	1
40	92	9	1020	STS	611 470	1
45	92	9	1020	STS	611 494	1



“M” = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



Please observe the installation and maintenance instructions which are supplied with the product.

For strikers, refer to “frame components”

V02 / 03, SRH 2200 mm

P600 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
40	92	9	1020	STS	611 455	1
45	92	9	1020	STS	611 479	1

P600 – Faceplate 20 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611 437	1
40	92	9	1020	STS	611 461	1
45	92	9	1020	STS	611 485	1

P600 – Faceplate 24 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611 443	1
40	92	9	1020	STS	611 467	1
45	92	9	1020	STS	611 491	1

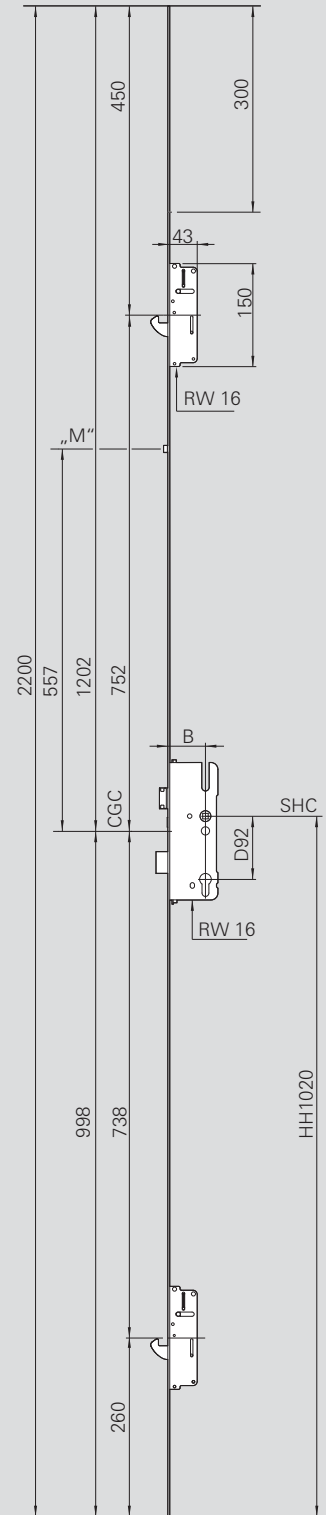
P600 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611 449	1
40	92	9	1020	STS	611 473	1
45	92	9	1020	STS	611 497	1



“M” = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



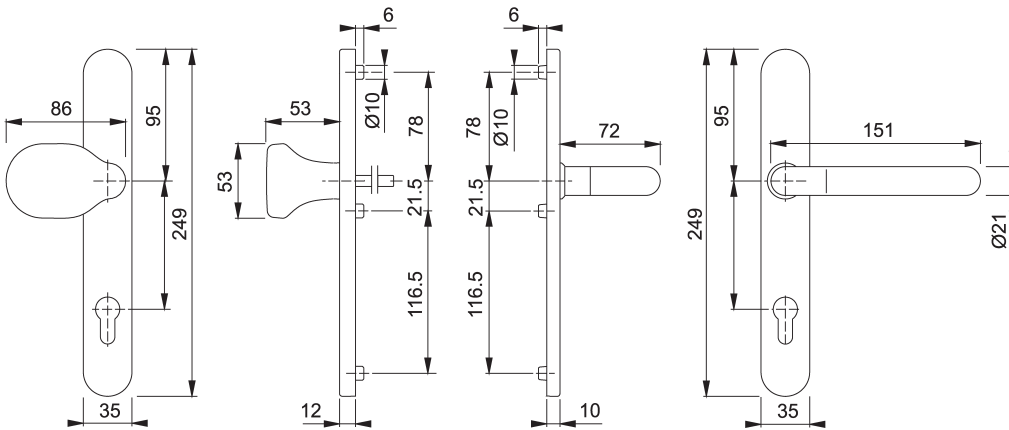
Please observe the installation and maintenance instructions which are supplied with the product.

For strikers, refer to “frame components”



Lever-handle set

Description	Specification	Material no.
Lever-handle set aluminium	F1-Aluminium natural matt/PC-92, 9 mm door leaf thickness 67-72 mm screw-fixing M6/EN 179 DO 20.5.02	618987
Lever-handle set white	F9016 - Traffic-white/PC-92, 9 mm door leaf thickness 67-72 mm screw-fixing M6/EN 179 DO 20.5.02	618988
Lever-handle set stainless steel	F69 - Stainless steel matt/PC-92, 9 mm door leaf thickness 67-72 mm screw-fixing M6/EN 179 DO 20.5.02	618989



1. General description

The DoorSafe Tandeo F emergency exit lock is only to be used in conjunction with Roto frame components and Hoppe hardware sets certified in accordance with DIN EN 179.

DoorSafe Tandeo F locks the door mechanically and automatically as soon as it is closed, manual unlocking is possible at any time. DoorSafe Tandeo F can be used on escape doors where panic scenarios are not expected, as well as on apartment entrance-doors and main entrance-doors in single-family houses and apartment buildings and is suitable for all door materials (timber, PVC and aluminium). Even existing doors can be retrofitted with the appropriate modification work on the door.

2. Operation and function

Automatic locking

Both additional locking points on the DoorSafe Tandeo F consist in each case of a latch and a bolt that is integrated in the latch; the automatic bolt. When closing over the door, the latches snap into its strikers, using the same principle as on the latch in the main lock. In doing so, the bolts in the latches are automatically activated and the door is securely locked.

Unlocking the door from the outside

Unlocking and opening of the door is only possible with the key.

Unlocking the door from the inside

The door can be opened at any time via the lever handle. All three latches and the two additional locking point's automatic bolts are withdrawn automatically.

3. Installation instructions

The automatic function is only ensured in the vertical position.

Check as to whether the door sash meets the frame and check the hardware and locking parts' smooth operation. Check the functional clearance (4–5 mm). Check the closing and opening function via both the lever handle and the key.

DoorSafe Tandeo F requires lever-handle versions with split spindle (pull handle or similar on the outside, lever handle on the inside).

Position the lever-handle height at between 900 mm and 1,100 mm. The installation company bears all responsibility for any deviations.

4. Application range

DoorSafe Tandeo F is designed for single leafed emergency exit doors with lever handles in accordance with DIN EN 179 where panic scenarios are not expected; e.g. offices etc.

Use only Hoppe lever-handle sets tested in accordance with DIN EN 179 (DO 20.5.01, DO 20.5.02, DO 20.20.01, DO 20.20.02, DO 20.7.01, DO 20.7.02).

V02 / 03, SRH 1900–2200 mm

P603 – Faceplate 16/3

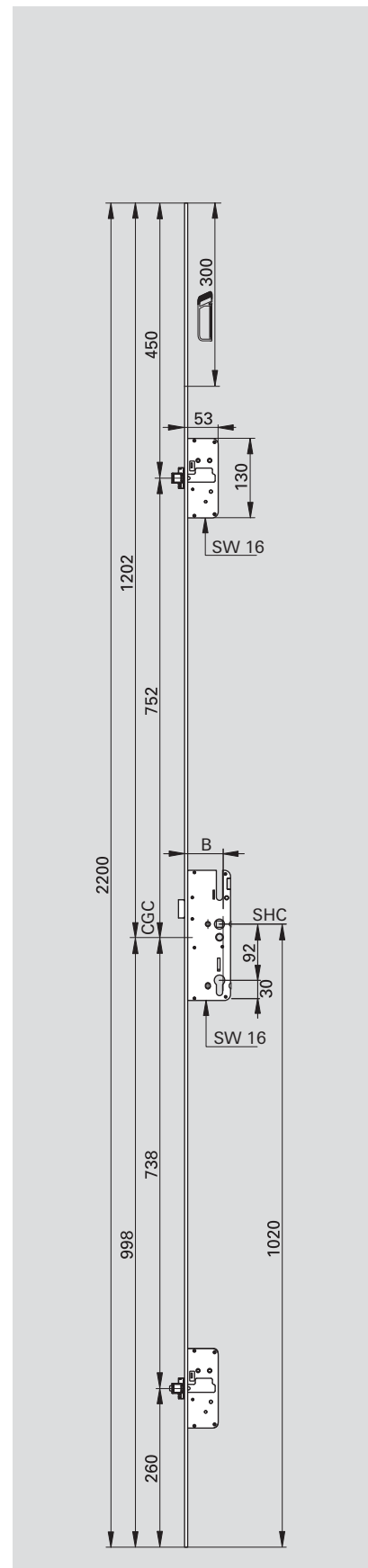
B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	SL	604497	1
40	92	9	1020	SL	604523	1
45	92	9	1020	SL	604521	1
55	92	9	1020	SL	604532	1
65	92	9	1020	SL	628023	1

P603 – Faceplate 20/3

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	9	1020	SL	604536	1
55	92	9	1020	SL	604544	1
65	92	9	1020	SL	604562	1

P603 – Faceplate U7x24

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	9	1020	SL	563346	1



1. Safety instructions



Installation and maintenance work may only be carried out by specialised electrical companies.

One is at the risk of one's life when working with 230 Volt (respectively 115 Volt) mains voltage. All work may only be carried out when the power supply is switched off.

2. General description

The DoorSafe Eneo AF emergency exit lock is only to be used in conjunction with Roto frame components and Hoppe hardware sets certified in accordance with DIN EN 179.

DoorSafe Eneo AF locks the door mechanically and automatically as soon as it is closed, unlocking is carried out electronically, or manual operation is possible at any time. DoorSafe Eneo AF can be used on escape doors where panic scenarios are not expected, as well as on apartment entrance-doors and main entrance-doors in single-family houses and apartment buildings and is suitable for all door materials (timber, PVC and aluminium). Even existing doors can be retrofitted with the appropriate modification work on the door.

3. Operation and function

Automatic locking

Both additional locking points on the DoorSafe Eneo AF consist in each case of a latch and a bolt that is integrated in the latch; the automatic bolt. When closing over the door, the latches snap into its strikers, using the same principle as on the latch in the main lock. In doing so, the bolts in the latches are automatically activated and the door is securely locked.

Unlocking the door from the outside

Depending on the admission control system installed, unlocking can be triggered by means of a transponder, key pad, magnetic card or manually via the cylinder.

Unlocking the door from the inside

The door can be opened at any time via the lever handle. All three latches and the two additional locking point's automatic bolts are withdrawn automatically.

4. Audible signals

1 x beep – Acknowledgement message: Command understood, procedure carried out correctly.

3 x short beep sound – Advisory message: Command understood, DoorSafe Eneo A cannot carry out the command, because the maximum number of cycles within the prescribed time unit has been exceeded.

3 x dual tone beep – Error prompt: The control unit detected an overcurrent in the motor and has stopped as a result.

4 x dual tone beep – Error prompt: The connecting rod's final position was not reached within the maximum permissible time of 3 seconds.

5. Installation instructions



Upon installing the door, the functional clearance (4–5 mm) is to be checked.

6. Application range

DoorSafe Eneo AF is designed for single leafed emergency exit doors with lever handles in accordance with DIN EN 179 where panic scenarios are not expected; e.g. offices etc. Use only Hoppe lever-handle sets tested in accordance with DIN EN 179 (DO 20.5.01, DO 20.5.02, DO 20.20.01, DO 20.20.02, DO 20.7.01, DO 20.7.02).

7. Technical specifications

Power supply: 24 V DC ($\pm 5\%$), 2.5 A, SELV output current in accordance with EN 60950-1

Continuous current absorption: 25 mA

Peak current absorption: 1.5 A (peak 2.3 A)

Relative humidity: $\leq 93\%$

Outside temperature:

–25 up to +60 °C (Transport –25 up to +70 °C)

Standards: EN 60 730-1, EN 50090-2-2

Low voltage directives fulfilled, conforms to CE

Faults	Cause	Rectification
The system does not work. Eneo AF does not react, no acoustic signals	230 volt is not applied to the power supply unit on the primary side.	Electrical installation work must – as specified in the installation instructions – be carried out by qualified personnel.
	24 volt is not applied to the power supply unit's secondary side.	Check the clip contacts on the power supply unit.
	24 volt is not applied to the Eneo AF.	Check the power supply line between the power supply unit and Eneo AF and replace if need be.
	24 volt is applied to the Eneo AF, however the +24 V/ GND (earth) are crossed.	Reverse the polarity of the power supply on the secondary side.
	Still not working?	– Switch off the power supply, wait 10 seconds and put it into operation again. – Test with the Eneo Control Unit. – Contact a specialist.
Eneo AF does not lock automatically	The door is not completely closed.	Close the door completely, check the functional clearance.
Door does not unlock.	No signal at the signal transmitter's output or no signal at Eneo AF's input.	Check the settings and access control respectively. Please refer to the access control's operating instructions!
	Door or strikers not adjusted correctly (overcurrent error prompt: Eneo AF beeps 3 x).	Adjust the door or strikers (refer to 5. Installation instructions).

Door commissioning:

Before you connect up the DoorSafe Eneo AF to the power supply the function must be checked – as with a mechanical multi-point locking system. The effort needed to activate the lever handle may not exceed the normal manual force.

Checking the door has been installed correctly:

Check as to whether the door sash meets the frame and check the hardware and locking parts' smooth operation. Check the functional clearance (4–5 mm). Manually check the closing and opening function via both the lever handle and the key while the power is switched off.

V02+E/03, SRH 1900–2200 mm

E601 – Faceplate 16/3

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	SL	563342	1
40	92	9	1020	SL	563343	1
45	92	9	1020	SL	563341	1
55	92	9	1020	SL	563344	1
65	92	9	1020	SL	628126	1

E601 – Faceplate 20/3

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	9	1020	SL	563345	1
55	92	9	1020	SL	563347	1
65	92	9	1020	SL	563348	1

E601 – Faceplate 24/3

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	SL	602991	1

E601 – Faceplate U7x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	SL	608518	1
45	92	9	1020	SL	563349	1

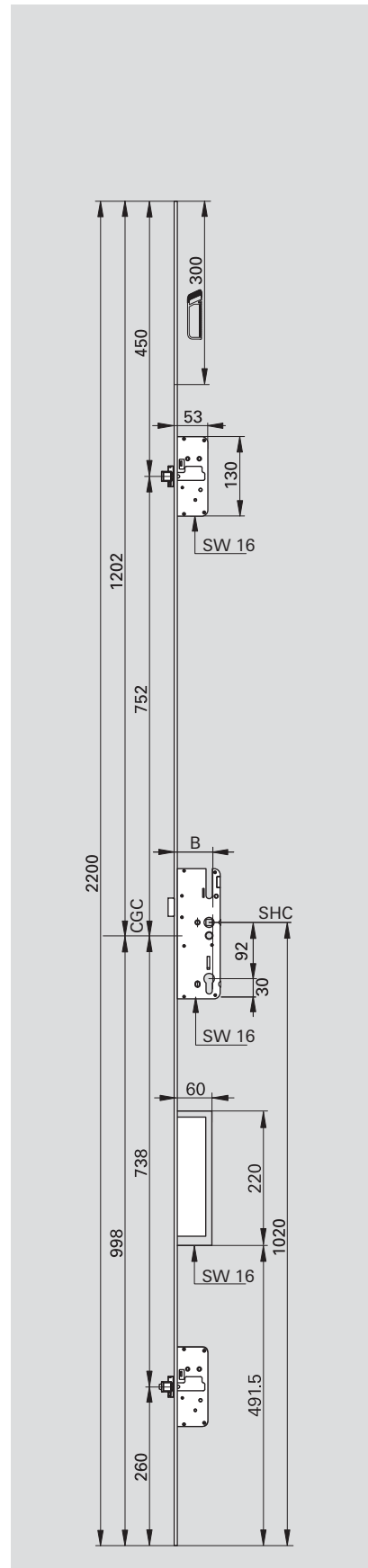


Components required:

Power supply unit • Cable junction • Cable

Delivery scope: E601 – Eneo AF

For strikers, refer to “frame components”



A power supply unit for DoorSafe Eneo A or Eneo AF, which has not been purchased from Roto Frank AG, must meet the following specifications and standards.

Power supply guidelines:

24 V +/-5%, 2.3 A < I < 3.5 A, SELV

If the power supply unit is able to deliver more than 3.5 A, an additional microfuse has to be installed in the 24 V line to Eneo A resp. Eneo AF (cable and fire protection).

Power supply unit standards:

DIN EN 60950-1

Information technology equipment – Safety (part 1)

Standards for the overall system:

DIN EN 60730-1

Automatic electrical controls for household and similar use (part 1)

DIN EN 50090-2-2

Home and building electronic systems
(part 2-2)

DIN EN 61000-3-2 and -3-3

Electromagnetic compatibility (parts 3-2 and 3-3)

DIN EN 55014-1 and -2

Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus (parts 1 and 2)

Emitted interference	Tested port	Limit value class / crit.
Induced interference voltage at AC connections 150 kHz to 30 MHz	230 V AC	HH

Interference immunity	Tested port	Test severity / crit.
Fast transients (burst)	230 V AC	3kV / A
Fast transients (burst)	Others	2kV / A
Surge voltage	230 V AC	1kV / A

1. General description

The DoorSafe P650 panic door lock is only to be used in conjunction with Roto frame components and hardware sets certified in accordance with DIN EN 1125.

DoorSafe P650 can be used on escape doors in public buildings and is suitable for all door materials (timber, PVC and aluminium).

2. Operation and function

Unlocking the door from the outside

Unlocking and opening of the door is only possible with the key.

Unlocking the door from the inside

The door can be opened with the push bar or the touch bar at any time. The latch and all locking points are withdrawn automatically.

Locking the door from the outside or from the inside

Locking is effected by turning the key 720° (2 x 360°).

In order to avoid malfunctions of the panic door lock, always remove the key!

3. Installation instructions



Caution! Malfunctions of the panic door lock can occur, if the installed free cam cylinder is not suitable.

A suitable free cam cylinder has to be

- equipped with a free rotating locking nose
- approved for the use of panic door locks
- free rotatable after the key withdrawal position.

It is compulsory to use a suitable free cam cylinder.

For further questions, please contact the manufacturer of the free cam cylinder. FZG certified cylinders are suitable.

Check as to whether the door sash meets the frame and check the hardware and locking parts' smooth operation. Check the functional clearance (4 mm). Manually check the closing and opening function via both the hardware and the key.

DoorSafe P650 requires lever-handle versions with split spindle (pull handle or similar on the outside, push bar or touch bar on the inside).

Position the lever-handle height at between 900 mm and 1,100 mm. The installation company bears all responsibility for any deviations.

4. Application range

DoorSafe P650 is designed for single leafed panic doors in accordance with DIN EN 1125. Only lever-handle sets, listed in the EC certificate of conformity No. 0432-CPD 0156, tested according to DIN EN 1125, may be applied.

Max. door height = 2520 mm, max. door width = 1320 mm

V02 / 03, SRH 2200 mm

P650 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
40	92	9	1020	STS	611 519	1
45	92	9	1020	STS	611 543	1

P650 – Faceplate 20 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611 501	1
40	92	9	1020	STS	611 525	1
45	92	9	1020	STS	611 549	1

P650 – Faceplate 24 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611 507	1
40	92	9	1020	STS	611 531	1
45	92	9	1020	STS	611 555	1

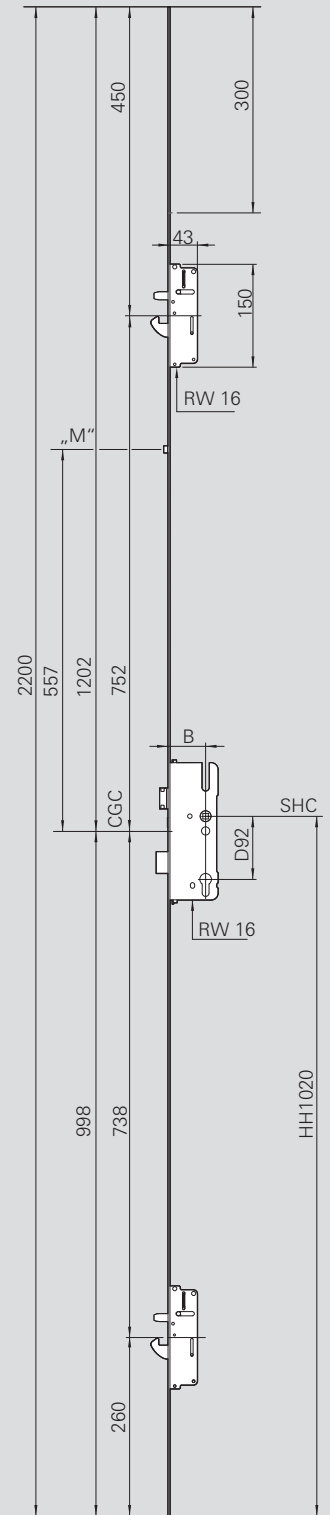
P650 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611 513	1
40	92	9	1020	STS	611 537	1
45	92	9	1020	STS	611 561	1



“M” = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



Please observe the installation and maintenance instructions which are supplied with the product.

For strikers, refer to “frame components”

V02/03, SRH 1900 mm – 2200 mm

P650 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
40	92	9	1020	STS	611518	1
45	92	9	1020	STS	611542	1

P650 – Faceplate 20 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611500	1
40	92	9	1020	STS	611524	1
45	92	9	1020	STS	611548	1

P650 – Faceplate 24 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611506	1
40	92	9	1020	STS	611530	1
45	92	9	1020	STS	611554	1

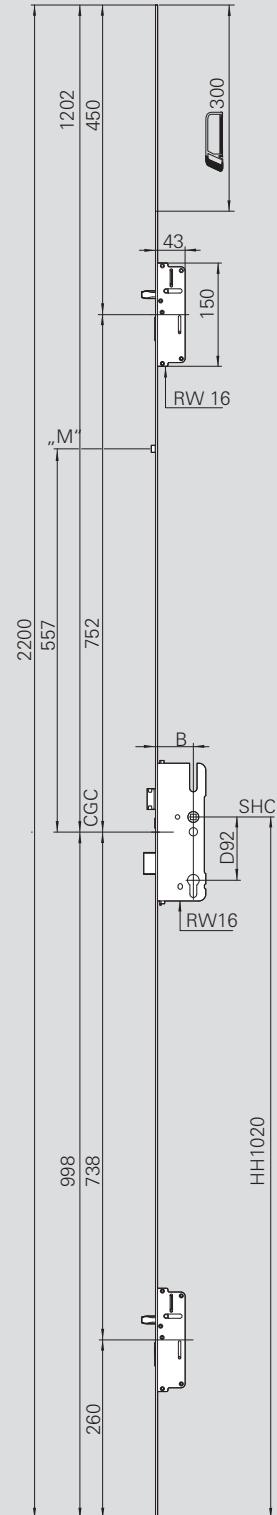
P650 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611512	1
40	92	9	1020	STS	611536	1
45	92	9	1020	STS	611560	1



“M” = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



Please observe the installation and maintenance instructions which are supplied with the product.

