

TECHNOLOGY IN MOTION























MACO RAIL-SYSTEMS

SLIDING HARDWARE



Catalogue 2017



	Part number		Sash lifter
	Packing unit		Number of security cams (i.S.)
	Maximum sash weight		Sash lifter
	Part number tricoat		Sash rebate width (SRW) and sash rebate height (SRH)
	Sash rebate width (SRW), standard		Rosette width
L	Overall component length	GRP	Glass fibre reinforced plastic (GRP)
W	Width	ALU	Aluminium
H	Height	HS	Lift&Slide hardware - HS
	Sash rebate height (SRH)	SKB	Tilt&Slide-hardware - SKB
	Handle height (HH)	SKB-S	Tilt&Slide (standard) hardware - SKB-S
	Spindle size	SKB-SE	Tilt&Slide (self-engaging) hardware - SKB-SE
	Handle height	SKB-Z	Tilt&Slide (positive control) hardware - SKB-Z
	Profile depth	PAS	Parallel - Stop - Slide Hardware
	Surface finish	PZ	Profile cylinder (PC)
	Spindle length	RZ	Round cylinder (RC)
	Diameter	FB	Sash width
	Backset (BS)	FH	Sash height
	Number of standard cams	RAB	Frame outside width
		RAH	Frame outside height
		FS	Sash strength
		DM	Backset (BS)
		li + re	left + right
		L	Air gap
		FT	Rebate depth
		V (offset)	Offset



Dear MACO customer,

You are holding our new order catalogue in your hands. Our main aim was to present our product range in a simple and easy-to-understand manner in order to provide you with a practical working document. In addition to this catalogue, our package leaflet and assembly instructions will help you to process and install our products correctly. These are available to download from www.maco.eu.

Our products help to ensure that windows, doors and large-scale elements offer optimum function and security. As a premium manufacturer, that carries out its business according to the highest standards, the optimum quality and functionality of our hardware is our top priority. While we guarantee the best possible product characteristics for our hardware components, the responsibility for professional installation and correct fixing lies in your hands.

We want to support you, as a dealer or fabricator, with your responsibility for the safety of your products. Our binding assembly instructions and package leaflets provide information about the general use and processing of our hardware. To ensure the best fabrication and attachment of the hardware components – to suit the relevant installation situation, such as strength and profile design of the timber, arrangement of chambers and reinforcement in PVC profiles, etc. , you can have elements tested and evaluated at our certified test centre: an air permeability and driving rain test as well as a pull-out test will help you to meet CE marking requirements. This means that you can rest assured that you are meeting all the standards and directives applicable to you.

You can find information about how to properly store our hardware components in the VHBH guideline of the Quality Assurance Association: Locks and Hardware (www.fvsb.de) or section Information on storage and transport of hardware components.

Important for dealers: MACO supplies its products with the corresponding number of package leaflets. As a dealer, you are responsible for enclosing the correct number of package leaflets with the products sold by you. Also, please ensure that you make your customers aware of the relevant binding instructions and legal aspects of the document.

We also provide you with operation and maintenance instructions for end users for you to pass on to your customers. These can also be downloaded from the MACO website (www.maco.eu).

We are offering an option in our extranet (extranet.maco.eu) with our online catalogue, which, in addition to highly up-to-date information, also offers the advantage of extensive additional technical information for all components. You can obtain access details from your contact partner in field sales.

All of our printed documentation is continuously revised and expanded. Please make sure that you are working with our most current documentation. All of our documentation is available for download from www.maco.eu. We hope that the catalogue will prove to be a valuable tool for your daily work. We wish you every success and hope to see you online soon.

Please fill in completely







We confirm receipt and approvingly acknowledge its contents.	
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Date: _____	Signature: _____

MACO sales manager: _____

MACO
RAIL-SYSTEMS





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MACO
RAIL-SYSTEMS





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1 Technical and General Information

1.1 How to use the catalogue

If not otherwise specified, all dimensions are stated in millimetres and packing units in items per box.

Drawings and diagrams are not to scale.

The content of this document is constantly being updated, so regular calibration is necessary.

The current version is downloadable from our website (www.macouk.net).

Please send comments or suggestions about our instructions by email to feedback@maco.eu.



1.2 Product information

Lift&Slide hardware for windows and casement doors

According to the defined manufacturer's liability described in the "product liability law" (§ 4), the following information regarding sliding hardware for window and balcony door sashes should be observed. Non-compliance exempts the manufacturer of his liability.

1. Product information and specified application

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

The sashes that are equipped with this sliding hardware are capable of:

- sliding,
- lifting and sliding,
- tilting and sliding (only SKB),
- lifting, tilting and sliding (only SKB),
- parallel-retracting and sliding,
- tilting, parallel-retracting and sliding (only SKB).

Sliding hardware is used on vertically installed windows and balcony doors made of timber, PVC, aluminium or steel and their corresponding material combinations. The sliding hardware covered by this definition is equipped with a locking mechanism that locks the sliding sash to the frame, as well as rollers located on the bottom horizontal side of the sliding sash. In addition, scissor stay-arms for tilting and mechanisms to lift and/or parallel-retract the sashes can be specified. This hardware locks the sashes, brings them to the ventilation position and pushes them to the side.

Differing applications do not correspond to its stipulated use. Burglar-inhibiting window and balcony doors, window 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 characteristics.

Opened windows and balcony door sashes achieve only a shielding function and do not meet any demands on joint impermeability, water tightness, sound insulation, thermal insulation, and burglary inhibition.

In case of wind and draught, the window and balcony-door sashes must be closed and locked. Wind and draught as covered by this definition is present, if a window or balcony door sash can open or close on its own in an uncontrolled manner while in one of its opening positions, either due to air pressure or air suction.

The resistance against wind loads in a closed and locked state is dependent on the respective designs of windows and balcony doors. Should wind loading in accordance with DIN EN 12210 be carried out (in particular pressure test p^3), suitable hardware compilations must be matched to the respective window design and frame material, and agreed individually on a case-to-case basis.

Generally speaking, the sliding hardware can fulfil the demands for barrier-free dwellings in accordance with DIN 18025. However corresponding hardware compilations and installations for windows and balcony doors are necessary, which must be coordinated and individually agreed on a case-to-case basis.

2. Misuse

Misuse - therefore not the specified product utilisation - of sliding hardware for windows and balcony doors occurs in particular:

If obstacles are inserted in the opening vicinity, thus preventing its proper specified use.

If additional loads are exerted on windows or balcony-door sashes

If someone reaches between the sash and frame when sliding over and/or locking, or a person or body-part is in this vicinity.

3. Liability

Each complete set of hardware may only consist of hardware components from MACO's sliding and tilt&slide systems. We accept no liability for improperly installed systems and/or the use of non-original or non factory approved system accessory parts.

4. Product performance

4.1 Maximum sash weights and sash rebate dimensions

The listed maximum sash weights for the individual hardware version may not be exceeded. The component with the least permissible load-carrying capacity determines the maximum sash weight. Application diagrams and component classifications must be observed.

4.2 Combination of hardware

The manufacturers' regulations concerning the combination of hardware are obligatory (for example: the exterior-handle arrangement, the hardware layout for burglar-inhibiting windows and balcony door sashes).

5. Product maintenance

Security relevant hardware components must be examined at least once a year for stability and wear and tear. Depending on the requirements, the fixing screws must be tightened and/or



parts replaced. In addition to this, the following maintenance work is to be carried out annually:

All movable parts and all locking points of the sliding hardware must be lubricated and tested.

Only cleaning and maintenance agents that do not damage the corrosion protection of the hardware components may be used.

The hardware adjustments as well as replacing parts must be carried out by a specialist company. When treating surface - for example when painting or varnishing - the hardware of windows and balcony doors are excluded from this process and must also be protected against any soiling.

5.1 Preservation of surface finish

Electrolytically applied zinc coatings are not affected in a normal room climate, provided that no condensation can form on the hardware and/or that sporadic condensation can dry rapidly.

To provide durable preservation of hardware surface quality and prevent deterioration due to corrosion, it is essential to observe the following points:

The hardware and/or the rebate areas must be ventilated sufficiently, in particular during the building phase, to ensure that they are not exposed to direct moisture or to condensation.

The hardware must be kept free from deposits and soiling from building materials (building dust, plaster, cement etc.).

Aggressive vapours in the rebate area (for example: through formic acid, acetic acid, ammonia, amine or ammonia compounds, aldehydes, phenols or tannic acid etc.) in connection with small formations of condensation can lead to fast corrosion of the hardware. In the case of such aggressive vapours occurring, a general adequate ventilation of the rebate areas of windows and balcony doors is to be ensured. This is particularly valid for windows and balcony doors made of oak or other types of timber with a high concentration of (tannic-) acid.

No acetic-acid or cross-linked acidic sealing compounds, or those with the above-mentioned contents may be used, since both direct - and vapour - contact with the sealing compound can attack the 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. Information and instruction obligations

Fulfilling our obligation to issue information and instructions, the following documentation is available in accordance with the "Product Liability Code":

For planning engineers: "planning documents"

For specialised dealers: "catalogues"

For fabricators "assembly instructions" and "factory drawings"

For builders and end users: "service & maintenance instructions" and "operating manuals"

In order to ensure proper functioning of sliding hardware on window and balcony-door sashes:

Planning must request and comply with the manufacturer's product information.

Specialised dealers must observe and request product information from the manufacturer and forward this to the fabricators, in particular installation instructions, factory drawings, service & maintenance instructions as well as operating instructions.

Fabricators are obliged to observe the product information and in particular, to request service & maintenance instructions as well as operating manuals from the manufacturer or specialised dealer, and to pass these on to the builders and end users.

7. Related hardware use

Related hardware with rollers and locking mechanisms - for example hardware for Slide&Fold doors - is to be treated accordingly with regard to product information and intended use, misuse, product features, product maintenance and the obligation to issue information & instructions.

8. Liability exclusion

The manufacturer's liability can among other things, also be excluded due to the fact that:

The error has arisen from a legal regulation or government authority regulation, with which the product had to comply with.

The products characteristics reflected the current state of science and technology at that time, and that the defect could not be recognised as such by the party who marketed it.

If the person in question has only produced the raw material or a component which caused the error due to the design of the product in which the raw material or component has been incorporated, or due to the manufacturers' instructions for the product.

9. Application

Application ranges for Lift&Slide hardware:

Lift&Slide doors as 2 - 6 pieced units;

Lift&Slide windows as 2 - 4 pieced units;

10. Version

Lift&Slide hardware 400 kg

Hardware for single sashes up to 400 kg, equipped with 2-roll rollers and additional roller for clampable connecting rod. Synthetically covered rolls with grooved ball bearings. Sash thickness from 56 up to 98 mm. Sash distance 28, 23 and 10 mm.



Lift drive-gear with 27.5 and 37.5 mm backset, designed for use with profile cylinders.

Lift&Slide hardware HS 300 kg

Hardware for single sashes up to 300 kg, equipped with 2-roll rollers for clampable connecting rod. Synthetically covered rolls with grooved ball bearings. Sash thickness from 56 up to 98 mm. Sash distance 28, 23 and 10 mm. Lift drive-gear with 27.5 and 37.5 mm backset, designed for use with profile cylinders.

Lift&Slide hardware HS 200 kg

Hardware for single sashes up to 200 kg, equipped with 2-roll rollers, for clampable connecting rod. Synthetically covered rolls with grooved ball bearings. Sash thickness from 56 up to 98 mm. Sash distance 28, 23 and 10 mm. Lift drive-gear with 27.5 and 37.5 mm backset, designed for use with profile cylinders.

11. Turning handles

The aluminium HARMONY HS handles are concealed. The rosettes are equipped with robust click-in positions and firm lugs.

Turning handles without PC hole are the standard version.

Turning handles with PC-hole, rotatable handles for operation on both sides with PC-hole.

12. Frame covers, thresholds, roller tracks and guide tracks

Top guide tracks

Version "with cover":

Aluminium guide track for Lift&Slide, sash thickness from 56 up to 68 mm.

Version "Universal low", "C" and "flush-mounted":

Aluminium guide track for Lift&Slide, sash thickness from 56 up to 110 mm.

GRP floor thresholds

For sash thicknesses from 56 - 110 mm.

Aluminium floor thresholds

Frame cover with threshold, sash thickness from 56 up to 68 mm, sash distance 23 or 10 mm.

Frame cover

Frame cover with threshold, sash thickness from 56 up to 68 mm, sash distance 23 or 10 mm.

Frame cover with threshold and clip-in track, sash thickness from 56 up to 68 mm, sash distance 23 or 10 mm.

Low roller track

Track for finished floors.

Bottom roller track / bottom C-track

The top C-track can also be used on the bottom, however only in conjunction with a clip-in track.

13. Standard colours

Lift&Slide and Lift&Slide&Tilt hardware is available in the following standard colours:

Visible aluminium hardware components "Silver anodised"

Visible aluminium hardware components "Bronze HS anodised"

Visible aluminium hardware components "Dark brown anodised"

Visible GFRP hardware components "Silver pigmented"

14. Materials, corrosion protection

The fittings are made of high-quality steel, zinc die-cast and aluminium alloys. Depending on the material, the parts are galvanised and passivated or anodised.





1.3 MACO surface finish

MACO Silver look

Since 2014 MACO has abandoned the use of cobalt during the anodizing process, thereby meeting future requirements for ecological and healthy production methods

Back in the year 2000 MACO was the first manufacturer of building hardware to use chrome-VI-free silicate-based silver passivation in their electrogalvanising. This process achieved excellent surface characteristic results and was the first alternative to chromating with chromium VI.

Excellent resistance to corrosion due to environmentally-friendly procedure:

Within the framework of state-of-the-art systems and on-going development particularly in electroplating (e.g. sealing with Nano-structured silicon compounds), MACO has been successful in fulfilling the requirements of Class 4 in accordance with EN 1670:2008.

The coating process in question is exceptionally environmentally friendly process that does not require the use of chromium VI.

Application areas:

Electrogalvanised hardware have proved to be ideal for normal stresses.

Nevertheless, these are only applicable to a limited extent for higher stresses such as damp room, food processing companies, coastal areas, certain types of timber etc.

This is due to the chemical reaction of the zinc coating to aggressive materials.

In application areas for which a high chemical resistance is required, MACO recommends the use of TRICOAT-PLUS hardware.

Benefits for the processor:

- a) high-quality silver-look surface finish
- b) The highest corrosion resistance with grade 4 in accordance with EN ISO 1670:2008
- c) Well suited for normal environmental influences/application areas
- d) Certified quality through externally accredited test institutes and through internal tests such as. Salt spray tests in accordance with DIN EN ISO 9227, outdoor exposure tests, etc.
- e) Quality leadership on the strength of our decade-long experience in the field of electrogalvanising
- f) Our window and door hardware is enhanced in ten electrogalvanising plants in our state-of-the-art, in-house production facilities

MACO TRICOAT-PLUS

MACO TRICOAT PLUS hardware are a further development of the MACO TRICOAT hardware and are produced especially for applications where enhanced corrosion protection is required.

The special thing about MACO TRICOAT PLUS hardware is that an organic Top-Coat (electrocoating and hydro-baked enamel finish) is applied on top of the electrogalvanised surface of the installed silver-look hardware.

With this coating system, MACO TRICOAT PLUS hardware achieve a very high level of chemical resistance and are as a result far superior to electrogalvanised hardware with regard to corrosion.

Excellent resistance to corrosion

The quality of the MACO TRICOAT hardware greatly exceeds the requirements of Class 5 in accordance with EN ISO 1670:2008. MACO underlines this fact with its 15-year TRICOAT-PLUS surface guarantee.

With its innovative TRICOAT-PLUS surface coating process, MACO is the only hardware manufacturer who can offer a full range of highly corrosion-resistant products.

Applications:

Basically everywhere where the corrosion resistance of electrogalvanised surface-finishes is no longer sufficient; for example in coastal areas, industrially congested areas, damp rooms, industrial premises with high corrosion impact, timber containing acids (e.g. oak, Accoya®, etc.), indoor swimming pools, food processing companies such as butcher's shops, cheese dairies, etc. as butcher's shops, cheese dairies, etc.

Fabricator benefits:

- a) 15-year surface guarantee
- b) Differentiating characteristics
- c) Unrivalled aesthetics
- d) Durability under extreme conditions
- e) Ultimate corrosion resistance
- f) Certified quality through externally accredited test institutes and through internal tests such as. salt spray tests in accordance with EN ISO 9227, weathering tests, etc.
- g) No corrosion during the construction phase
- h) Solutions for problematic application areas
- i) 10 year surface-finish guarantee for use in Accoya® and oak.

Preservation of surface protection for hardware components



A series of regulations must be observed to ensure the proper functions of the window hardware.

The following points should be taken into account so that end users can enjoy perfect operation and aesthetics of the windows and hardware.

Causes of corrosion on hardware components:

Should signs of corrosion on hardware components develop after a short period of time in individual cases (despite surface protection), the following listed points are generally the cause of corrosion:

- a) The real cause of the corrosion is the oxygen. In practice however, corrosion only appears, when the relative humidity reaches a critical value of approx. 60 to 70% achieved.
- b) An additional cause of corrosion can be the formation of condensation on the metal components; caused by undershooting the dew point under strong temperature fluctuations.
- c) Corrosion attacks have increased due to gaseous air pollution (industrial atmosphere, car exhaust emissions) such as sulphur dioxide (SO₂) and nitrogen oxide gases (NO₂) and resulting compounds in the presence of humidity - sulphurous acid (H₂SO₃), sulphuric acid (H₂SO₄), nitric acid (HNO₃). This air pollution also has a corrosive effect in a dry condition.
- d) The location of the object must be taken into account in connection with point c) above, e.g. busy roads, industrial areas, waste water treatment plants, sea air, air containing chlorine, intensive livestock breeding etc.
- e) Also harmless materials such as paper/cardboard as well as different types of timber used in the fenestration industry partially contain aggressive components (acids, alkali, and chlorides) that can destroy the passivation upon contact and thus cause corrosion.

f) Plaster, cement and other building materials e.g. acetic acid cross-linked silicone as is used frequently in the fenestration, industry, are additional causes for corrosion

g) A common and not sufficiently recognised source of damage is cleaning by chemical attack (acetic cleaning, agents, acidic cleaning agents with citric acid, cement residue remover with phosphoric acid, severe alkaline cleaning agents, etc.) or by means of mechanical abrasion (abrasive cleansers, steel wool), which destroys the passivation and as a result, speed up the corrosion attack.

Measures for looking after surfaces:

- a) The hardware and/or the rebate areas must be ventilated sufficiently – in particular during the building phase – so that they are not exposed to direct wetness impact or to condensation.
- b) The hardware must be kept free of deposits and soiling through construction material (building dust, gypsum plaster, cement etc.), i.e. windows must be covered.
- c) Aggressive vapours in combination with low formation of condensation can cause a fast corrosion on hardware components.
- d) Timber frames and sashes with a high concentration of (tannic) acid must be treated with suitable surface coatings to ensure that these contents do not evaporate from the timber.
- e) No acetic-acid or cross-linked acidic sealing compounds or those with the above mentioned contents may be used.
- f) The hardware may only be cleaned or polished with mild, pH-neutral cleaning agent in diluted form.
- g) The hardware must not be damaged with sharp edged tools.

Further information about MACO surface finishes is available on our homepage or in the Surfaces brochure Order No. 49510.



1.4 Tender specifications



LIFT & SLIDE HARDWARE up to 200kg sash weight

General hardware properties

- Use with timber – timber/aluminium systems
- Profile thicknesses 56 – 110 mm
- Threshold made of glass-fibre reinforced polymer (surface coating available in all colours, paint recommendation to fabricator)

Threshold with thermal break

- Barrier-free design acc. to DIN 18025
- Drive gear for BS 27.5 mm or 37.5 mm; all drive gears are pre-set for use with profile cylinders
- Drive gear for 2 – 4 fold interlocking
- Lift & slide handle for indoor and out; or outdoors with finger pull
- Surface is available in Silver look or with corrosion-resistant TRICOAT surface
- Applicable for all systems from A - L

Application range (dimensions apply to timber units only)

- Min. sash width: 630 mm
- Max. sash width: 2,200 mm
- Min. sash height: 745 mm
- Max. sash height: 2,870 mm
- Max. sash weight: 150 kg
- The sash height must not exceed 2.5 times the sash width



Optional accessories (deluxe solution)

a) Insert profiles

(The insert profile as used in conjunction with the threshold made of glass-fibre reinforced polymer can achieve a U value of 0.82 W/m²K)

b) Anti-moisture foil

LIFT & SLIDE HARDWARE up to 300 kg sash weight

General hardware properties

a) Use with timber – timber/aluminium and PVC systems

b) Profile thicknesses 56 – 110 mm

c) Threshold made of glass-fibre reinforced polymer (surface coating available in all colours, paint recommendation to fabricator)

d) Threshold with thermal break

e) Barrier-free design acc. to DIN 18025

f) Drive gear for BS 27.5 mm or 37.5 mm; all drive gears are pre-set for use with profile cylinders

g) Drive gear for 2 – 4 fold interlocking

h) Lift & slide handle for indoor and out; or outdoors with finger pull

i) Surface is available in silver look or with corrosion-resistant TRICOAT surface

j) Applicable for all systems from A - L

Application range (dimensions apply to timber units only); refer to Installation Instructions for PVC units

a) Min. sash width: 720 mm

b) Max. sash width: 3,385 mm

c) Min. sash height: 745 mm

d) Max. sash height: 2,870 mm

e) Max. sash weight: 300 kg

f) The sash height must not exceed 2.5 times the sash width

Optional accessories (deluxe solution)

a) Insert profiles

(The insert profile as used in conjunction with the threshold made of glass-fibre reinforced polymer can achieve a U value of 0.82 W/m²K)

b) Anti-moisture foil

LIFT & SLIDE HARDWARE up to 400 kg sash weight

General hardware properties

a) Use with timber – timber/aluminium systems

b) Profile thicknesses 56 – 110 mm

c) Threshold made of glass-fibre reinforced polymer (surface coating available in all colours, paint recommendation to fabricator)

d) Threshold with thermal break

e) Barrier-free design acc. to DIN 18025





- f) Drive gear for BS 27.5 mm or 37.5 mm; all drive gears are pre-set for use with profile cylinders
- g) Drive gear for 2 – 4 fold interlocking
- h) Lift & slide handle for indoor and out; or outdoors with finger pull
- i) Surface is available in Silver look or with corrosion-resistant TRICOAT surface
- j) Applicable for all systems from A - L

Application range (dimensions apply to timber units only)

- a) Min. sash width: 1,200 mm
- b) Max. sash width: 3,385 mm
- c) Min. sash height: 745 mm
- d) Max. sash height: 2,870 mm
- e) Max. sash weight: 400 kg
- f) The sash height must not exceed 2.5 times the sash width

Optional accessories (deluxe solution)

- a) Insert profiles

(The insert profile as used in conjunction with the threshold made of glass-fibre reinforced polymer can achieve a U value of 0.82 W/m²K)

- b) Anti-moisture foil

TILT & SLIDE HARDWARE – S (standard) up 160 kg sash weight

General hardware properties

- a) Use with all standard profiles made of timber – timber/aluminium and PVC systems
- b) Frame clearance of 35 mm
- c) Drive gear for 15 – 25 – 40 mm
- d) Surface is available in Silver look or with corrosion-resistant TRICOAT surface
- e) Manual opening and closing function
- f) Applicable for systems A and C

Application range

- a) Min. sash rebate width: 620 mm
- b) Max. sash rebate width: 1,650 mm
- c) Min. sash rebate height: 840 mm
- d) Max. sash rebate height: 2,450 mm
- e) Max. sash weight: 160 kg
- f) The sash height must not exceed 2.5 times the sash width

TILT & SLIDE HARDWARE – SE (self-engaging) up 160 kg sash weight

General hardware properties

- a) Use with all standard profiles made of timber – timber/aluminium and PVC systems
- b) Frame clearance of 35 mm



- c) Drive gear for BS 15 mm
- d) Surface is available in Silver look or with corrosion-resistant TRICOAT surface
- e) Automatic latching function below
- f) Anti lock-out device
- g) Applicable for systems A and C

Application range

- a) Min. sash rebate width: 650 mm
- b) Max. sash rebate width: 1,650 mm
- c) Min. sash rebate height: 840 mm
- d) Max. sash rebate height: 2,450 mm
- e) Max. sash weight: 160 kg
- f) The sash height must not exceed 2.5 times the sash width

TILT & SLIDE HARDWARE –Z (positive control) up 200 kg sash weight

General hardware properties

- a) Use with all standard profiles made of timber – timber/aluminium and PVC systems
- b) Frame clearance of 35 mm
- c) Drive gear for BS 0 – 17.5 – 30 – 35 – 40 – 45 – 50 mm
- d) Surface is available in Silver look or with corrosion-resistant TRICOAT surface
- e) Automatic opening and closing function is controlled centrally via the lever.
- f) Anti lock-out device
- g) Applicable for systems A and C

Application range

- a) Min. sash rebate width: 720 mm
- b) Max. sash rebate width: 2,000 mm
(a tandem roller must be used upwards of 160 kg sash weight)
- c) Min. sash rebate height: 900 mm
- d) Max. sash rebate height: 2,700 mm
- e) Max. sash weight: 200 kg
(a tandem roller must be used upwards of 160 kg sash weight)
- f) The sash height must not exceed 2.5 times the sash width

Optional accessories (deluxe solution)

- a) Mishandling device





PARALLEL-STOP-SLIDE - HARDWARE - PAS up to 200 kg sash weight

General hardware properties

Manual opening and closing function with intuitive operation. Handle setting as for T&T windows. Integrated top and bottom spring mechanisms for easy operation when pulling the sash into the frame. Guaranteed evenly distributed peripheral ventilation in the parallel position.

- a) Use with all standard profiles made of timber, timber/aluminium and PVC systems
- b) Frame clearance of 35 mm
- c) Drive gear from BS 15 mm to BS 50 mm
- d) Central lock surface: silver look or with optional highly corrosion-resistant TRICOAT surface
- e) Cover colours: silver, white, brown, bronze SKB and cream white
- f) Applicable for systems A and C
- g) Central lock with height-adjustable and compression-adjustable i.S. safety roller cams

Application range

- a) Min. sash rebate width: 720 mm
- b) Max. sash rebate width: 2000 mm
- c) Min. sash rebate height: 841 mm
- d) Max. sash rebate height: 2,685 mm
- e) Sash weight up to 160 kg
- f) A tandem roller must be used for a sash weight above 160 kg.
- g) The sash height must not exceed 2.5 times the sash width.



Application range :	
SKB-S	FFB: 620 - 1650
160 kg	FFH: 840 - 2450
SKB-SE	FFB: 650 - 1650
160 kg	FFH: 840 - 2450
SKB-Z:	FFB: 720 - 2000
160kg	FFH: 900 - 2700
SKB-Z:	FFB: 620 - 1650
200 kg mit Tandemlaufwagen	FFH: 900 - 2700
PAS:	FFB: 750 - 2000
160kg	FFH: 841 - 2685
PAS:	SRW: 1150 - 2000
200 kg mit Tandemlaufwagen	FFH: 841 - 2685
HS:	FB: 630 - 2200
200 kg	FH: 745 - 2870*
HS:	FB: 720 - 3385
300 kg	FH: 745 - 2870*
HS:	FB: 1200 - 3385
400 kg with additional roller	FH: 745 - 2870*

* up to 3,860 mm in special cases. The manufacturer is responsible for the static load calculations.

The sash height must not exceed 2.5 times the sash width!

SW:SH = 1:2.5



1.5 Storage instructions fittings

Improper storage of fittings can affect the surface quality. To prevent this, the following points should be noted:

- Ensure that the room air is permanently dry
- Large temperature fluctuations, which lead to condensation must be prevented. Condensation on fittings means that the galvanized surfaces are attacked

- Aggressive vapors by cleaners or assembly aids such as silicone, and the like must - be avoided - even briefly. Vapors of such substances can cause very rapid corrosion of fittings
- Salty air or polluted by industrial air causes galvanized surfaces to corrode and can leave deposits.

1.6 Certificates and guarantees

MACO ensures high quality, not only with ongoing continuous internal testing, but also through external auditing by renowned, independent institutes. Copies of all our independent test certificates, covering our quality, safety and environmental management systems, as well as our product guarantees are

available to download from our website www.maco.eu. In addition our safety descriptions relating to dangerous substances (REACH Declaration) are available, covering all MACO products.

1.7 General Terms and Conditions

Our general terms and conditions are available for download from our website (www.maco.eu).



2 HS-ST

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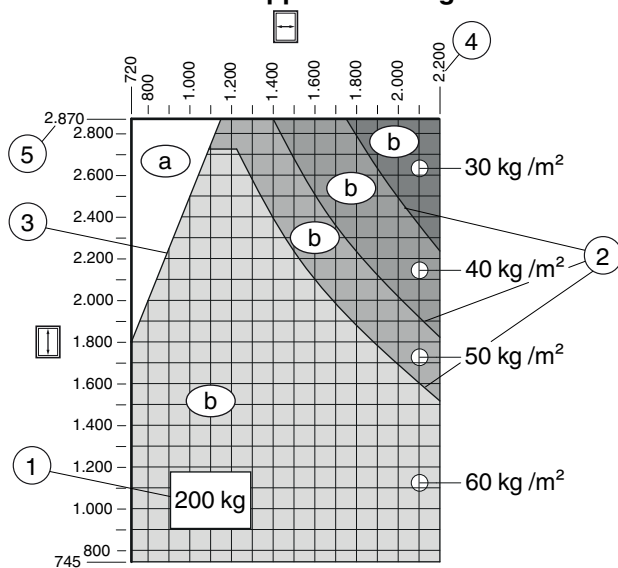
2 HS-ST

2.1 Application diagrams

The application diagrams provided represent the maximum and minimum application range for the sash sizes. These application ranges relate to the MACO lift & slide hardware and are binding. They must not be exceeded. The sash height must not exceed 2.5 times the sash width!

SW: SH = max. 1 : 2.5

Specifications on the application diagram

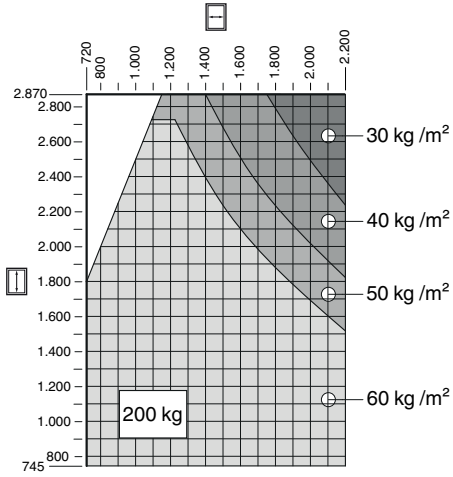


CAUTION: When fabricating lift & slide PVC profiles and aluminium profiles, the application ranges of the profile manufacturer must be observed. The application ranges of the profile manufacturer can limit the application ranges of the MACO lift & slide hardware.

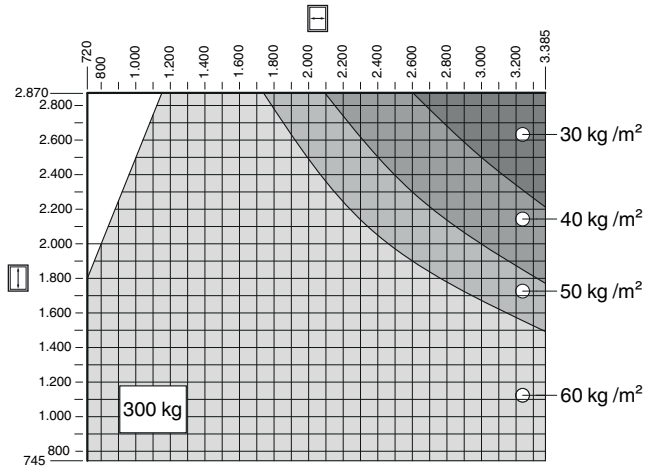
- 1) Maximum permissible sash weight
 - 2) Maximum size per glass weight
 - 3) Proportion SW: SH = max. 1 : 2.5
 - 4) Maximum SW
 - 5) Maximum SH
- a) White area = not permissible
b) Grey area = permissible



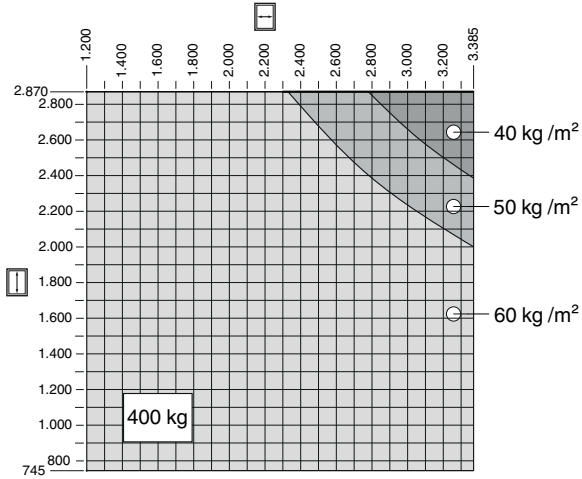
Application diagram 200 kg



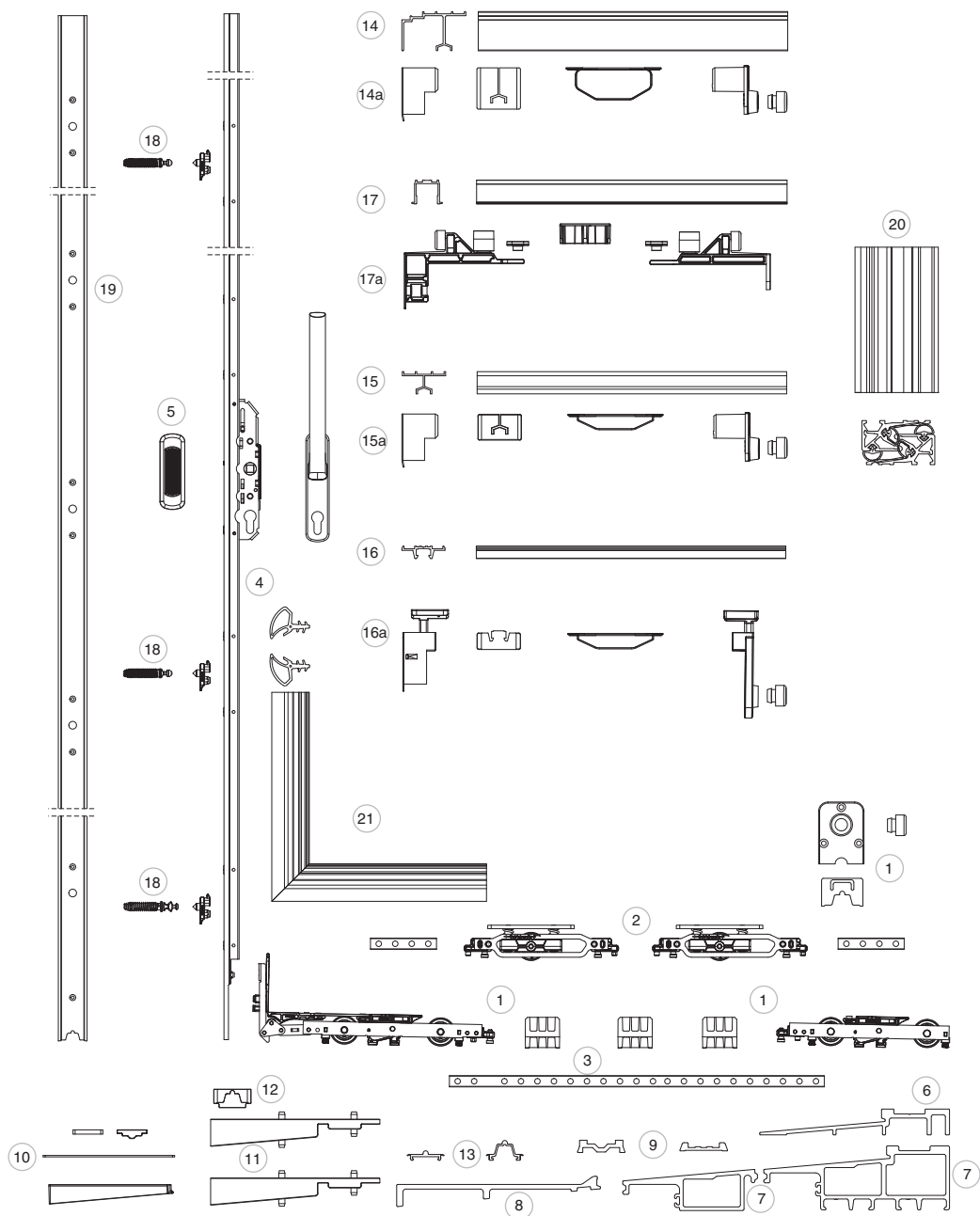
Application diagram 300 kg



Application diagram 400 kg



2.2 HS-ST hardware overview



The standard lift&slide HS-ST hardware allows the design of lift&slide windows and doors for all commercial window profiles made from timber, PVC or timber/aluminium.

For sash weights above 300 kg additional rollers must be installed.

The moving sash must not exceed a total weight of 400 kg.

Observe all MACO restrictions regarding sash size limits (see application diagrams)!

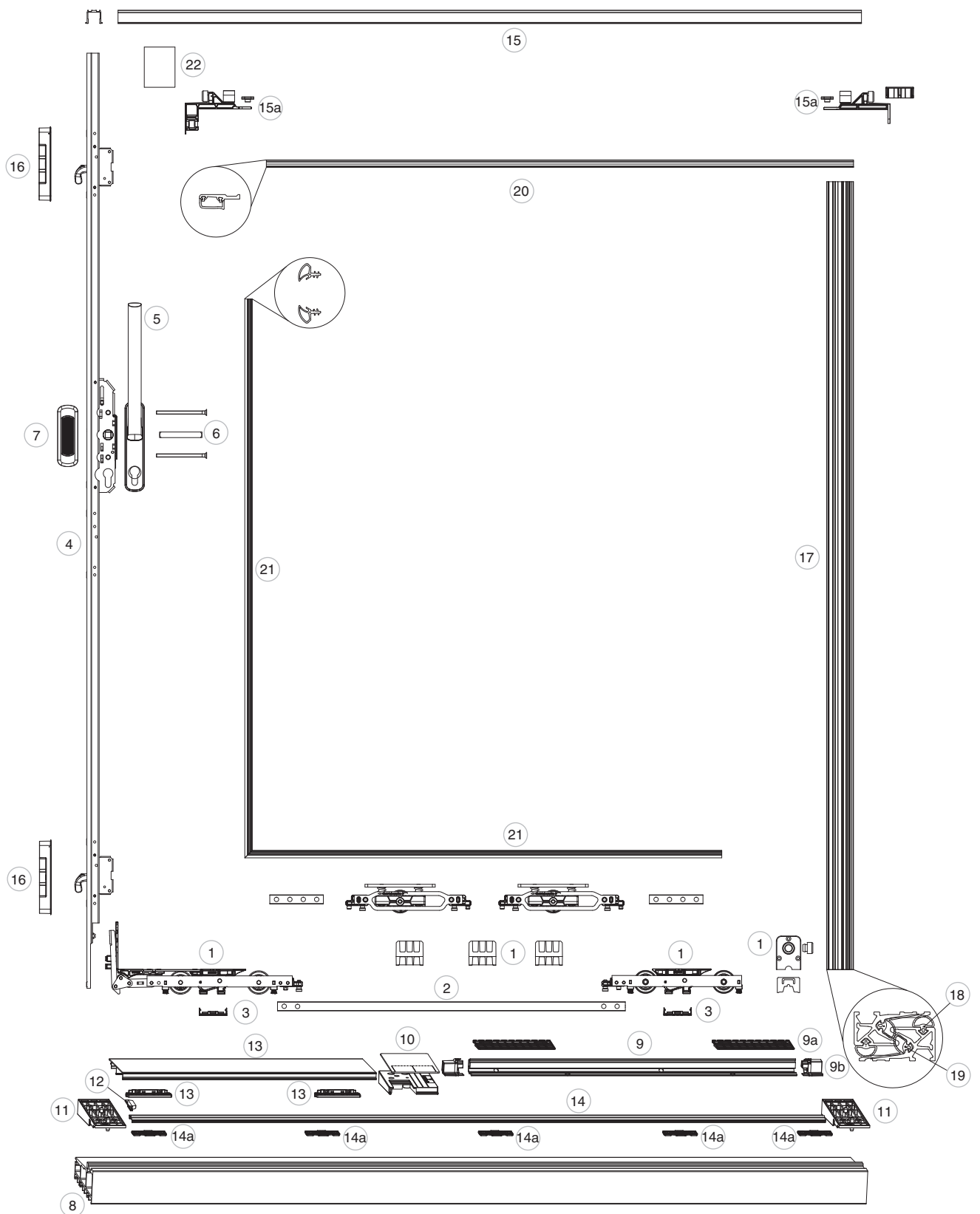
The sash must not exceed 2.5 times the sash width.



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2.3 L&S-Panorama timber: Hardware overview

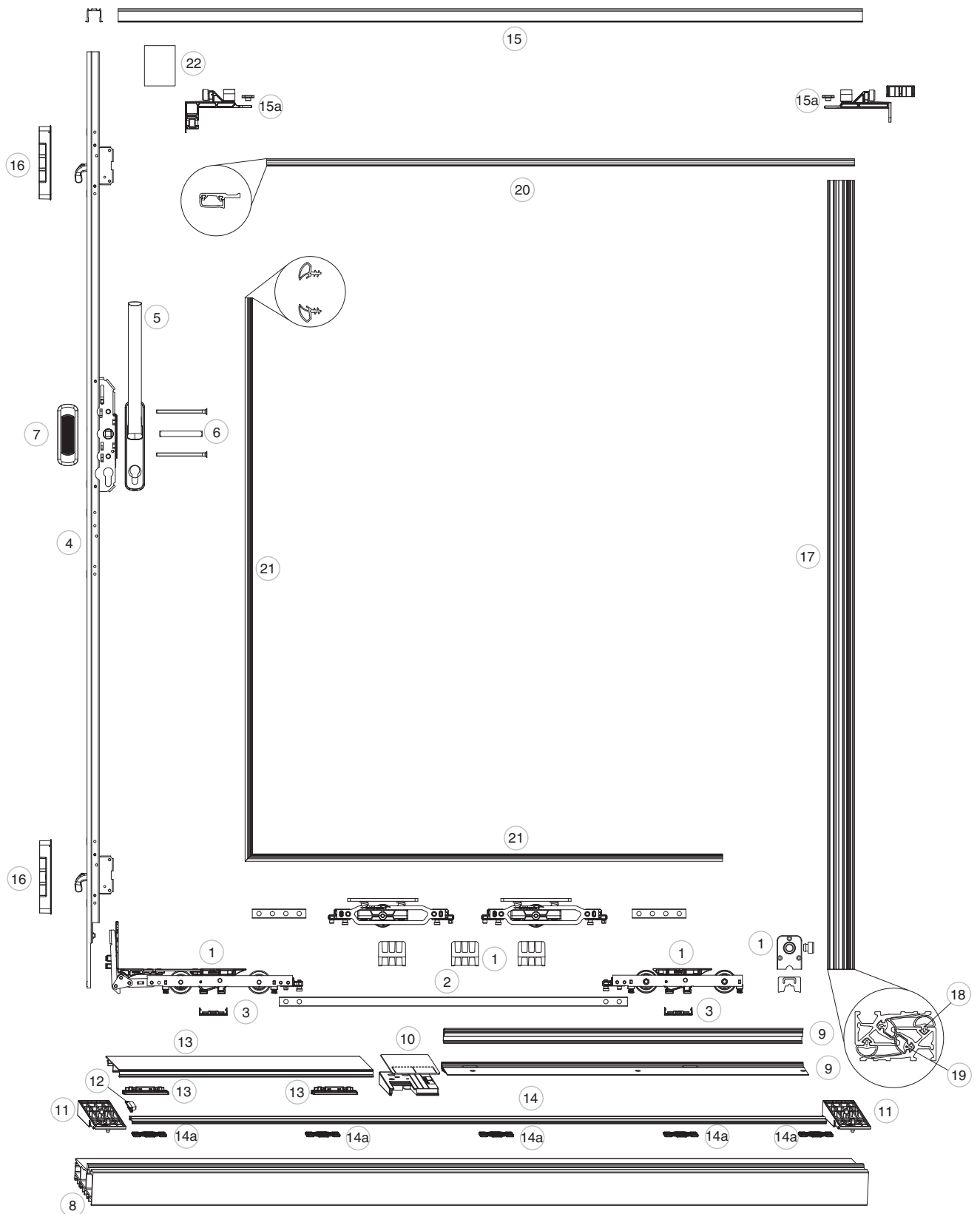




Selection guide		Page
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④	2.8.2.2.3 HS hook drive gear BS 37.5 PC	41
⑤	2.8.3.2.7 HS handle 12 with cover plate	54
⑥	2.8.3.3.1 Set of screws and spindle — HS handle 12	58
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⑧	2.9.1.2.3 Basic profile 180, special design SWITZERLAND	62
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⑬	2.9.1.11.1 Threshold	70
⑭	2.9.3.2 Roller tracks low 5 mm	75
14a	2.9.3.3 Retainer for roller track low 5 mm	75
⑮	2.9.4.1.1 Guide tracks flush-mounted	76
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⑯	2.9.5.1 Striker plates for HS hook drive gear	83
⑰	2.10.1.1.1 Pack of sealing profiles PVC	85
⑱	2.10.1.1.3 Seals for sealing profiles PVC	85
⑲	2.10.1.1.4 Bubble gaskets for sealing profiles PVC	85
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㉒	2.10.2.2.3 Foamed rubber seals	88



2.4 L&S-Panorama timber/alu: Hardware overview



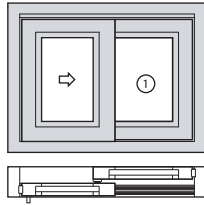


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14a	2.9.3.3 Retainer for roller track low 5 mm	75
15	2.9.4.1.1 Guide tracks flush-mounted	76
15a	2.9.4.1.2 Accessories for flush-mounted guide tracks	76
16	2.9.5.1 Striker plates for HS hook drive gear	83
17	2.10.1.1.1 Pack of sealing profiles PVC	85
18	2.10.1.1.3 Seals for sealing profiles PVC	85
19	2.10.1.1.4 Bubble gaskets for sealing profiles PVC	85
20	2.10.1.2.1 Top guide track for narrow crossbar	86
21	2.10.2.1.1 Pack of DSE7400-7430 sash seals	87
22	2.10.2.2.3 Foamed rubber seals	88

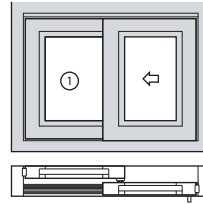


2.5 HS-ST hardware list

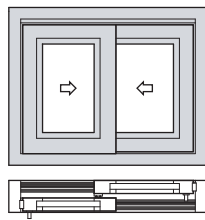
A DIN Left



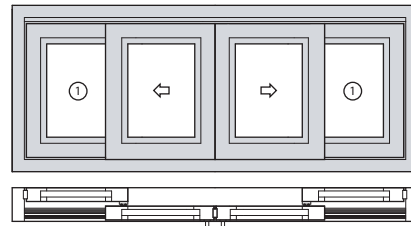
A DIN Right



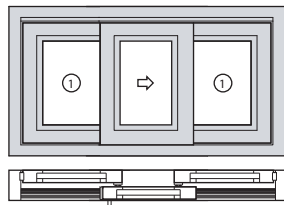
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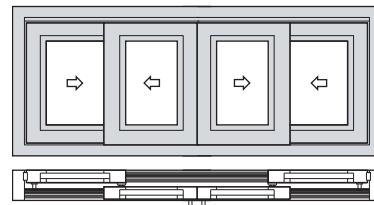
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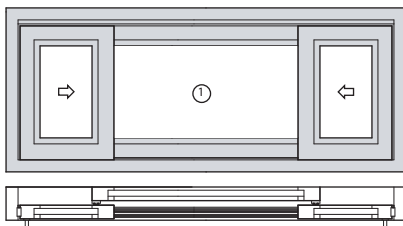
G



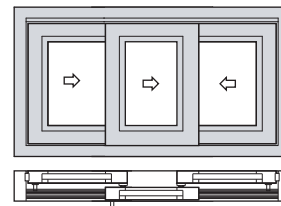
F



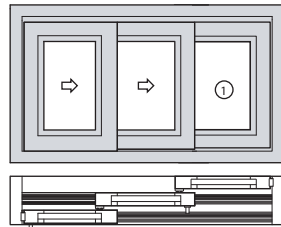
K



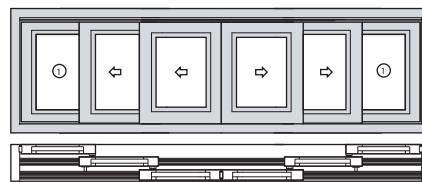
H



E



L





Quantity for diagram									Table No.	Order text
A	C	G	K	D	F	H	E	L		
Sash components										
1	2	1	2	2	4	3	2	4	2.8.1.1	Basic packs for rollers
1	2	1	2	2	4	3	2	4	2.8.1.1.5	Connection rod
1	2	1	2	2	4	3	2	4	2.8.2	Drive gears
1	2	1	2	2	4	3	2	4	2.8.3.2.7	HS-handle 12 with cover plate
1	2	1	2	2	4	2	1	2	2.8.3.3.1	Set of screws and spindle
1	2	1	2	2	4	2	1	2	2.8.3.3.3	Short finger pull
-	-	-	-	-	-	1	1	2	2.8.3.3.5	Spindles
-	-	-	-	-	-	1	1	2	2.8.3.3.8	Locking nuts for drive gears
Frame components										
1	1	1	1	1	1	1	1	1	2.9.1.2	GRP basic profile
-	-	-	-	-	-	-	1	1	2.9.1.2.5	Extensions
-	-	-	-	-	-	-	1	1	2.9.1.2.6	Extension connector 3 pcs. per meter
1	2	2	1	1	2	2	2	4	2.9.1.3.1	Intermediate profiles
-	-	-	-	1	1	1	-	-	2.9.1.3.2	Intermediate profiles with drainage slot
-	-	-	-	1	2	2	-	-	2.9.1.3.3	Sealing for intermediate profile with drainage slot
1	2	2	1	-	-	-	1	2	2.9.1.4.1	Surface-mounted track for inactive sash
-	-	-	-	1	1	1	1	2	2.9.1.4.2	Surface-mounted track for active sash
1	2	2	2	-	-	-	1	2	2.9.1.9.3	Basic packs sealing plate for intermediate profile
2	2	2	2	2	2	2	2	2	2.9.1.10.1	Connecting plates
1	-	1	2	2	2	2	1	-	2.9.1.10.2	Sealing components for roller tracks
-	1	-	-	-	1	-	-	1	2.9.1.10.3	Sealing components for roller tracks
-	-	-	-	1	2	2	1	2	2.9.1.10.4	Centre seals for 2 active sashes
-	-	-	-	-	-	-	1	2	2.9.1.10.5	Sealing plates and surface-mounted tracks diagram E and L
-	-	-	-	-	-	-	1	2	2.9.1.11.4	Cover caps
1	1	1	1	2	2	2	2	3	2.9.3	Roller tracks
1	1	1	1	2	2	2	2	3	2.9.4	Guide tracks
1	2	1	2	2	4	3	2	4	2.9.4	Accessories for guide tracks
-	2	-	-	-	2	-	-	2	2.9.5.2	Locking bolt
1	1	1	1	1	1	1	1	1	2.9.6.1	Corner connector
Sash/Frame components										
2	4	2	4	1	2	2	2	4	2.10.1.2.1	Gasket tracks (vertical and horizontal)
1	1	1	1	1	1	1	1	2	2.10.2.2.1	Sealing HS drive gear side
1	1	1	2	2	3	2	2	3	2.10.2.2.3	Overlap gasket plate
-	-	-	-	2	4	4	2	4	2.10.3	Buffer stop





2.6 Operating and maintenance instruction HS-timber

TECHNOLOGY IN MOTION

Operation and maintenance instructions
Lift & slide fittings

Product liability advice

- Your windows and doors have been equipped with a high-quality lift & slide fittings. Their operation is straightforward and trouble-free; nevertheless you should read these instructions carefully and adhere to the operation advice.
- In your own interest, please read these operation and maintenance instructions!
- Keep these operation and maintenance instructions safe in case needed and also inform other users of the contents of these instructions.
- Check as to whether an operation sticker has been applied to the window or if one is necessary.
- In order to ensure that your windows are operational for many years to come please adhere to the care and maintenance instructions!