For strikers, refer to “frame components”

V02/03, SRH 1900mm – 2200mm

P650 – Faceplate 16 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
40	92	9	1020	STS	611521	1
45	92	9	1020	STS	611545	1

P650 – Faceplate 20 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611503	1
40	92	9	1020	STS	611527	1
45	92	9	1020	STS	611551	1

P650 – Faceplate 24 / 2

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611509	1
40	92	9	1020	STS	611533	1
45	92	9	1020	STS	611557	1

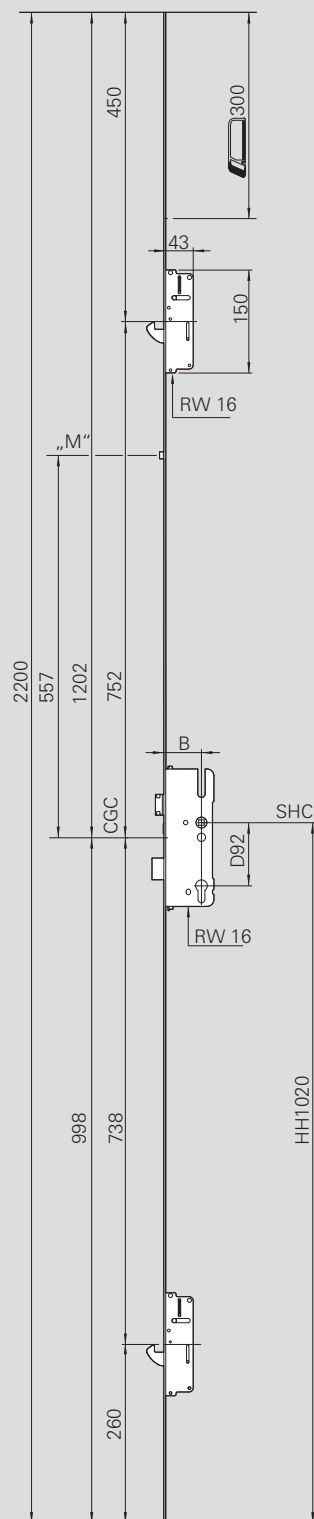
P650 – Faceplate U6x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	9	1020	STS	611515	1
40	92	9	1020	STS	611539	1
45	92	9	1020	STS	611563	1



“M” = version with MVS cams (dimension is centre MVS cam in the locked position)

① Rounded faceplate (special order)



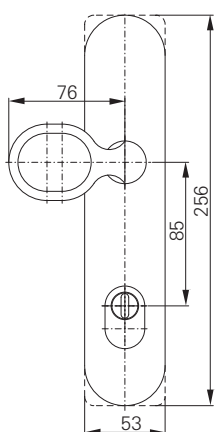
Please observe the installation and maintenance instructions which are supplied with the product.

For strikers, refer to “frame components”



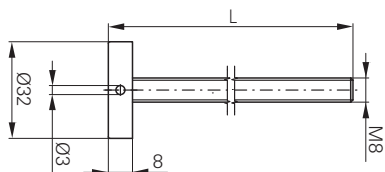
Push bar

Description	Specification	Material no.
Push bar stainless steel	Stainless steel, rust-proof, matt EN 1125, EN 1634, DIN 4102 part 18, PC 92 mm, applicable DIN L and DIN R	619036
Push bar aluminium	Silver-coloured F1 EN 1125, EN 1634, DIN 4102 part 18, PC 92 mm, applicable DIN L and DIN R	619037



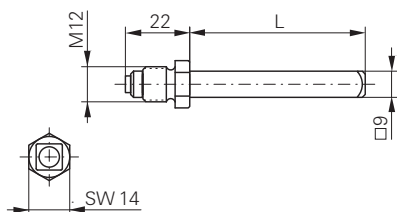
External fitting without roller-bearer pin

Description	Specification	Material no.
External fitting stainless steel	Handle plate 160/surface: ER stainless steel 1.4301	619038
External fitting aluminium	Handle plate 160/surface: F1 aluminium	619039



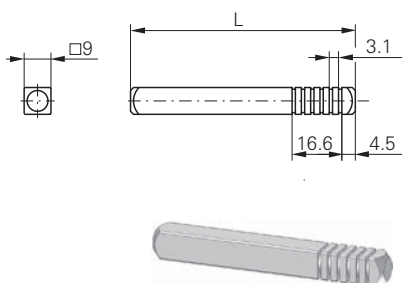
External fitting fastening

Description	Specification	Material no.
50–80 mm M8	Fastening system for external fitting door thickness 50–80 mm/M8	619040



Roller-bearer pin with screws for external fitting

Description	Specification	Material no.
9/80 mm	Roller-bearer pin with eccentric drill hole spindle 9 mm/length 80 mm/door leaf thickness 46–70 mm	619043
9/100 mm	Roller-bearer pin with eccentric drill hole spindle 9 mm/length 100 mm/door leaf thickness 66–90 mm	619042
9/120 mm	Roller-bearer pin with eccentric drill hole spindle 9 mm/length 120 mm/door leaf thickness 86–110 mm	619041



Spindle with insertable clip for the use without external fitting

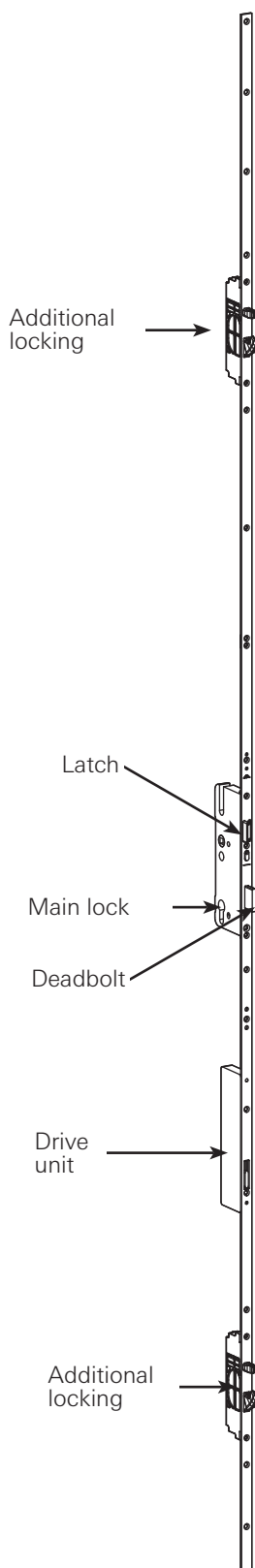
Description	Specification	Material no.
9/55 mm with insertable clip	Spindle 9 mm for the fastening on the side of the passive leaf spindle 9x9 mm/with groove and insertable clip length 55 mm/door leaf thickness 40–64 mm	619044
9/75 mm with insertable clip	Spindle 9 mm for the fastening on the side of the passive leaf spindle 9x9 mm/with groove and insertable clip length 75 mm/door leaf thickness 60–84 mm	619045
9/95 mm with insertable clip	Spindle 9 mm for the fastening on the side of the passive leaf spindle 9x9 mm/with groove and insertable clip length 95 mm/door leaf thickness 80–104 mm	619046

A well proven lock with innovative drive unit concept has been realised with the completely re-engineered and improved DoorSafe Eneo drive unit. Regardless of whether for free systems, open to conventional access systems or radio systems, the convenience plus point is that the routing dimensions are all the

same. DoorSafe Eneo fits on all faceplate widths and in the standard strikers, and can be installed in all conventional main entrance-doors without any restrictions. The customer enjoys maximum convenience in conjunction with optimal security, with transponder or radio engineering – also for barrier free living!

Furthermore there is no more complicated cable handling – with the plug-and-play system the DoorSafe Eneo can be tested with the Eneo Control Unit, thus avoiding operating errors. This is all made possible with Roto DoorSafe Eneo's convenient fast assembly plug system.





Security:

- The multi-point locking system is equipped with optional bolt, power wedge, combination lock or automatic bolt (Eneo A)
- The standard version is suitable for BRG2
- Emergency opening at any time via key – no danger in the case of power blackouts
- Hand-held transmitters can only be programmed and deleted when the door is open and the doorlock is locked

Convenience

- The multi-point locking system can be conveniently unlocked via hand-held transmitters or various access control systems
- The system is automatically locked when the door is closed over
- Straightforward operation by means of 1-channel radio-controlled remote control
- Connection for revolving door drive mechanism available – enables barrier-free living applications
- Flexibility due to the day/night switchover function – no automatic locking of the whole system in the day operation mode if the door is often opened for example at weekends
- No special cylinder necessary, no risk of injury caused by a bunch of keys revolving with the key
- Very short locking and unlocking times due to the extreme low-maintenance drive unit

Handling

- Uniform drive unit routing dimensions on all Eneo variants
- Plug-and-play solution for straightforward function testing with the Eneo Control Unit. No more complicated cable handling
- Can be used on all faceplate widths from 16 mm
- Standard strikers can be used
- The rebate magnet is integrated in the strikers and convenient one-piece striker strips, as well as being laterally and vertically adjustable
- Main locks from 35 mm backset, hole-distance 92 mm
- Floating contact output to connect e.g. revolving door drive mechanisms

Roto Door

Due to Roto's Eneo Control Unit with plug-and-play feature, it's no problem for either fabricators in production nor for building site staff to check the DoorSafe Eneo's functions. Operating errors due to different plug-and-socket connections are out of the question with the 4 m long accessories connecting cable that is easy to plug in to the Eneo Control Unit (cable junction control unit). Nevertheless if a customer wants to test the Eneo on bare cable ends, Roto has an adapter with crocodile clips in its range of accessories.

Why check?

The Eneo Control Unit serves testing correct installation, checks the electrical basic function and Roto DoorSafe Eneo's demonstration function. For this reason it is an important fabricator's tool both in the workshop and on the building site in order to warrant correct installation.

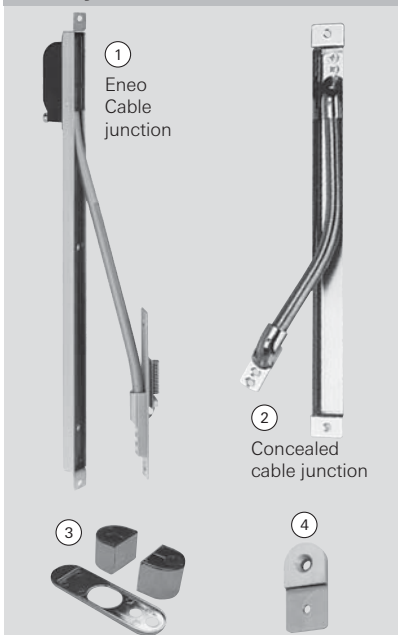
The Eneo Control Unit is s the ideal device for in the workshop and on the building site. Small, handy and surprisingly easy operation.



Description	Mat. no.	PQ
Eneo Control Unit	495064	1
Adapter with crocodile clips	495189	1
4 m connection cable (cable junction – Control Unit)	524935	1

Accessories

Cable junctions



Description	Mat. no.	PQ
① Eneo cable junction plug-in, 180° opening	494799	1
② Cable junction non plug-in, 180° opening	319135	1
Additional components required: Cable for cable junction (348564) Eneo plug, 3-pin, 2 pieces (494801)		
③ Assembly component for cable junction, 4 mm	319136	2
④ Radius part for cable junction, 4 mm	472708	2
Cable for cable junction 7 x 0.5mm ² , 10 m	348564	1
Eneo plug, 3-pin, 2 pieces (green and black)	494801	2

Eneo hand-held transmitter (Eneo C)



Description	Mat. no.	PQ
Eneo hand-held transmitter	494798	1

Eneo power supply unit

Description	Mat. no.	PQ
Power supply unit, 24 V, top-hat rail mounting	563512	1

Spare parts


Eneo power supply unit

Description	Mat. no.	PQ
Power supply unit, 24 V, top-hat rail mounting	563512	1

Eneo plug

Description	Mat. no.	PQ
Eneo 10-pin plug from the plug-in cable junction	494802	1

1. Safety instructions

 Installation and maintenance work may only be carried out by specialised electrical companies. One is at the risk of one's life when working with 230 Volt (respectively 115 Volt) mains voltage. All work may only be carried out when the power supply is switched off.


2. General description

Roto has developed a new lock generation with DoorSafe Eneo C, which enables complete electromechanical locking and unlocking of doors. With this opening and closing the main entrance-door has become considerably user-friendlier.

DoorSafe Eneo C can be used in apartment entrance-doors and main entrance-doors in single and multi-family houses. In order to operate the multi-point locking, you don't need a key – however this possibility has been retained as an additional emergency opening system.

DoorSafe Eneo C is suitable for all door materials (timber, PVC and aluminium). Even existing doors can be retrofitted with the appropriate modification work on the door. Due to the different options and the extensive range of accessories, DoorSafe Eneo C sets no boundaries to your door design wishes.

DoorSafe Eneo C can be combined with commercially available profile cylinders and exterior hardware.

 A manual emergency operation of the door by means of a key, for example during power failure, is possible at any time.

3. Explanation of terms

Locking points: What is meant by locking points, is the main lock's faceplate and the additional locking points with which the door is securely locked.

Latched door: The door is closed over with the so-called latch in the main lock, however it is not locked. The latch is withdrawn by moving the door handle, and the door can be opened.

Locking the door: What is meant by locking, is that the closed (latched) door is secured by means of a non spring-loaded rigid bar that protracts from the main lock and/or additional locking points. All locking devices engage into corresponding recesses in the door frame, resp. strikers, lock casing etc.


Unlocking and releasing the door: Upon unlocking the door with DoorSafe Eneo C, all locking points and the latch are retracted. The latch is held for 3 seconds and then released again. This time can not be changed. While the latch is retracted, the floating contact is closed (e.g. for a revolving door drive mechanism).

Retracting the latch: The door is held closed (latched) only by the latch, upon receiving the signal "open the door" only the latch is retracted.

Night operation mode means, that DoorSafe Eneo C recognises the signal "door is closed" via a sensor (dry reed contact) upon closing the door and locks the door automatically after 2 seconds.

Day operation mode means, that DoorSafe Eneo C recognises the signal "door is closed" via a sensor (dry reed contact) upon closing the door, the door however is not locked (the door is only held closed by the latch).


Manual operation = emergency operation: A manual emergency operation, by means of locking and/or unlocking the door via the cylinder is possible at any time.

 If a manual operation has been carried out, DoorSafe Eneo C is to be brought back manually into the fully locked position via the cylinder, only then is an electromechanical operation again possible.

4. Operation and function

Locking the door:

Firstly lock the door, turning the key until the end stop (approx. 2 full turns), and then remove the key.

 Now the electromechanical operating mode is possible again!

DoorSafe Eneo C must be in the "night operation mode". As soon as the door is closed, an automatic locking of all locking points takes place. After approx. 2 seconds the locking procedure is completed.

Unlocking the door from the outside

Depending on the admission control system installed, unlocking can be triggered by means of hand-held transmitter, transponder, key pad, magnetic card, etc.

Unlocking the door from the inside

The signal "open the door" can be triggered by means of an admission control or a push-button switch.

5. Audible signals

1 x beep – Acknowledgement message: Command understood, procedure carried out correctly.

3 x short beep sound – Advisory message: Command understood, however DoorSafe Eneo C cannot carry out the command because the maximum number of cycles within the prescribed time unit has been exceeded.

3 x dual tone beep – Error prompt: The magnetic contact was broken during locking. Either somebody opened the door again during this time, or the magnet wasn't positioned/adjusted correctly.

3 x dual tone beep – Error prompt: The control unit detected an overcurrent in the motor and has stopped as a result.

4 x dual tone beep – Error prompt: The connecting rod's final position was not reached within the maximum permissible time of 3 seconds.

5 x dual tone beep – Advisory message: The hand-held transmitter's command shall be carried out but the hand-held transmitter's battery is soon dead.

6. Installation instructions



Check the gasket compression via the cylinder and the correct adjustment of the door after installation. It must be possible to fully lock the doorlock without exerting great effort. Before putting the DoorSafe Eneo C into operation, the lock is to be brought into the fully locked position via the cylinder.

7. Technical specifications

Power supply: 24 V DC ($\pm 5\%$), 1.5 A, SELV output current in accordance with EN 60950-1

Continuous current absorption: 25 mA

Peak current absorption: 1.5 A (peak 2.3 A)

Relative humidity: $\leq 93\%$

Outside temperature:

-25 up to +60 °C (Transport -25 up to +70 °C)

Standards: EN 60 730-1, EN 50090-2-2

Low voltage directives fulfilled, conforms to CE

Output relay load: max. 40 mA,

Free-wheeling diode for inductive load internally incorporated

Door commissioning

Before you connect up the DoorSafe Eneo C/ CR to the power supply the function must be checked – as with a mechanical multi-point locking system. The effort needed to activate the lever handle and the profile-cylinder key may not exceed the normal manual force.

The following steps are to be carried out while the power is switched off:

- **Check that the door has been installed correctly:** Check as to whether the door sash meets the frame and check the hardware and locking parts' smooth operation. Manually check the closing and opening function via both the lever handle and the key while the power is switched off.
- **The main lock is to be disengaged before commissioning.** The following steps are to be observed: Unlock the door completely. Lock the door, turn the key until the end stop (approx. 2 full turns) and then remove the key. The main lock is disconnected and an electro-mechanical operating mode is then possible.
- **The electromechanical operational test** can be carried out with the Eneo Control Unit.

V02+E/03, SRH 1900–2200 mm

E510 – Faceplate 16/3

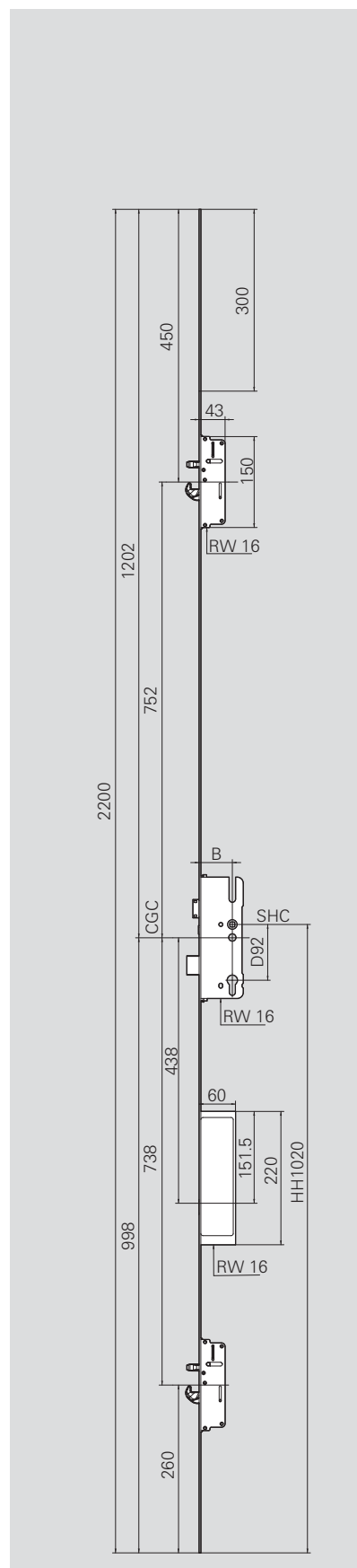
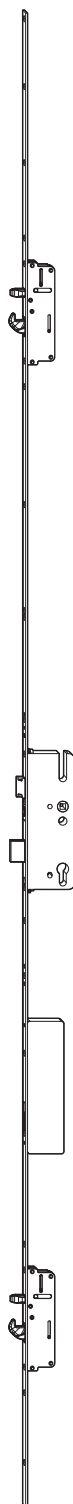
B	D	⊙	HH	SF	Mat. no.	PQ
55	92	8	1020	SL L	627333	1
				R	627334	1
55	92	10	1020	SL L	628020	1
				R	628021	1
65	92	10	1020	SL L	627331	1
				R	627332	1

E510 – Faceplate 20/3

B	D	⊙	HH	SF	Mat. no.	PQ
55	92	8	1020	SL L	633520	1
				R	633521	1
55	92	10	1020	SL L	633243	1
				R	633244	1
65	92	10	1020	SL L	627329	1
				R	627330	1

E510 – Faceplate U7x24

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	10	1020	SL L	633253	1
				R	633254	1



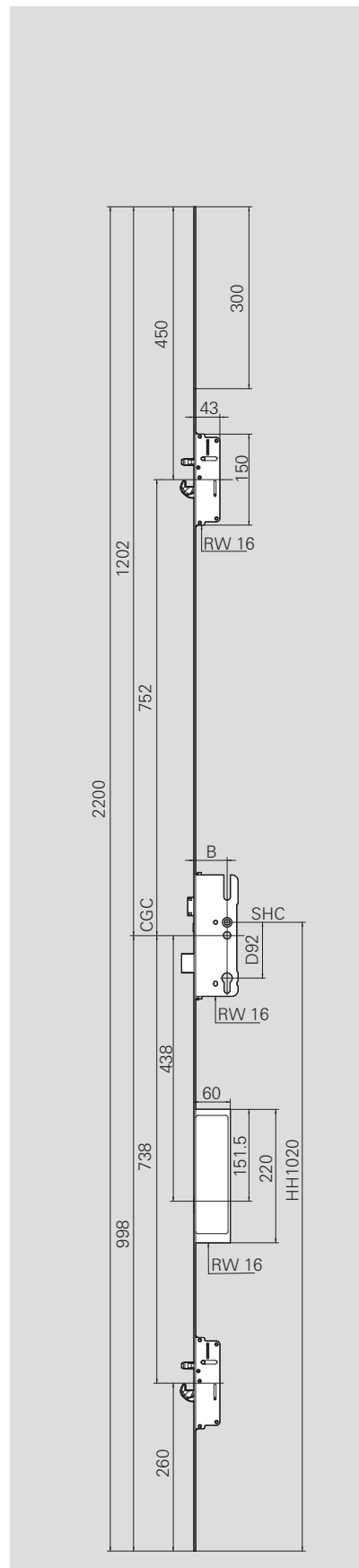
Components required: Cable junction • Access system • Cable • Magnetic striker

Delivery scope: E515 – Eneo CR, 1 power supply unit and 2 hand-held transmitters

V02+E/03, SRH 1900–2200 mm

E510 – Faceplate 24/6

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS L	633454	1
				R	633455	1



Components required: Cable junction • Access system • Cable • Magnetic striker

Delivery scope: E515 – Eneo CR, 1 power supply unit and 2 hand-held transmitters

Roto Door

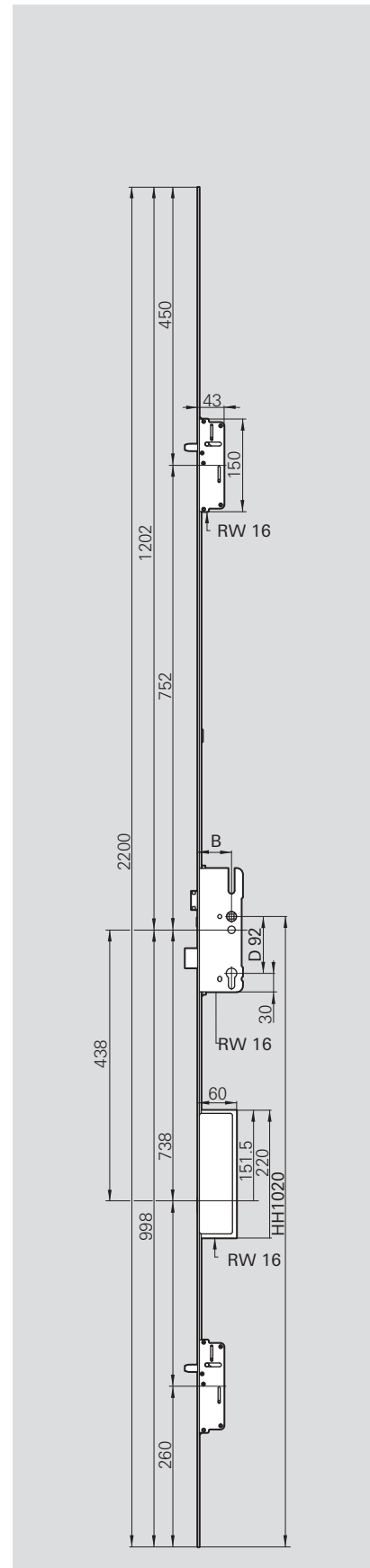
V02+E/03, SRH 1900–2200 mm

E510 – Faceplate 16/3

B	D	⊙	HH	SF	Mat. no.	PQ
55	92	10	1020	SL L	628016	1
				R	628017	1
65	92	10	1020	SL L	628018	1
				R	628019	1

E510 – Faceplate 20/3

B	D	⊙	HH	SF	Mat. no.	PQ
65	92	10	1020	SL L	629879	1
				R	629880	1



Components required: Cable junction • Access system • Cable • Magnetic striker

Delivery scope: E515 – Eneo CR, 1 power supply unit and 2 hand-held transmitters

With Roto DoorSafe E515 Eneo CR we offer the possibility of a radio-controlled Roto multi-point locking system. The technically mature system captivates with decisive advantages:

- The radio receiver is located in the drive unit.
- Maximum security against code scanning due to 66-bit coding and "rolling code system" (every individual unlocking procedure takes place with a new, automatically assigned code; the playback of a recorded code is therefore in vain).
- Very small, compact hand-held transmitter design.
- Frequency: 433.92 MHz
- Radio range: 10 metres with unobstructed view of the door and fresh battery.
- The radio communication license applies to the following countries: A, B, CH, D, DK, E, F, FIN, GB, GR, I, IRL, IS, L, LT, N, NL, P, S, CZ



Upon deciding to purchase a DoorSafe Eneo C, you receive an outstanding, electromechanical locking system for your main entrance-door. This system is supplied with the following components: 2 hand-held transmitters, 1 power supply unit. The 2 enclosed hand-held transmitters are already programmed in and tuned in to your radio receiver. That is to say, that this radio receiver can be operated exclusively with these two hand-held transmitters. Should you need additional hand-held transmitters, you can order these and programme them in to the radio receiver (refer to: programming in hand-held transmitters).

1. Operation with radio remote control

First step

Firstly lock the door, turning the key until the end stop (approx. 2 full turns), then remove the key. Only now is the electromechanical operation by means of radio-controlled remote control possible!

Unlocking and locking the main entrance-door

Press the button on the hand-held transmitter. The Eneo C is unlocked and the latch is retracted (the drive unit emits a short beep when the door is unlocked). You can now open the door and enter. The Eneo C automatically locks when the door is closed over (night operation mode). If the door is not opened in the unlocked status, it locks again automatically after approx. 3–5 seconds.

Day and night operation mode

Changing between day and night operation mode is carried out by means of a switch, connected to the drive unit's input 2.

2. Programming in the hand-held transmitters

You can of course purchase more if you need more than the 2 supplied tuned in hand-held transmitters. Up to 31 hand-held transmitters can be tuned in to the radio receiver.

The basic principle: The radio receiver comes with a specific code. Only when the radio receiver's code corresponds with that of the hand-held transmitter, does the receiver accept the radio transmitter's signals. You shall need the following to programme in a new hand-held transmitter:

1. A thin rod with max. 3 mm diameter to activate the Eneo C's learn button
2. A hand-held transmitter
3. Eneo C
4. A key that fits the profile cylinder

Programming in the hand-held transmitters

1. Unlock and open the door.
2. Lock the door-lock with the key while the door is open.
3. Below the sensor area (black PVC area) there is a hole in the faceplate. The 'radio learn key' is located behind this. This can only be operated when the Eneo C is locked. After having briefly pressed the button, a maximum 18 second long tone sequence is emitted. This indicates that Eneo C is in the learning mode.
4. The hand-held transmitter must be operated during the 18 seconds. When the Eneo C recognises the hand-held transmitter's signal, it stops the tone sequence at this point and then acknowledges the recognised signal with a 2 second beep.
5. Eneo C automatically quits the learning mode.
6. If more hand-held transmitters are to be programmed in, repeat steps 3 and 4.
7. Unlock the door-lock with the key and close the door.
8. Turn the key until the end stop (approx. 2 full turns), and then remove the key. Now electromechanical operation is possible again by means of the hand-held transmitter!

Deleting the hand-held transmitters

1. Carry out step 1 and 2 of "Programming in the hand-held transmitters". Then press the radio learn key for at least 10 seconds.
2. When the Eneo C recognises the radio learn key's signal, it acknowledges this with 2 short beeps in quick succession.
3. As a result all programmed hand-held transmitters are deleted. (It is not possible to delete individual hand-held transmitters.)
4. Eneo C automatically quits the deleting mode.

3. Emergency opening with the key

You can lock and unlock your entrance-door at any time using your key. It is imperative to adhere to the following: If you unlock the door with the key, the electromechanical operation is deactivated. If you want to reactivate the electromechanical operation, please proceed as follows:

Firstly lock the door, turning the key until the end stop (approx. 2 full turns), then remove the key. Now electromechanical operation is possible again by means of the hand-held transmitter!

More security for apartment buildings.

Security in apartment buildings begins at the main door. Often, only equipped with a simple lock and electrical opener, such main doors provide no security and make it easy for uninvited visitors to suddenly stand in front of your apartment door.

To prevent unwanted access to the house, Roto DoorSafe Eneo A is recommended. The multi-point locking system DoorSafe Tandeo provides a plus for convenience and safety. Via intercom system, the opening of the main entrance-door is possible at any time from any apartment – when closing, the door simply locks itself, completely automatically.

The Eneo A advantages:


- The lock can be unlocked (again) via intercom system
- Extremely short unlocking time
- Night-time locking
- Completely maintenance-free
- Installation according to plug-and-play principle; no short-circuit possible
- The 'Eneo Control Unit' is equipped with simple plug connections and facilitates straight-forward checking both in the factory and on the building site



**DoorSafe Tandeo –
the unique
2-in-1 lock for
improved security and
comfort.**


Roto Door

1. Safety instructions

 Installation and maintenance work may only be carried out by specialised electrical companies. One is at the risk of one's life when working with 230 Volt (respectively 115 Volt) mains voltage. All work may only be carried out when the power supply is switched off.

2. General description

DoorSafe Eneo A locks automatically, unlocking is carried out electronically or manually. DoorSafe Eneo A is suitable for apartment entrance-doors and main entrance-doors made from all door materials (timber, PVC and aluminium). Even existing doors can be retrofitted with the appropriate modification work on the door. DoorSafe Eneo A can be combined with commercially available profile cylinders and exterior hardware.

 A manual emergency operation of the door by means of a key, for example during power failure, is possible at any time.

3. Operation and function

Automatic locking (day-time locking)

Both additional locking points on the DoorSafe Eneo A consist in each case of a latch and a bolt that is integrated in the latch; the automatic bolt. When closing over the door, the latches snap into its strikers, using the same principle as on the latch in the main lock. In doing so the bolts are automatically activated and the door is locked with two additional locking points. This automatic locking system is already effective when you close over the door without locking it!

Additional key-locking with the key (night-time locking)

In order to completely lock the DoorSafe Eneo A, turn the key in the cylinder 360°. With this your door is locked.

Unlocking the door in the day-time locking mode from the outside

Depending on the admission control system installed, unlocking can be triggered by means of a transponder, key pad, magnetic card or manually via the cylinder.

Unlocking the door in the day-time locking mode from the inside


In the day-time locking mode, the door can be opened at any time via the lever handle. All three latches and the two additional locking point's automatic bolts are

withdrawn automatically.

When using the DoorMan a push-button switch is recommended (not included).

Unlocking the door in the night-time locking mode

By means of a 360° key operation in the cylinder, the main-lock's deadbolt is withdrawn. For additional procedures please refer to: Unlocking the door in the day-time locking mode.

 When the deadbolt is locked, the lock cannot be electronically opened!

4. Audible signals


1 x beep – Acknowledgement message: Command understood, procedure carried out correctly.

3 x short beep sound – Advisory message: Command understood, DoorSafe Eneo A cannot carry out the command, because the maximum number of cycles within the prescribed time unit has been exceeded.

3 x dual tone beep – Error prompt: The control unit detected an overcurrent in the motor and has stopped as a result.

4 x dual tone beep – Error prompt: The connecting rod's final position was not reached within the maximum permissible time of 3 seconds.

5. Installation instructions

 Upon installing the door, the functional clearance (3-5 mm) is to be checked. The deadbolt must be able to travel freely into the latch/deadbolt striker.

6. Technical specifications

Power supply: 24 V DC (±5%), 2.5 A, SELV output current in accordance with EN 60950-1

Continuous current absorption: 25 mA

Peak current absorption: 1.5 A (peak 2.3 A)

Relative humidity: ≤ 93%

Outside temperature:
–25 up to +60 °C (Transport –25 up to +70 °C)

Standards: EN 60 730-1, EN 50090-2-2

Low voltage directives fulfilled, conforms to CE

Faults	Cause	Rectification
The system does not work. Eneo A does not react, no acoustic signals	230 volt is not applied to the power supply unit on the primary side.	Electrical installation work must – as specified in the installation instructions – be carried out by qualified personnel.
	24 volt is not applied to the power supply unit's secondary side.	Check the clip contacts on the power supply unit.
	24 volt is not applied to the Eneo A.	Check the power supply line between the power supply unit and Eneo A and replace where deemed necessary.
	24 volt is applied to the Eneo A, however the +24 V/ GND (earth) are crossed.	Reverse the polarity of the power supply on the secondary side.
	Still not working?	– Switch off the power supply, wait 10 seconds and put it into operation again. – Test with the Eneo Control Unit. – Contact a specialist.
Eneo A does not lock automatically	The door is not completely closed.	Close the door completely, check the functional clearance.
Door does not unlock	No signal at the signal transmitter's output or no signal at Eneo A's input.	Check the settings and access control respectively. Please refer to the access control's operating instructions!
	Eneo A drive unit emits overcurrent error prompt Eneo A beeps x 3.	Unlock the deadbolt by means of the cylinder.
	Door or strikers not adjusted correctly (overcurrent error prompt: Eneo A beeps 3 x).	Adjust the door or strikers (refer to 5. Installation instructions).

Door commissioning:

Before you connect up the DoorSafe Eneo A to the power supply the function must be checked – as with a mechanical multi-point locking system. The effort needed to activate the lever handle and the profile-cylinder key may not exceed the normal manual force.

Checking the door has been installed correctly:

Check as to whether the door sash meets the frame and check the hardware and locking parts' smooth operation. Check the functional clearance (3–5 mm). Manually check the closing and opening function via both the lever handle and the key while the power is switched off.

V02+E/03, SRH 1900–2200 mm

E600 – Faceplate 16/3

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	SL	554150	1
40	92	8	1020	SL	554110	1
45	92	8	1020	SL	554108	1
55	92	8	1020	SL	554111	1
55	92	10	1020	SL	628024	1
65	92	10	1020	SL	628125	1

E600 – Faceplate 20/3

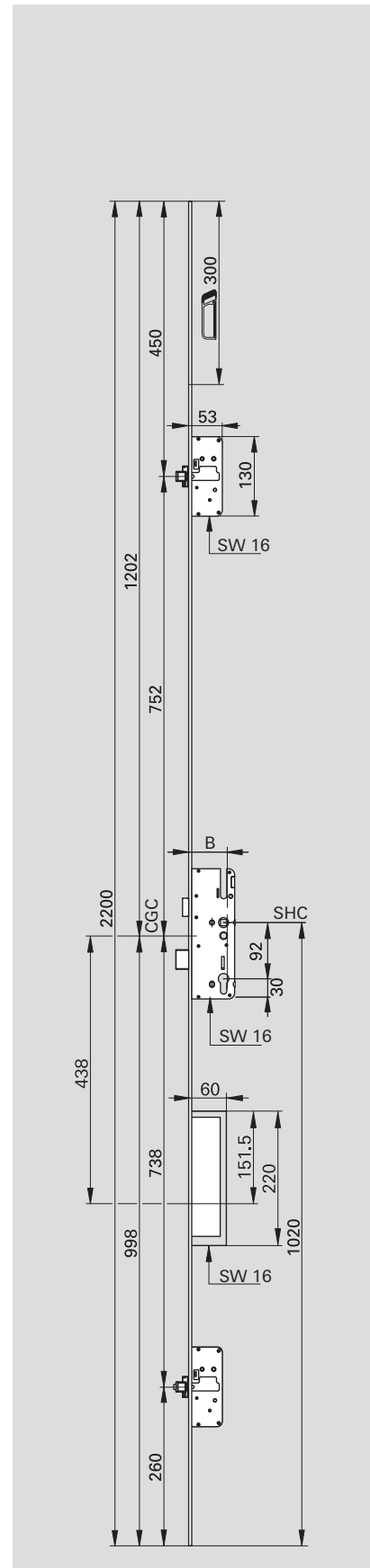
B	D	⊙	HH	SF	Mat. no.	PQ
45	92	8	1020	SL	554112	1
45	92	10	1020	SL	633238	1
55	92	8	1020	SL	554114	1
65	92	10	1520	SL	554145	1

E600 – Faceplate 24/3

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	8	1020	SL	632916	1
65	92	10	1020	SL	614199	1

E600 – Faceplate U7x24

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	SL	608517	1
45	92	8	1020	SL	554146	1



Components required:

Cable junction • Cable

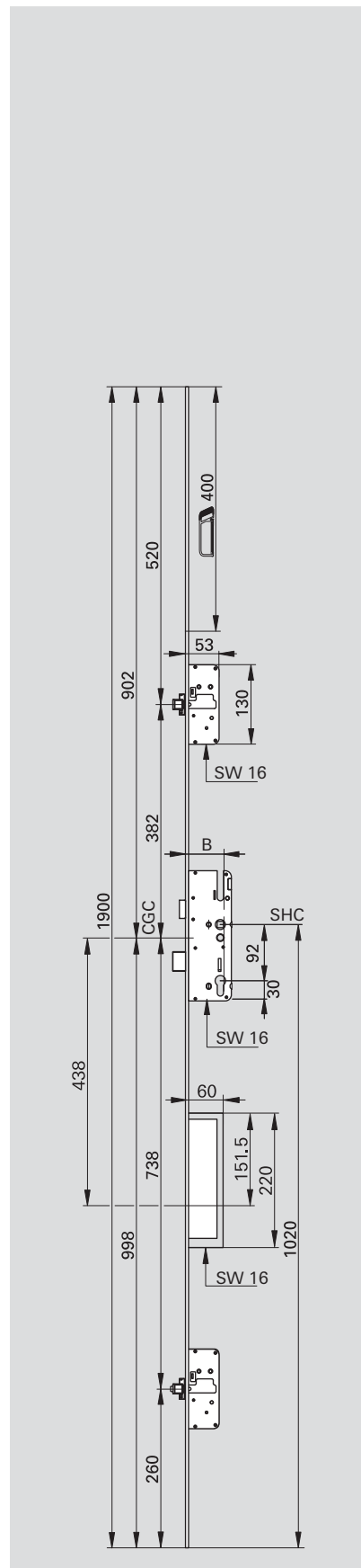
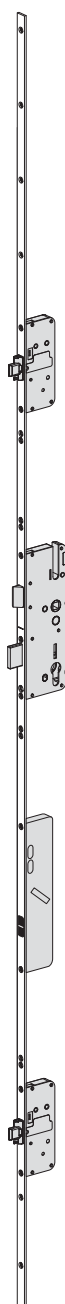
Delivery scope: E600 – Eneo A, 1 power supply unit

For strikers, refer to “frame components”

V02+E/05, SRH 1500 – 1900 mm

E600 – Faceplate 16/3

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	8	1020	SL	554147	1



Components required:

Cable junction • Cable

Delivery scope: E600 – Eneo A, 1 power supply unit

For strikers, refer to “frame components”

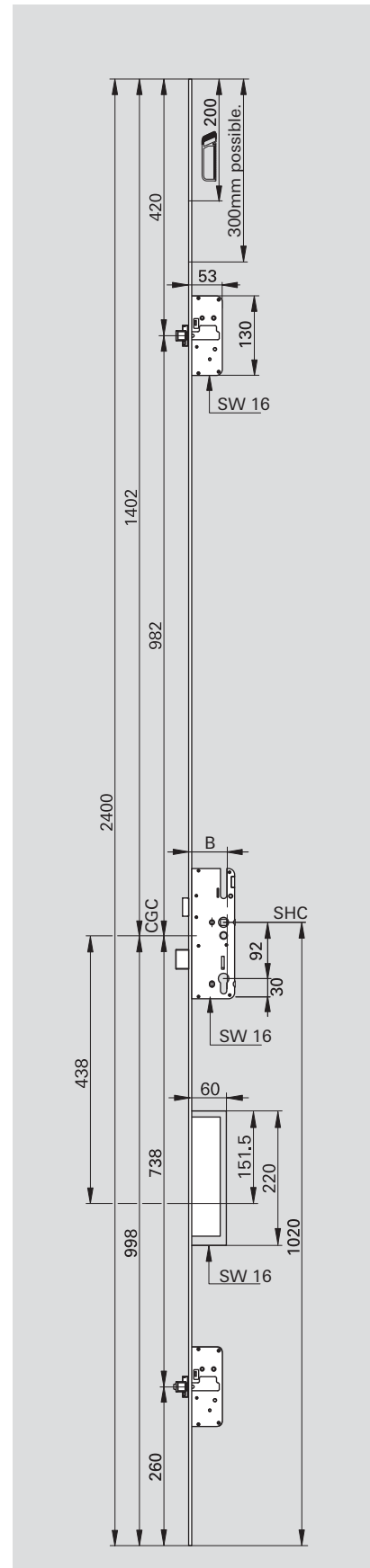
V02+E/07, SRH 2200-2400 mm

E600 – Faceplate 16/3

B	D	⊙	HH	SF	Mat. no.	PQ
55	92	8	1020	SL	554149	1

E600 – Faceplate 20/3

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	8	1020	SL	629205	1
45	92	10	1020	SL	633239	1
55	92	8	1020	SL	629206	1



Components required:

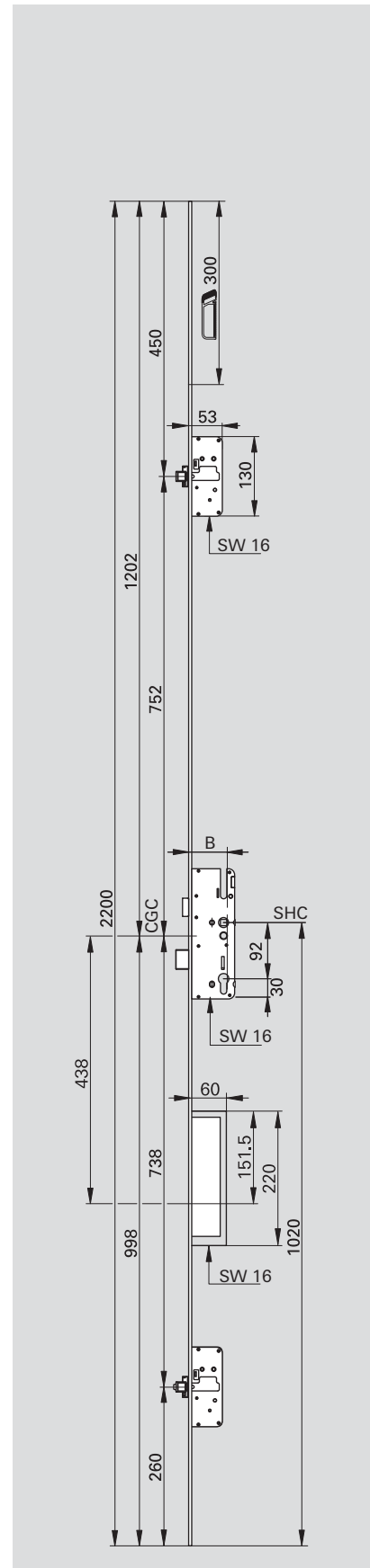
Cable junction • Cable

Delivery scope: E600 – Eneo A, 1 power supply unit

V02+E/03, SRH 1900–2200 mm

E600 – Faceplate 24/6

B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	STS	633453	1
45	92	8	1020	STS	633385	1



Components required:

Cable junction • Cable

Delivery scope: E600 – Eneo A, 1 power supply unit

For strikers, refer to “frame components”

Roto Door

V02+E/03, SRH 1900–2200 mm

E600 – Faceplate 16/3

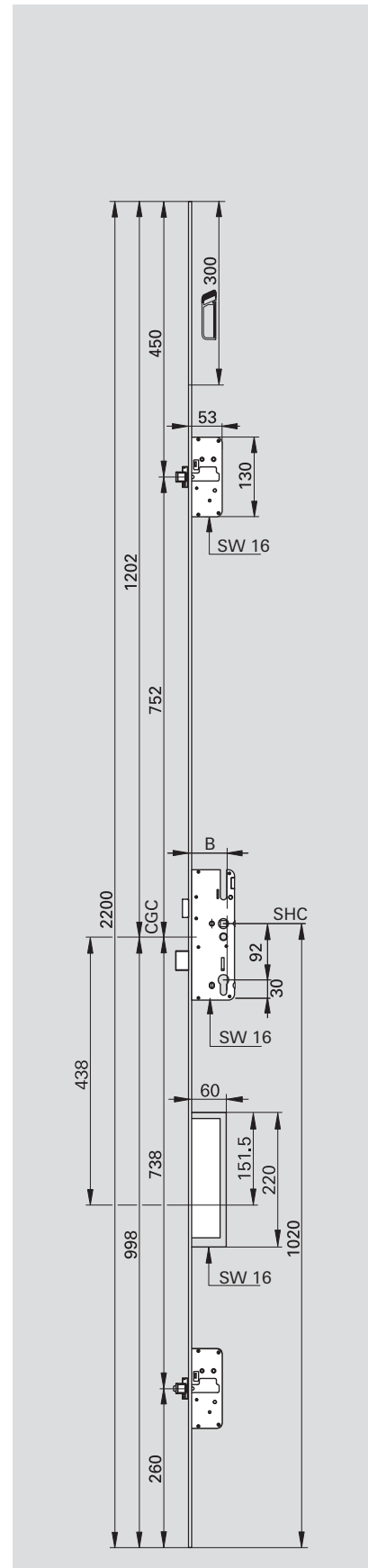
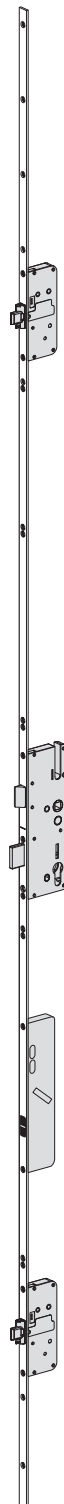
B	D	⊙	HH	SF	Mat. no.	PQ
35	92	8	1020	SL	599587	1
45	92	8	1020	SL	599586	1
55	92	8	1020	SL	599589	1