Lubricate air gap as shown and drive gear with lubrication grease or technical Vaseline.

Maintenance

To maintain the functionality of lift & slide fittings (HS) for windows and French door sashes, the following maintenance work must be performed annually:

- Safety-relevant fittings must be checked for wear regularly.
- Lubricate all movable parts and locking points of the lift & slide fittings.
- Use only those types of cleaning and maintenance products that do not affect the corrosion protection of the fittings components!

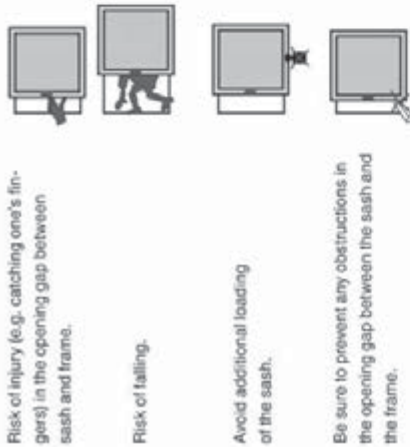
Lubricate air gap as shown and drive gear with lubrication grease or technical Vaseline.

Operation

1 Close
2 Open/Slide

Lubricate air gap as shown and drive gear with lubrication grease or technical Vaseline.

Safety and maintenance instructions



Risk of injury (e.g. catching one's fingers) in the opening gap between sash and frame.

Risk of falling.

Avoid additional loading of the sash.

Be sure to prevent any obstructions in the opening gap between the sash and the frame.

General advice for your windows

A good window can do more than just let in air and light:

It is a design element, and at the same time a component that must satisfy demanding technical requirements.

Apart from the essential care of the fittings components, you should also constantly check the surface finish, the glazing, and the seals and immediately repair any defective areas.

Use only water with a mild soap solution for cleaning purposes: no corrosive cleaning agents!

Do not paint over the fittings!

Inserting the slider sash

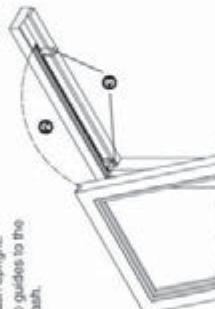
Specialists must pay particular attention to the following points, since the installation no longer lies within the sphere of influence of the fittings manufacturer!

Guide rail C



1 Set down the slider sash on the roller.

2 Position the sash upright.
3 Fasten the top guides to the sides of the sash.

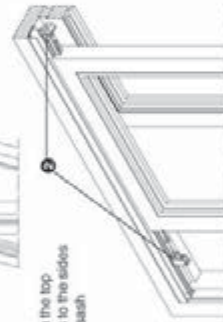


Universal low guide frame with cover:

1 Insert the top guide into the sash and set down on the roller.

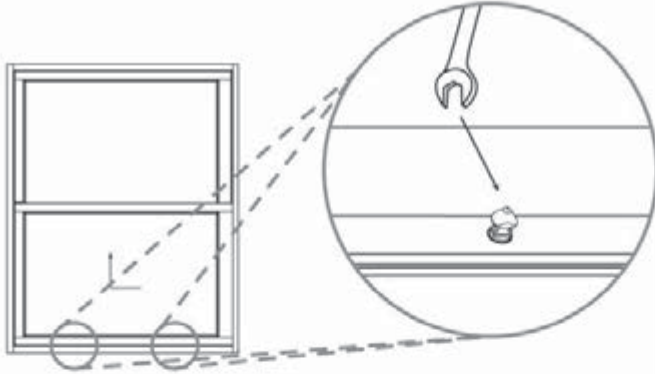


2 Fasten the top guides to the sides of the sash.



Window adjustments

Settings and adjustments for the fittings (including inserting and removing the sashes) must only be carried out by specialists.



The same care and maintenance instructions apply to all window types that are not specifically mentioned in these instructions (e.g. System C lift & slide windows)!

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Order No. 750464_EN
Date created:
October 2006
Date changed:
February 2011
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2.7 Operating and maintenance instruction HS-PVC

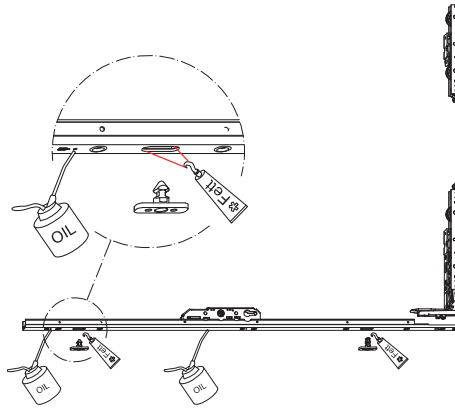


TECHNOLOGY IN
MOTION

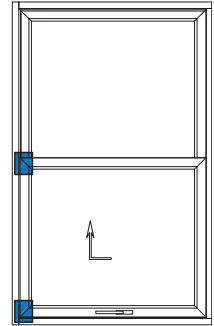
Maintenance

To maintain the functionality of lift & slide fittings (HS) for windows and French door sashes, the following maintenance work must be performed annually:

1. Lubricate all movable parts and locking points of the Lift&Slide hardware.
No rust removers, silicone sprays etc. should be used!
Lubrication must be carried out only with lubrication grease or technical Vaseline!



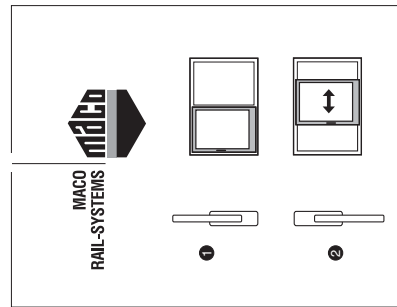
2. Security relevant fittings components are to be examined at regular intervals for wear and tear!



Product liability advice

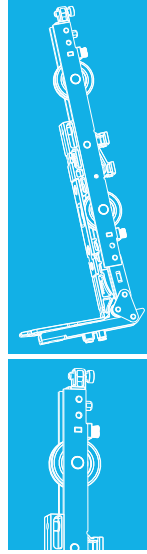
- Your windows and doors have been equipped with a high-quality turn&lift hardware. The operation is straightforward and trouble-free; nevertheless you should read through these instructions carefully and adhere to the operation advice.
- In your interests, please do not forget to observe the safety and neglect instructions!
- Keep these operation and maintenance instructions safe in case needed and also inform other users of the contents of these instructions.
- Check as to whether an operation sticker has been applied to the window or if one is necessary.
- To ensure that your windows are operational for years to come, please adhere to the care and maintenance instructions!

Operation



- 1 close
- 2 open/close

MACO
RAIL SYSTEMS
SLIDING FITTINGS

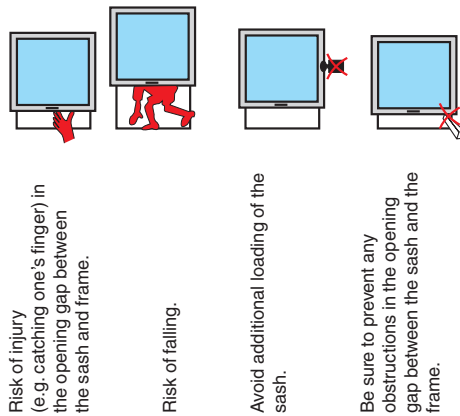


Operation and maintenance
instructions Lift&Slide fittings

PVC



Safety and neglect instruction



Risk of injury (e.g. catching one's finger) in the opening gap between the sash and frame.

Risk of falling.

Avoid additional loading of the sash.

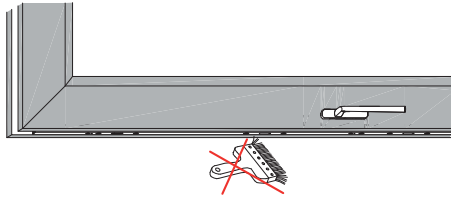
Be sure to prevent any obstructions in the opening gap between the sash and the frame.

General advice for your windows

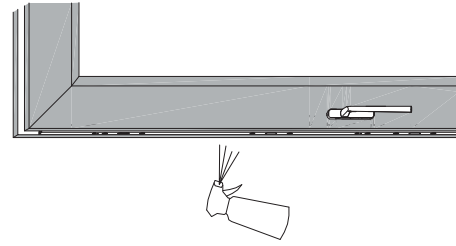
- A good window can do more than just let in light: It is a design element, and at the same time a component that must satisfy demanding technical requirements.
- Apart from the essential care of the fittings components, you should also constantly check the surface finish, the glazing, and the seals and immediately repair any defective areas.
- Use only a mild soap solution (no corrosive agents) for cleaning purposes!
- Do not paint over the fittings!

Operating instructions

1. Do not paint over fittings!



2. Only use cleaning and maintenance agents, that do not affect the corrosion protection of the fittings components!



Window adjustments

Settings and adjustments for the fittings (including inserting and removing the sashes) must only be carried out by authorized specialists.

We strongly recommend window and door buyers, to have their windows and doors installed by authorised specialists.

The same care and maintenance instructions apply to all window types that are not specifically mentioned in these instructions (e.g. System C lift & slide windows)!

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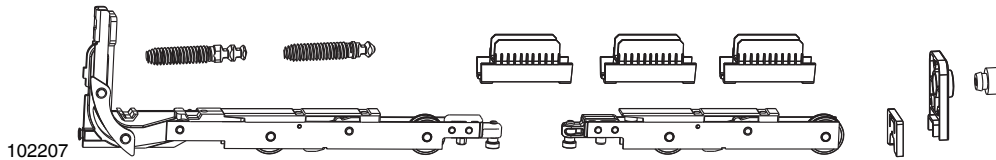
Order No.758944_EN
Date:March 2013
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and subject to change.



2.8 Sash components:

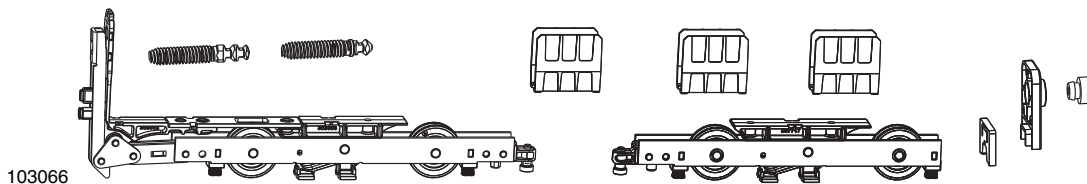
2.8.1 Rollers

2.8.1.1 Roller sets and connecting rods



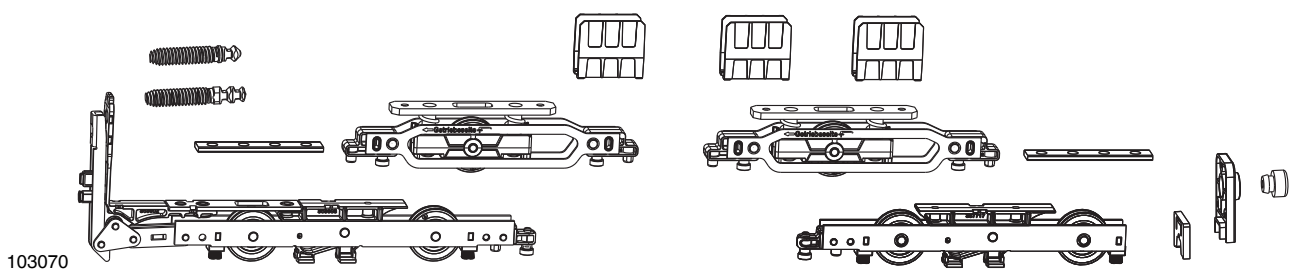
2.8.1.1.1 Roller set 200 kg

			kg		No	No Tricoat
roller pack	silver		200	1	102206	102309
	black		200	1	102207	102310



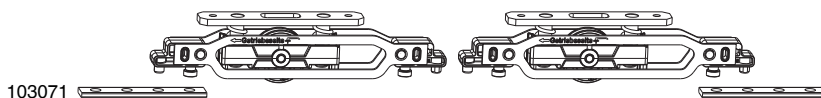
2.8.1.1.2 Roller set 300 kg

			kg		No	No Tricoat
roller pack	with brushes	silver	300	1	103065	105203
		black	300	1	103066	105204
	with brushes without locking bolt	silver	300	1	103559	
		black	300	1	103560	
	without brushes	silver	300	1	103063	105201
		black	300	1	103064	105202
without brushes, without locking bolt	silver	300	1	103772		
	black	300	1	103773		



2.8.1.1.3 Roller set 400 kg

			kg		No	No Tricoat
roller pack	with brushes	silver	400	1	103069	103726
		black	400	1	103070	103727
	without brushes	silver	400	1	103067	103724
		black	400	1	103068	103725



2.8.1.1.4 Additional rollers 400 kg

			kg		No	No Tricoat
additional roller pack	silver		400	1	103071	103728

359639

2.8.1.1.5 Connecting rods			L		No	No Tricoat		
fully punched connecting rod HS 16.4x4	silver	720 - 3.385	3.240	10	361173 ^{1,2}			
	Tricoat	720 - 3.385	2.784	1		367616 ^{1,2}		
punched connecting rod HS 16.4x4	silver	720 - 1.300	692	10	359639 ^{1,2}	360551 ^{1,2}		
		1.225 - 1.800	1.196	10			359640 ^{1,2}	360552 ^{1,2}
		1.730 - 2.305	1.700	10			359641 ^{1,2}	360553 ^{1,2}
		2.235 - 2.810	2.204	10			359642 ^{1,2}	360554 ^{1,2}
		2.740 - 3.385	2.708	10			359643 ^{1,2}	360555 ^{1,2}
connecting rod punched HS 16.4x4 for additional roller	silver		96	10	359638 ^{1,2}	360550 ^{1,2}		

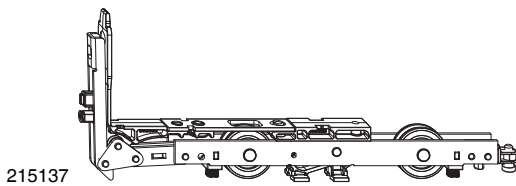
¹ For 200 kg the application ranges are reduced by - 65 mm.

For 400 kg the application ranges are increased by + 475 mm.

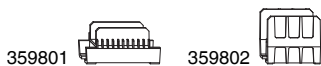
² Application areas only for design HS 300 kg. Refer to installation instructions for 150 kg and 400 kg.



2.8.1.2 Accessories and individual components for roller



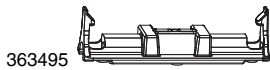
2.8.1.2.1 Individual components for roller					No	No Tricoat	
roller	with brushes	300	behind	silver	10	215136	223357
			centre	silver	10	215138	223358
			in front	silver	10	215137	223356
	without brushes	200	behind	silver	10	210492	211462
			in front	silver	10	210491	211461
		300	behind	silver	10	214689	223354
			centre	silver	10	214691	223355
			in front	silver	10	214690	223353




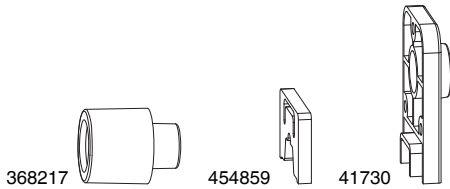
2.8.1.2.2 Rod guides and groove supports			No	No Tricoat
groove support-brace for 200 kg		10	359801	
groove support-brace for 300 kg		10	359802	




2.8.1.2.3 Bracket and support for HS rollers for narrow sash frames			No	No Tricoat
Retainer bracket	for HS roller	1	104666	



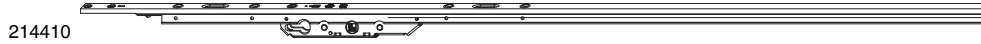
2.8.1.2.4 Roller supports for roller		No	No Tricoat
support for 200 kg for HS roller silver	50	370317	
support for 300 kg for HS roller silver	50	363495	







2.8.1.2.5 Individual components		No	No Tricoat
extension for gasket case length 27 mm silver	50	368217	
gasket for seal case black	10	454859	
seal case black	10	41730	
seal case silver	10	358380	

2.8.2 Drive gears

2.8.2.1 HS drive gear BS 27.5







2.8.2.1.1 HS drive gear BS 27.5 PC

				L			No	No Tricoat
size 1	silver	745 - 1.360	400	1.300	10	5	214410 ¹	223305 ¹
	bronze HS	745 - 1.360	400	1.300	10	5	214597 ¹	223315 ¹
	brown	745 - 1.360	400	1.300	10	5	214607 ¹	223325 ¹
size 2	silver	1.260 - 1.760	400	1.700	10	5	214411 ¹	223306 ¹
	bronze HS	1.260 - 1.760	400	1.700	10	5	214598 ¹	223316 ¹
	brown	1.260 - 1.760	400	1.700	10	5	214608 ¹	223326 ¹
size 3	silver	1.660 - 2.160	1.000	2.100	10	5	214412 ¹	223307 ¹
	bronze HS	1.660 - 2.160	1.000	2.100	10	5	214599 ¹	223317 ¹
	brown	1.660 - 2.160	1.000	2.100	10	5	214609 ¹	223327 ¹
size 3,5	silver	1.860 - 2.360	1.000	2.300	10	5	228262 ¹	
size 4	silver	2.060 - 2.560	1.000	2.500	10	5	214413 ¹	223308 ¹
	bronze HS	2.060 - 2.560	1.000	2.500	10	5	214600 ¹	223318 ¹
	brown	2.060 - 2.560	1.000	2.500	10	5	214610 ¹	223328 ¹
size 5	silver	2.460 - 2.860	1.000	2.800	10	5	214414 ¹	223309 ¹
	bronze HS	2.460 - 2.860	1.000	2.800	10	5	214601 ¹	223319 ¹
	brown	2.460 - 2.860	1.000	2.800	10	5	214611 ¹	223329 ¹
size 6	silver	2.860 - 3.360	1.000	3.300	10	5	215557 ¹	223345 ¹
	brown	2.860 - 3.360	1.000	3.300	10	5	215563 ¹	223349 ¹
size 7	silver	3.260 - 3.860	1.000	3.800	10	5	215559 ¹	223347 ¹
	brown	3.260 - 3.860	1.000	3.800	10	5	215565 ¹	223351 ¹

¹ The application ranges apply only if a flat roller track is used with universal low guide frame with cover. If the high roller is used, the application ranges are increased by 10 mm. If guide rail C is used, the application ranges are increased by 10 mm. If guide rail C is used, the application areas are increased by 10 mm.

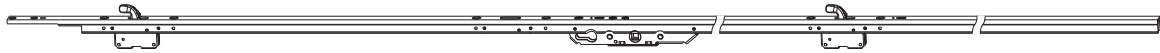









2.8.2.1.2 HS drive gear BS 27.5 RC

				L			No	No Tricoat
size 1	silver	745 - 1.360	400	1.300	10	5	214581 ¹	223335 ¹
size 2	silver	1.260 - 1.760	400	1.700	10	5	214582 ¹	223336 ¹
size 3	silver	1.660 - 2.160	1.000	2.100	10	5	214583 ¹	223337 ¹
size 4	silver	2.060 - 2.560	1.000	2.500	10	5	214584 ¹	223338 ¹
size 5	silver	2.460 - 2.860	1.000	2.800	10	5	214585 ¹	223339 ¹

¹ The application ranges apply only if a flat roller track is used with universal low guide frame with cover. If the high roller is used, the application ranges are increased by 10 mm. If guide rail C is used, the application ranges are increased by 10 mm. If guide rail C is used, the application areas are increased by 10 mm.

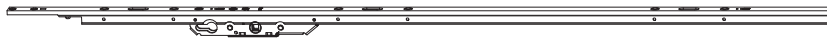
224154










2.8.2.1.3 HS hook drive gear BS 27.5 PC				L					
size 1	silver	735 - 1.360	400	1.305	10	5	227751 ¹		
size 2-3	silver	1.235 - 1.960	400	1.900	10	5	227752 ¹		
size 4	silver	1.835 - 2.560	1.000	2.500	10	5	224154 ¹		
	bronze HS	1.835 - 2.560	1.000	2.500	10	5	224382 ¹		
	brown	1.835 - 2.560	1.000	2.500	10	5	224390 ¹		
size 5	silver	2.270 - 2.860	1.000	2.800	10	5	224155 ¹		
	bronze HS	2.270 - 2.860	1.000	2.800	10	5	224383 ¹		
	brown	2.270 - 2.860	1.000	2.800	10	5	224391 ¹		
size 6	silver	2.670 - 3.360	1.000	3.300	10	5	224156 ¹		
	bronze HS	2.670 - 3.360	1.000	3.300	10	5	224384 ¹		
	brown	2.670 - 3.360	1.000	3.300	10	5	224392 ¹		
size 7	silver	2.670 - 3.860	1.000	3.800	10	5	224157 ¹		
	bronze HS	2.670 - 3.860	1.000	3.800	10	5	224385 ¹		
	brown	2.670 - 3.860	1.000	3.800	10	5	224393 ¹		

¹ The application ranges apply only if a flat roller track is used with universal low guide frame with cover. If the high roller is used, the application ranges are increased by 10 mm. If guide rail C is used, the application ranges are increased by 10 mm. If guide rail C is used, the application areas are increased by 10 mm.

228122










2.8.2.1.4 HS Hook Drive Gear Scheme C DM 27,5				L					
silver		735 - 1.960	400	1.300	10	5	228122 ¹		
		1.835 - 2.860	1.000	2.300	10	5	228124 ¹		

¹ The application ranges apply only if a flat roller track is used with universal low guide frame with cover. If the high roller is used, the application ranges are increased by 10 mm. If guide rail C is used, the application ranges are increased by 10 mm. If guide rail C is used, the application areas are increased by 10 mm.