E600 – Faceplate 20/3

B	D	⊙	HH	SF	Mat. no.	PQ
65	92	10	1020	SL	599593	1

E600 – Faceplate U7x24

B	D	⊙	HH	SF	Mat. no.	PQ
45	92	8	1020	SL	599594	1



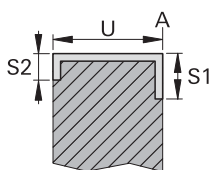
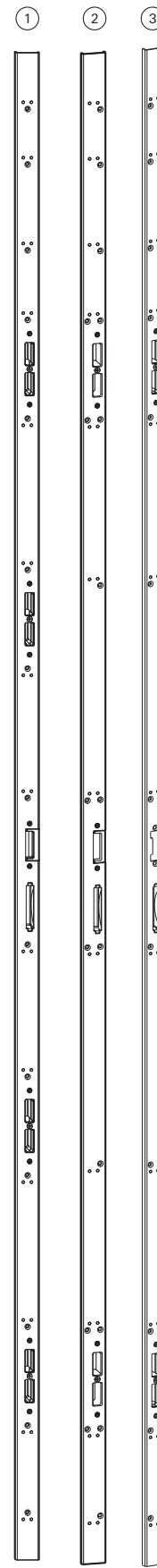
Components required:
 Power supply unit • Cable junction • Cable

Delivery scope: E600 – Eneo A

For strikers, refer to “frame components”

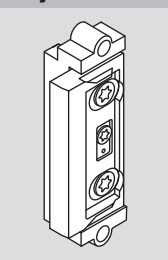
12 mm clearance, 24 mm rebate depth

Profile system Frame • Sash	A	Series	Description	Piece		Profile (U)	SF	Mat. no.	PQ
				S1	S2				
4 combination locks (4C) – V08/17 – faceplate length 2112 mm									
Alumil s95018-s95022 • s95004 s95018-s95026 • s95006 s95002 • s95004, s95006, s95032, s95030	11	AS 515	① 4C-0817 / L+DB / left	6.5	6.5	U24	SL	630044	10
			4C-0817 / L+DB / right	6.5	6.5		SL	630045	10
			1C-0817 / L+DB (may be extended)	6.5	6.5	U24	SL	630046	10
2 combination locks (2C) – V02/03 – faceplate length 2230 mm									
Alumil s95018-s95022 • s95004 s95018-s95026 • s95006 s95002 • s95004, s95006, s95032, s95030	11	AS 515	② 2C-0203 / L+DB / left	6.5	6.5	U24	STS	633332	10
			2C-0203 / L+DB / right	6.5	6.5		STS	633333	10
			③ 2C-0203 / L+DB / left	6.5	6.5	U24	STS	633334	10
			2C-0203 / L+DB / right	6.5	6.5		STS	633345	10
			2C-0203 / L+DB / left	6.5	6.5	U24	STS	633353	10
			2C-0203 / L+DB / right	6.5	6.5		STS	633354	10
<i>Extension 600 mm for striker strips</i>			2C-0203 / L+DB / left	6.5	6.5	U24	STS	633375	10
			2C-0203 / L+DB / right	6.5	6.5		STS	633376	10



- A = Striker axis
- SL = RotoSil
- W = White
- B = Brown
- AL = Grey / Aluminium (RAL 9007)

Adjustable latch receiver (only applicable with E-opener striker)



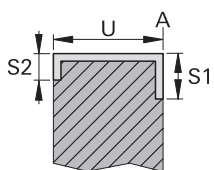
Axis dimension	SF	Mat. no.	PQ
8,5-11,5mm	SL	311013	10
12-14,5mm	SL	311014	10
15-16,5mm	SL	311015	10

Roto Door

12 mm clearance, 24 mm rebate depth

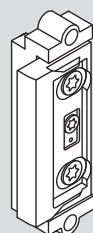
Profile system Frame • Sash	A	Series	Description	Piece		Profile (U)	SF	Mat. no.	PQ
				S1	S2				
2 combination locks + magnet – V02/03 – faceplate length 2230 mm									
Alumil	11	AS 515	2C+M-0203 / EO+DB / left	6.5	6.5	U24	STS	633461	10
s95018-s95022 • s95004 s95018-s95026 • s95006 s95002 • s95004, s95006, s95032, s95030			① 2C+M-0203 / EO+DB / right	6.5	6.5		STS	633462	10

①



- A = Striker axis
- SL = RotoSil
- W = White
- B = Brown
- AL = Grey / Aluminium (RAL 9007)

Adjustable latch receiver (only applicable with E-opener striker)

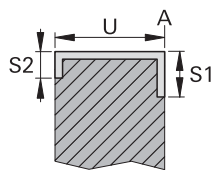


Axis dimension	SF	Mat. no.	PQ
8.5–11.5 mm	SL	311013	10
12–14.5 mm	SL	311014	10
15–16.5 mm	SL	311015	10

12 mm clearance, 24 mm rebate depth

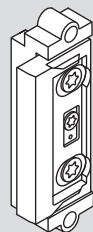
Profile system Frame • Sash	A	Series	Description	Piece		Profile (U)	SF	Mat. no.	PQ
				S1	S2				
2 automatic bolts – V02/03 – faceplate length 2230 mm									
Alumil s95018-s95022 • s95004 s95018-s95026 • s95006 s95002 • s95004, s95006, s95032, s95030	11	AS 515	① 2A-0203 / L+DB / left	6.5	6.5	U24	SL	627213	10
			2A-0203 / L+DB / right	6.5	6.5		SL	627214	10
			2A-0203 / L+DB / left	6.5	6.5	U24	STS	633386	10
			2A-0203 / L+DB / right	6.5	6.5		STS	633387	10

①

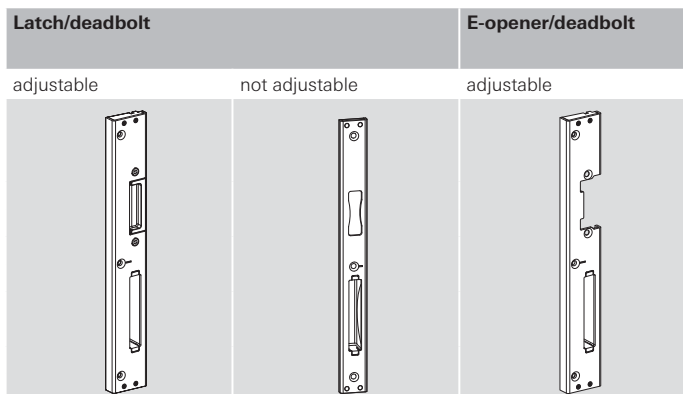


- A = Striker axis
- SL = RotoSil
- W = White
- B = Brown
- AL = Grey / Aluminium (RAL 9007)

Adjustable latch receiver (only applicable with E-opener striker)




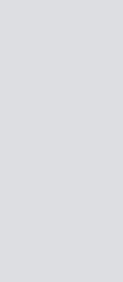
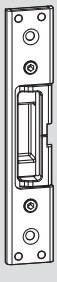

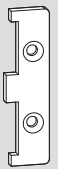
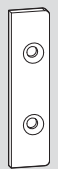
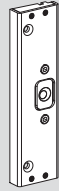
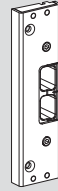
Axis dimension	SF	Mat. no.	PQ
8.5–11.5 mm	SL	311013	10
12–14.5 mm	SL	311014	10
15–16.5 mm	SL	311015	10

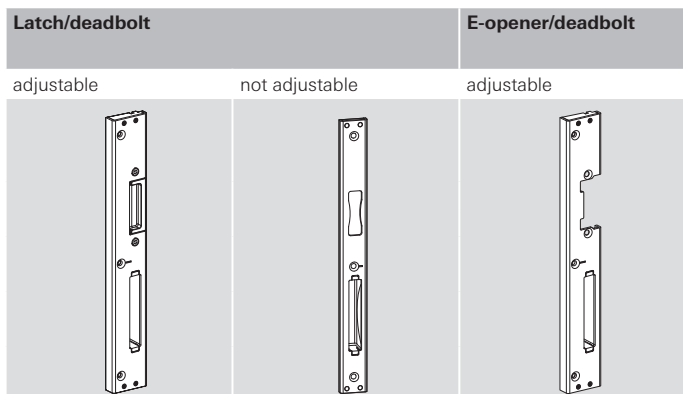


A = Axis dimension in mm – () axis dimension striker
 SF = Surface-finish
 SL = RotoSil Nano
 STS = Stainless steel
 W = White (RAL 9016)

Packaging unit: 50 pieces

Profile system										
Frame • Sash	A	Series	SF	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.
Aliplast Imperial IP 014, IP 015 • IP 024, IP 025	35 (13)	AS 441	SL	L 616374	R 616405					
Aliplast Ecofutural EF 011 • EF 723 Aliplast Imperial IP 011 • IP 723	10 (8.5)	AS 469	SL	L 616407	R 616408					
Alumil 11084 • 11082	20.9 (11.5)	AS 456	STS	L 611014	R 611015	L 611025	R 611026	L 611018	R 611019	
Alumil 11154 • 11084	41.5 (11.5)	AS 456	STS			L 611016	R 611017			
Alumil 11162 • 11084	41.5 (11.5)	AS 456	STS			L 611016	R 611017			
Alumil 62564 • 11082	20.7 (11.5)	AS 456	STS	L 611014	R 611015	L 611025	R 611026	L 611018	R 611019	
Alumil 62564 • 11082	20.7 (11.5)	AS 456	SL	L 630030	R 630031					
Alumil s95002 • s95004, s95006, s95030, s95032	24.5 (12)	AS 515	STS	L 633382	R 633383			L 633456	R 633457	
Aluminco	23.2 (11.5)	AS 458	STS	L 611039	R 611040	L 611047	R 611048	L 611041	R 611042	
Aluprof MB K518055X • K518083X	21.8 (11.5)	AS456	STS	L 611014	R 611015	L 611025	R 611026	L 611018	R 611019	
Aluprof MB K518056X • K518084X	38.2 (11.5)	AS456	STS			L 611016	R 611017			
Aluprof MB K518114X • K518105X	21.8 (11.5)	AS 456	STS	L 611014	R 611015	L 611025	R 611026	L 611018	R 611019	
Aluprof MB K518115X • K518106X	48.2 (11.5)	AS456	STS			L 611016	R 611017			
Aluset 52109 • 52204	10.3 (10)	AS 457	STS	L 611028	R 611029	L 611036	R 611037	L 611030	R 611031	
Aluset 52316 • 52204	11.1 (10)	AS 457	STS	L 611028	R 611029	L 611036	R 611037	L 611030	R 611031	
Brisa	9 (8.5)	AS 309	SL	L 562856	R 562858			L 562859	R 562860	
Clima	13 (11.5)	AS 342	SL	L 469365	R 469366			L 469367	R 469368	
EPAL 18501 • 18507	14 (13)	AS 526	SL	L 630931	R 630932					
Gutmann 270181 • 270281	47.8 (11.5)	AS 455	STS			L 611002	R 611003			
Gutmann 270181 • 270281	47.8 (11.5)	AS 455	STS			L 611011	R 611012			
Gutmann 270385 • 270281	47.8 (11.5)	AS 455	STS			L 611002	R 611003			
Gutmann 270387, 270180 • 270280	22.2 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005	








Combination striker Bolt - power wedge		Automatic striker		Latch-slide for strikers		Magnetic striker	Shootbolt protrusion
adjustable	not adjustable	adjustable	not adjustable	adjustable	not adjustable	adjustable	adjustable
							
Material no.	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.
611023	611024	611021	611022	613588	619557	611027	
		611021	611022	613588	619557		
611023	611024					611027	
630043		630032					
633384		633458					633346
611045	611046					611049	
611023	611024					611027	
		611021	611022	613586	619464		
611023	611024					611027	
		611021	611022	613589	619558		
611034	611035					611038	
611034	611035					611038	
630933							
		611007		613589			
			611008		619558		
		611007	611008	613589	619558		
611009	611010					611013	

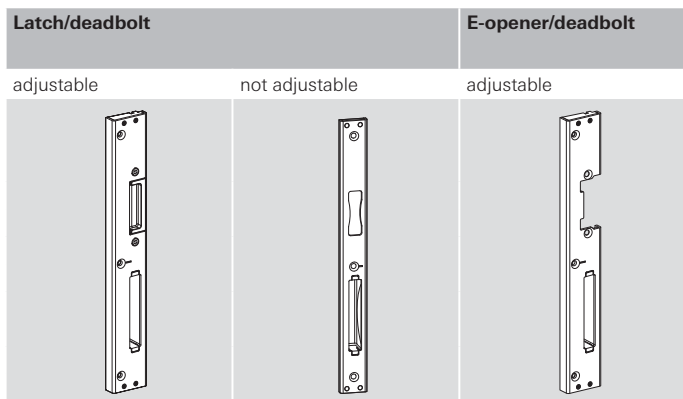


A = Axis dimension in mm – () axis dimension striker
 SF = Surface-finish
 SL = RotoSil Nano
 STS = Stainless steel
 W = White (RAL 9016)

Packaging unit: 50 pieces

Profile system	A	Series	SF	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.
Frame • Sash									
Heroal 9023 • 9081	23.1 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
Heroal 9080 • 9181	23 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
Heroal 9096 • 9081	22.9 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
Heroal 9184 • 9082	58.5 (11.5)	AS 455	STS			L 611002	R 611003		
Heroal 9380 • 9381	23 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
Heroal 9324 • 9381	23 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
Heroal 9358 • 9381	23 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
Heroal 9380 • 9481	23 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
Heroal 15079 • 15082	48.5 (11.5)	AS 455	STS			L 611002	R 611003		
Heroal 110 ES 15479 • 15493	49 (11.5)	AS 307	SL	L 449827	R 449828			L 449829	R 449830
Heroal 110 ES 15480 • 15481	23 (11.5)	AS 307	SL	L 449827	R 449828			L 449829	R 449830
Kawneer Kalory AA765 br_Kalory AA765 • FI_Kalory AA765	9 (8.5)	AS 501	STS	L 633116	R 633117				
Metales Extruidos KL 13 ter17 • ter57	13 (12.5)	AS 471	SL	L 617118	R 617119			L 617120	R 617121
MKF 770132 • 770134	21.4 (11.5)	AS 456	STS	L 611014	R 611015	L 611025	R 611026	L 611018	R 611019
MKF 770133 • 770135	50.5 (11.5)	AS 456	STS			L 611016	R 611017		
MKF 773175 • 770135	50.5 (11.5)	AS 456	STS			L 611016	R 611017		
MKF 773175_1 • 770134	21.4 (11.5)	AS 456	STS	L 611014	R 611015	L 611025	R 611026	L 611018	R 611019
MKF	51 (11.5)	AS 456	STS			L 611016	R 611017		
Reynaers 1080869 • 1081014	54.5 (11.5)	AS 455	STS			L 611002	R 611003		
RP-System RP002 • RP004	12.1 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
RP-System RP008 • RP004	12.1 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
RP-System RP002 • RP006	12.1 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005







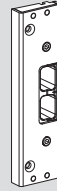
Combination striker Bolt – power wedge		Automatic striker		Latch-slide for strikers		Magnetic striker	Shootbolt protrusion		
adjustable	not adjustable	adjustable	not adjustable	adjustable	not adjustable	adjustable	adjustable		
									
Material no.	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.		
611009	611010					611013			
611009	611010					611013			
611009	611010					611013			
		611007	611008	613589	619558				
611009	611010					611013			
611009	611010					611013			
611009	611010					611013			
611009	611010					611013			
		611007	611008	613589	619558				
633448									
633448									
633118									
611023	611024					611027			
		611021	611022	613590	619559				
		611021	611022	613590	619559				
611023	611024					611027			
		611021	611022	613590	619559				
		611007	611008	613641	619561				
611009	611010					611013			
611009	611010					611013			
611009	611010					611013			

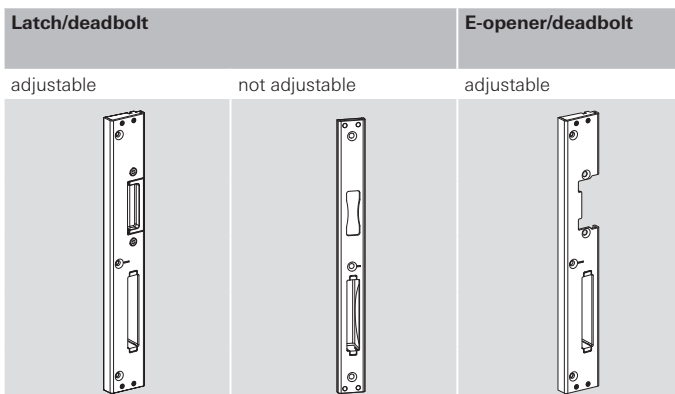


A = Axis dimension in mm – () axis dimension striker
 SF = Surface-finish
 SL = RotoSil Nano
 STS = Stainless steel
 W = White (RAL 9016)

Packaging unit: 50 pieces

Profile system	A	Series	SF	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.
Frame • Sash									
RP-System RP008 • RP006	12.1 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
RP-System RP002 • RP022	14.8 (14.5)	AS 459	STS	L 611050	R 611051	L 611058	R 611059	L 611052	R 611053
RP-System RP008 • RP022	14.8 (14.5)	AS 459	STS	L 611050	R 611051	L 611058	R 611059	L 611052	R 611053
Sapa 32k82 • 32v12	22.5 (11.5)	AS 456	STS	L 611014	R 611015	L 611025	R 611026	L 611018	R 611019
Sapa Duo 75 High Performance Door DF305 • DF421	23 (20)	AS 637	SL	L 469623	R 469624				
Schüco 167030 • 167050	22.5 (11.5)	AS 307	SL	L 449827	R 449828			L 449829	R 449830
Schüco 167030 • 167050	22.3 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
Schüco 167040 • 167060	42.7 (11.5)	AS 455	STS	L 449827	R 449828	L 611002	R 611003	L 449829	R 449830
SYKON	22 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
VERALU	14 (13)	AS 530	STS	L 629761	R 629762			L 629763	R 629764
Yawal Aludoor T74 08.14067 • 08.24078	21.5 (11.5)	AS 307	SL	L 449827	R 449828			L 449829	R 449830
Yawal Aludoor T74 08.14053 • 08.24092	22 (11.5)	AS 307	SL	L 449827	R 449828			L 449829	R 449830
YAWAL-TM 04.11065.x • 04.24078.x	21.6 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 04.11077.x • 04.24078.x	21.6 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 04.14067.x • 04.24078.x	21.6 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 04.31090.x • 04.24078.x	21.6 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 04.31102.x • 04.24078.x	21.6 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 04.14067.x • 04.24084.x	21.6 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 08.14067.x • 08.24078.x	21.8 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 08.24092.x • 08.24078.x	21.8 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 08.24078.x • 08.31090.x	21.8 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 08.24078.x • 08.24078.x	23.4 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005






Combination striker Bolt - power wedge		Automatic striker		Latch-slide for strikers		Magnetic striker	Shootbolt protrusion
adjustable	not adjustable	adjustable	not adjustable	adjustable	not adjustable	adjustable	adjustable
							
Material no.	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.
611009	611010					611013	
611056	611057					611060	
611056	611057					611060	
611023	611024					611027	
633448							
611009	611010					611013	
		611007	611008	613641	619561		
611009	611010					611013	
629785							
633448							
633448							
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	



A = Axis dimension in mm – () axis dimension striker
 SF = Surface-finish
 SL = RotoSil Nano
 STS = Stainless steel
 W = White (RAL 9016)

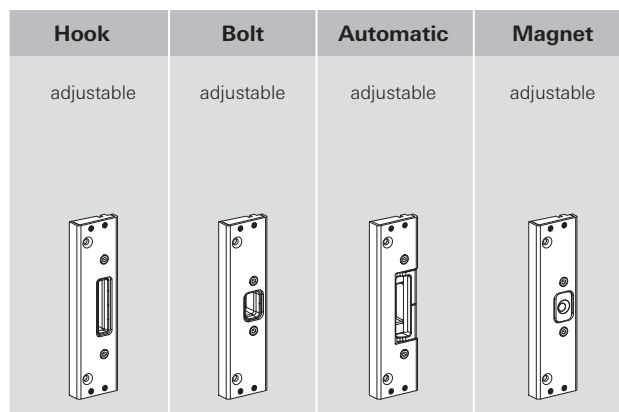
Packaging unit: 50 pieces

Profile system	A	Series	SF	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.
Frame • Sash YAWAL-TM 08.14067.x • 08.24084.x	21.8 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 08.24098.x • 08.24084.x	21.8 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 04.14074.x • 04.24089.x	25.2 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 04.14074.x • 04.24103.x	25.2 (11.5)	AS 455	STS	L 610990	R 610991	L 611011	R 611012	L 611004	R 611005
YAWAL-TM 04.14053.x • 04.24092.x	40.6 (11.5)	AS 455	STS			L 611002	R 611003		
YAWAL-TM 04.14053.x • 04.24098.x	40.6 (11.5)	AS 455	STS			L 611002	R 611003		
YAWAL-TM 04.24078.x • 04.24092.x	40.6 (11.5)	AS 455	STS			L 611002	R 611003		
YAWAL-TM 04.24084.x • 04.24098.x	40.6 (11.5)	AS 455	STS			L 611002	R 611003		
YAWAL-TM 04.82050.x • 04.24092.x	40.6 (11.5)	AS 455	STS			L 611002	R 611003		
YAWAL-TM 08.14053.x • 08.24092.x	52.6 (11.5)	AS 455	STS			L 611002	R 611003		
YAWAL-TM 08.14053.x • 08.24098.x	52.6 (11.5)	AS 455	STS			L 611002	R 611003		

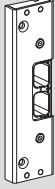
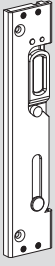
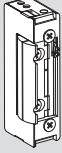
Combination striker Bolt - power wedge		Automatic striker		Latch-slide for strikers		Magnetic striker	Shootbolt protrusion
adjustable	not adjustable	adjustable	not adjustable	adjustable	not adjustable	adjustable	adjustable
							
Material no.	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.	Material no.
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	
611009	611010					611013	
		611007	611008	613592	619556		
		611007	611008	613592	619556		
		611007	611008	613592	619556		
		611007	611008	613592	619556		
		611007	611008	613591	619560		
		611007	611008	613591	619560		

A = Axis dimension in mm – () axis dimension striker
 SF = Surface-finish
 SL = RotoSil Nano
 STS = Stainless steel
 W = White (RAL 9016)