2.8.2.2 HS drive gear BS 37.5

214415



2.8.2.2.1 HS drive gear BS 37.5 PC				L					
size 1	silver	745 - 1.360	400	1.300	10	5	214415 ¹	223310 ¹	
	bronze HS	745 - 1.360	400	1.300	10	5	214602 ¹	223320 ¹	
	brown	745 - 1.360	400	1.300	10	5	214612 ¹	223330 ¹	
size 2	silver	1.260 - 1.760	400	1.700	10	5	214416 ¹	223311 ¹	
	bronze HS	1.260 - 1.760	400	1.700	10	5	214603 ¹	223321 ¹	
	brown	1.260 - 1.760	400	1.700	10	5	214613 ¹	223331 ¹	
size 3	silver	1.660 - 2.160	1.000	2.100	10	5	214417 ¹	223312 ¹	
	bronze HS	1.660 - 2.160	1.000	2.100	10	5	214604 ¹	223322 ¹	
	brown	1.660 - 2.160	1.000	2.100	10	5	214614 ¹	223332 ¹	
size 3,5	silver	1.860 - 2.360	1.000	2.300	10	5	228263 ¹		
size 4	silver	2.060 - 2.560	1.000	2.500	10	5	214418 ¹	223313 ¹	
	bronze HS	2.060 - 2.560	1.000	2.500	10	5	214605 ¹	223323 ¹	
	brown	2.060 - 2.560	1.000	2.500	10	5	214615 ¹	223333 ¹	
size 5	silver	2.460 - 2.860	1.000	2.800	10	5	214419 ¹	223314 ¹	
	bronze HS	2.460 - 2.860	1.000	2.800	10	5	214606 ¹	223324 ¹	
	brown	2.460 - 2.860	1.000	2.800	10	5	214616 ¹	223334 ¹	
size 6	silver	2.860 - 3.360	1.000	3.300	10	5	215558 ¹	223346 ¹	
	brown	2.860 - 3.360	1.000	3.300	10	5	215564 ¹	223350 ¹	
size 7	silver	3.260 - 3.860	1.000	3.800	10	5	215560 ¹	223348 ¹	
	brown	3.260 - 3.860	1.000	3.800	10	5	215566 ¹	223352 ¹	

¹ The application ranges apply only if a flat roller track is used with universal low guide frame with cover. If the high roller is used, the application ranges are increased by 10 mm. If guide rail C is used, the application ranges are increased by 10 mm. If guide rail C is used, the application areas are increased by 10 mm.

214586



2.8.2.2.2 HS drive gear BS 37.5 RC					L			No	No Tricoat
size 1	silver	745 - 1.360	400	1.300	10	5	214586 ¹	223340 ¹	
size 2	silver	1.260 - 1.760	400	1.700	10	5	214587 ¹	223341 ¹	
size 3	silver	1.660 - 2.160	1.000	2.100	10	5	214588 ¹	223342 ¹	
size 4	silver	2.060 - 2.560	1.000	2.500	10	5	214589 ¹	223343 ¹	
size 5	silver	2.460 - 2.860	1.000	2.800	10	5	214590 ¹	223344 ¹	

¹ The application ranges apply only if a flat roller track is used with universal low guide frame with cover. If the high roller is used, the application ranges are increased by 10 mm. If guide rail C is used, the application ranges are increased by 10 mm. If guide rail C is used, the application areas are increased by 10 mm.



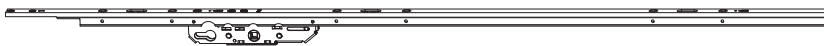
224158



2.8.2.2.3 HS hook drive gear BS 37.5 PC					L			No	No Tricoat
size 1	silver	735 - 1.360	400	1.305	10	5	227753 ¹	228067 ¹	
size 2-3	silver	1.235 - 1.960	400	1.900	10	5	227754 ¹	228068 ¹	
size 4	silver	1.835 - 2.560	1.000	2.500	10	5	224158 ¹	228070 ¹	
	bronze HS	1.835 - 2.560	1.000	2.500	10	5	224386 ¹		
	brown	1.835 - 2.560	1.000	2.500	10	5	224394 ¹		
size 5	silver	2.270 - 2.860	1.000	2.800	10	5	224159 ¹	228069 ¹	
	bronze HS	2.270 - 2.860	1.000	2.800	10	5	224387 ¹		
	brown	2.270 - 2.860	1.000	2.800	10	5	224395 ¹		
size 6	silver	2.670 - 3.360	1.000	3.300	10	5	224160 ¹		
	bronze HS	2.670 - 3.360	1.000	3.300	10	5	224388 ¹		
	brown	2.670 - 3.360	1.000	3.300	10	5	224396 ¹		
size 7	silver	2.670 - 3.860	1.000	3.800	10	5	224161 ¹		
	bronze HS	2.670 - 3.860	1.000	3.800	10	5	224389 ¹		
	brown	2.670 - 3.860	1.000	3.800	10	5	224397 ¹		

¹ The application ranges apply only if a flat roller track is used with universal low guide frame with cover. If the high roller is used, the application ranges are increased by 10 mm. If guide rail C is used, the application ranges are increased by 10 mm. If guide rail C is used, the application areas are increased by 10 mm.

228123

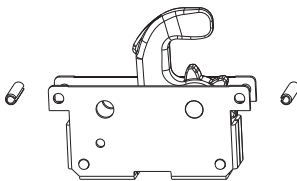


2.8.2.2.4 HS Hook Drive Gear Scheme C DM 37,5					L			No	No Tricoat
silver		735 - 1.960	400	1.300	10	5	228123 ¹		
		1.835 - 2.860	1.000	2.300	10	5	228125 ¹		

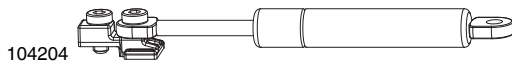
¹ The application ranges apply only if a flat roller track is used with universal low guide frame with cover. If the high roller is used, the application ranges are increased by 10 mm. If guide rail C is used, the application ranges are increased by 10 mm. If guide rail C is used, the application areas are increased by 10 mm.

2.8.2.3 Accessories and individual components for drive gear

104296



2.8.2.3.1 Hook casing for hook drive gear					L			No	No Tricoat
hook case for HS hook drive gear silver							10	104296	



2.8.2.3.2 Drive gear damper



No

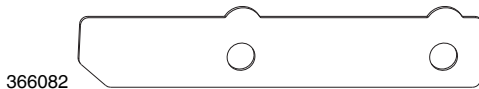
No
Tricoat

retrofit drive gear damper HS

10

104204¹

¹ Change of application range - minimum sash height increases by 145 mm. This part is recommended for sash weights above 250 kg.



366082

2.8.2.3.3 Anti-drill plate for drive gear



No

No
Tricoat

anti-drill plate RC2

for HS drive gear

silver

DM 27,5

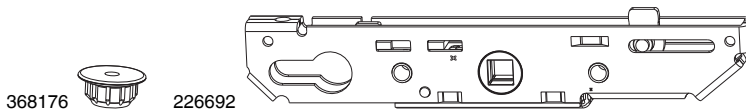
5

366080

DM 37,5

5

366082



368176

226692

2.8.2.3.4 Individual components



No

No
Tricoat

cover cap

1.000

368176

lock case BS 27.5 PC

for HS drive gear

10

226692

lock case BS 37.5 PC

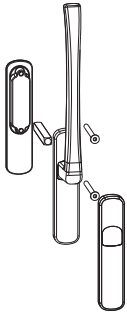
for HS drive gear

10






226693

2.8.3 Handles

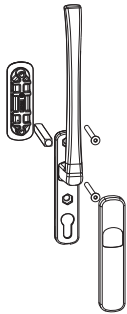
2.8.3.1 HS handle sets




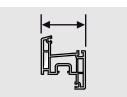

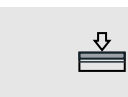

13341

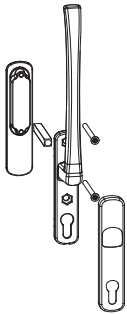
2.8.3.1.1 with cover plate and long finger pull						No	No Tricoat
black brown RAL 8022	71	56	10	anodised	1	13340	
		68	10	anodised	1	13342	
bronze	71	56	10	anodised	1	13281	
		68	10	anodised	1	10141	
champagne	71	56	10	anodised	1	13337	
		68	10	anodised	1	13345	
silver	71	56	10	anodised	1	13339	
		68	10	anodised	1	13341	
titanium	71	56	10	anodised	1	11761	
		68	10	anodised	1	10210	
traffic white RAL 9016	71	56	10	powder coated	1	13338	
		68	10	powder coated	1	13352	





101841

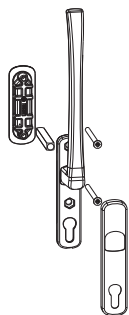
2.8.3.1.2 with cover plate and short finger pull						No	No Tricoat
black brown RAL 8022	71	56	10	anodised	1	101863	
		68	10	anodised	1	101864	
		max. 110	10	anodised	1	101963	
bronze	71	56	10	anodised	1	101834	
		68	10	anodised	1	101835	
		max. 110	10	anodised	1	101961	
champagne	71	56	10	anodised	1	101837	
		68	10	anodised	1	101838	
		max. 110	10	anodised	1	101962	
silver	71	56	10	anodised	1	101840	
		68	10	anodised	1	101841	
		max. 110	10	anodised	1	101964	
titanium	71	56	10	anodised	1	101842	
		68	10	anodised	1	101843	
		max. 110	10	anodised	1	101965	
traffic white RAL 9016	71	56	10	powder coated	1	101844	
		68	10	powder coated	1	101845	
		max. 110	10	powder coated	1	101966	








10549

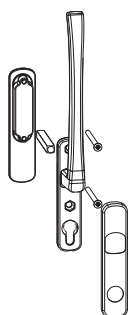
2.8.3.1.3 with cover plate PC and long finger pull							No	No Tricoat
black brown RAL 8022	71	56	10	anodised	1		11766	
		68	10	anodised	1		10594	
		max. 110	10	powder coated	1		103907	
bronze	71	56	10	anodised	1		10623	
		68	10	anodised	1		10592	
		max. 110	10	anodised	1		103903	
champagne	71	56	10	anodised	1		10547	
		68	10	anodised	1		11763	
		max. 110	10	anodised	1		103905	
silver	71	56	10	anodised	1		10548	
		68	10	anodised	1		10549	
		max. 110	10	anodised	1		103909	
titanium	71	56	10	anodised	1		11768	
		68	10	anodised	1		11764	
		max. 110	10	anodised	1		103910	
traffic white RAL 9016	71	56	10	powder coated	1		11765	
		68	10	powder coated	1		11762	
		max. 110	10	powder coated	1		103911	










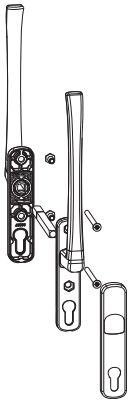
101851

2.8.3.1.4 with cover plate PC and short finger pull						No	No Tricoat
black brown RAL 8022	71	56	10	anodised	1	101865	
		68	10	anodised	1	101866	
		max. 110	10	anodised	1	101969	
bronze	71	56	10	anodised	1	101846	
		68	10	anodised	1	101847	
		max. 110	10	anodised	1	101967	
champagne	71	56	10	anodised	1	101848	
		68	10	anodised	1	101849	
		max. 110	10	anodised	1	101968	
silver	71	56	10	anodised	1	101850	
		68	10	anodised	1	101851	
		max. 110	10	anodised	1	101970	
titanium	71	56	10	anodised	1	101852	
		68	10	anodised	1	101853	
		max. 110	10	anodised	1	101971	
traffic white RAL 9016	71	56	10	powder coated	1	101854	
		68	10	powder coated	1	101855	
		max. 110	10	powder coated	1	101972	



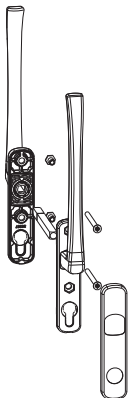
101736

2.8.3.1.5 with cover plate RC and long finger pull						No	No Tricoat
black brown RAL 8022	71	56	10	anodised	1	101740	
		68	10	anodised	1	101741	
bronze	71	56	10	anodised	1	101736	
		68	10	anodised	1	101737	
champagne	71	56	10	anodised	1	101738	
		68	10	anodised	1	101739	
silver	71	56	10	anodised	1	101742	
		68	10	anodised	1	101692	
titanium	71	56	10	anodised	1	101743	
		68	10	anodised	1	101744	
traffic white RAL 9016	71	56	10	powder coated	1	101745	
		68	10	powder coated	1	101746	



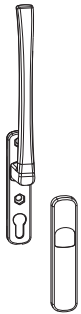
13343

2.8.3.1.6 with interior and exterior cover plate PC						No	No Tricoat
black brown RAL 8022	71	68 max. 110	10	anodised anodised	1	13344 101975	
bronze	71	68 max. 110	10	anodised anodised	1	10142 101973	
champagne	71	68 max. 110	10	anodised anodised	1	13346 101974	
silver	71	68 max. 110	10	anodised anodised	1	13343 101976	
titanium	71	68 max. 110	10	anodised anodised	1	10647 101977	
traffic white RAL 9016	71	68 max. 110	10	powder coated powder coated	1	10353 101978	









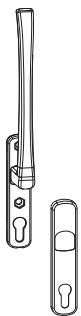
101731

2.8.3.1.7 with interior and exterior cover plate RC						No	No Tricoat
black brown RAL 8022	71	68	10	anodised	1	101732	
bronze	71	68	10	anodised	1	101727	
champagne	71	68	10	anodised	1	101731	
silver	71	68	10	anodised	1	101693	
titanium	71	68	10	anodised	1	101733	
traffic white RAL 9016	71	68	10	powder coated	1	101734	









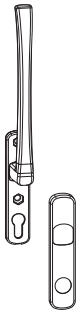
28576

2.8.3.1.8 with cover plate						
black brown RAL 8022	71	10	anodised	1	28580	
bronze	71	10	anodised	1	21422	
champagne	71	10	anodised	1	28578	
silver	71	10	anodised	1	28576	
titanium	71	10	anodised	1	28043	
traffic white RAL 9016	71	10	powder coated	1	28972	







28577

2.8.3.1.9 with cover plate PC						
black brown RAL 8022	71	10	anodised	1	28581	
bronze	71	10	anodised	1	20190	
champagne	71	10	anodised	1	28579	
silver	71	10	anodised	1	28577	
titanium	71	10	anodised	1	28044	
traffic white RAL 9016	71	10	powder coated	1	28973	





208320

2.8.3.1.10 with cover plate RC					No	No Tricoat
black brown RAL 8022	71	10	anodised	1	208424	
bronze	71	10	anodised	1	208422	
champagne	71	10	anodised	1	208423	
silver	71	10	anodised	1	208320	
titanium	71	10	anodised	1	208425	
traffic white RAL 9016	71	10	powder coated	1	208426	





36416

2.8.3.1.11 Cover plates without holes			No	No Tricoat
black brown RAL 8022	anodised	10	36425	
bronze	anodised	10	37853	
champagne	anodised	10	36418	
silver	anodised	10	36416	
titanium	anodised	10	39828	
traffic white RAL 9016	powder coated	10	36834	



36415

2.8.3.1.12 Cover plates for PC			No	No Tricoat
black brown RAL 8022	anodised	10	36420	
bronze	anodised	10	37555	
champagne	anodised	10	36417	
silver	anodised	10	36415	
titanium	anodised	10	39827	
traffic white RAL 9016	powder coated	10	36835	



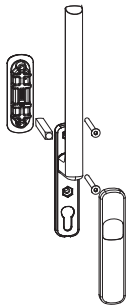
358180

2.8.3.1.13 Cover plates for RC



			No.	No. Tricoat
black brown RAL 8022	anodised	10	358358	
bronze	anodised	10	358356	
champagne	anodised	10	358357	
silver	anodised	10	358180	

2.8.3.2 HS handle 12

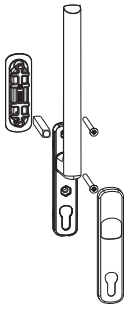


103632






2.8.3.2.1 HS handle 12 with cover plate and short finger pull



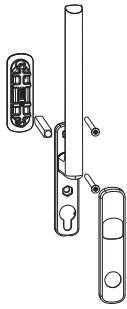
						No.	No. Tricoat
black brown RAL 8022	72	68	10	anodised	1	103631	
		78	10	anodised	1	103637	
		max. 86	10	anodised	1	104246	
		max. 110	10	anodised	1	103813	
bronze	72	68	10	anodised	1	103629	
		78	10	anodised	1	103635	
		max. 86	10	anodised	1	104244	
		max. 110	10	anodised	1	103811	
champagne	72	68	10	anodised	1	103630	
		78	10	anodised	1	103636	
		max. 86	10	anodised	1	104245	
		max. 110	10	anodised	1	103812	
jet black RAL 9005	72	68	10	powder coated	1	104716	
silver	72	68	10	anodised	1	103632	
		78	10	anodised	1	103638	
		max. 86	10	anodised	1	104247	
		max. 110	10	anodised	1	103814	
titanium	72	68	10	anodised	1	103633	
		78	10	anodised	1	103639	
		max. 86	10	anodised	1	104248	
		max. 110	10	anodised	1	103815	
traffic white RAL 9016	72	68	10	powder coated	1	103634	
		78	10	powder coated	1	103640	
		max. 86	10	powder coated	1	104249	
		max. 110	10	powder coated	1	103816	








103650

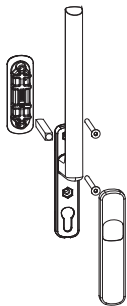
2.8.3.2.2 HS handle 12 with cover plate PC and short finger pull						No	No Tricoat
black brown RAL 8022	72	68	10	anodised	1	103649	
		78	10	anodised	1	103643	
		max. 86	10	painted	1	104252	
		max. 110	10	painted	1	103819	
bronze	72	68	10	anodised	1	103647	
		78	10	anodised	1	103641	
		max. 86	10	anodised	1	104250	
		max. 110	10	anodised	1	103817	
champagne	72	68	10	anodised	1	103648	
		78	10	anodised	1	103642	
		max. 86	10	anodised	1	104251	
		max. 110	10	anodised	1	103818	
jet black RAL 9005	72	68	10	powder coated	1	104389	
silver	72	68	10	anodised	1	103650	
		78	10	anodised	1	103644	
		max. 86	10	anodised	1	104253	
		max. 110	10	anodised	1	103820	
titanium	72	68	10	anodised	1	103651	
		78	10	anodised	1	103645	
		max. 86	10	anodised	1	104254	
		max. 110	10	anodised	1	103821	
traffic white RAL 9016	72	68	10	powder coated	1	103652	
		78	10	powder coated	1	103646	
		max. 86	10	powder coated	1	104255	
		max. 110	10	powder coated	1	103822	









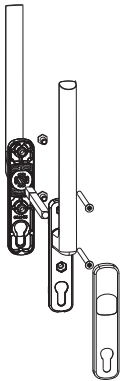
103662

2.8.3.2.3 HS handle 12 with cover plate RC and short finger pull						No	No Tricoat
black brown RAL 8022	72	68	10	anodised	1	103661	
		78	10	anodised	1	103655	
bronze	72	68	10	anodised	1	103659	
		78	10	anodised	1	103653	
champagne	72	68	10	anodised	1	103660	
		78	10	anodised	1	103654	
silver	72	68	10	anodised	1	103662	
		78	10	anodised	1	103656	
titanium	72	68	10	anodised	1	103663	
		78	10	anodised	1	103657	
traffic white RAL 9016	72	68	10	powder coated	1	103664	
		78	10	powder coated	1	103658	








105260

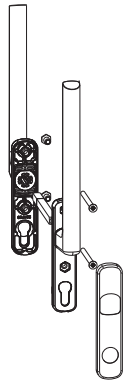
2.8.3.2.4 HS-Handle 12 with cover plate and finger pull short and Rosette RZ					No	No Tricoat
silver	72	10	anodised	1	105260	








103668

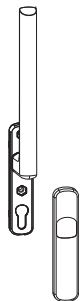


2.8.3.2.5 HS handle 12 with interior and exterior cover plate PC						No	No Tricoat
black brown RAL 8022	72	68	10	anodised	1	103667	
		78	10	anodised	1	103673	
		max. 110	10	anodised	1	103825	
bronze	72	68	10	anodised	1	103665	
		78	10	anodised	1	103671	
		max. 110	10	anodised	1	103823	
champagne	72	68	10	anodised	1	103666	
		78	10	anodised	1	103672	
		max. 110	10	anodised	1	103824	
jet black RAL 9005	72	68	10	powder coated	1	104390	
silver	72	68	10	anodised	1	103668	
		78	10	anodised	1	103674	
		max. 110	10	anodised	1	103826	
titanium	72	68	10	anodised	1	103669	
		78	10	anodised	1	103675	
		max. 110	10	anodised	1	103827	
traffic white RAL 9016	72	68	10	powder coated	1	103670	
		78	10	powder coated	1	103676	
		max. 110	10	powder coated	1	103828	







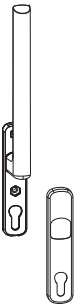
103680

2.8.3.2.6 HS handle 12 with interior and exterior cover plate RC						No	No Tricoat
black brown RAL 8022	72	68	10	anodised	1	103679	
		78	10	anodised	1	103685	
bronze	72	68	10	anodised	1	103677	
		78	10	anodised	1	103683	
champagne	72	68	10	anodised	1	103678	
		78	10	anodised	1	103684	
silver	72	68	10	anodised	1	103680	
		78	10	anodised	1	103686	
titanium	72	68	10	anodised	1	103681	
		78	10	anodised	1	103687	
traffic white RAL 9016	72	68	10	powder coated	1	103682	
		78	10	powder coated	1	103688	



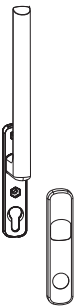
218397

2.8.3.2.7 HS handle 12 with cover plate					No	No Tricoat
black brown RAL 8022	72	10	powder coated	1	218396	
bronze	72	10	anodised	1	218394	
champagne	72	10	anodised	1	218395	
cream white RAL 9001	72	10	powder coated	1	218765	
jet black RAL 9005	72	10	powder coated	1	226148	
silver	72	10	anodised	1	218397	
titanium	72	10	anodised	1	218398	
traffic white RAL 9016	72	10	powder coated	1	218399	



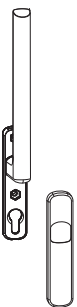
218403

2.8.3.2.8 HS handle 12 with cover plate PC					No	No Tricoat
black brown RAL 8022	72	10	anodised	1	218402	
bronze	72	10	anodised	1	218400	
champagne	72	10	anodised	1	218401	
cream white RAL 9001	72	10	powder coated	1	218766	
jet black RAL 9005	72	10	powder coated	1	226239	
silver	72	10	anodised	1	218403	
titanium	72	10	anodised	1	218404	
traffic white RAL 9016	72	10	powder coated	1	218405	



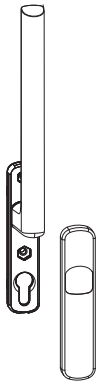
218409

2.8.3.2.9 HS handle 12 with cover plate RC					No	No Tricoat
black brown RAL 8022	72	10	anodised	1	218408	
bronze	72	10	anodised	1	218406	
champagne	72	10	anodised	1	218407	
silver	72	10	anodised	1	218409	
titanium	72	10	anodised	1	218410	
traffic white RAL 9016	72	10	powder coated	1	218411	



227878

2.8.3.2.10 HS handle with cover plate and rosette RZ					No	No Tricoat
silver	72	10	anodised	1	227878	



219498

2.8.3.2.11 HS handle 12 without cylinder hole



cream white RAL 9001

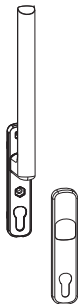
72

10

powder coated

1

219498



218416

2.8.3.2.12 HS handle 12 set exterior PC without lugs



black brown RAL 8022

72

10

anodised

1

218415

bronze

72

10

anodised

1

218413

champagne

72

10

anodised

1

218414

cream white RAL 9001

72

10

powder coated

1

219505

jet black RAL 9005

72

10

powder coated

1

227609

silver

72

10

anodised

1

218416

titanium

72

10

anodised

1

218417

traffic white RAL 9016

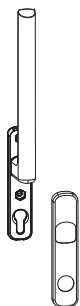
72

10





powder coated

1

218418





218422

2.8.3.2.13 L&S handle 12 set exterior RC without lugs					No	No Tricoat
black brown RAL 8022	72	10	anodised	1	218421	
bronze	72	10	anodised	1	218419	
champagne	72	10	anodised	1	218420	
silver	72	10	anodised	1	218422	
titanium	72	10	anodised	1	218423	
traffic white RAL 9016	72	10	powder coated	1	218424	





365924

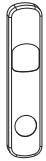
2.8.3.2.14 HS handle 12 cover plates without holes			No	No Tricoat
black brown RAL 8022	anodised	10	365923	
blank		10	369880	
bronze	anodised	10	365921	
champagne	anodised	10	365922	
silver	anodised	10	365924	
titanium	anodised	10	365925	
traffic white RAL 9016	powder coated	10	365926	



365912

2.8.3.2.15 HS handle 12 cover plates PC			No	No Tricoat
black brown RAL 8022	powder coated	10	365911	
bronze	anodised	10	365909	
champagne	anodised	10	365910	
silver	anodised	10	365912	
titanium	anodised	10	365913	
traffic white RAL 9016	powder coated	10	365914	

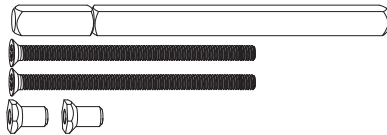




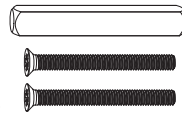
365918

2.8.3.2.16 HS handle 12 cover plates PC				
black brown RAL 8022	anodised	10	365917	
bronze	anodised	10	365915	
champagne	anodised	10	365916	
silver	anodised	10	365918	
titanium	anodised	10	365919	
traffic white RAL 9016	powder coated	10	365920	