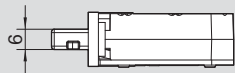
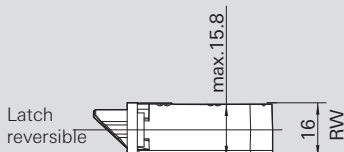
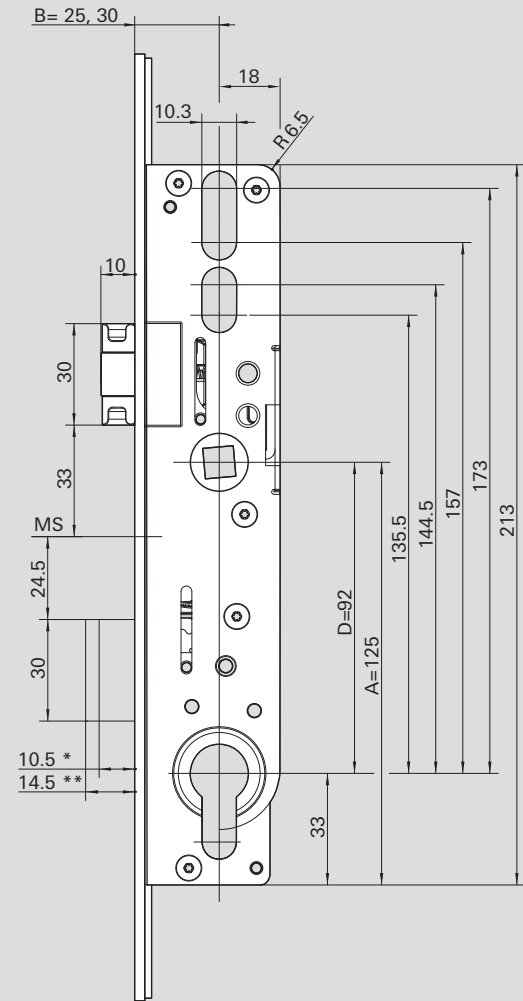
Packaging unit: 50 pieces



Profile system	A	Series	SF	Material no.	Material no.	Material no.	Material no.
Frame • Sash Aliplast Imperial IP 014, IP 015 • IP 024, IP 025	35 (13)	AS 441	SL		616406		
Aliplast Ecofutural EF 011 • EF 723 Aliplast Imperial IP 011 • IP 723	10 (8.5)	AS 469	SL	616409			
Brisa	9 (8.5)	AS 309	SL				
Clima	13 (11.5)	AS 342	SL	469369			
Heroal 110 ES 15479 • 15493	49 (11.5)	AS 307	SL	478333	449831	478288	478334
Heroal 110 ES 15480 • 15481	23 (11.5)	AS 307	SL				
Sapa Duo 75 High Performance Door DF305 • DF421	23 (20)	AS 637	SL	469755			
Schueco 167030 • 167050	22.5 (11.5)	AS 307	SL	478333	449831	478288	478334
Schueco 167040 • 167060	42.5 (11.5)	AS 307	SL	478333	449831	478288	478334
Metales Extruidos KL 13 ter17 • ter57	13 (12.5)	AS 471	SL	617122	617123	617124	
Yawal Aludoor T74 08.14067 • 08.24078	21.5 (11.5)	AS 307	SL	478333	449831	478288	478334
Yawal Aludoor T74 08.14053 • 08.24092	22 (11.5)	AS 307	SL	478333	449831	478288	478334

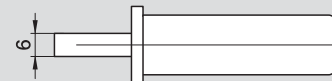
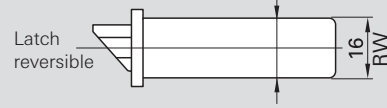
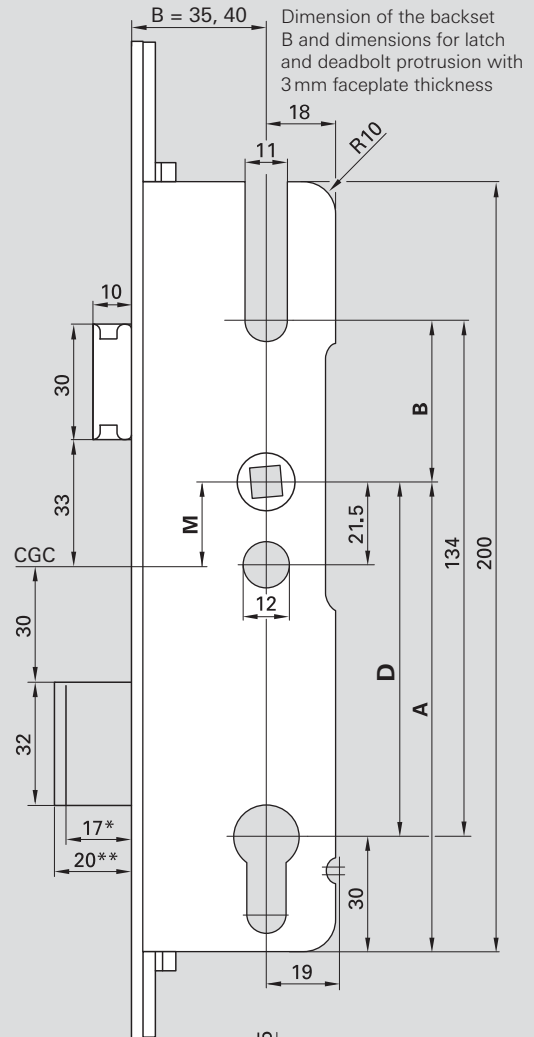
Shootbolt protrusion	ID latch		E-opener
adjustable			
			
Material no.	Material no.	Material no.	Model
			E 17R
			E 17R
			E 17R
			E 20R, E 20RD
	L 536462	R 536463	E 17R
	L 536462	R 536463	E 17R
	L 536462	R 536463	E 17R
	L 536462	R 536463	E 17R
617125			
	L 536462	R 536463	E 17R
	L 536462	R 536463	E 17R

C600 main lock B 25, 30



* with backset 25
** with backset 30

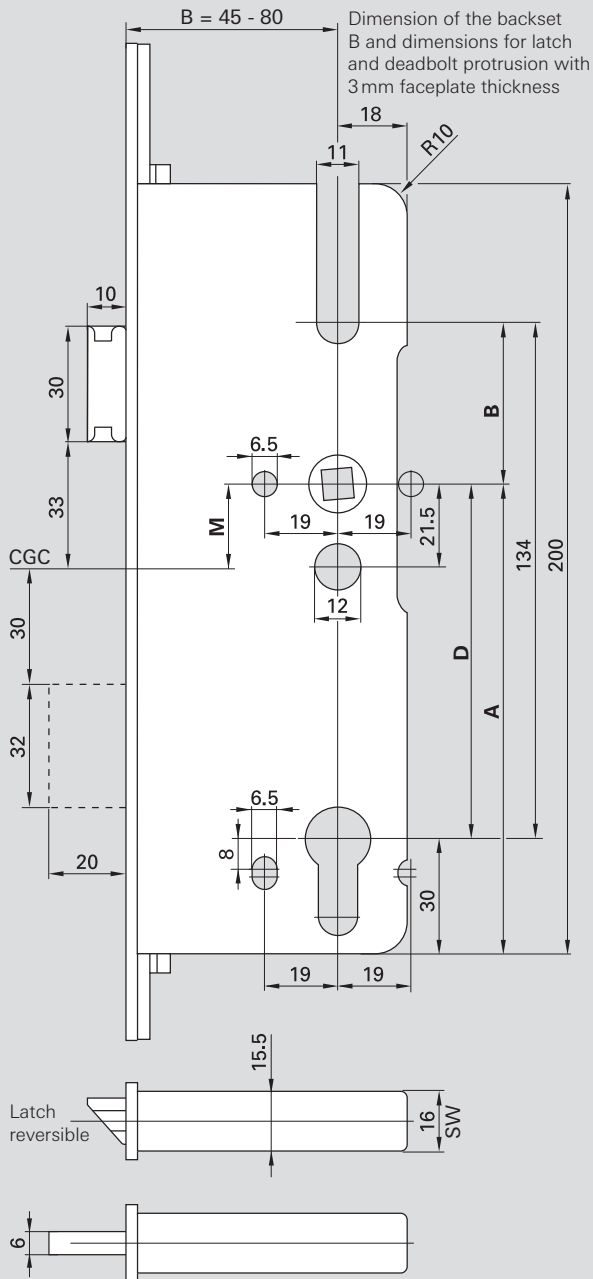
C500 main lock B 35, 40



* with backset 35
** with backset 40

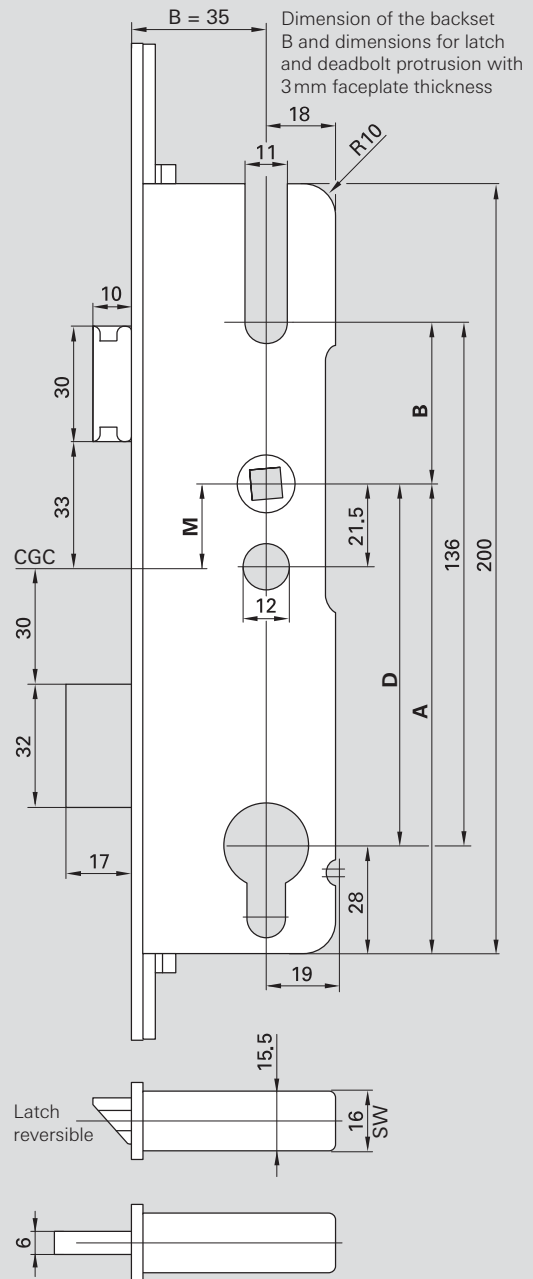
D	A	B	M
85	115	49	15
88	118	46	18
92	122	42	22

C500 main lock from B 45



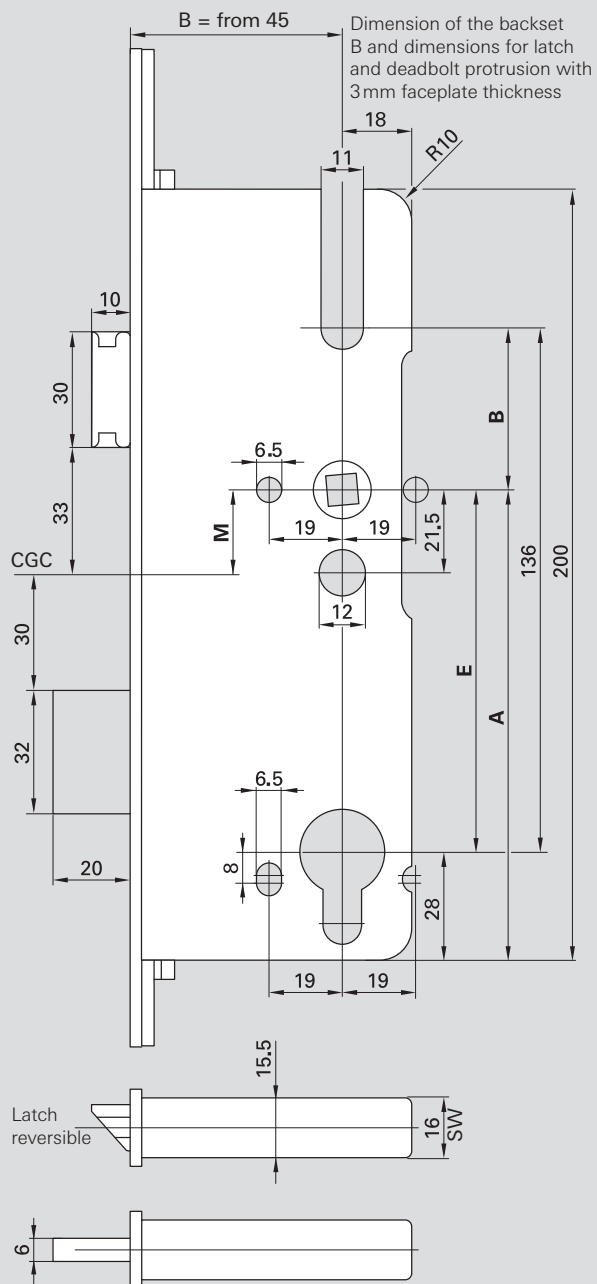
Backset						D	A	B	M
45	50	55	65	70	80				
-	-	•	•	•	•	72	102	62	2
•	•	•	•	•	•	85	115	49	15
•	•	•	•	•	•	88	118	46	18
•	-	-	-	-	-	90	120	44	20
•	•	•	•	•	•	92	122	42	22

C500 main lock B 35 - round cylinder



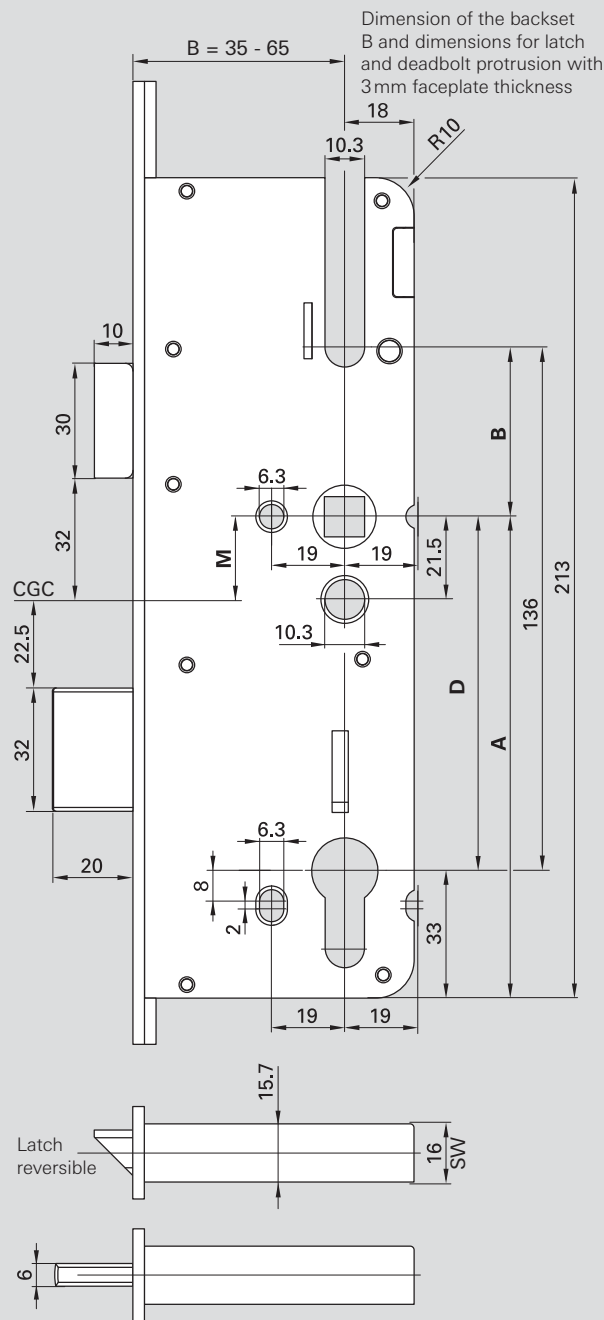
D	A	B	M
94	122	42	22

C500 main lock from B 45 – round cylinder



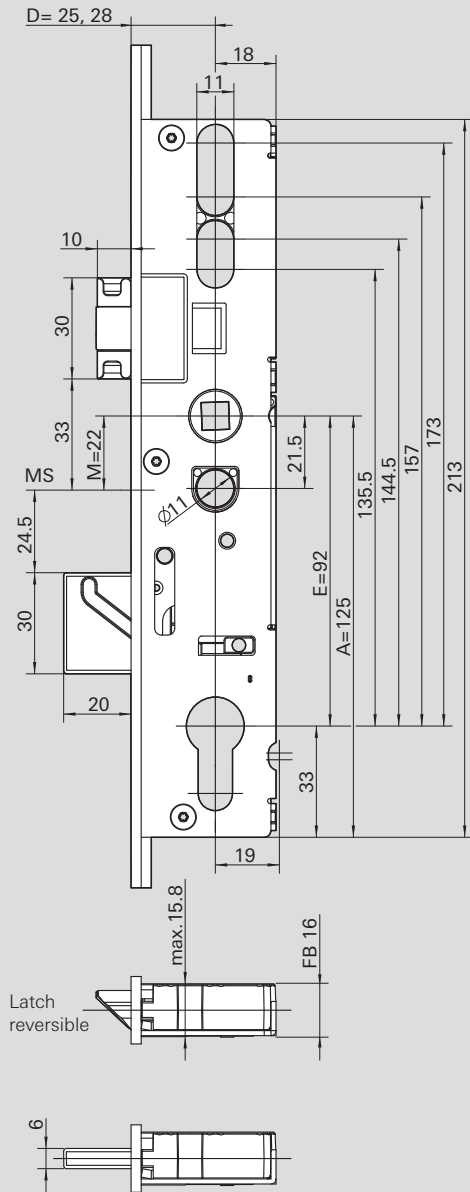
Backset			D	A	B	M
45	55	65				
•	•	•	94	122	42	22

C600 – Main lock Tandeo B 35–65

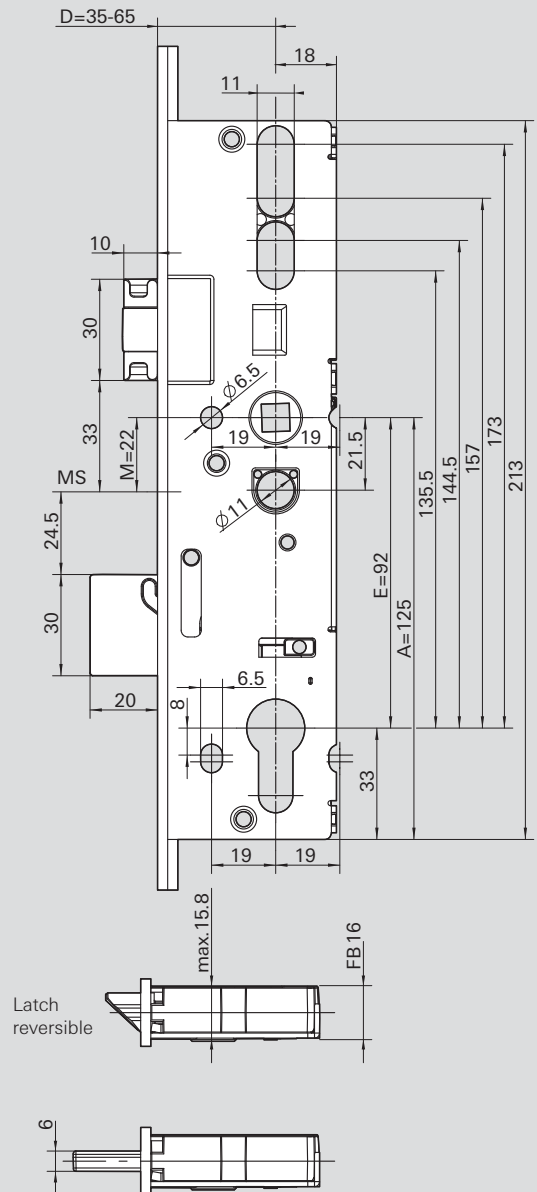


Backset						D	A	B	M
35	40	45	50	55	65				
•	•	•	•	•	•	85	118	51	15
•	•	•	•	•	•	92	125	44	22

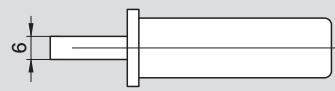
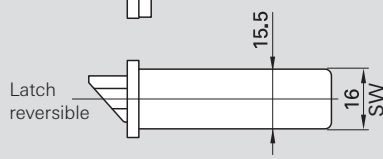
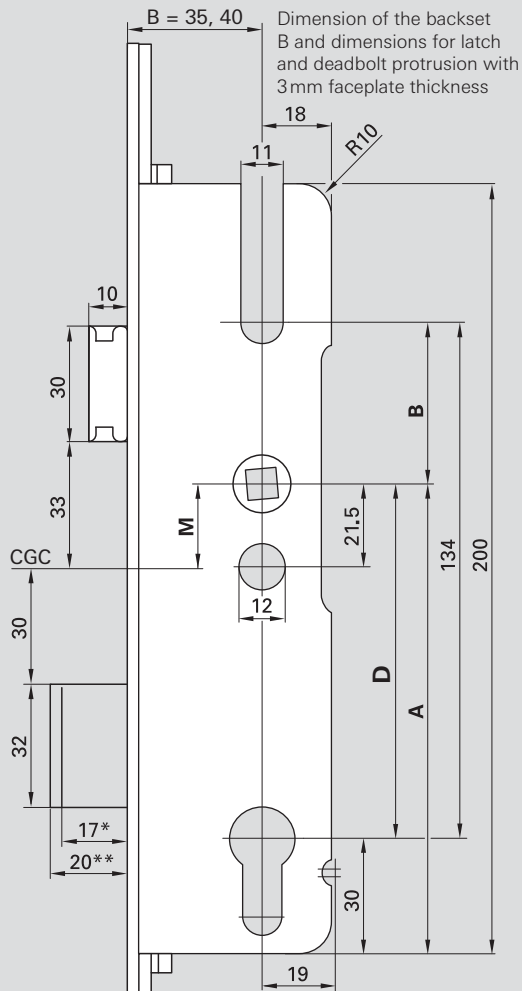
H600 Main lock B 25, 28