2.8.3.3 Accessories and individual components for handles

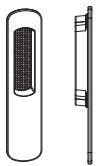


104831



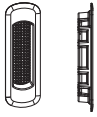
104825

2.8.3.3.1 Set of screws and spindle — HS handle 12		L				
for HS handle inside and outside	58-92	100	10	10	104831	
	88-112	115	10	10	104832	
for HS handle with finger pull	56-62	60	10	10	104825	
	68-72	70	10	10	104826	
	78-82	80	10	10	104827	
	88-92	90	10	10	104828	
	98-102	100	10	10	104829	
	108-112	115	10	10	104830	



36820

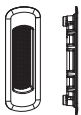
2.8.3.3.2 Long finger pulls				
black brown RAL 8022	anodised	10	36822	
bronze	anodised	10	37566	
champagne	anodised	10	36821	
cream white RAL 9001	powder coated	10	358347	
silver	anodised	10	36820	
titanium	anodised	10	39829	
traffic white RAL 9016	powder coated	10	36823	



358342

2.8.3.3.3 Short finger pulls

			No	No Tricoat
black brown RAL 8022	Painted	10	358340	
blank		100	364131	
bronze	Painted	10	358343	
champagne	Painted	10	358342	
cream white RAL 9001	Painted	10	358350	
jet black RAL 9005	Powder coated		366689	
silver	Painted	10	358341	
titanium	Painted	10	358344	
traffic white RAL 9016	Painted	10	358339	

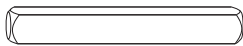


369773

2.8.3.3.4 Short finger pulls 9 mm routing depth

			No	No Tricoat
black brown RAL 8022	Painted	10	369772	
blank		10	369778	
bronze	Painted	10	369763	
champagne	Painted	10	369774	
cream white RAL 9001	Painted	10	369777	
jet black RAL 9005	Painted	10	370973	
silver	Painted	10	369773	
titanium	Painted	10	369775	
traffic white RAL 9016	Painted	10	369776	

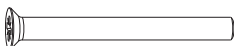
30000



2.8.3.3.5 Spindles

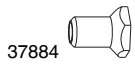
		L			No	No Tricoat
spindle for lever handle set inside + outside	56-62	120	88	10 10	370749	
	58-92	152	120	10 10	369820	
	68	132		10 10	365627	
		138		10 10	30016	
	78	142		10 10	365706	
	88-112	172	140	10 10	369821	
	max. 110	194		10 10	365130	
spindle for lever handle set with HS finger pull	56	78		10 10	30000	
	68	84		10 10	30014	
	78-82	81	49	10 10	369819	


368713




2.8.3.3.6 Screws

				Ø	L		No	No Tricoat
silver	countersunk screw	DIN 965	cross recess	M6	60	100	369882	
					70	500	369883	
					80	100	368713	
					90	100	365979	
					100	10	455291	
					110	100	363957	




2.8.3.3.7 Tap hexagonal nuts and cams					No	No Tricoat
M6 SW12		allen-key nut		100	37884	
Ø 10 mm		allen-key pin		100	370221	
Ø 8 mm		allen-key pin		50	357004	



2.8.3.3.8 Counter nuts for drive gear fastening		Ø	L		No	No Tricoat
silver	counter nut	M5		100	455274	
	screw set	M5	80	10	101652	

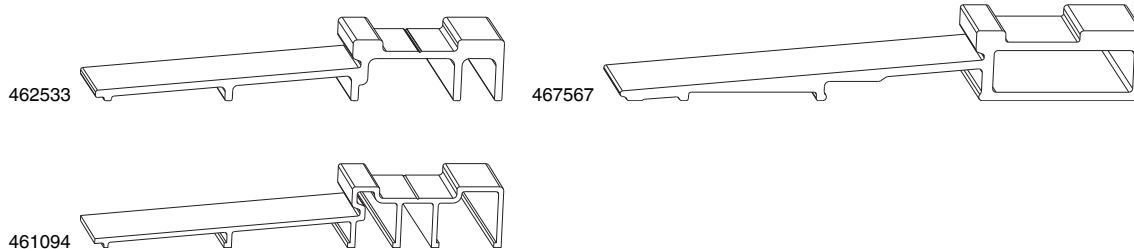
2.8.4 Accessories for sash components




2.8.4.1 Sash positioning tool				No	No Tricoat
silver	for high roller track	for 300 kg	10	360060	
		for 200 kg	10	360061	

2.9 Frame components

2.9.1 Thresholds

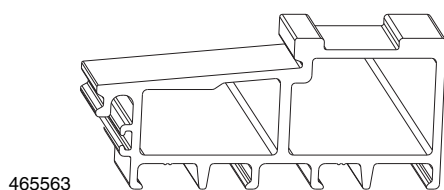


2.9.1.1 Frame cover ALU and GRP


			L		No	No Tricoat
frame cover HS GRP	silver	W=164 mm H=25 mm	2.500	1	462533	
			3.500	1	462534	
			5.000	1	462535	
			6.500	1	462536	
		W=184 mm H=25 mm	2.500	1	462279	
			3.500	1	462280	
			5.000	1	462281	
			6.500	1	462282	
		W=212 mm H=29 mm	2.500	1	467567	
			3.500	1	467568	
			5.000	1	467569	
			6.500	1	467570	
frame cover HS alu	silver	W=164 mm H=25 mm	2.500	1	461094 ¹	
			3.500	1	461095 ¹	
			5.000	1	461096 ¹	
			6.500	1	461097 ¹	

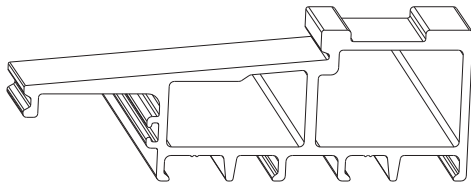
¹ The part number 356613 is absolutely necessary in conjunction with this part.

2.9.1.2 GRP basic profiles




2.9.1.2.1 GRP basic profile 140

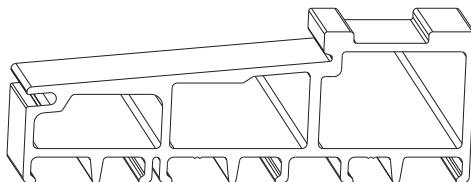
		L		No	No Tricoat
140 mm wide	silver	2.500	1	465563	
		3.000	1	465564	
		3.500	1	465565	
		4.000	1	465566	
		4.500	1	465567	
		5.000	1	465568	
		5.500	1	465569	
		6.000	1	465570	
		6.500	1	466672	
		9.000	1	465788	



465554


2.9.1.2.2 GRP basic profile 180

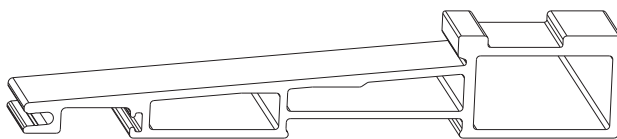
		L		No	No Tricoat
180 mm wide	silver	2.500	1	465554	
		3.000	1	465555	
		3.500	1	465556	
		4.000	1	465557	
		4.500	1	465558	
		5.000	1	465559	
		5.500	1	465560	
		6.000	1	465561	
		6.500	1	466671	
		9.000	1	465787	



466034


2.9.1.2.3 Basic profile 180, special design SWITZERLAND

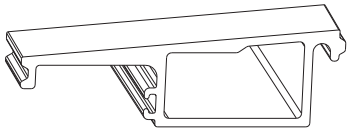
		L		No	No Tricoat
180 mm wide	silver	2.500	1	466034	
		3.000	1	466035	
		3.500	1	466036	
		4.000	1	466037	
		4.500	1	466038	
		5.000	1	466039	
		5.500	1	466040	
		6.000	1	466041	
		6.500	1	466673	
				9.000	1



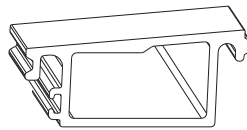
466909

2.9.1.2.4 GRP basic profile 240

		L		No	No Tricoat
240 mm wide	silver	3.000	1	466909	
		3.500	1	466910	
		4.000	1	466911	
		5.000	1	466912	
		6.500	1	466913	
				9.000	1



466675



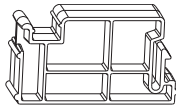
466674

2.9.1.2.5 Extensions

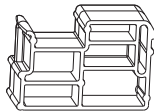
			L		No	No Tricoat
long 128 mm wide	silver		2.500	1	458395	
			3.000	1	458118	
			3.500	1	458408	
			4.000	1	458119	
			6.500	1	466675	
short 88 mm wide	silver		2.500	1	458398	
			3.000	1	458116	
			3.500	1	458117	
			4.500	1	458217	
			6.500	1	466674	



455125



455126

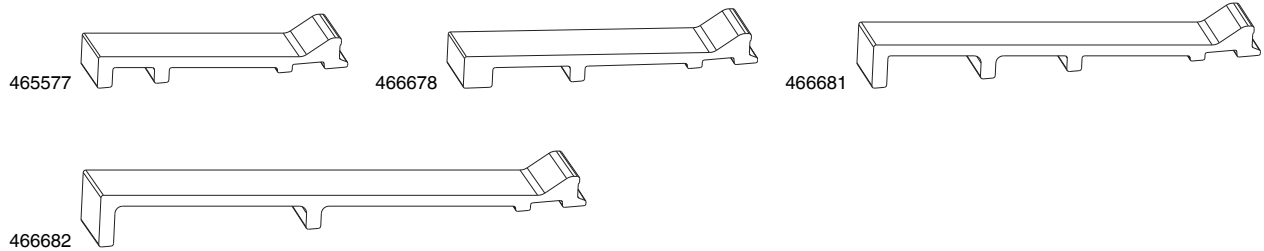



367851

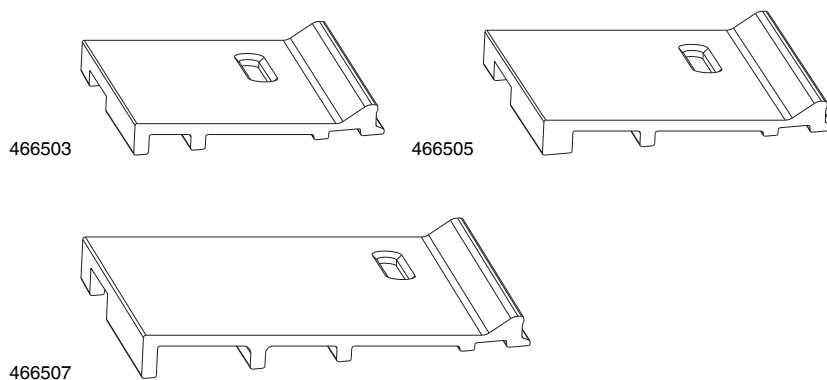
2.9.1.2.6 Extension connectors


				No	No Tricoat
extension-connector for basic profile	140 mm	silver	10	455125	
	180 mm	silver	10	455126	
	240 mm	silver	10	367851	

2.9.1.3 Intermediate profiles

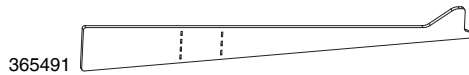



2.9.1.3.1 Intermediate profiles		L		No	No Tricoat
99 mm wide	silver	1.500	1	465577	
		2.000	1	465578	
		2.500	1	465579	
		3.500	1	465580	
		6.500	1	466677	
		9.000	1	465789	
115 mm wide	silver	1.500	1	458326	
		2.000	1	458327	
		2.500	1	458328	
		3.500	1	458329	
		6.500	1	466678	
		9.000	1	473383	
155 mm wide	silver	2.500	1	458330	
		3.000	1	458331	
		3.500	1	458332	
		4.000	1	458333	
		6.500	1	466681	
		9.000	1	465790	
195 mm wide	silver	2.500	1	458334	
		3.000	1	458335	
		3.500	1	458336	
		4.000	1	458337	
		6.500	1	466682	



2.9.1.3.2 Intermediate profile with drainage slots for systems D, F and H		L		No	No Tricoat
99 mm wide	silver	3.500	1	466503 ¹	
		6.500	1	466683 ¹	
115 mm wide	silver	3.500	1	466505 ¹	
		6.500	1	466684 ¹	
155 mm wide	silver	3.500	1	466507 ¹	
		6.500	1	466685 ¹	


¹ Also order 1x seal for intermediate profile Art. No. 365491




2.9.1.3.3 Seal for intermediate profiles with drainage slots					No	No Tricoat
gasket for intermediate profile with drainage holes	thickness 3 mm	black	99/115/155	1	365491	

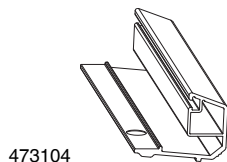
2.9.1.4 Surface-mounted tracks




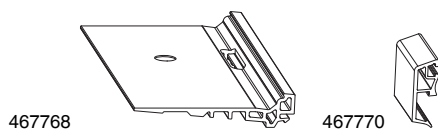
2.9.1.4.1 Surface-mounted tracks for inactive sash				L		No	No Tricoat
silver				1.500	1	454792	
				2.000	1	454826	
				2.500	1	454827	
				3.500	1	454793	




2.9.1.4.2 Surface-mounted tracks for active sash				L		No	No Tricoat
silver				2.500	1	454796	
				3.500	1	454797	
				5.000	1	454798	
				6.500	1	466686	



2.9.1.5 Tracks for frameless fixed glazing Timber				L		No	No Tricoat
silver	Glass gripping bar			3.500	1	473104	



2.9.1.6 Tracks for frameless fixed glazing Timber/Alu				L		No	No Tricoat
silver	Glass gripping bar			2.500	1	467768	
	Cover strip Alu			2.500	1	467770	
				5.000	1	467771	
blank	Cover strip Alu			2.500	1	467772	
				5.000	1	467773	



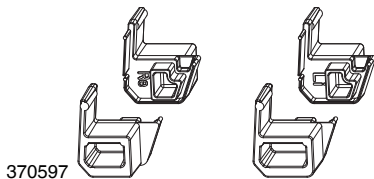
2.9.1.7 Glass gripping for threshold for frameless fixed glazing



packer for glazing for fixed glazing frameless timber silver

10

370598



2.9.1.8 Inch for glass reception board Timber

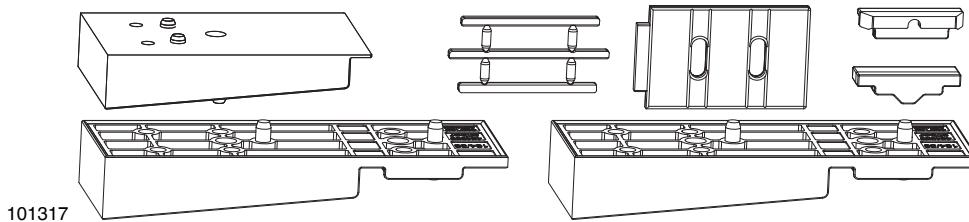


clip-on end cap Glass gripping bar for fixed glazing frameless timber silver

10

370597

2.9.1.9 Basic packs of gasket plates



2.9.1.9.1 Gasket plates for flat roller tracks



accessories for flat roller track diagram A for Fibertherm

68/28mm

silver

1

101317¹

78/28

silver

1

102740²

for 98/28mm

silver

1

102729³

68/28mm

black

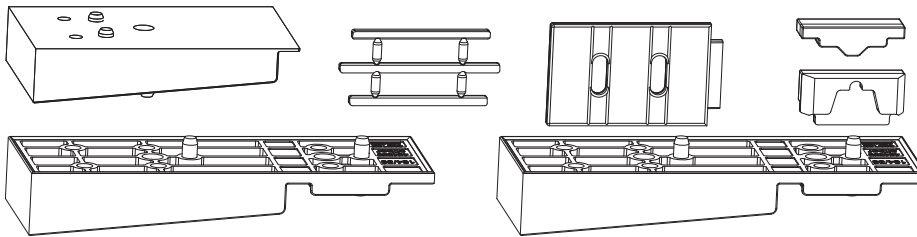
1

101828¹

¹ Contents: 2x connection plates 164/56, 1 x gasket piece for low roller track, 1x sealing plate for intermediate profile 99mm, clip-on gasket for sealing plate 42mm timber, 1 x gasket piece for fixed sashes


² Contents: 2x connection plate 180/56, 1 x seal for roller track, 1 x gasket plate for intermediate profile 115mm, 1 x attachable seal for gasket plate 42mm timber, 1 x seal for fixed sash, 1 x filler element for connection plate and centre seal

³ Contents: 2 x connection plate 216/56, 1 x seal for roller track, 1 x gasket plate for intermediate profile 155mm, 1 x attachable seal for gasket plate 42mm timber, 1 x seal for fixed sash, 1 x filler element for connection plate and centre seal



101318

2.9.1.9.2 Gasket plates for high roller tracks

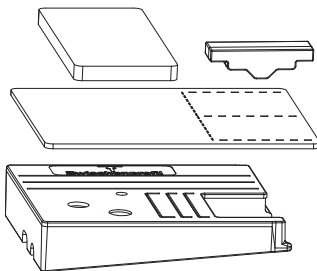
				No	No Tricoat
accessories for high roller track for Fibertherm	64/28	silver	1	101785 ¹	
	68/28mm	silver	1	101318 ²	
	78/28	silver	1	102741 ³	
	for 98/28mm	silver	1	102730 ⁴	
	68/28mm	black	1	101829 ²	

¹ Contents: 2 x 455331 connection plates silver 156/56, 1 x 454858 gasket piece for high roller track, 1 x 454860 sealing plate for intermediate profile 99 mm silver, 1 x 454861 clip-on gasket for sealing plate 42mm timber silver, 1 x 454882 gasket piece for fixed sashes

² Contents: 2x connection plates 164/56, 1 x gasket piece for low roller track, 1x sealing plate for intermediate profile 99mm, clip-on gasket for sealing plate 42mm timber, 1 x gasket piece for fixed sashes


³ Contents: 2x connection plate 180/56, 1 x seal for roller track, 1 x gasket plate for intermediate profile 115mm, 1 x attachable seal for gasket plate 42mm timber, 1 x seal for fixed sash, 1 x filler element for connection plate and centre seal

⁴ Contents: 2 x connection plate 216/56, 1 x seal for roller track, 1 x gasket plate for intermediate profile 155mm, 1 x attachable seal for gasket plate 42mm timber, 1 x seal for fixed sash, 1 x filler element for connection plate and centre seal



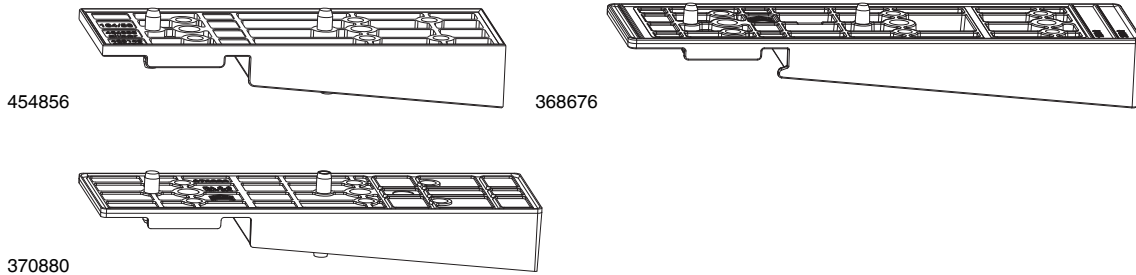
104683

2.9.1.9.3 Packaging for gasket plates


					No	No Tricoat
Package sealing plate for intermediate profile 115 mm with drainage		silver	left	1	104685 ¹	
			right	1	104686 ¹	
Package sealing plate for intermediate profile 155 mm with drainage		silver	left	1	104687 ¹	
			right	1	104689 ¹	
Package sealing plate for intermediate profile 99 mm with drainage		silver	left	1	104683 ¹	
			right	1	104684 ¹	

¹ Contents: 1 x sealing plate for intermediate profile, 1 x gasket for sealing plate, 1 x clip-on gasket for sealing plate 42 mm, 1 x sealing component for inactive sash

2.9.1.10 Individual components for threshold



2.9.1.10.1 Connection plates

				No	No Tricoat
connecting plate for Fibertherm	158/56	silver	10	455331	
	164/56	silver	10	454856	
	180/56	silver	10	362792	
	210/56 croppable	silver	10	368676¹	
	216/56	silver	10	455393	
	237/56 croppable	silver	10	368677²	
	260/56	silver	10	455106	
connecting plate with sealing groove	180/56 ablängbar	silver	10	370880	
	195/56 ablängbar	silver	10	370881³	
connecting plate for Fibertherm	164/56	black	10	455149	
	260/56	black	10	370340	


¹ Can be cropped to 200, 190/56.

² Can be cropped to 227, 217, 204, 190/56.

³ Can be cut to 164, 153, 135/56.




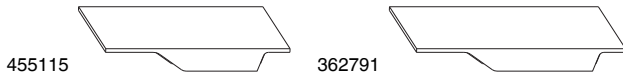
2.9.1.10.2 Seals for roller tracks

				No	No Tricoat
silver	for flat roller track asymmetrical	applicable for left and right	10	367852	
	for high asymmetrical roller track	applicable for left and right	10	367853	
	for flat roller track		100	454857	
	for high roller track		10	454858	
black	for flat roller track asymmetrical	applicable for left and right	10	370341	
	for high asymmetrical roller track	applicable for left and right	10	370342	
	for flat roller track		10	455150	
	for high roller track		10	455151	



2.9.1.10.3 Gasket sets for RAIL Scheme C, F, L

				No	No Tricoat
black	for flat roller track	applicable for left and right	1	473390	
	for high roller track	applicable for left and right	1	473391	
	for high asymmetrical roller track	applicable for left and right	1	473392	



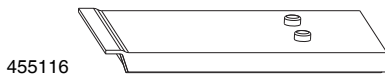
2.9.1.10.4 Centre seals for 2 active sashes



No

No
Tricoat

centre gasket for 2 active sashes for Fibertherm	68/28mm	silver	10	455115
	78/28	silver	10	362791
	68/28mm	black	10	366808



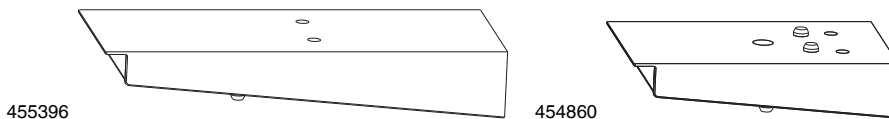
2.9.1.10.5 Gasket plates and clip-on gaskets for diagram E and L



No

No
Tricoat

gasket for fixed sash	silver	10	455116
	black	10	370334



2.9.1.10.6 Gasket plates



No

No
Tricoat

sealing plate for intermediate profile 115 mm for Fibertherm	silver	10	362790
	black	10	366795
sealing plate for intermediate profile 155 mm	silver	10	455396
sealing plate for intermediate profile 99 mm for Fibertherm	silver	10	454860
	black	10	455152



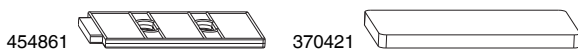
2.9.1.10.7 Seals for inactive sash



No

No
Tricoat

silver	for fixed sash	10	454882
black	for fixed sash	10	455154



2.9.1.10.8 Clip-on gaskets



No

No
Tricoat

attachment gasket for sealing plate 42 mm timber for Fibertherm	silver	10	454861
	black	10	370421
		10	455153



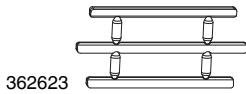
2.9.1.10.9 Filler for GRP body



No

No
Tricoat

filler for receiving GRP body 180/240 silver		50	370879
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362623

2.9.1.10.10 Insert part for connection plates and gasket plates



No

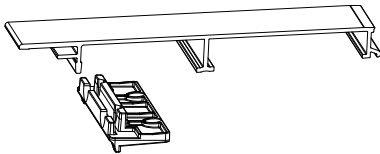
No
Tricoat

filler for gasket plate and centre seal silver

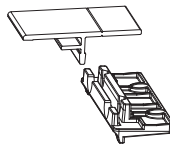
500

362623

2.9.1.11 Accessories for thresholds



104667



104669

2.9.1.11.1 Threshold

L



No

No
Tricoat

Package low threshold tread board HS alu

silver

for GRP 180

2.500

1

104667¹

5.000

1

104668¹

for GRP 240

2.500

1

104674¹

5.000

1

104678¹

Package low threshold tread board HS alu inactive sash

silver

for GRP 180

2.500

1

104669¹

5.000

1

104672¹

for GRP 240

2.500

1

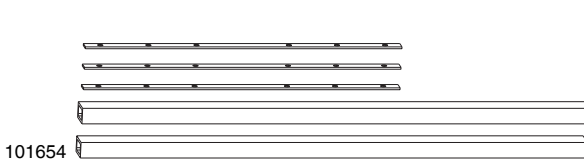
104681¹

5.000

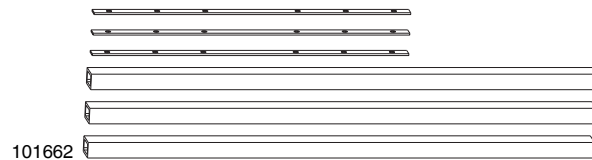
1

104682¹

¹ Contents: 1 x low threshold tread board, brackets for low threshold tread board