H600 Main lock B 35 – 65



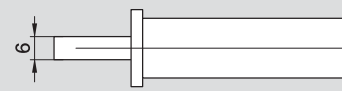
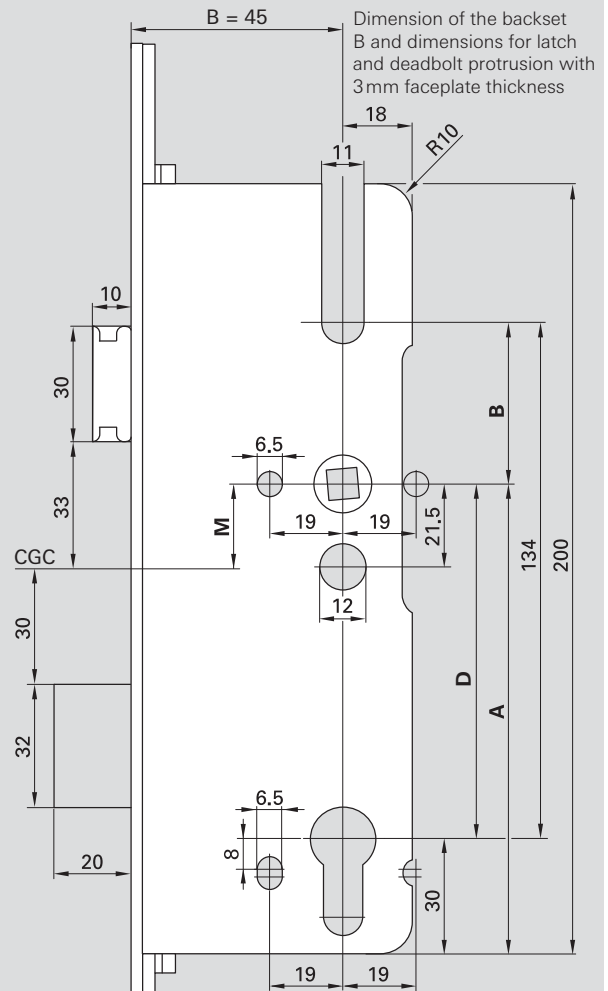
P600/P650 main lock B 35, 40



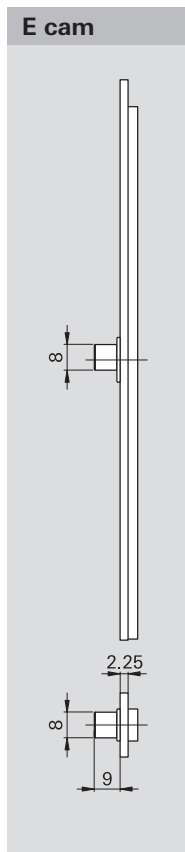
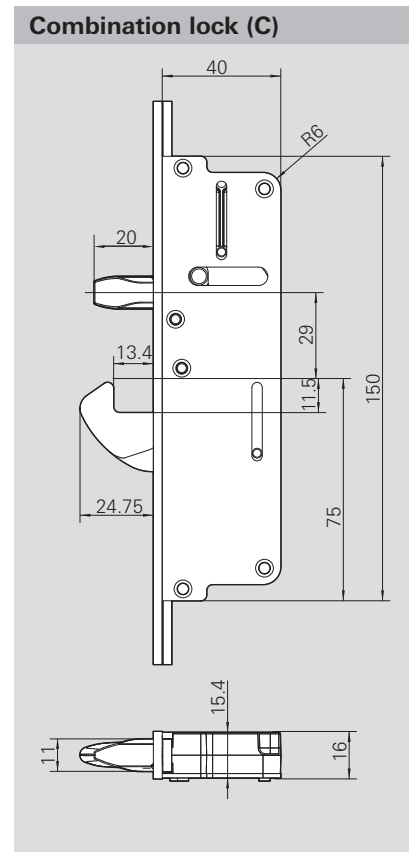
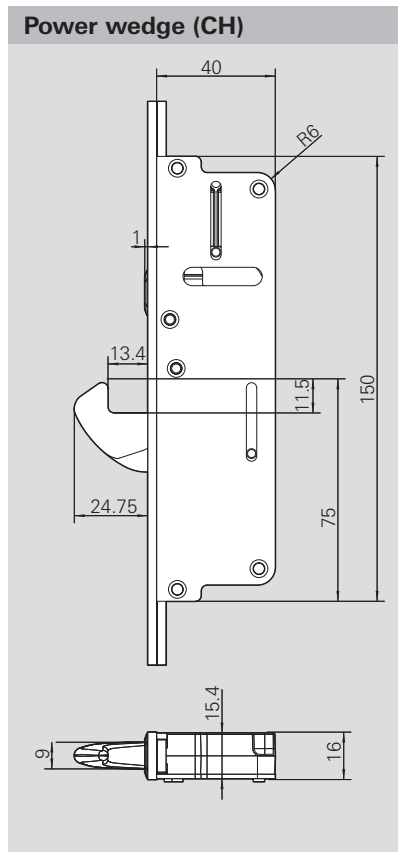
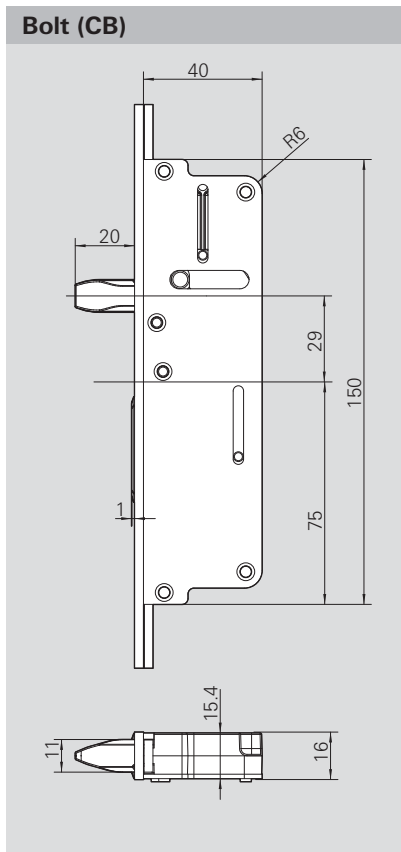
* with backset 35
** with backset 40

D	A	B	M
92	122	42	22

P600/P650 main lock B 45



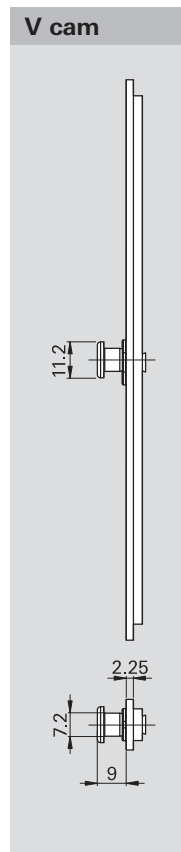
D	A	B	M
92	122	42	22



Adjustment instructions E cam

Adjustable with an Allen key (4mm)

Adjustment range in °	Gasket-compression adjustment in mm
Basic setting	+/- 0.8
90°	90°

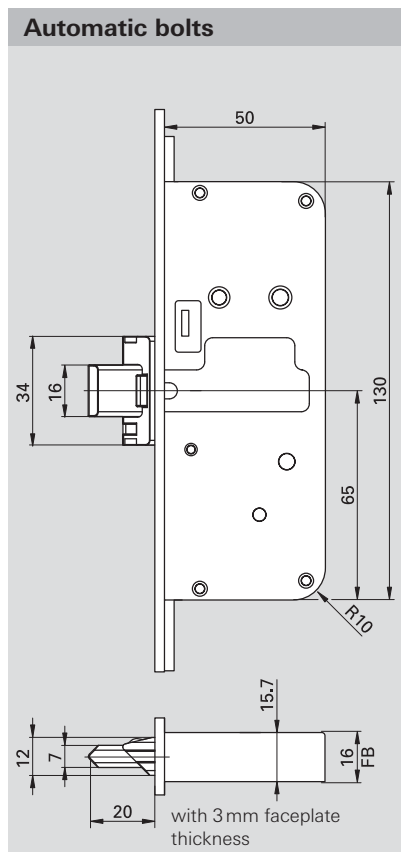


Adjustment instructions V cam

Adjustable with an Allen key (2.5mm)

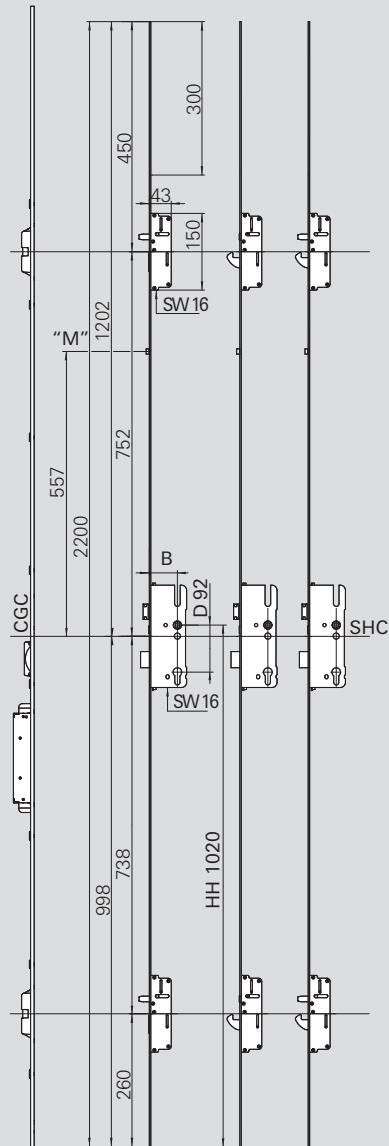
1.6mm automatic height adaptation

Adjustment range in °	Gasket-compression adjustment in mm
Basic setting	+/- 0.8
90°	90°

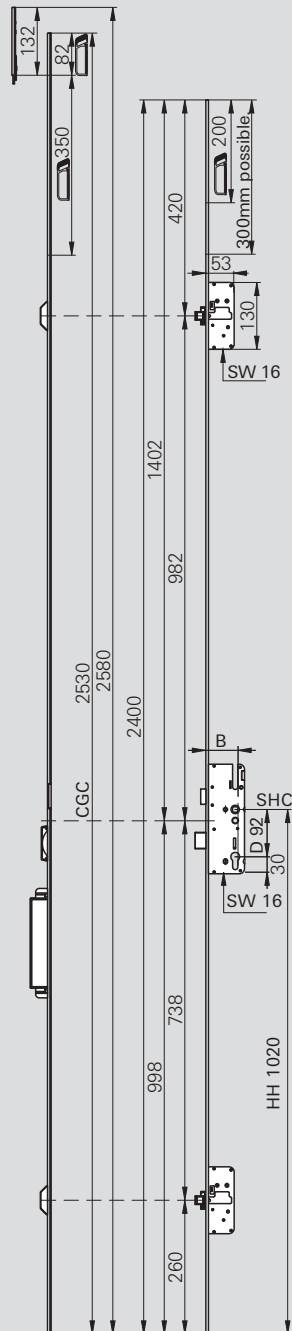


V02/03

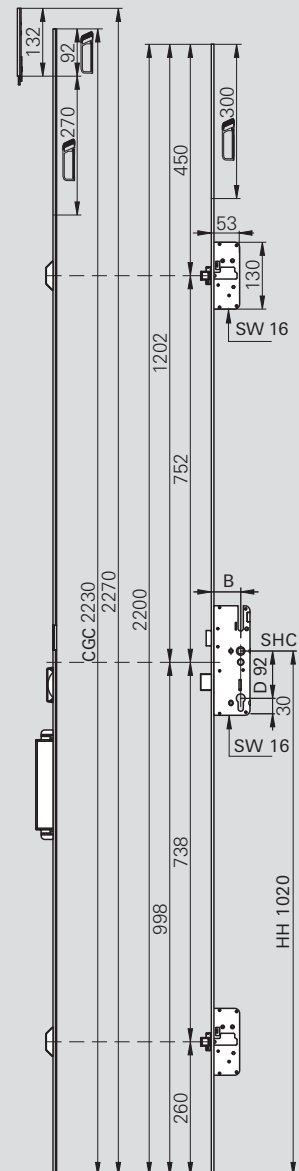
Bolt, power wedge, combination lock



Automatic bolts



Automatic bolts

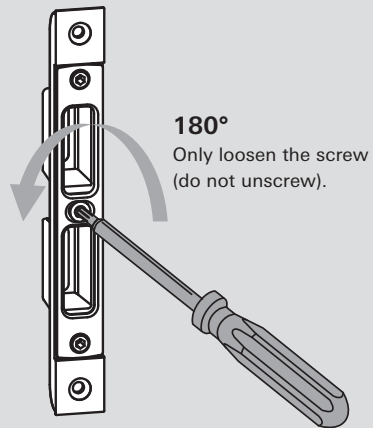


V02/03

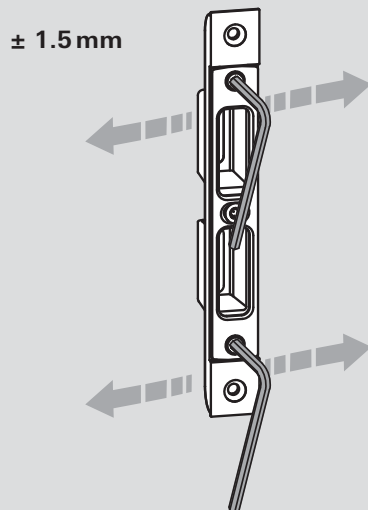
Bolt, power wedge, combination lock



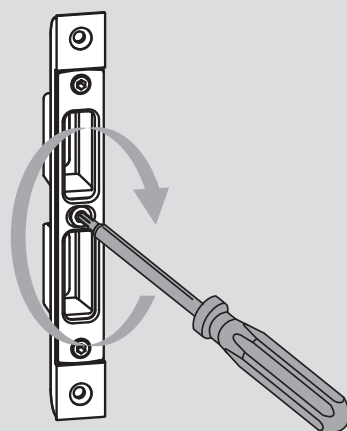
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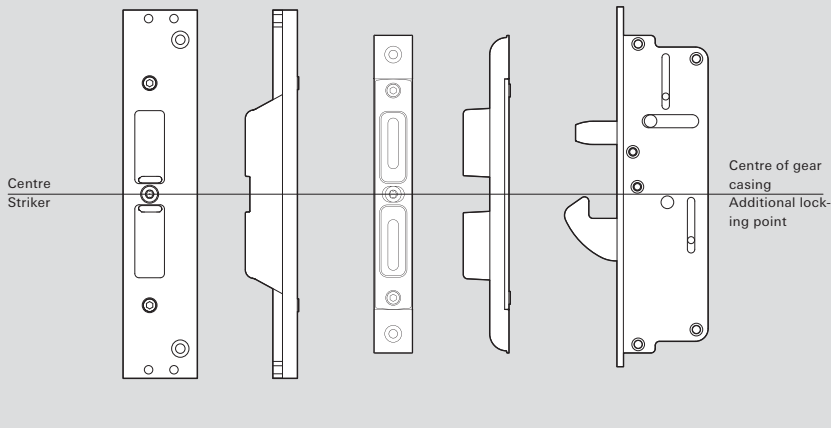
2.



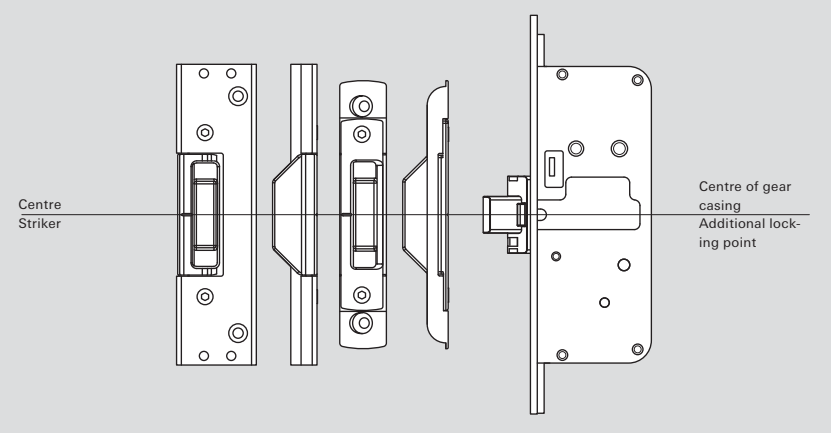
3.



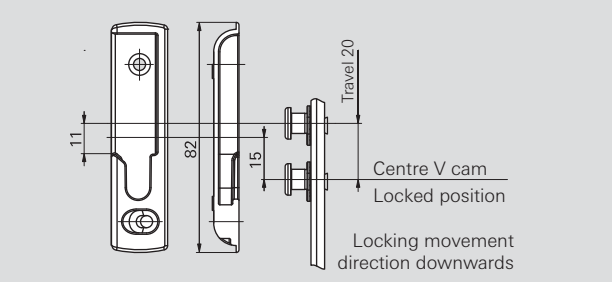
Combination striker



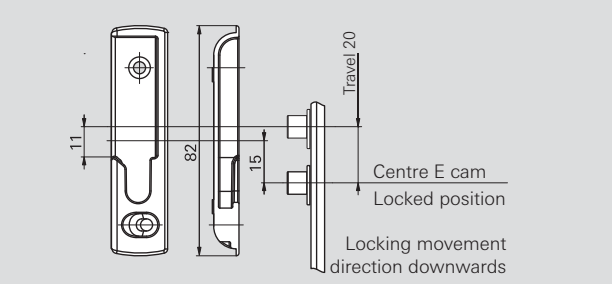
Automatic bolts

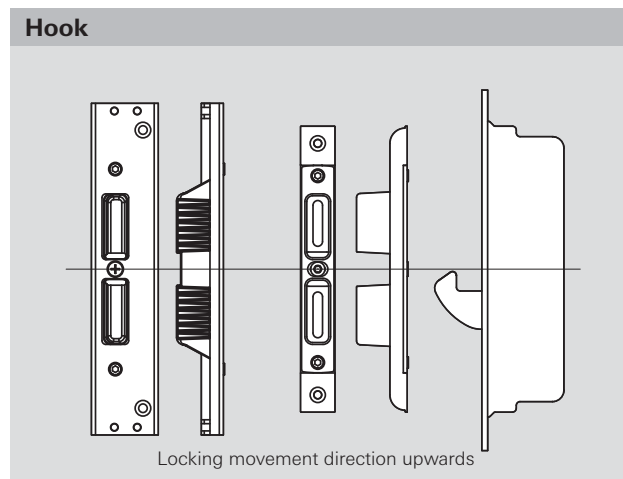
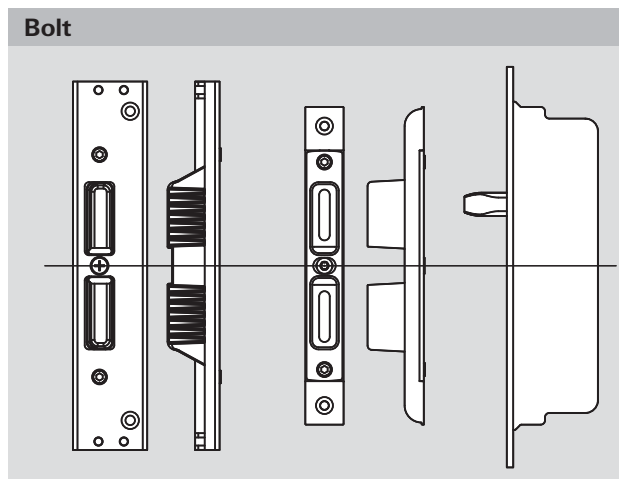


V cam



E cam





Mortise lock

with latch and deadbolt, profile cylinder, switchable ("niro" stainless-steel set)



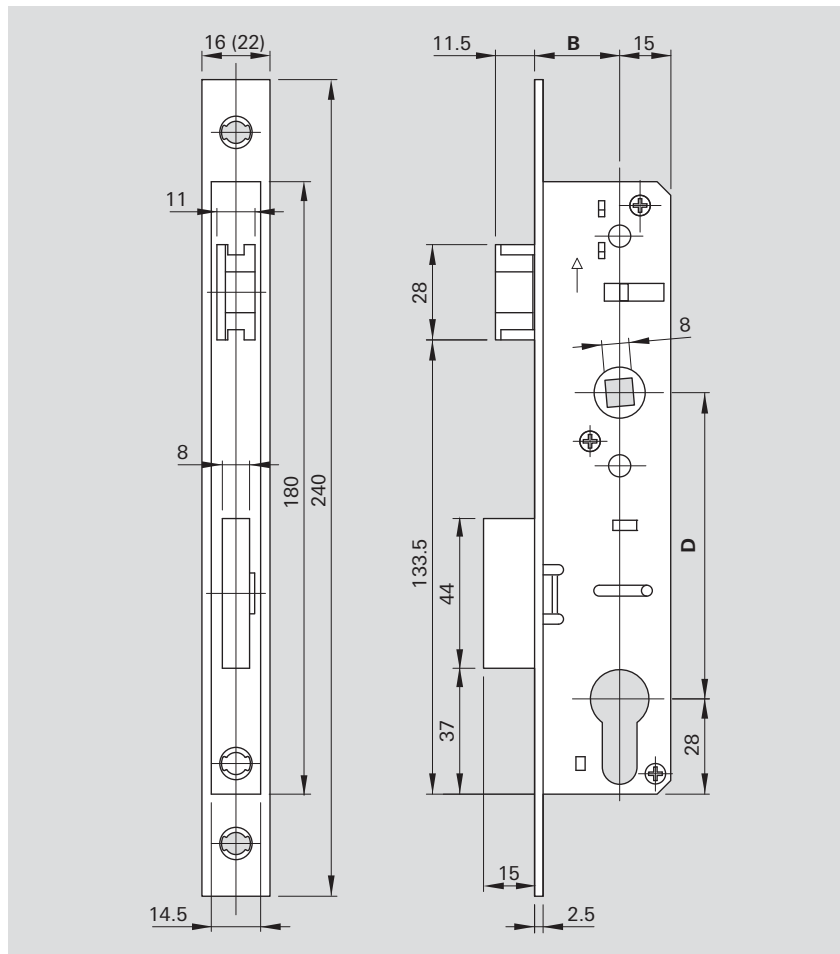
Faceplate 22/2.5 – Niro set*
Length 240 mm

B	D	⊙	SF	Mat. no.	PQ
25	92	8	Niro	494636	25

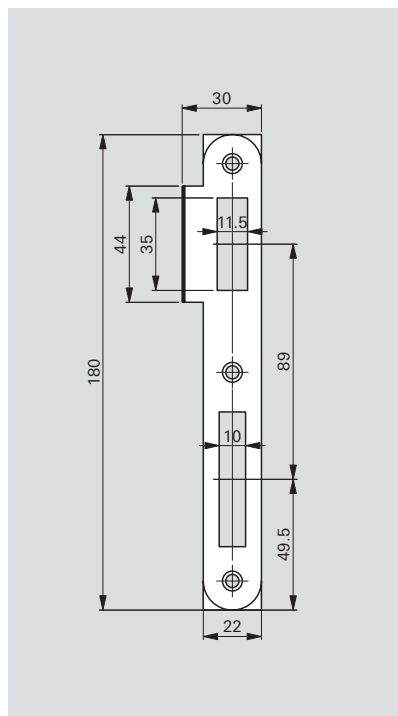
Faceplate 24/2.5 – Niro set*
Length 240 mm

B	D	⊙	SF	Mat. no.	PQ
25	92	8	Niro	492873	25

* 1 set contains lock and striker



- NIRO (stainless steel) mortise lock with latch/deadbolt and DIN profile cylinder operation
- Recommended for aluminium, metal and PVC doors
- Surface-finish stainless steel
- Latch is reversible
- Deadbolt with sawing protection
- Single throw, 15 mm deadbolt protrusion
- Parts are corrosion-resistant
- The product is in accordance with the DIN 18251-2/3 regulations
- 1 set consists of lock and striker plate



Application ranges

- For heavily used aluminium doors up to 160 kg
- For inward and outward opening doors

Product characteristics

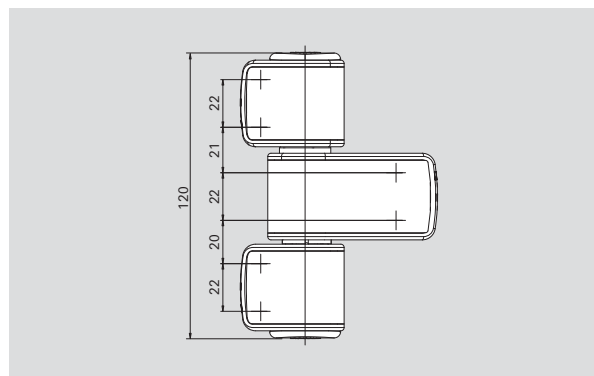
- The as-delivered condition is preset to zero adjustment DIN left or DIN right
- Modular design: combination of various hinge and accessory modules
- The patented door leaf and frame aluminium cover plate hugs the contours of the profile
- Maintenance-free bearing bushes containing Teflon
- Contemporary design of the diecast hinge casing
- Trendsetting surface treatment
- One-man adjustment of the door
- Certified in accordance with DIN EN 1935 :2002

Adjustment possibilities

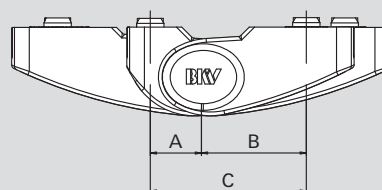
- Linear adjustments without changing the hinge body aesthetics
- All adjustments possible without removing the sash and frame cover plates



Surface-mounted hinge 120 ATB					
Description	Version	surface-finish	Material no. Left	Material no. Right	PQ
120 ATB	I	RAL 9016	548 386	548 390	6
120 ATB	I	RAL 8077	548 388	548 392	6
120 ATB	I	Delta Silber	548 389	548 393	6
120 ATB	II	RAL 9016	548 394	548 398	6
120 ATB	II	RAL 8077	548 396	548 400	6
120 ATB	II	Delta Silber	548 397	548 401	6
120 ATB	III	RAL 9016	548 402	548 406	6
120 ATB	III	RAL 8077	548 404	548 408	6
120 ATB	III	Delta Silber	548 405	548 409	6
120 ATB	IV	RAL 9016	548 410	548 414	6
120 ATB	IV	RAL 8077	548 412	548 416	6
120 ATB	IV	Delta Silber	548 413	548 417	6
120 ATB	V	RAL 9016	548 418	548 422	6
120 ATB	V	RAL 8077	548 420	548 424	6
120 ATB	V	Delta Silber	548 421	548 425	6
120 ATB	VI	RAL 9016	548 434	548 438	6
120 ATB	VI	RAL 8077	548 436	548 440	6
120 ATB	VI	Delta Silber	548 437	548 441	6
120 ATB	VII	RAL 9016	548 442	548 446	6
120 ATB	VII	RAL 8077	548 444	548 448	6
120 ATB	VII	Delta Silber	548 445	548 449	6
120 ATB	VIII	RAL 9016	548 426	548 430	6
120 ATB	VIII	RAL 8077	548 428	548 432	6
120 ATB	VIII	Delta Silber	548 429	548 433	6
120 ATB	IX	RAL 9016	548 458	548 462	6
120 ATB	IX	RAL 8077	548 460	548 464	6
120 ATB	IX	Delta Silber	548 461	548 465	6
120 ATB	X	RAL 9016	548 450	548 454	6
120 ATB	X	RAL 8077	548 452	548 456	6
120 ATB	X	Delta Silber	548 453	548 457	6
120 ATB	XI	RAL 9016	548 466	548 470	6
120 ATB	XI	RAL 8077	548 468	548 472	6
120 ATB	XI	Delta Silber	548 469	548 473	6
120 ATB	XII	RAL 9016	548 474	548 478	6
120 ATB	XII	RAL 8077	548 476	548 480	6
120 ATB	XII	Delta Silber	548 477	548 481	6

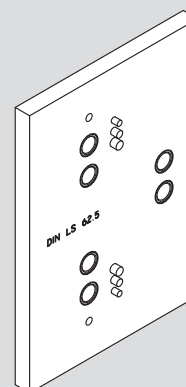


Variants



Version	A	B	C
I	20.5	42.0	62.5
II	20.5	47.0	67.5
III	20.5	57.5	78.0
IV	42.0	42.0	84.0
V	42.0	47.0	89.0
VI	47.0	42.0	89.0
VII	47.0	47.0	94.0
VIII	42.0	57.5	99.5
IX	57.5	42.0	99.5
X	47.0	57.5	104.5
XI	57.5	47.0	104.5
XII	57.5	57.5	115.0

Drilling jig



Drilling jig

Description	Material no.	PQ
80 ATB/120 ATB drilling jig		Upon request

Application ranges

- For all conventional aluminium doors up to 120 kg
- For inward and outward opening doors

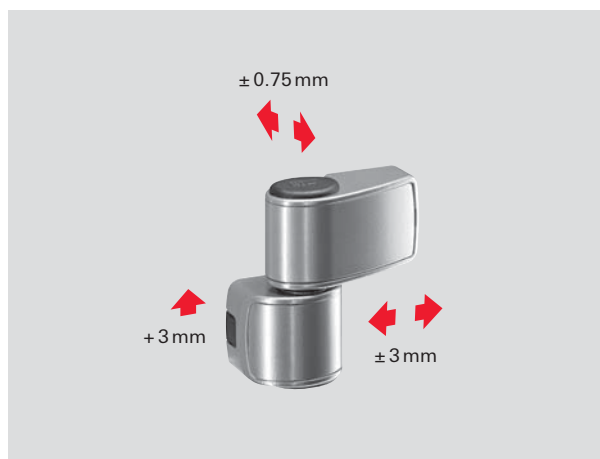
Product characteristics

- The as-delivered condition is preset to zero adjustment DIN left or DIN right
- Modular design: combination of various hinge and accessory modules
- The patented door leaf and frame aluminium cover plate hugs the contours of the profile
- Maintenance-free bearing bushes containing Teflon
- Contemporary design of the diecast hinge casing
- Trendsetting surface treatment
- One-man adjustment of the door
- Certified in accordance with DIN EN 1935 : 2002

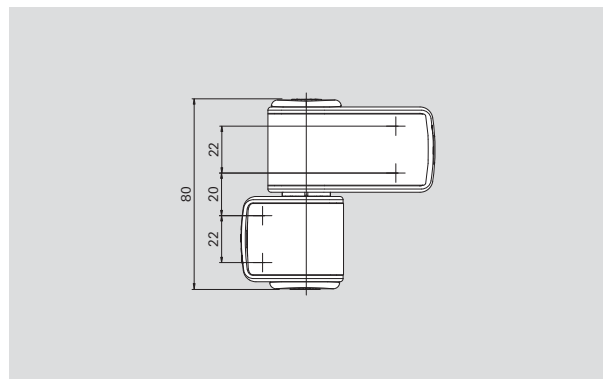


Adjustment possibilities

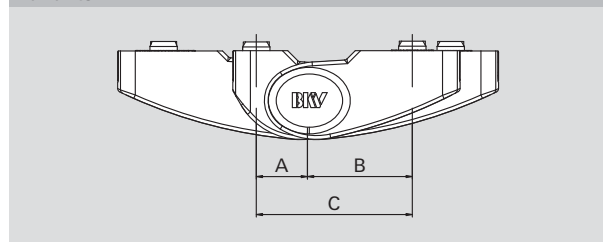
- Linear adjustments without changing the hinge body aesthetics
- All adjustments possible without removing the sash and frame cover plates



Surface-mounted hinge 80 ATB					
Description	Version	surface-finish	Material no. Left	Material no. Right	PQ
80 ATB	I	RAL 9016	548290	548294	6
80 ATB	I	RAL 8077	548292	548296	6
80 ATB	I	Delta Silber	548293	548297	6
80 ATB	II	RAL 9016	548298	548302	6
80 ATB	II	RAL 8077	548300	548304	6
80 ATB	II	Delta Silber	548301	548305	6
80 ATB	III	RAL 9016	548306	548310	6
80 ATB	III	RAL 8077	548308	548312	6
80 ATB	III	Delta Silber	548309	548313	6
80 ATB	IV	RAL 9016	548314	548318	6
80 ATB	IV	RAL 8077	548316	548320	6
80 ATB	IV	Delta Silber	548317	548321	6
80 ATB	V	RAL 9016	548322	548326	6
80 ATB	V	RAL 8077	548324	548328	6
80 ATB	V	Delta Silber	548325	548329	6
80 ATB	VI	RAL 9016	548338	548342	6
80 ATB	VI	RAL 8077	548340	548344	6
80 ATB	VI	Delta Silber	548341	548345	6
80 ATB	VII	RAL 9016	548346	548350	6
80 ATB	VII	RAL 8077	548348	548352	6
80 ATB	VII	Delta Silber	548349	548353	6
80 ATB	VIII	RAL 9016	548330	548334	6
80 ATB	VIII	RAL 8077	548332	548336	6
80 ATB	VIII	Delta Silber	548333	548337	6
80 ATB	IX	RAL 9016	548362	548366	6
80 ATB	IX	RAL 8077	548364	548368	6
80 ATB	IX	Delta Silber	548365	548369	6
80 ATB	X	RAL 9016	548354	548358	6
80 ATB	X	RAL 8077	548356	548360	6
80 ATB	X	Delta Silber	548357	548361	6
80 ATB	XI	RAL 9016	548370	548374	6
80 ATB	XI	RAL 8077	548372	548376	6
80 ATB	XI	Delta Silber	548373	548377	6
80 ATB	XII	RAL 9016	548378	548382	6
80 ATB	XII	RAL 8077	548380	548384	6
80 ATB	XII	Delta Silber	548381	548385	6

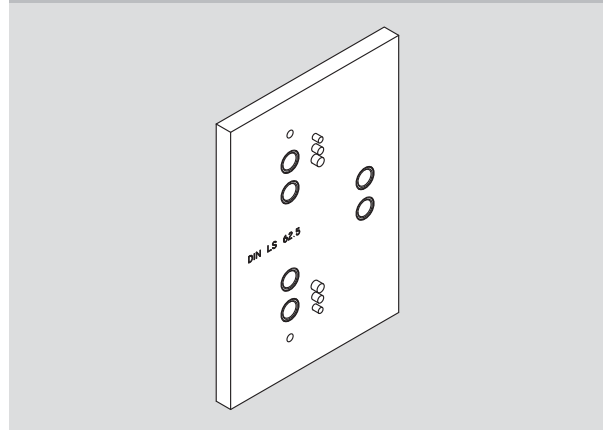


Variants



Version	A	B	C
I	20.5	42.0	62.5
II	20.5	47.0	67.5
III	20.5	57.5	78.0
IV	42.0	42.0	84.0
V	42.0	47.0	89.0
VI	47.0	42.0	89.0
VII	47.0	47.0	94.0
VIII	42.0	57.5	99.5
IX	57.5	42.0	99.5
X	47.0	57.5	104.5
XI	57.5	47.0	104.5
XII	57.5	57.5	115.0

Drilling jig

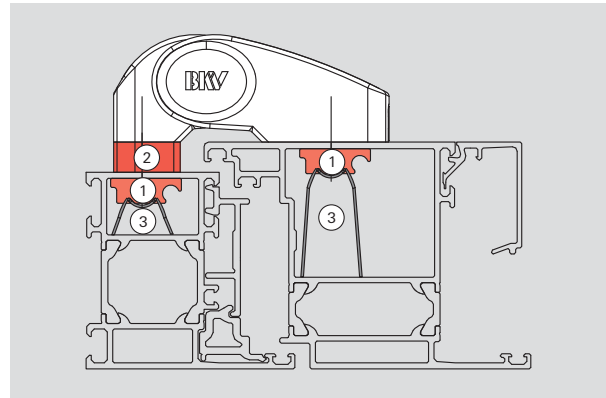


Drilling jig

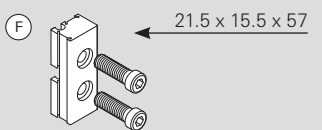
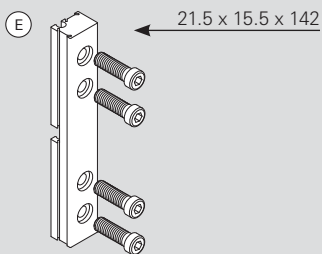
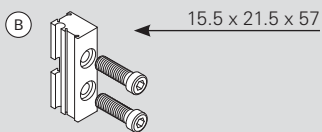
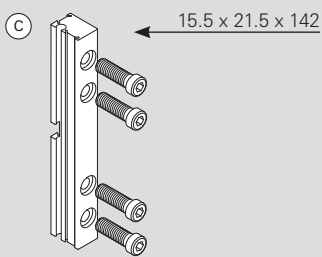
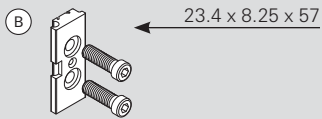
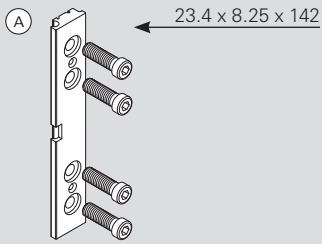
Description	Material no.	PQ
80 ATB/120 ATB drilling jig		Upon request

Back-up spacers

- The fixing technology classic
- High level of stability due to the special aluminium alloy



1 Rearward spacer elements (incl. screws)



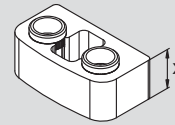
Rearward spacer elements for 80 ATB

Description	Material no.	PQ
(B) incl. screws M8x25	551296	48
(B) incl. screws M8x40	551358	48
(D) incl. screws M8x25	548945	48
(F) incl. screws M8x25	548484	48

Rearward spacer elements for 120 ATB

Description	Material no.	PQ
(A)+(B) incl. screws M8 x 25 (each 24 pcs.)	548485	48
(C)+(D) incl. screws M8 x 25 (each 24 pcs.)	548946	48
(E)+(F) incl. screws M8 x 25 (each 24 pcs.)	548486	48

2 Spacer element on stepped profiles



Spacer element

Description	Surface-finish	Material no.	PQ
Spacer element – 40x22x3mm	RAL 9016	565163	6
	RAL 8077	565164	6
	Delta Silber	565175	6
Spacer element – 40x22x7mm	RAL 9016	548488	6
	RAL 9006	548489	6
	RAL 8077	548490	6
	Delta Silber	548491	6
Spacer element – 40x22x10mm	RAL 9016	548492	6
	RAL 8077	548494	6
	Delta Silber	548495	6
Spacer element – 40x22x12mm	RAL 9016	548496	6
	RAL 8077	548498	6
	Delta Silber	548499	6
Spacer element – 40x22x14mm	RAL 9016	548500	6
	RAL 8077	548502	6
	Delta Silber	548503	6
Spacer element – 40x22x16mm	RAL 9016	549570	6
	RAL 8077	549572	6
	Delta Silber	549573	6
Spacer element – 40x22x18mm	RAL 9016	548504	6
	RAL 8077	548506	6
	Delta Silber	548507	6
Spacer element – 40x22x19mm	RAL 9016	548508	6
	RAL 8077	548510	6
	Delta Silber	548511	6

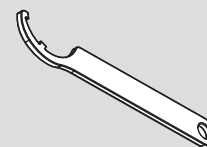
3 Stainless-steel spring



Stainless-steel spring

Description	Material no.	PQ
Stainless-steel spring	548487	200

Metal adjustment key for gasket compression



Metal adjustment key

Description	Material no.	PQ
Metal adjustment key	547206	1

Linkdrill I

- High-quality and cost-effective application
- Suitable for almost all conventional thermally insulated systems
- No deformation of the profile walls

Linkdrill II

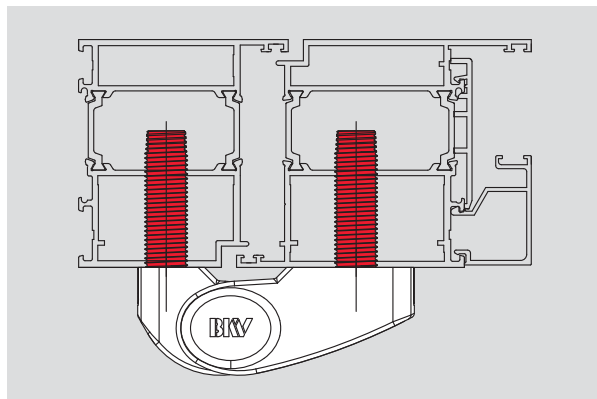
- The installation can easily be carried out directly on the aluminium shell on timber/aluminium systems (outward opening)
- Short installation times

Support pin

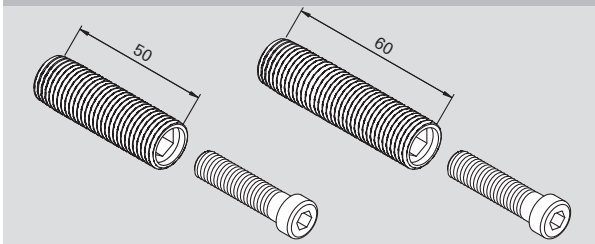
- Optionally for heavily used doors from version IV or higher (refer to parts overview)
- Creates a triangle of forces which can transfer high loads

Security pin

- Additional protection of the screw-fixing of external hinges



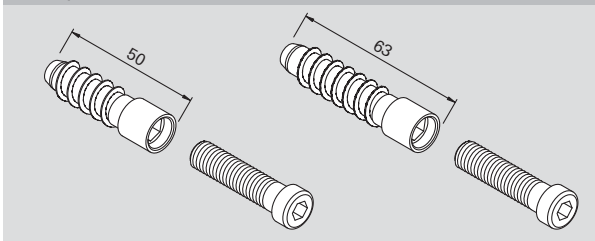
Linkdrill I



Linkdrill I

Description	Material no.	PQ
M14 x 50 mm, with screw M8 x 40	548515	1
without screw	548516	48
M14 x 60 mm, with screw M8 x 40	561698	1
without screw	561379	48

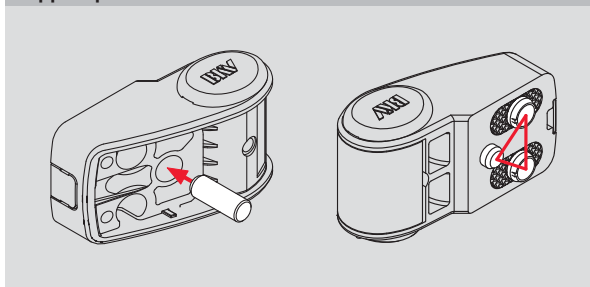
Linkdrill II



Linkdrill II

Description	Material no.	PQ
M14 x 50 mm, with screw M8 x 40	548517	1
M14 x 63 mm, with screw M8 x 40	548518	1

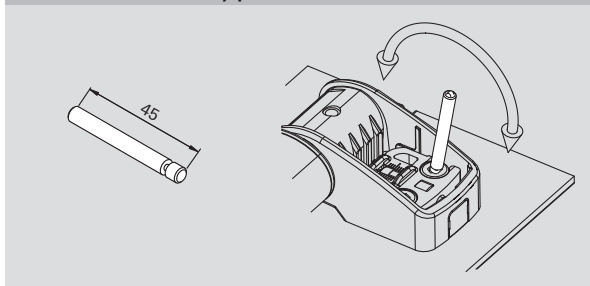
Support pin



Support pin

Description	Material no.	PQ
Ø 8 x 28 mm	550245	1

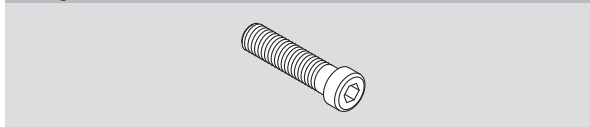
Stainless-steel security pin



Stainless-steel security pin

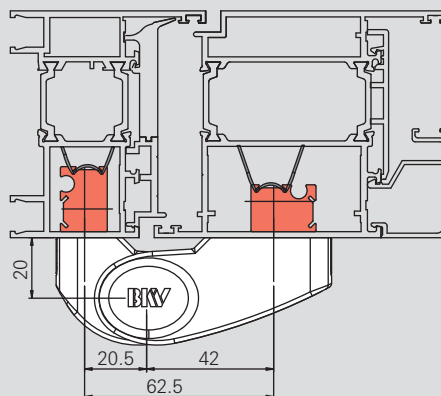
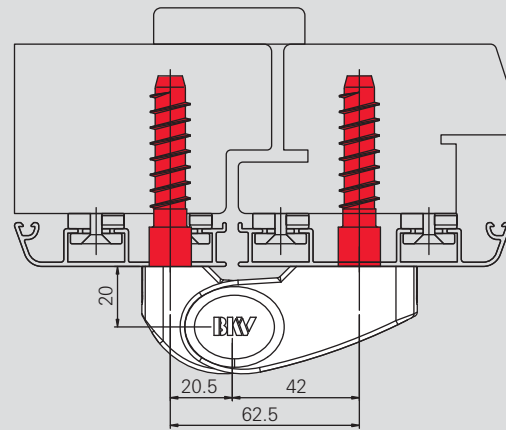
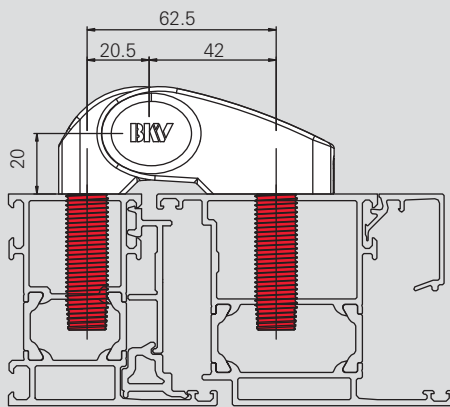
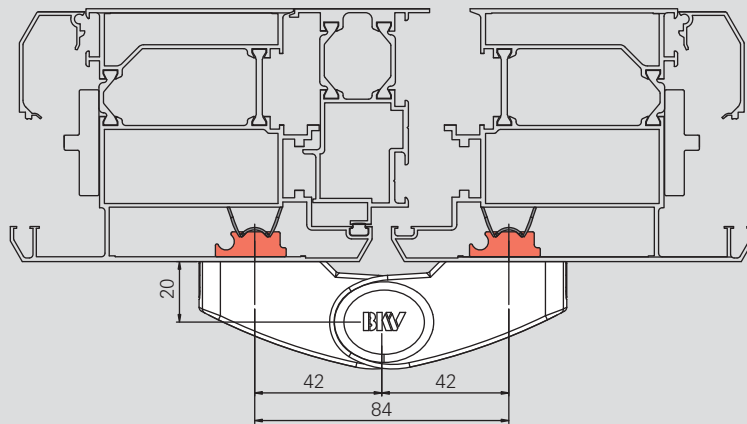
Description	Material no.	PQ
Ø 5 x 45 mm	547534	24

Fixing screws



Fixing screws

Description	Material no.	PQ
M8x25 mm	547947	48
M8x40 mm	548512	48
M8x50 mm	548513	48



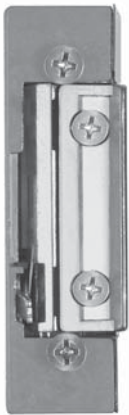


Fig. 1



Fig. 2

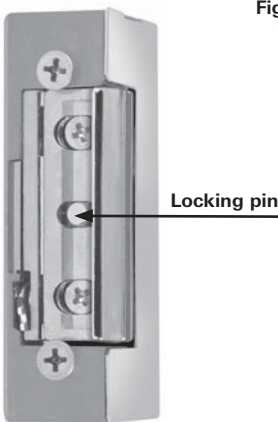


Fig. 3

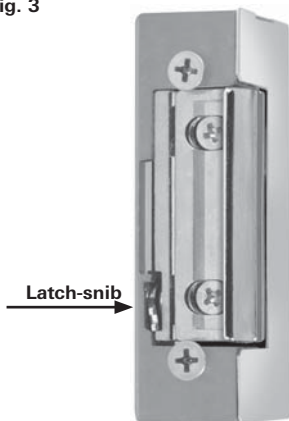


Fig. 4

- Electronic door opener for timber, PVC and aluminium doors, which by means of operating the trigger/switch (usually from within the apartment), unlocks the main entrance door.
- Voltage 6-12 V/AC-DC (minimum and/or maximum voltage level to trigger locking).
- The standard opener is equipped with the following basic functions:
 - Release via continuous trigger contact (switch) – e.g. model E 17R, E 20, E 20R
 - Manual unlocking feature on the electrical opener
 - Adjustable latch piece (flex)
- Radius function: When opening the latch, a radial opening electronic door-opener does not require any more space than the total thickness of the opener already available. This enables easy installation and improved aesthetics without an additional recess in the frame (fig. 1). If no radial function is available (model E 20), the latch rotates out by 5 mm. A frame recess must be considered for this. This model is to be used on timber doors with latch/deadbolt angled striker-plates (fig. 2).
- The locking pin (model E 20RD) unlocks the door opener upon single contact. After opening and closing the door, the door opener is locked again by means of the locking pin. This means that after triggering the contact at the push-button switch, the door remains open until the door has been closed (fig. 3). For comparison: without locking pin, the door is prepared for opening as long as contact is triggered at the push-button switch.
- Manual unlocking: Unlocking mechanism for manual continuous opening of the door opener. The latch-snib is set to closed in this case (the door can only be opened with contact from the push-button switch). Likewise, the latch-snib can be set to continuous opening (fig. 4).