101654



101662

2.9.1.11.2 Extension connector



No

No
Tricoat

extension-connector for basic profiles

silver

for Fibertherm

1

101654

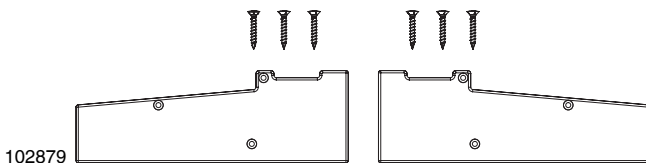
with extension

silver

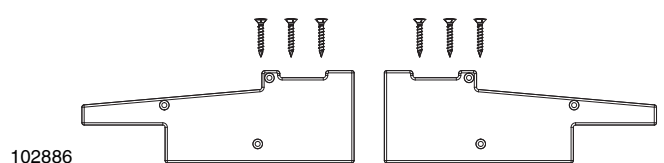
for Fibertherm

1

101662



102879



102886

2.9.1.11.3 Cover cap sets



No

No
Tricoat

cover cap set for base plate for Fibertherm

140 mm

silver

10

102887

cover cap set for base plate CH for Fibertherm

180 mm

silver

10

102879

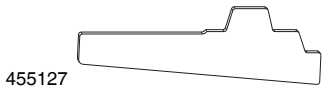
cover cap set for base plate for Fibertherm

180 mm

silver

10

102886



455127

2.9.1.11.4 Cover caps



No

No
Tricoat

cover caps for intermediate profile 99 mm diagram E-L for Fibertherm	LS flat, 68/28	silver	10	455249	
	LS high, 68/28	silver	10	455127	



368967

2.9.1.11.5 Accessories



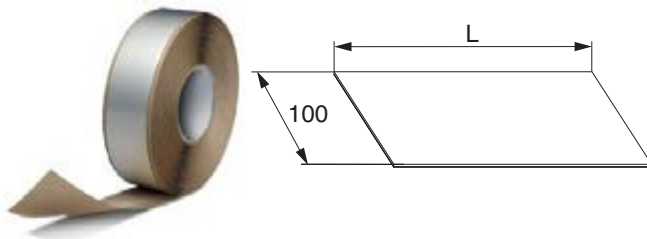
No

No
Tricoat

Retainer bracket for threshold HS alu silver			20	368967	
--	--	--	----	---------------	--

2.9.2 Sealants and insulators

2.9.2.1 Sealing films



370855

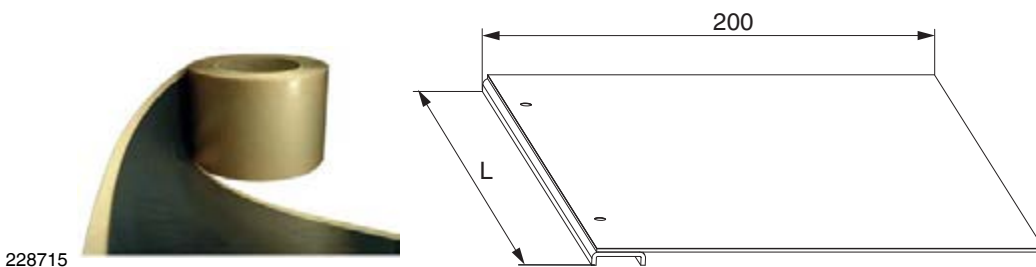
2.9.2.1.1 Steam-tight butyl rubber sealing tape for GRP body cover



No

No
Tricoat

Sealing film for front face closure 100x1.1 for GRP 180 L=0,185M			10	370855	
Sealing film for front face closure 100x1.1 for GRP 240 L=0,245M			10	370856	



228715

2.9.2.1.2 Diffusion and waterproof sealing film self-adhesive with mounting plate



No

No
Tricoat

Sealing film with fixing plate 200x1.5 for lateral connection threshold L=0,49M			2	228715	
---	--	--	---	---------------	--





370864

2.9.2.1.3 Diffusion and waterproof sealing film self-adhesive



Sealing film Teroson FO KSK M+S black 300x1.5 1x20M L=20M

1

370864



370863

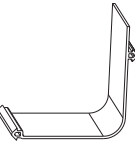
2.9.2.1.4 Water-vapor-free and over-pliable sealing film self-adhesive



Sealing film Teroson FO SD1 FullTaQ grey 250x0.3 1x30M L=30M

1

370863



356640

2.9.2.1.5 EPDM sealing foil for GRP body



sealing strip 200 mm wide

black

2.5m

1

358713

3.5 metres

1

358714

5m

1

358715

7m

1

358716

10 metres

1

356640

60 m

1

458060

2.9.2.2 Sealants and adhesives



370866



370865

2.9.2.2.1 Polymer sealing adhesive for sealing films



sealing compound Teroson AD KDS for connection joints black pouch 590 ml

16

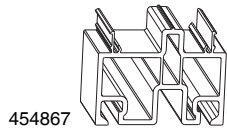
370866

sealing compound Teroson MS 930 for connection joints black cartridge 300 ml

12

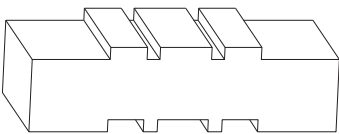
370865

2.9.2.3 Substructure and insulation profiles

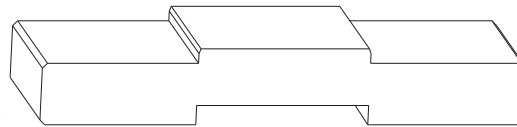


454867


2.9.2.3.1 Doubling profiles for GRP body 140/180			L		No	No Tricoat
MACO Fibre-Therm add-on profile, height 30mm	white	6.000	1	454867		

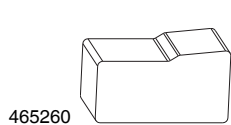


458374

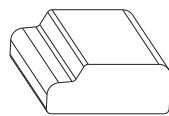


458477

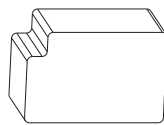
2.9.2.3.2 Underbuilding profile for GRP body				No	No Tricoat
MACO thermal insulation profile for basic profile 180 30 mm L=2.350mm		1	458374		
MACO thermal insulation profile for basic profile 180 50 mm L=2.350mm		1	458375		
MACO thermal insulation profile for basic profile 180 98 mm L=2.350mm		1	458376		
MACO thermal insulation profile for basic profile 240 25.5 mm L=2.350mm		1	458477		
MACO thermal insulation profile for basic profile 240 45.5 mm L=2.350mm		1	458478		
MACO thermal insulation profile for basic profile 240 94 mm L=2.350mm		1	458479		



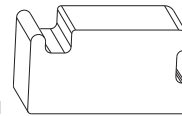
465260



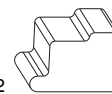
362794



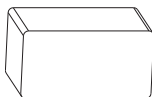
362897



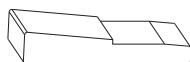
465261



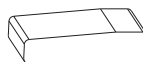
465262




367871



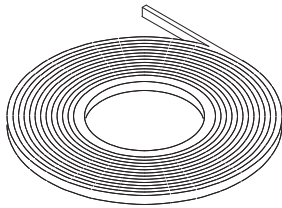
367872



367873


2.9.2.3.3 Insertion profiles for GRP body				No	No Tricoat
insert profile for basic profile and extension for small cavity	L = 1000 mm	silver	10	465260	
insert profile for basic profile CH cavity with connector	L = 1000 mm	silver	10	362794	
insert profile for basic profile for large snap-in chamber	L = 1000 mm	silver	10	362897	
insert profile between basic profile and extension 180	L = 300 mm	silver	30	465261	
insert profile between basic profile and extension 140	L = 300 mm	silver	30	465262	
insert profile for basic profile 240 mm for inside cavity	L = 1000 mm		5	367871	
insert profile for basic profile 240 mm for centre cavity	L = 1000 mm		10	367872	
insert profile for basic profile 240 mm for outside cavity	L = 1000 mm		10	367873	

2.9.2.4 Sealing tapes



455092

2.9.2.4.1 Spring joint tapes

		No	No Tricoat
precompressed Illbruck sealing tape eco anthracite 10/2 L=12,5M	1	367615 ¹	
precompressed Illbruck sealing tape eco anthracite 10/4 L=8M	1	455092 ¹	
precompressed Illbruck sealing tape eco anthracite 10/6 L=5,6M	3	455093 ¹	
precompressed Illbruck sealing tape eco anthracite 15/10 L=3,3M	3	455094 ¹	

¹ All dimensions in metres



461505


2.9.2.4.2 Roll for installation

		No	No Tricoat
Pressure roller for films and ribbons	1	461505	

2.9.3 Roller tracks




2.9.3.1 Roller tracks 15 mm high

		L		No	No Tricoat
MACO Fibre-Therm roller track	silver	2.500	1	454814	
		3.500	1	454815	
		5.000	1	454816	
		6.500	1	466688	
MACO Fibre-Therm roller track asymmetric	silver	3.500	1	466980	
		6.500	1	466981	



2.9.3.2 Roller tracks low 5 mm

		L		No	No Tricoat
MACO Fibre-Therm roller track	silver	2.500	1	454810¹	
		3.500	1	454811¹	
		5.000	1	454812¹	
		6.500	1	466687¹	
MACO Fibre-Therm roller track asymmetric	silver	3.500	1	466978¹	
		6.500	1	466979¹	

¹ The part number 356613 is absolutely necessary in conjunction with this part.



2.9.3.3 Retainer for roller track low 5 mm

				No	No Tricoat
retainer for low roller track for Fibertherm			100	356613¹	


¹ Mounting all 300 mm

2.9.4 Guide tracks

2.9.4.1 Guide tracks flush-mounted

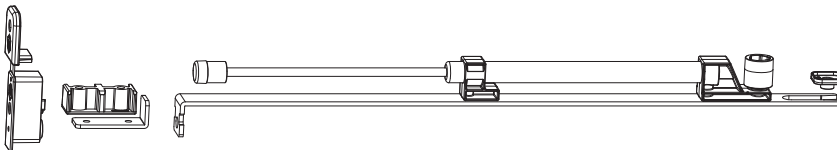


467769


2.9.4.1.1 Guide tracks flush-mounted	L		No	No Tricoat
silver	3.500	1	467769	
	5.000	1	467774	
	6.500	1	467776	
brown	3.500	1	468832	
	5.000	1	468833	
	6.500	1	468834	



104779

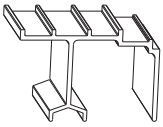


104784

2.9.4.1.2 Accessories for flush-mounted guide tracks			No	No Tricoat	
accessories for top guide track	flush	silver	10	104779	
		black	10	104780	
	with stop absorber	flush	black	5	104783¹
		flush	silver	5	104784¹


¹ Can be installed for sash weights above 200 kg

2.9.4.2 Guide tracks with cover

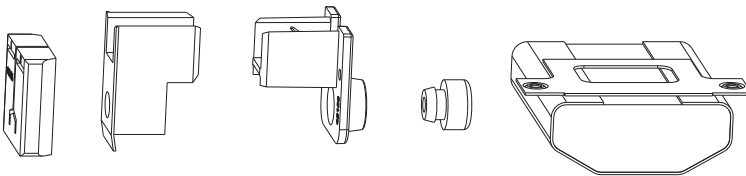


N19813

2.9.4.2.1 Guide tracks with cover


		L		No	No Tricoat
S = 56	silver	2.500	1	N19813 ¹	
		3.500	1	N19814 ¹	
		5.000	1	N19815 ¹	
		6.500	1	N19816 ¹	
	bronze HS	2.500	1	N19833 ¹	
		3.500	1	N19834 ¹	
		5.000	1	N19835 ¹	
		6.500	1	N19836 ¹	
	brown	2.500	1	N19853 ¹	
		3.500	1	N19854 ¹	
		5.000	1	N19855 ¹	
		6.500	1	N19856 ¹	
S = 68	silver	2.500	1	N19913 ¹	
		3.500	1	N19914 ¹	
		5.000	1	N19915 ¹	
		6.500	1	N19916 ¹	
	bronze HS	2.500	1	N19933 ¹	
		3.500	1	N19934 ¹	
		5.000	1	N19935 ¹	
		6.500	1	N19936 ¹	
	brown	2.500	1	N19953 ¹	
		3.500	1	N19954 ¹	
		5.000	1	N19955 ¹	
		6.500	1	N19956 ¹	

¹ Equip with ILLRID tape



101307

2.9.4.2.2 Accessories for guide tracks with cover

				No	No Tricoat
accessories for top guide track	diagram A 68/23mm	with cover	black	10	101307 ¹
			silver	10	101749 ¹
	diagram A 68/28mm	with cover	black	10	101309 ²
			silver	10	101751 ²
	diagram D 68/23mm	with cover	black	10	101308 ³
			silver	10	101750 ³
	diagram D 68/28mm	with cover	black	10	101310 ⁴
			silver	10	101752 ⁴

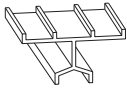
¹ Contents: 1 x top guide drive gear side, 1 x top guide hinge side, 1 x rubber buffer, 1 x gasket piece, 1 x gasket bridge L=72 mm 454866

² Contents: 1 x rear top guide 42128, 1 x front drive-gear sided guide 42129, 1 x rubber buffer 42146, 1 x gasket bridge 454868, 1 x gasket piece N21051


³ Contents: 1 x rear top guide 42128, 1 x front drive-gear sided guide 42129, 1 x rubber buffer 42146, 1 x gasket bridge 454879, 1 x gasket piece 42496

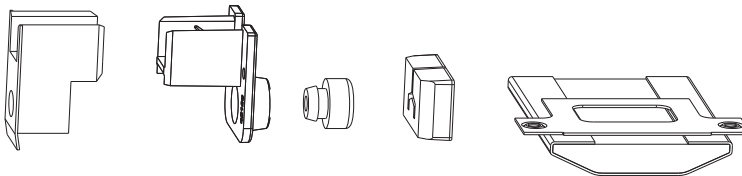
⁴ Contents: 1 x rear top guide 42128, 1 x front drive-gear sided guide 42129, 1 x rubber buffer 42146, 1 x gasket bridge 454881, 1 x gasket piece 42496

2.9.4.3 Guide tracks universal low




N20913

2.9.4.3.1 Guide tracks universal low		L		No	No Tricoat
silver		2.500	1	N20913	
		3.500	1	N20914	
		5.000	1	N20915	
		6.500	1	N20916	
bronze HS		2.500	1	N20933	
		3.500	1	N20934	
		5.000	1	N20935	
		6.500	1	N20936	
brown		2.500	1	N20953	
		3.500	1	N20954	
		5.000	1	N20955	
		6.500	1	N20956	



101311

2.9.4.3.2 Accessories for guide track universal low					No	No Tricoat
accessories for top guide track	diagram A 68/23mm	universal low	black	10	101313 ¹	
			silver	10	101755 ¹	
	diagram A 68/28mm	universal low	black	10	101311 ²	
			silver	10	101753 ²	
	diagram D 68/23mm	universal low	black	10	101314 ³	
			silver	10	101756 ³	
	diagram D 68/28mm	universal low	black	10	101312 ⁴	
			silver	10	101754 ⁴	

¹ Contents: 1 x rear top guide 42128, 1 x front drive-gear sided guide 42129, 1 x rubber buffer 42146, 1 x gasket bridge 454865, 1 x gasket piece N21051

² Contents: 1 x rear top guide 42128, 1 x front drive-gear sided guide 42129, 1 x rubber buffer 42146, 1 x gasket bridge 454868, 1 x gasket piece N21051


³ Contents: 1 x rear top guide 42128, 1 x front drive-gear sided guide 42129, 1 x rubber buffer 42146, 1 x gasket bridge 454870, 1 x gasket piece N21051

⁴ Contents: 1 x rear top guide 42128, 1 x front drive-gear sided guide 42129, 1 x rubber buffer 42146, 1 x gasket bridge 454871, 1 x gasket piece N21051

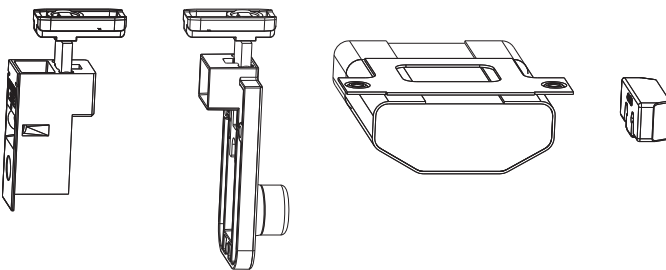
2.9.4.4 Guide tracks C




N20113

2.9.4.4.1 Guide tracks C	L		No	No Tricoat
silver	2.500	1	N20113 ¹	
	3.500	1	N20114 ¹	
	5.000	1	N20115 ¹	
	6.500	1	N20116 ¹	
bronze HS	2.500	1	N20133 ¹	
	3.500	1	N20134 ¹	
	5.000	1	N20135 ¹	
	6.500	1	N20136 ¹	
brown	2.500	1	N20153 ¹	
	3.500	1	N20154 ¹	
	5.000	1	N20155 ¹	
	6.500	1	N20156 ¹	

¹ Equip with ILLRID tape

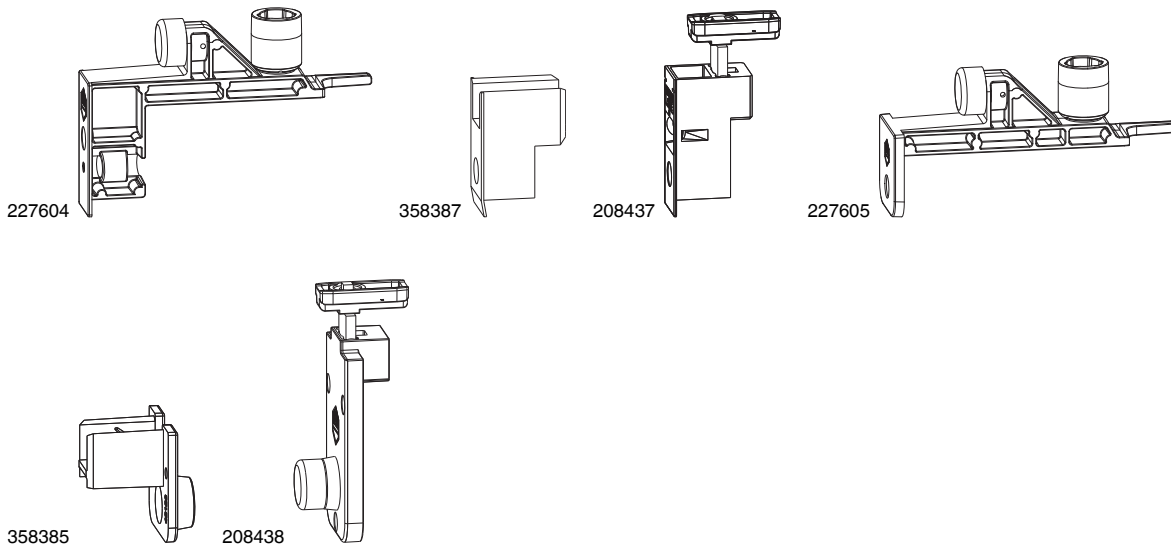



101757

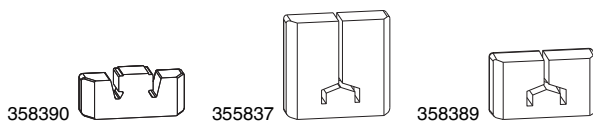
2.9.4.4.2 Accessories for guide track C			No	No Tricoat
accessories for top guide track	diagram A 68/28mm mod.C	silver	10	101757 ¹
		black	10	101319 ¹


¹ Contents: 1 x top guide drive gear side, 1 x top guide hinge side, 1 x rubber buffer, 1 x gasket piece, 1 x gasket bridge L=65 mm 454898

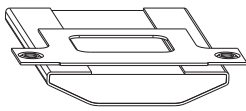
2.9.4.5 Accessories and individual components for guide tracks



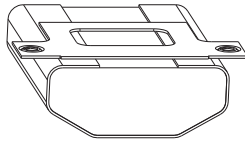
2.9.4.5.1 Top guides				No	No Tricoat
top guide - drive gear side, for flush guide track	with buffer	silver	20	227604	
		black	20	227606	
	for guide track	silver	10	358387	
		black	10	42129	
	for guide track "C"	silver	20	208437	
		black	20	28774	
top guide - hinge-side,	for flush guide track	silver	20	227605	
		black	20	227607	
	for guide track	silver	10	358385	
		black	10	42128	
	for guide track "C"	silver	20	208438	
		black	20	28773	



2.9.4.5.2 Sealing components				No	No Tricoat
gasket piece for top guide mod.C black			100	41483	
gasket piece for top guide mod.C silver			100	358390	
gasket piece for top guide with cover silver			100	355837	
gasket piece HS for guide with top cover black			100	42496	
gasket piece HS for low universal guide on the top black			100	358656	
gasket piece HS for low universal guide on the top silver			100	358389	



454868




454866

2.9.4.5.3 Gasket bridges

15 mm air gap

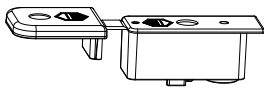
for "C" and low universal guide track

for guide track with cover

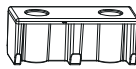
L		No	No Tricoat
62	10	469573	
90	10	469574	
60	10	454864	
72	10	454865	
77	10	454868	
81	10	454869	
93	10	454870	
98	10	454871	
124	10	465249	
44	10	455389	
54	10	455385	
60	10	42130	
65	10	454898	
72	10	454866	
77	10	454880	
81	10	455404	
93	10	454879	
98	10	454881	
124	10	465250	



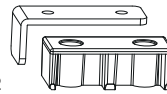
369679



369683



369678



104782

2.9.4.5.4 Individual parts

safety catch for top guide for flush guide track silver

set of cover caps for top guide with stop absorber for flush guide track black


set of cover caps for top guide with stop absorber for flush guide track silver

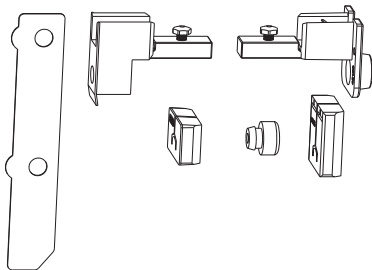
stop for flush guide track black

stop for flush guide track silver

stop for flush guide track with stop absorber black

stop for flush guide track with stop absorber silver


	No	No Tricoat
50	369679	
10	369683	
10	369682	
20	369678	
20	369677	
10	104782	
10	104781	



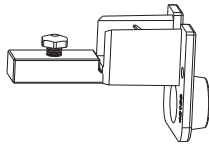
103098

2.9.4.5.5 Accessories for RC 2


RC2 accessories for HS drive gear for top universal low guide frame with cover

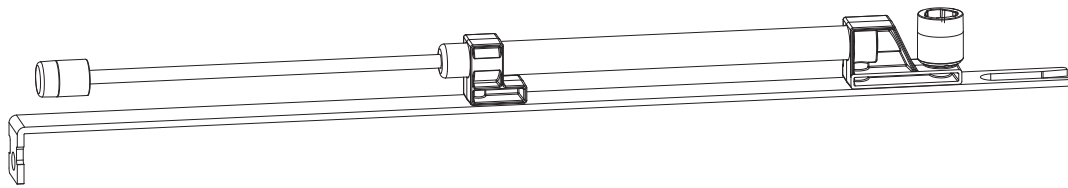
		No	No Tricoat
black DM27,5	1	103568 ¹	
DM37,5	1	103567 ¹	
silver DM27,5	1	103566 ¹	
DM37,5	1	103098 ¹	

¹ RC2 test valid only from HS RC2 - drive gear size 2 and larger



218040

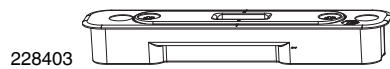
2.9.4.5.6 Top guides with safety catch		No	No Tricoat
top guide - drive gear side, for RC2 with safety catch for top universal low guide frame with cover black	20	214420	
top guide - drive gear side, for RC2 with safety catch for top universal low guide frame with cover silver	20	218007	
top guide - hinge-side, for RC2 with safety catch for top universal low guide frame with cover black	20	214421	
top guide - hinge-side, for RC2 with safety catch for top universal low guide frame with cover silver	20	218040	



227484

2.9.4.5.7 Stop damper for lift and slide door with guide rail, flush	No	No Tricoat
Stop damper for lift and slide door with guide rail, flush	227484	

2.9.5 Locks



228403

2.9.5.1 Striker plates for HS hook drive gear



No

No
Tricoat

Hook Striker HS for timber adjustable diagram A-C right and left silver

10

228403¹

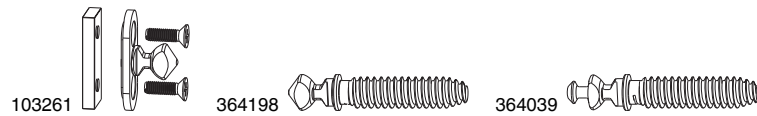
Hook Striker HS for timber adjustable diagram A-C right and left Tricoat