Technical specifications

Model	Resistance	VAC / 12 Volt	VAC / 6 Volt	VDC / 12 Volt	VDC / 6 Volt
E 17R	8.3 ohm	1140 mA	570 mA	1320 mA	660 mA
E 20, E 20R, E 20RD	8.3 ohm	1100 mA	560 mA	1390 mA	690 mA

The tolerance at a temperature of 24° is ±10%. The maximum current gain for alternating current is 2 seconds. VAC = alternating current / VDC = direct current

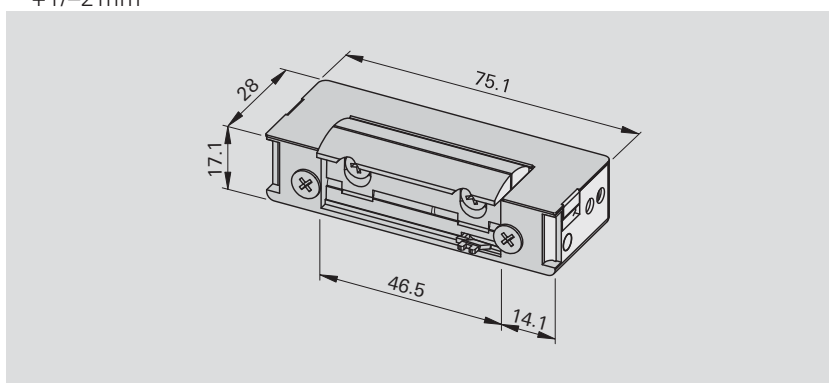
Model E 17R



Product description:

- Symmetrical standard opener with radial latch function – pre-wired
- Dimensions: Length 75.1 mm x width 17.1 mm x depth 28 mm
- Non-handed
- Weight 165 g
- Latch adjustment range +1/-2 mm

Description	Mat. no.	PQ
Model E 17R	446263	20



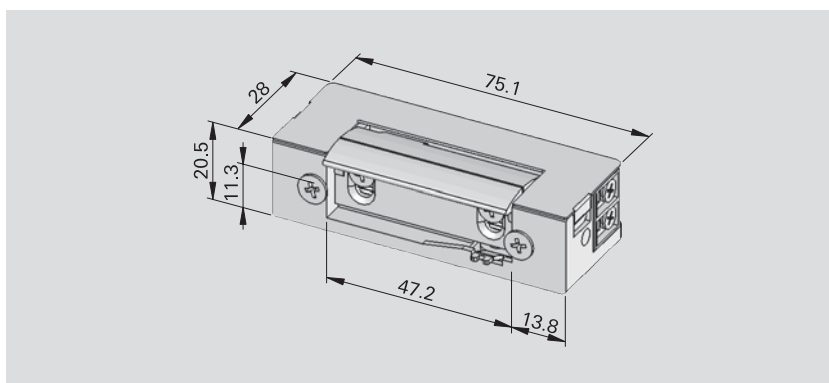
Model E 20



Product description:

- Symmetrical standard opener without radial latch function
- Dimensions: Length 75.1 mm x width 20.5 mm x depth 28 mm
- Non-handed
- Weight 200 g
- Latch adjustment range +0/-4 mm

Description	Mat. no.	PQ
Model E 20	389675	20



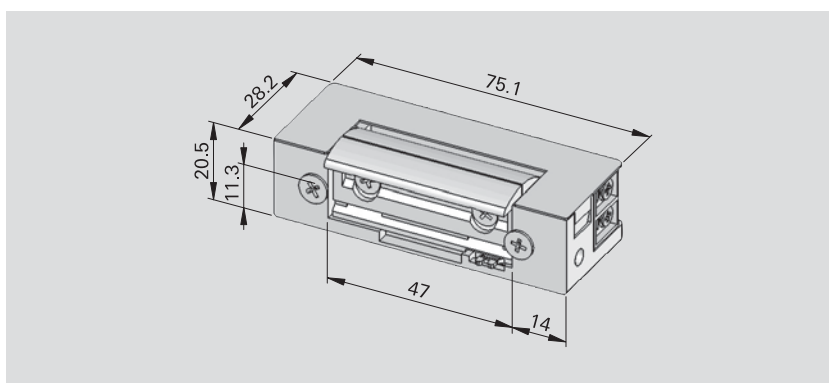
Model E 20R



Product description:

- Symmetrical standard opener with radial latch function
- Dimensions: Length 75.1 mm x width 20.5 mm x depth 28.2 mm
- Non-handed
- Weight 200 g
- Latch adjustment range ± 1 mm

Description	Mat. no.	PQ
Model E 20R	389653	20



Model E 20RD

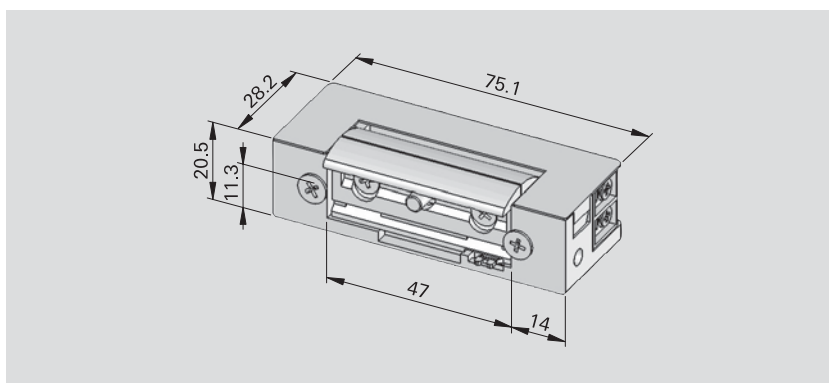


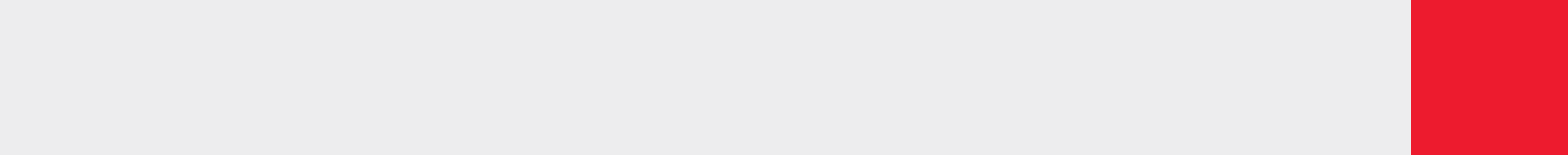
Locking pin

Product description:

- Symmetrical standard opener with radial latch function and additional locking pin
- Dimensions: Length 75.1 mm x width 20.5 mm x depth 28.2 mm
- Non-handed
- Weight 200 g
- Latch adjustment range ± 1 mm

Description	Mat. no.	PQ
Model E 20RD	389654	20

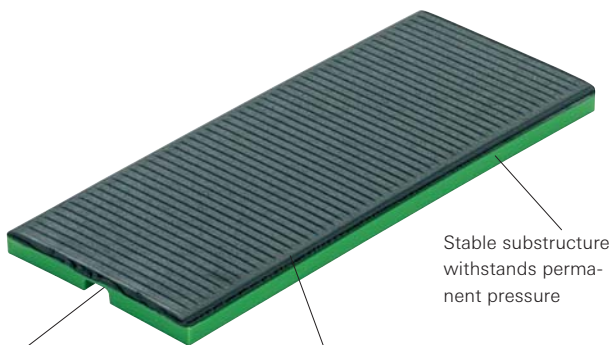




Roto Door



Gluske GL-UK	488
Gluske GL-UKS	489

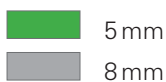
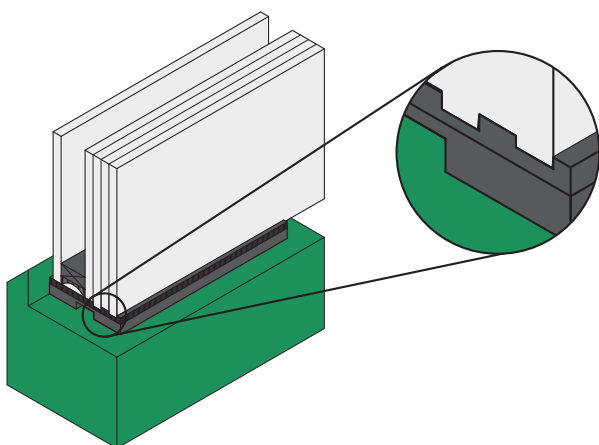


Ventilation channel for vapour pressure compensation

Stable substructure withstands permanent pressure

Glass support surface made of elastic material; especially for fragile glass edges

In the case of triple glazings, the ventilation channel has to be located off-centre



The two-component glazing packer

Especially for fragile glass edges for the safe support of high-quality insulating glass:

- Bulletproof glass
- VSG-glass (laminated safety glass)
- Soundproofing glass and solar control glass, etc.

In the window and facade area, these glazing products are really high-tech products. Due to the normally non-treated glass edges specially adapted glazing-packer material is required.

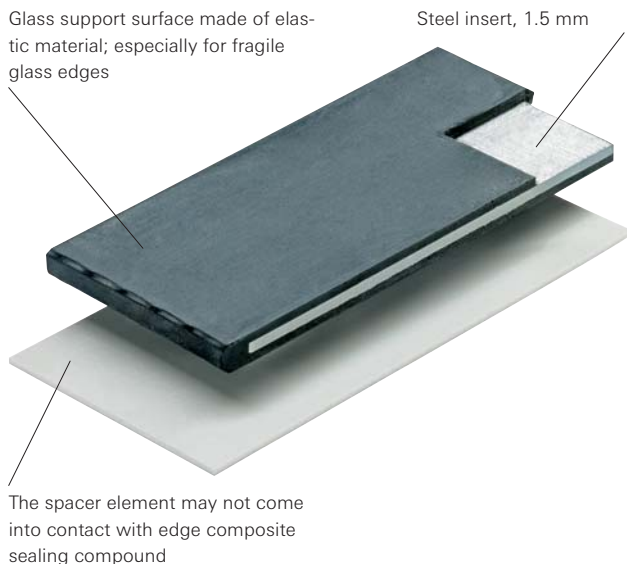
Simple packers made of timber, PVC or rubber do not fulfil these requirements.

Only a sufficient permanent pressure resistance prevents the concentrated load on the glass edges. The end-to-end ventilation channel ensures the ventilation of the rebate area.

- Resistant to pressure and capable of bearing loads due to the asymmetrical profile leg system
- Longer packer length (120 mm) for better carrying capacity from 80 mm width
- Compatible with edge composite sealing compounds for insulating glass
- Resistant to ageing
- Temperature resistant

GLUSKE GL-UK			
Dimension	Colour	PQ	Material no.
100 x 20 x 5	Green	1000 pcs	538261
100 x 22 x 5	Green	1000 pcs	538264
100 x 24 x 5	Green	1000 pcs	538265
100 x 26 x 5	Green	1000 pcs	538269
100 x 28 x 5	Green	500 pieces	538270
100 x 30 x 5	Green	500 pieces	538271
100 x 30 x 8	Grey	500 pieces	538998
100 x 32 x 5	Green	500 pieces	538272
100 x 32 x 8	Grey	500 pieces	538999
100 x 34 x 5	Green	500 pieces	538273
100 x 36 x 5	Green	500 pieces	538274
100 x 36 x 8	Grey	500 pieces	539000
100 x 38 x 5	Green	500 pieces	538275
100 x 40 x 5	Green	500 pieces	538276
100 x 40 x 8	Grey	500 pieces	539001
100 x 42 x 5	Green	500 pieces	539002
100 x 42 x 8	Grey	500 pieces	539136
120 x 50 x 5	Green	250 pieces	539162
120 x 50 x 8	Grey	250 pieces	539228
120 x 80 x 5	Green	250 pieces	539161
120 x 80 x 8	Grey	250 pieces	539177

Further dimensions are available upon request.



Glazing packer with integrated steel insert

- Can be used with protruding substructures
- Compensates protruding glass edges with elastic surface
- High inherent stability
- Compatible with edge composite sealing compounds for insulating glass
- Temperature resistant
- Resistant to ageing

Note:

With stainless-steel packings, carrier packers are used which are to transfer the glass weight of the respective glazing unit to the frame structure. Open joints must be sealed off immediately after packing!

Which packer version is to be used according to the purpose and especially regarding the material compatibility must be checked and determined by an expert. Please refer to the Technical Guidelines of the Glazing Trade, Part 3.

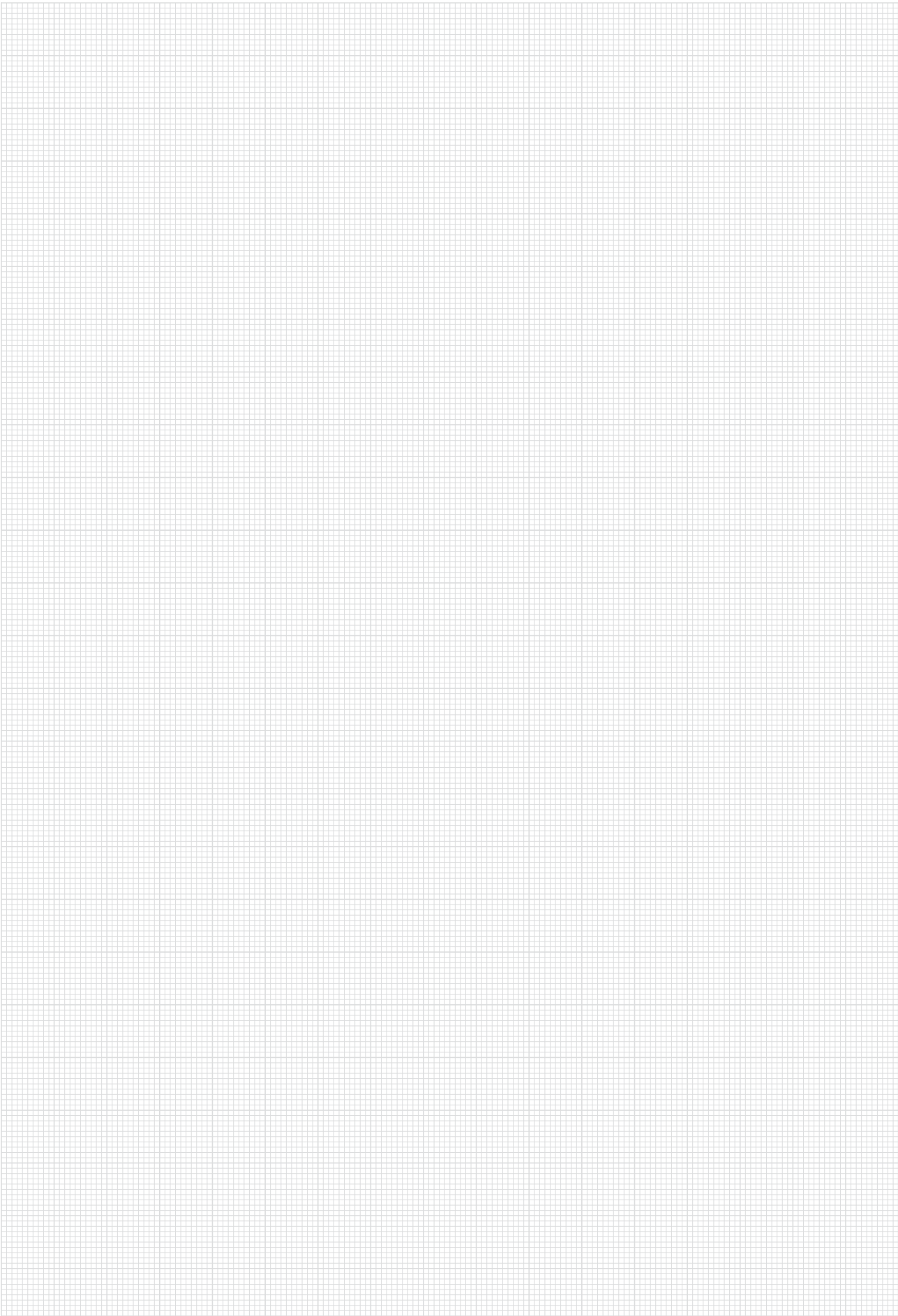
GLUSKE GL-UKS

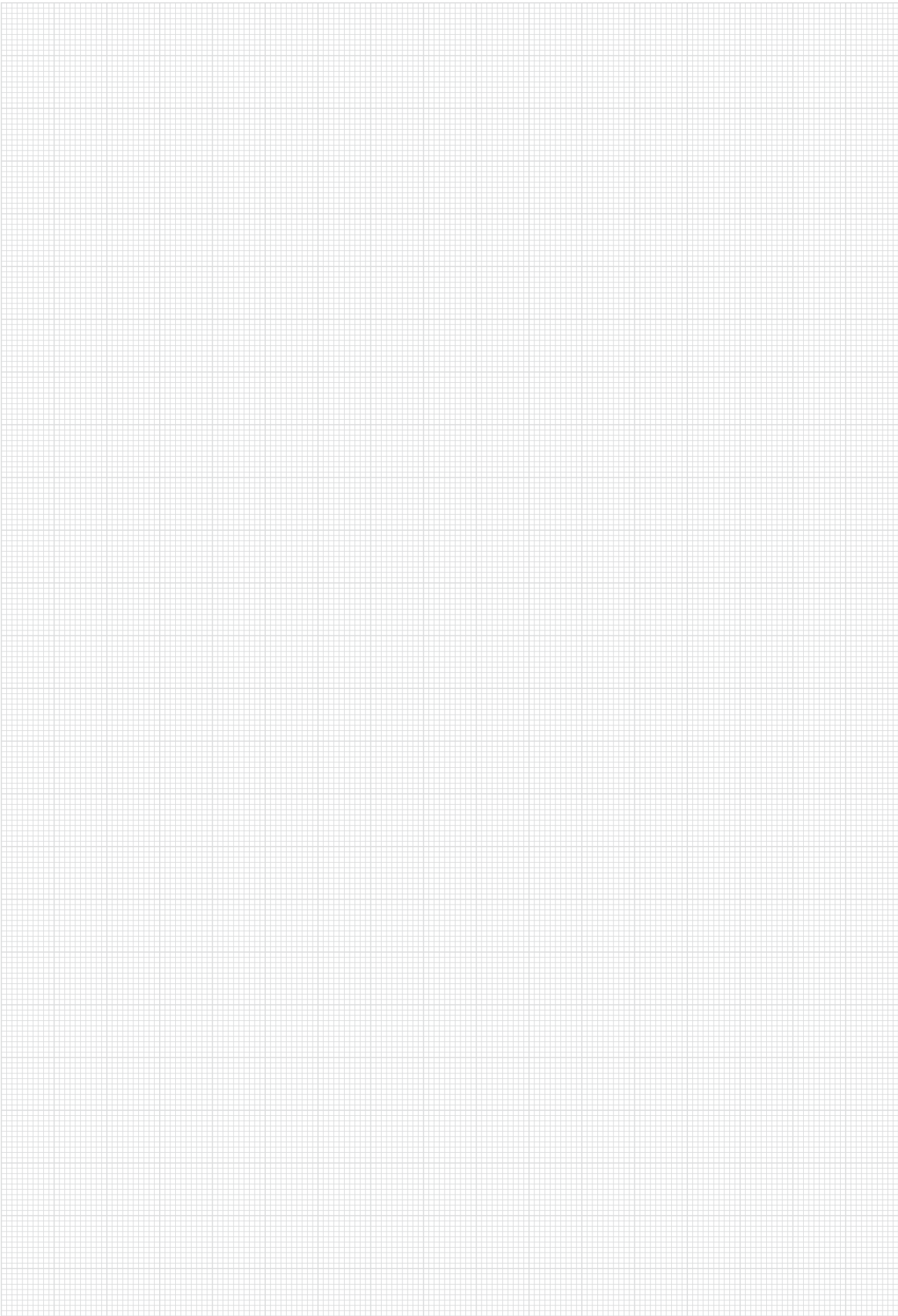
Dimension	Colour	Material no.
100 x 20 x 5	Black	539615
100 x 30 x 5	Black	539313
100 x 34 x 5	Black	539609
100 x 36 x 5	Black	539630
100 x 38 x 5	Black	539631
100 x 40 x 5	Black	539551
100 x 42 x 5	Black	539550
100 x 44 x 5	Black	539544
100 x 50 x 5	Black	539608
100 x 52 x 5	Black	539767
100 x 55 x 5	Black	539629
100 x 56 x 5	Black	540118
100 x 60 x 5	Black	540071

Further dimensions are available upon request.

PVC spacer element

Dimension	Colour	PQ	Material no.
120 x 80 x 1	White	500 pieces	539389





Roto Frank AG
Window and door technology

Wilhelm-Frank-Platz 1
D-70771 Leinfelden-Echterdingen
Telephone +49 711 7598 0
Telefax +49 711 7598 253
info@roto-frank.com

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