10

229030¹

¹ 2 striker plates for hook drives, size 1 - 4

3 striker plates for hook drives, size 5 - 7



103261

364198

364039

2.9.5.2 Locking bolts



No

No
Tricoat

silver

complete for diagram C and L standard

10

103261

105205

with special thread standard

100

364198

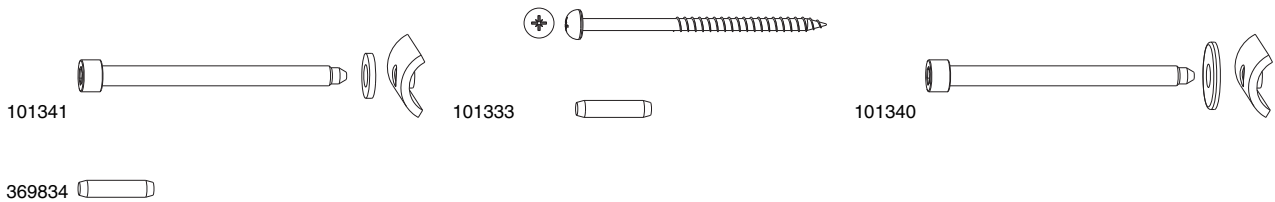
385037


with special thread with night-vent

10

364039

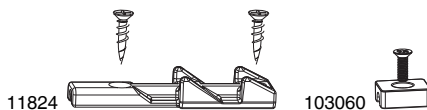
2.9.6 Accessories for frame components




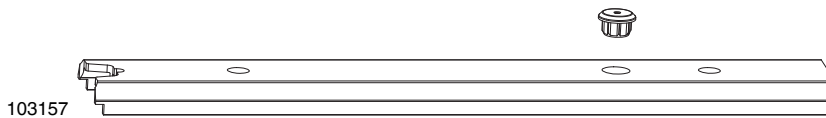
2.9.6.1 Corner connectors		No	No Tricoat
chipboard screw Torx 6x100 round head silver	100	105362	
corner connector bottom silver	1	101341¹	
corner connector components for Fibertherm silver	10	101333²	
corner connector top silver	1	101340¹	
rawplug D= 6,8 L= 30	50	369834	


¹ Contents: 4 x corner connector

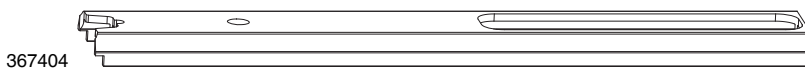
² Contents: 2x connection plate 180/56, 1 x seal for roller track, 1 x gasket plate for intermediate profile 115mm, 1 x attachable seal for gasket plate 42mm timber, 1 x seal for fixed sash, 1 x filler element for connection plate and centre seal




2.9.6.2 Locking blocks		No	No Tricoat
accessories bag for night-vent HS 150kg silver	20	11824	102721
locking block HS 300/400 silver	20	103060	103695



2.9.6.3 Stop sealing profiles		No	No Tricoat
package - PVC buffer gasket track for HS drive gear silver L=2.716mm	1	103157	



2.9.6.4 Stop sealing profiles for HS hook drive gear		No	No Tricoat
gasket stop rail in PVC for hook mechanism Gr.1 2 striker closing part silver L=716mm	1	369263	
gasket stop rail in PVC for hook mechanism Gr.4 2 striker closing part silver L=2.416mm	1	367518	
PVC buffer gasket track for hook drive gear size 4 with 3 striker plate routings silver L=2.416mm	1	367404	
PVC buffer gasket track for hook drive gear size 5 with 3 striker plate routings silver L=2.716mm	1	367402	
PVC buffer gasket track for hook drive gear size 6+7 with 3 striker plate routings silver L=2.716mm	1	367403	

2.10 Sash/frame components


2.10.1 Sealing Profiles

2.10.1.1 Gasket track PVC 28 mm



458436


2.10.1.1.1 Pack of sealing profiles PVC

		L		No	No Tricoat
HS gasket track set for 28 mm sash distance	silver	2.500	1	458436	
		3.500	1	458437	
		5.000	1	458438	
	white	2.500	1	458439	
		3.500	1	458440	
		2.500	1	458441	
	black	2.500	1	458441	
		5.000	1	458442	



466915


2.10.1.1.2 Individual track components for sealing profiles PVC

		L		No	No Tricoat
HS PVC gasket track for 28 mm sash distance	silver	2.500	1	466915	
		3.500	1	466916	
		5.000	1	466917	
	white	2.500	1	466920	
		3.500	1	466921	
		2.500	1	466922	
	black	2.500	1	466922	
		5.000	1	466923	



466918

2.10.1.1.3 Seals for sealing profiles PVC


				No	No Tricoat
PVC brush gasket for HS gasket track	black	L = 50m	50	467022¹	
	grey	L = 50m	50	466918¹	

¹ All dimensions in metres



466919

2.10.1.1.4 Bubble gaskets for sealing profiles PVC

				No	No Tricoat
bubble gasket for HS gasket track PVC L = 50m black			50	467023¹	
bubble gasket for HS gasket track PVC L = 50m grey			50	466919¹	

¹ All dimensions in metres



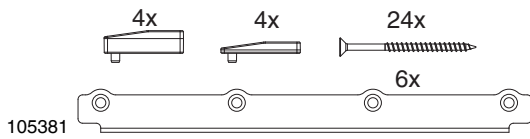
2.10.1.1.5 Individual components for sealing profiles PVC



No

No
Tricoat

fixing screw for HS gasket track PVC silver	100	367613	
set of cover caps for HS gasket track in PVC left/right black	10	369471	
set of cover caps for HS gasket track in PVC left/right silver	10	367284	
set of cover caps for HS gasket track in PVC left/right white	10	369469	



2.10.1.1.6 Accessories for RC2 for seal rail PVC

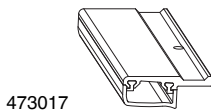


No

No
Tricoat

RC2 accessories for HS gasket track in PVC black	1	105383	
RC2 accessories for HS gasket track in PVC silver	1	105381	
RC2 accessories for HS gasket track in PVC white	1	105382	

2.10.1.2 Sealing profiles for narrow crossbar



2.10.1.2.1 Top guide track for narrow crossbar

L



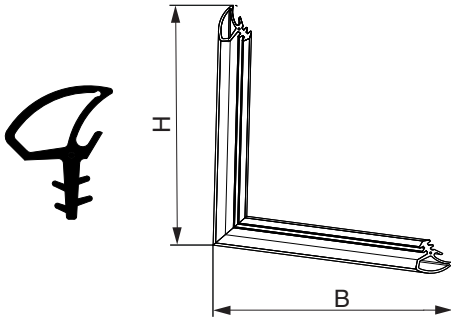
No

No
Tricoat


silver	2.000	1	473017	
	3.500	1	473018	

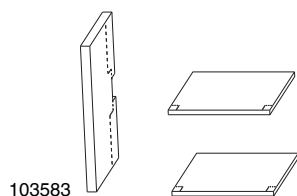
2.10.2 Seals

2.10.2.1 Pack of seals



469387

2.10.2.1.1 Pack of DSE7400-7430 sash seals			W	H		No	No Tricoat
DSE7430	silicone	white	3,5	3,5	5	469382	
DSE7400	silicone	white	1,5	2,5	5	469387	
DSE7425	silicone	white	2,5	2,5	5	469450	
DSE7430	silicone	black	3,5	3,5	5	469383	
DSE7400	silicone	black	1,5	2,5	5	469388	
DSE7425	silicone	black	2,5	2,5	5	469451	
DSE7430	silicone	graphite grey RAL 7024	3,5	3,5	5	469384	
DSE7400	silicone	graphite grey RAL 7024	1,5	2,5	5	469389	
DSE7425	silicone	graphite grey RAL 7024	2,5	2,5	5	469453	
DSE7430	silicone	light grey RAL 7035	3,5	3,5	5	469386	
DSE7400	silicone	light grey RAL 7035	1,5	2,5	5	469391	
DSE7425	silicone	light grey RAL 7035	2,5	2,5	5	469452	
DSE7430	silicone	rustic	3,5	3,5	5	469385	
DSE7400	silicone	rustic	1,5	2,5	5	469390	
DSE7425	silicone	rustic	2,5	2,5	5	469454	

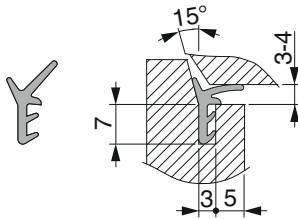


103583

2.10.2.1.2 Centre gasket plates and overlap gasket plates				No	No Tricoat
black	diagram A	for gasket strip timber universally applicable	10	103583 ¹	
		for gasket track alu universally applicable	10	103239 ¹	

¹ Use up to 110/28 mm

2.10.2.2 Accessories and individual seal components

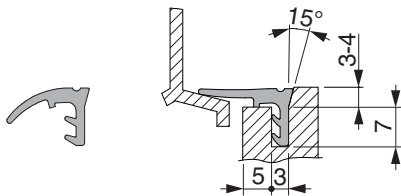


I732235

2.10.2.2.1 HS drive gear side S3223a seals

			L		No	No Tricoat
gasket for HS doorsL&S sash gasket sideways and at bottom S3223a	rustic	siliconised	30	1	I732231 ¹	
	black	siliconised	30	1	I732233 ¹	
	white	siliconised	30	1	I732235 ¹	

¹ All dimensions in metres

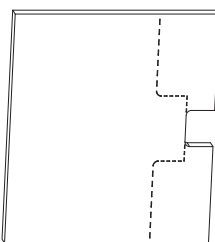


I725865

2.10.2.2.2 HS top seals S2586a

			L		No	No Tricoat
gasket for HS doorsGuide track sealing S2586a	rustic	siliconised	15	1	I725861 ¹	
	black	siliconised	15	1	I725863 ¹	
	white	siliconised	15	1	I725865 ¹	
gasket for HS doorsL&S sash gasket sideways and at bottom S3223a	black		300	300	453684 ¹	

¹ All dimensions in metres

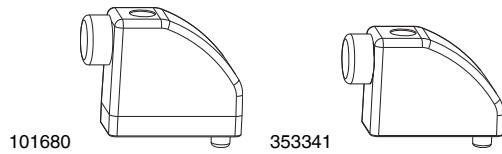


369760



2.10.2.2.3 Foamed rubber seals

				No	No Tricoat
overlap sealing plate	black	universal	10	369760	

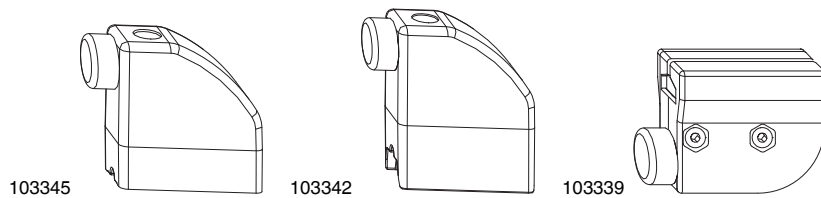
2.10.3 Buffer stops





2.10.3.1 Pack of buffer stops

			No	 Tricoat
for 28 mm distance	silver	10	101680 ¹	
	white	10	101681 ¹	
	black	10	101682 ¹	
for 23 mm distance	silver	10	353341 ¹	
	white	10	42240 ¹	
	black	10	42278 ¹	
	cream white RAL 9001	10	102215 ¹	

¹ 2 stop buffers (top and bottom) are required for each active sash.





2.10.3.2 Pack of buffer stops universal for tracks

			No	 Tricoat
for flat roller track	black	10	103346 ¹	
	silver	10	103345 ¹	
	white	10	103347 ¹	
for high roller track	black	10	103343 ¹	
	silver	10	103342 ¹	
	white	10	103344 ¹	
for top universal low guide frame with cover	black	10	103340 ¹	
	silver	10	103339 ¹	
	white	10	103341 ¹	

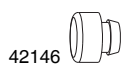
¹ 2 stop buffers (top and bottom) are required for each active sash.





2.10.3.3 Pack of buffer stops for frame installation

			No	 Tricoat
silver	length 45 mm	10	103201 ¹	
	length 65 mm	10	103202 ¹	

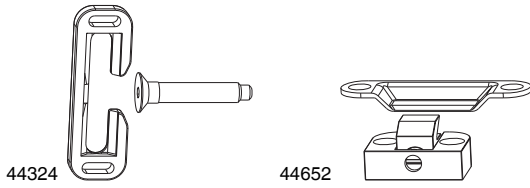
¹ 2 stop buffers (top and bottom) are required for each active sash.




2.10.3.4 Individual rubber buffers

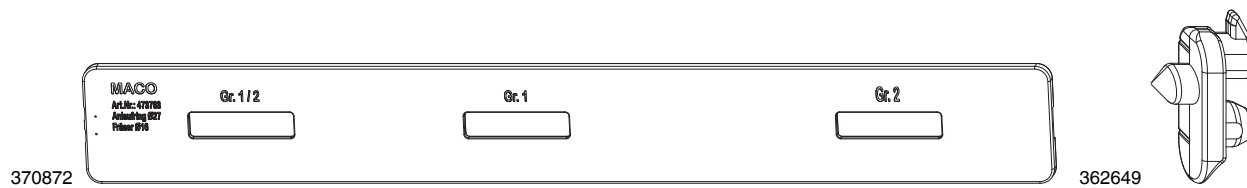
			No	 Tricoat
rubber buffer HS	silver	50	358379	
rubber buffer HS Ø = 19 mm	silver	50	369680	
rubber buffer HS	black	50	42146	
rubber buffer HS Ø = 19 mm	black	50	369681	

2.10.4 Accessories for frame/sash components



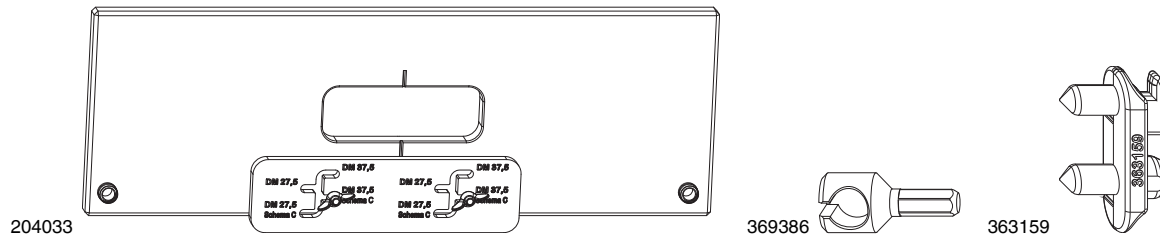
2.10.4.1 Centre lock			No	No Tricoat
centre lock vertical HS	silver	10	44324	216767
centre lock vertical HS adjustable	silver	1	44652	216768

2.11 Jigs



370872

362649




204033

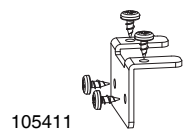
369386

363159




2.11.1 Jigs

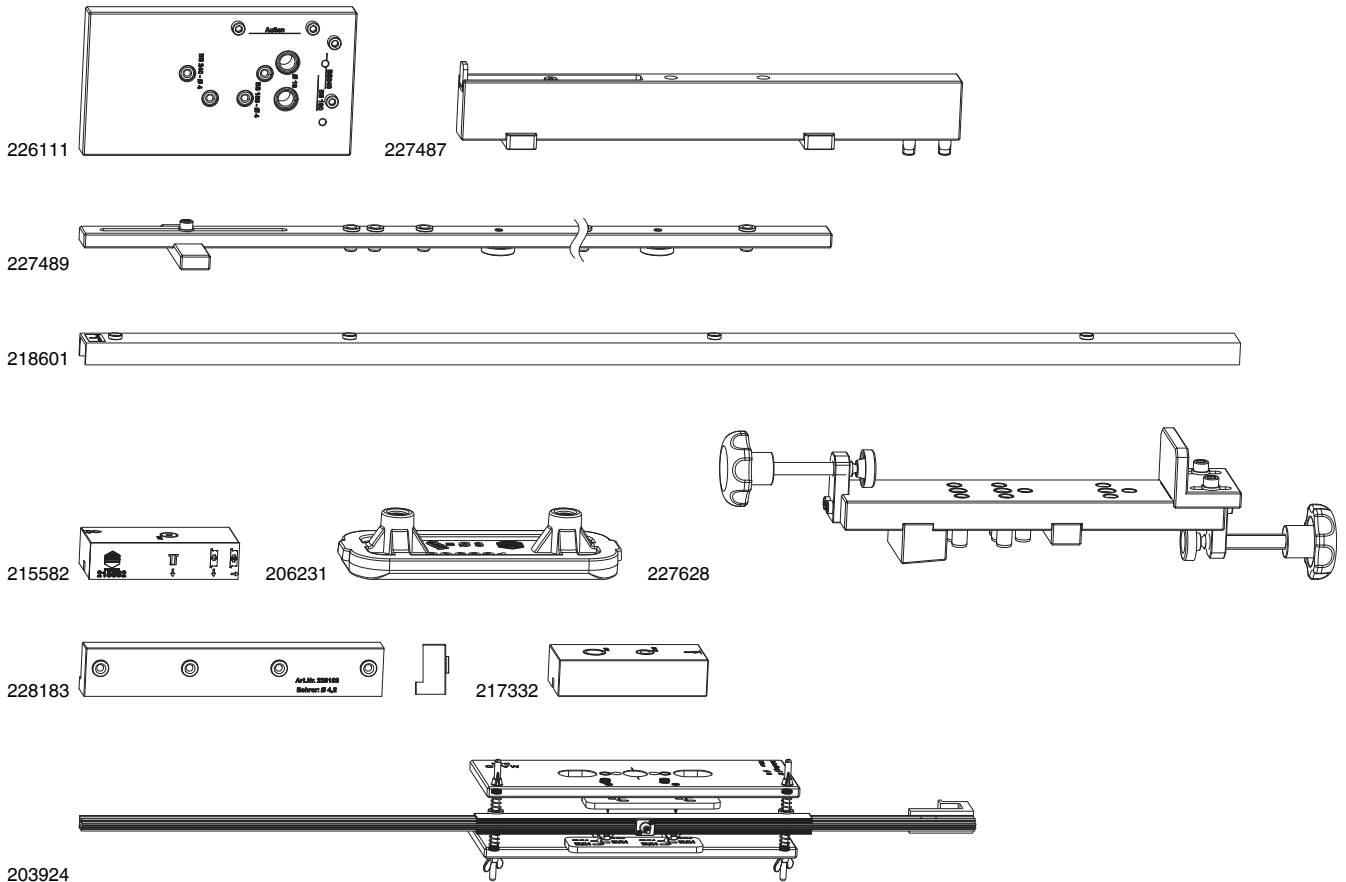
		No	No Tricoat
routing jig for striker plate HS hook drive gear Gr. 1-3 for timber	1	370872	
routing jig for striker plate HS hook drive gear Gr. 4-7 for timber	1	370873	
routing template for HS recessed grip	1	204033	
screw-driving tool for HS locking bolt	1	369386	
scriber for HS locking bolt base plate hole distance 22 mm	50	363159	
scriber for HS locking bolt for timber	50	362649	





105411

2.11.2 Pack stop routing jig for hook strike


		No	No Tricoat
stop set for milling guage HS hook strike for milling at the pre-welded profile for timber	1	105411	

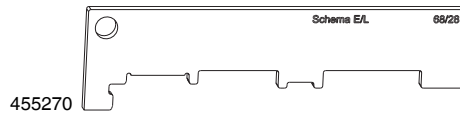
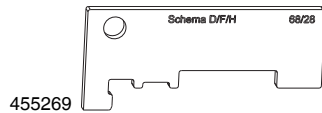
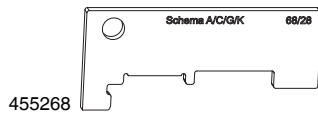


2.11.3 Drilling jigs			No	No Tricoat
drill jig for central jamb HS Panorama diagram A-C-G-K			1	226111
drill jig for front HS roller for 300 kg			1	227487
drill jig for HS drive gear standard	2.860 - 745		1	227489
drill jig for HS locking bolt for HS drive gear size 3 for timber			1	218601
drill jig for HS locking bolt for HS drive gear size 4 for timber			1	218602
drill jig for HS locking bolt for HS drive gear size 5 for timber			1	218603
drill jig for HS rear roller for 300 kg			1	227488
drill jig for locking block			1	215582
drill jig for Maco Fiber-Therm for flat roller track		10		206231
drill jig for Maco Fiber-Therm GRP 180		1		227628
drill jig for Maco Fiber-Therm GRP 240		1		227629
drill jig for rear grip back up RC2 HS PVC gasket track for 28 mm sash distance		1		228183
drill jig for universal buffer stop		1		217332
HS drilling and routing jig for drive gear drill-hole and finger pull		1		203924
HS drilling and routing jig for HS espagnolette drill holes		1		204032




2.11.4 Pack stop for drill jig

		No	No Tricoat
stop set for roller drilling jig for 300 kg 22 mm	1	104848	
stop set for roller drilling jig for 300 kg 28 mm	1	104849	
stop set for roller drilling jig for 300 kg 30 mm	1	104850	
stop set for roller drilling jig for 300 kg 32 mm	1	104851	
stop set for roller drilling jig for 300 kg 34 mm	1	104852	
stop set for roller drilling jig for 300 kg 36 mm	1	104853	
stop set for roller drilling jig for 300 kg 38 mm	1	104854	
stop set for roller drilling jig for 300 kg 40 mm	1	104855	
stop set for roller drilling jig for 300 kg 60 mm	1	104856	



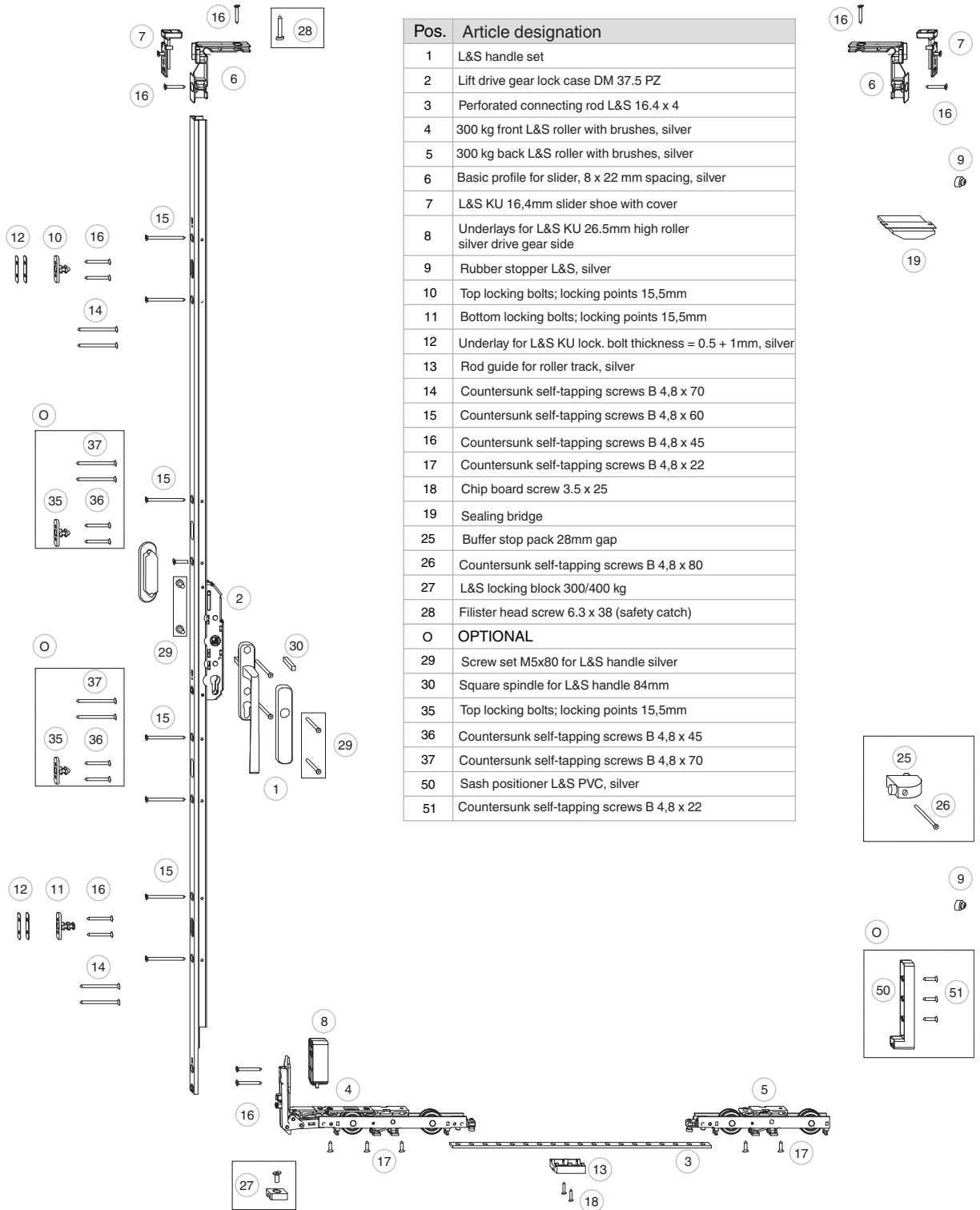
2.11.5 Intermediate profile jigs

		No	No Tricoat
intermediate profile jig for Maco Fiber-Therm 64/28 diagram A-C-G-K	10	455449	
intermediate profile jig for Maco Fiber-Therm 68/28 diagram A-C-G-K	10	455268	
intermediate profile jig for Maco Fiber-Therm 68/28 diagram D-F-H	10	455269	
intermediate profile jig for Maco Fiber-Therm 68/28 diagram E-L	10	455270	
intermediate profile jig for Maco Fiber-Therm 78/28 diagram A-C-G-K	10	465410	
intermediate profile jig for Maco Fiber-Therm 78/28 for Alto Nova diagram A-C-G-K	10	465411	
intermediate profile jig for Maco Fiber-Therm for intermediate profile 115 mm 78/28 asymmetric diagram A-C-G-K	5	364617	
intermediate profile jig for Maco Fiber-Therm for intermediate profile 115 mm 78/28 diagram A-C-G-K	10	363037	
intermediate profile jig for Maco Fiber-Therm for intermediate profile 115 mm 78/28 diagram D-F-H	10	363038	

2.12 Hardware for HS PVC profiles

2.12.1 Hardware for HS PVC profiles

2.12.1.1 Aluplast 70





ALUPLAST 70

Pos.	Pieces in diagram				Component description	Order number							
	A	D	C	F		white	silver	bronze	brown				
1	1	2	2	4	L&S handle set								
					L&S handle with cover plate and recessed grip, short	103634	103632	103629	103631				
					L&S handle with cover plate PC and recessed grip, short	103652	103650	103647	103649				
					L&S handle with cover plate ¹⁾	218399	218397	218394	218396				
				L&S handel with cover plate PC ¹⁾	218405	218403	218400	218402					
2	1	2	2	4	L&S drive-gears BS 37.5 PC	Size	HD	L	RH				
					FH = RAH - 127,5	1	408	1300	815 - 1420	²⁾	214415	214602	214612
						2	408	1700	1330 - 1820	²⁾	214416	214603	214613
						3	1008	2100	1730 - 2220	²⁾	214417	214604	214614
						4	1008	2500	2130 - 2620	²⁾	214418	214605	214615
				5		1008	2800	2530 - 2920	²⁾	214419	214606	214616	
3	1	2	2	4	L&S punched connecting rod 16,4 x 4	Size	L	RH					
					Diagram A, D $FB = (RAB / 2) - 28$ Diagram C, F $FB = (RAB / 4) + 7$	1	692	700 - 1270		359639			
						2	1196	1200 - 1770		359640			
						3	1700	1710 - 2270		359641			
						4	2204	2210 - 2780		359642			
				5		2708	2720 - 3280		359643				
4 - 18	1	2	2	4	L&S roller pack PVC Aluplast 300 KG silver					102953			
19	1	-	2	-	Gasket bridge					469573			
19	-	1	-	2	Gasket bridge					454868			
25 - 26	-	1	-	2	L&S buffer stop PVC					102945	102946	⁷⁾	102947 ⁶⁾
27 - 28	-	-	1	1	L&S locking point PVC diagram C, F, G silver					104206			
OPTIONAL													
29	1	2	2	4	Screw set M5x80 for L&S handle, silver					101652			
30	1	2	2	4	Spindle for L&S handle 10x86mm					365620			
35 - 37	1	2	1	3	Locking bolts L&S PVC locking point 15.5mm silver					102944			
50 - 51	1	2	2	4	L&S sash positioner PVC, silver					102949			





ALUPLAST 70

Installation jigs

70		L&S drilling and routing jigs for drive-gear drill hole and recessed grip, Aluplast	214861
71		Marking sickle for L&S locking bolts, base plate hole distance 22 mm	363159
72		Drilling jig for locking block L&S drive-gear size 3	224398
73		Drilling jig for locking bolt ⁹⁾	224399
74		Drilling jig for locking block	215582

¹⁾ Use pos. 29 and 30

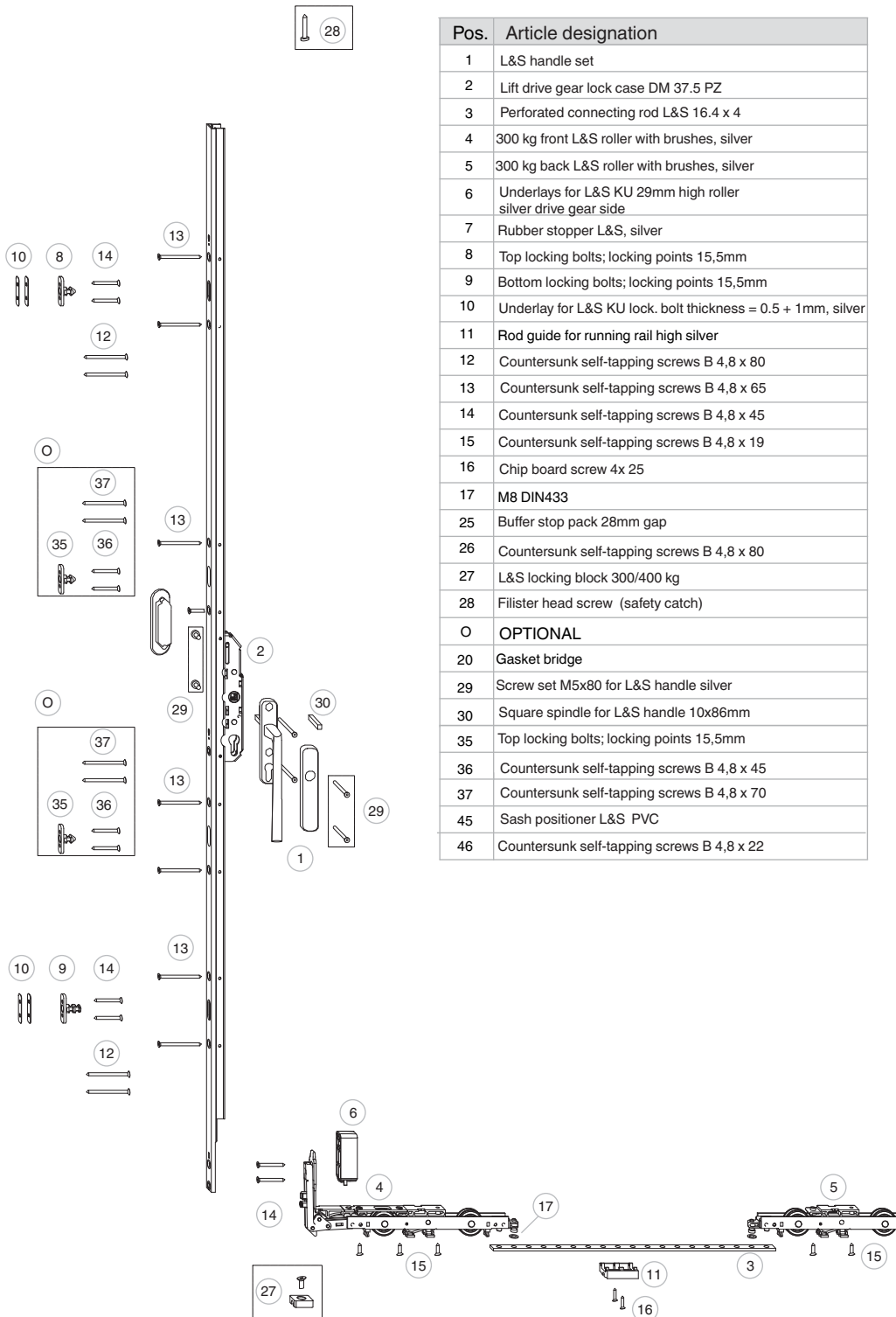
²⁾ Use lift drive gear lockcase DM 37.5 PC in silver

⁶⁾ Use black colour

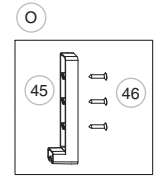
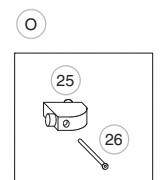
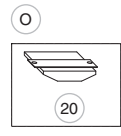
⁷⁾ Use black or silver component colour

⁹⁾ Use 1 piece for drive gear size 4, use 2 pieces for drive gear size 5
Hardware design in Tricoat available on request

2.12.1.2 Aluplast 85



Pos.	Article designation
1	L&S handle set
2	Lift drive gear lock case DM 37.5 PZ
3	Perforated connecting rod L&S 16.4 x 4
4	300 kg front L&S roller with brushes, silver
5	300 kg back L&S roller with brushes, silver
6	Underlays for L&S KU 29mm high roller silver drive gear side
7	Rubber stopper L&S, silver
8	Top locking bolts; locking points 15,5mm
9	Bottom locking bolts; locking points 15,5mm
10	Underlay for L&S KU lock. bolt thickness = 0.5 + 1 mm, silver
11	Rod guide for running rail high silver
12	Countersunk self-tapping screws B 4,8 x 80
13	Countersunk self-tapping screws B 4,8 x 65
14	Countersunk self-tapping screws B 4,8 x 45
15	Countersunk self-tapping screws B 4,8 x 19
16	Chip board screw 4x 25
17	M8 DIN433
25	Buffer stop pack 28mm gap
26	Countersunk self-tapping screws B 4,8 x 80
27	L&S locking block 300/400 kg
28	Filister head screw (safety catch)
O	OPTIONAL
20	Gasket bridge
29	Screw set M5x80 for L&S handle silver
30	Square spindle for L&S handle 10x86mm
35	Top locking bolts; locking points 15,5mm
36	Countersunk self-tapping screws B 4,8 x 45
37	Countersunk self-tapping screws B 4,8 x 70
45	Sash positioner L&S PVC
46	Countersunk self-tapping screws B 4,8 x 22





ALUPLAST 85

Pos.	Pieces in diagram				Component description	Order number							
	A	D	C	F		white	silver	bronze	brown				
1	1	2	2	4	L&S handle set 12								
					L&S handle 12 with cover plate and recessed grip, short	103816	103814	103811	103813				
					L&S handle 12 with cover plate PC and recessed grip, short	103822	103820	103817	103819				
					L&S handle 12 with cover plate PC	103828	103826	103823	103825				
					L&S handle 12 with cover plate ¹⁾	218399	218397	218394	218396				
				L&S handle 12 with cover plate PC ¹⁾	218405	218403	218400	218402					
2	1	2	2	4	L&S drive-gears BS 37.5 PC								
					FH = RAH - 128	Size	DH	L	RH				
						1	410	1300	730 - 1340	-	214415	214602	214612
						2	410	1700	1245 - 1740	-	214416	214603	214613
						3	1010	2100	1645 - 2140	-	214417	214604	214614
						4	1010	2500	2045 - 2540	-	214418	214605	214615
						5	1010	2800	2445 - 2840	-	214419	214606	214616
3	1	2	2	4	L&S punched connecting rod 16,4 x 4	Size	L	RB					
					Diagram A, D $FB = (RAB / 2) - 28$	1	692	705 - 1280		359639			
					Diagram C, F $FB = (RAB / 4) + 7$	2	1196	1210 - 1785		359640			
						3	1700	1715 - 2285		359641			
						4	2204	2215 - 2795		359642			
						5	2708	2720 - 3300		359643			
4 - 17	1	2	2	4	L&S roller pack PVC Aluplast 300 KG silver					104134			
25 -26	-	1	-	2	L&S buffer stop PVC					102945	102946	⁶⁾	102947 ⁵⁾
27 -28		-	1	1	Spindle for L&S handle 10x86mm					102948			
20	1	-	2	-	Gasket bridge					469573			
20	-	1	-	2	Gasket bridge					469574			
OPTIONAL													
29	1	2	2	4	Screw set M5x80 for L&S handle, silver					101652			
30	1	2	2	4	Spindle for L&S handle 10x86mm					365705			
35 -37	1	2	1	3	Locking bolts L&S PVC locking point 15.5mm silver					102944			
45 -46	1	2	2	4	L&S sash positioner PVC, silver					102949			



ALUPLAST 85

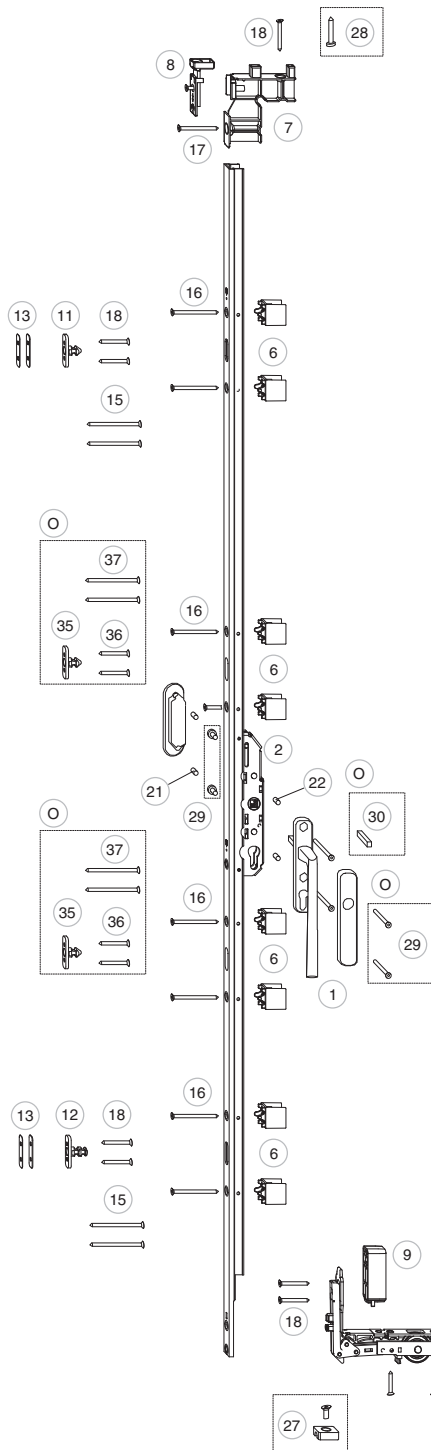
Installing Tools

70		L&S drilling and routing jigs for drive gear drilling hole and Aluplast finger pull	215133
71		Marking gauge for L&S locking bolts Base plate hole spacing 22m	363159
72		Drilling jig for locking block L&S drive-gear size 3	224398
73		Drilling jig for locking bolt ⁷⁾	224399
74		Drilling jig for locking block	215582

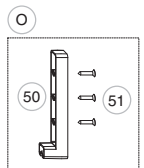
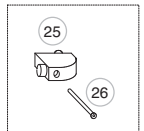
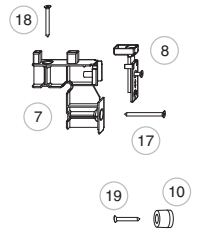
- ¹⁾ Use pos. 29 and 30
- ⁵⁾ Use silver L&S drive-gears
- ⁶⁾ Use black or silver component colour
- ⁷⁾ Use 1 piece for drive-gear size 4, use 2 pieces for drive-gear size 5
Hardware design in Tricoat available on request



2.12.1.3 Schüco - Corona CT 70



Pos.	Article designation
1	L&S handle set
2	Lift drive gear lock case DM 37.5 PZ
3	Perforated connecting rod L&S 16.4 x 4
4	300 kg front L&S roller with brushes, silver
5	300 kg back L&S roller with brushes, silver
6	Underlays for L&S KU 25.5 mm high drive gear, silver
7	Basic profile for slider, 33 x 47,5 mm spacing, silver
8	L&S KU 16.4 mm slider shoe with cover
9	Underlays for L&S KU 25.5 mm high roller silver drive gear side
10	20 mm high buffer stop, soft
11	Top locking bolts, locking point 12mm
12	Bottom locking bolt locking point 12mm
13	Underlay for L&S KU lock. bolt thickness = 0.5 + 1mm, silver
14	L&S groove support for 300kg, silver
15	Countersunk self-tapping screws B 4.8 x 80
16	Countersunk self-tapping screws B 4.8 x 70
17	Countersunk self-tapping screws B 4.8 x 60
18	Countersunk self-tapping screws B 4.8 x 45
19	Countersunk self-tapping screws B 4.8 x 32
20	Countersunk self-tapping screws B 3.9 x 45
21	Spacer socket for 13.8 mm handle fastening
22	Spacer socket for 19.8 mm handle fastening
25	Buffer stop pack 28mm gap
26	Countersunk self-tapping screws B 4.8 x 80
27	L&S locking block 300/400 kg
28	Filister head screw 6.3 x 38 (safety catch)
O	OPTIONAL
29	Screw set M5x80 for L&S handle silver
30	Square spindle for L&S handle 76mm
35	Top locking bolts; locking points 12mm
36	Countersunk self-tapping screws B 4.8 x 45
37	Countersunk self-tapping screws B 4.8 x 80
50	Sash positioner L&S PVC, silver
51	Countersunk self-tapping screws B 4.8 x 22



SCHÜCO Corona CT70

Pos.	Quantity for system				Article designation	Order number				
	A	D	C	F		white	silver	bronze	brown	
1	1	2	2	4	L&S handle set					
					L&S handle set with cover and short finger pull	103634	103632	103629	103631	
					L&S handle set with PZ cover and short finger pull	103652	103650	103647	103649	
					L&S handle with cover ¹⁾	218399	218397	218394	218396	
				L&S handle with PZ cover ¹⁾	218405	218403	218400	218402		
2	1	2	2	4	Lift drive gear lock case DM 37.5 PZ	Size	GM	L	RH	
					FH = RAH - 124	1	402	1300	805 - 1420	²⁾ 214415 214602 214612
						2	402	1700	1320 - 1820	²⁾ 214416 214603 214613
						3	1002	2100	1720 - 2220	²⁾ 214417 214604 214614
						4	1002	2500	2120 - 2620	²⁾ 214418 214605 214615
				5		1002	2800	2520 - 2920	²⁾ 214419 214606 214616	
3	1	2	2	4	Perforated connecting rod L&S 16.4 x 4	Size	L	RB		
					Schema A, D $FB = (RAB / 2) - 22$ Schema C, F $FB = (RAB / 4) + 11$	1	692	720 - 1290	359639	
						2	1196	1220 - 1790	359640	
						3	1700	1730 - 2300	359641	
						4	2204	2230 - 2800	359642	
				5		2708	2740 - 3310	359643		
4 - 22	1	2	2	4	L&S roller pack PVC Schüco Corona CT 70 300kg silver				102952	
25 - 26	-	1	-	2	L&S PVC buffer stop				102945 102946 ⁷⁾ 102947 ⁶⁾	
27 - 28	-	-	1	1	L&S PVC locking systems C, F and G silver				102948	
OPTIONAL										
29	1	2	2	4	Screw set M5x80 for L&S handle silver				101652	
30	1	2	2	4	Square spindle for L&S handle 76mm				365620	
35 - 37	1	2	1	3	L&S PVC locking bolt, locking point 12.00 mm silver				102950	
50 - 51	1	2	2	4	Sash positioner L&S PVC, silver				102949	
INSTALLING TOOLS										
70					L&S drilling and routing jigs for drive gear drilling hole and Schüco finger pull				214863	
71					Marking gauge for L&S locking bolts Base plate hole spacing 22 mm				363159	
72					Drilling jig for locking block L&S drive-gear size 3				224398	
73					Drilling jig for locking bolt ⁹⁾				224399	
74					Drilling jig for locking block				215582	

¹⁾ Use pos. 29 and 30

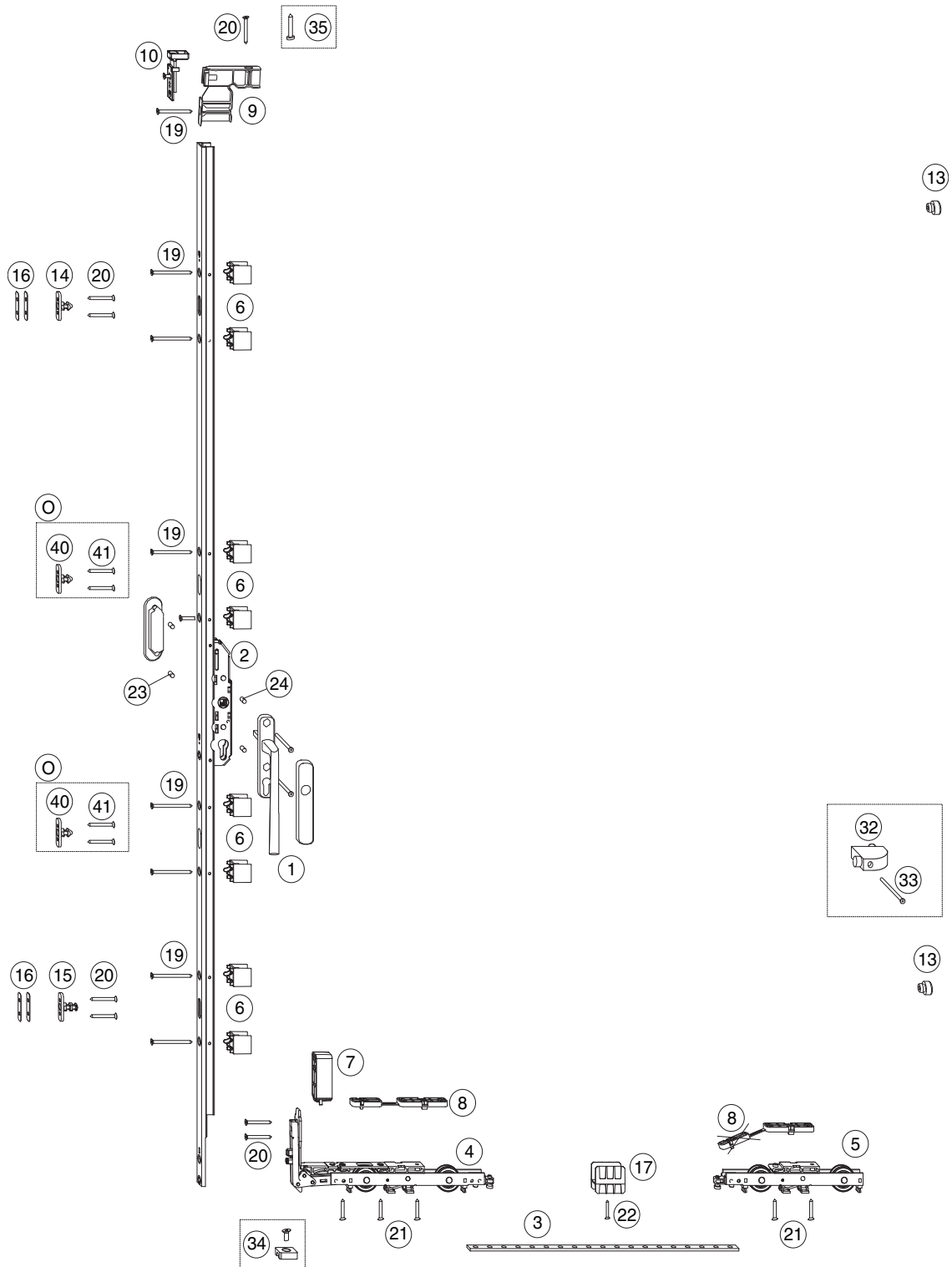
⁶⁾ Component colour black

⁹⁾ Use 1 piece for drive-gear size 4, use 2 pieces for drive-gear size 5
Hardware design in Tricoat available on request

²⁾ Use lift drive gear lockcase DM 37.5 PZ in silver

⁷⁾ Use component colour black or silver

2.12.1.4 Schüco Thermo Slide 82



Schüco Thermo Slide 82

Pos.	Quantity for system				Article designation	Order number							
	A	D	C	F		white	silver	bronze	brown				
1	1	2	2	4	L&S handle set								
					L&S handle set with cover and short finger pull	103640	103638	103635	103637				
					L&S handle set with PZ cover and short finger pull	103646	103644	103641	103643				
2	1	2	2	4	Lift drive gear lock case DM 37,5 PZ	Size	GM	L	FH				
					FH = RAH - 122	1	407	1300	815 - 1425	-	214415	214602	214612
						2	407	1700	1330 - 1825	-	214416	214603	214613
						3	1007	2100	1730 - 2225	-	214417	214604	214614
						4	1007	2500	2130 - 2625	-	214418	214605	214615
						5	1007	2800	2430 - 2925	-	214419	214606	214616
3	1	2	2	4	Perforated connecting rod L&S 16.4 x 4	Size	L	FB					
					Schema A, D $FB = (RAB / 2) - 38,5$ Schema C, F $FB = (RAB / 4) - 8$	1	692	715 - 1290		359639			
						2	1196	1220 - 1795		359640			
						3	1700	1725 - 2300		359641			
						4	2204	2230 - 2805		359642			
						5	2708	2730 - 3310		359643			
4-16	1	2	2	4	L&S PVC roller pack for L&S PVC Schüco Thermo Slide 300KG silver					104073			
32-33	-	1	-	1	L&S PVC buffer stop				102945	102946	⁷⁾	102947⁶⁾	
34-35	-	-	1	1	L&S PVC locking systems C, F and G silver					104206			



OPTIONAL

40-41	1	2	1	3	L&S PVC locking bolt, locking point 15.5 silver					102944		
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INSTALLING TOOLS

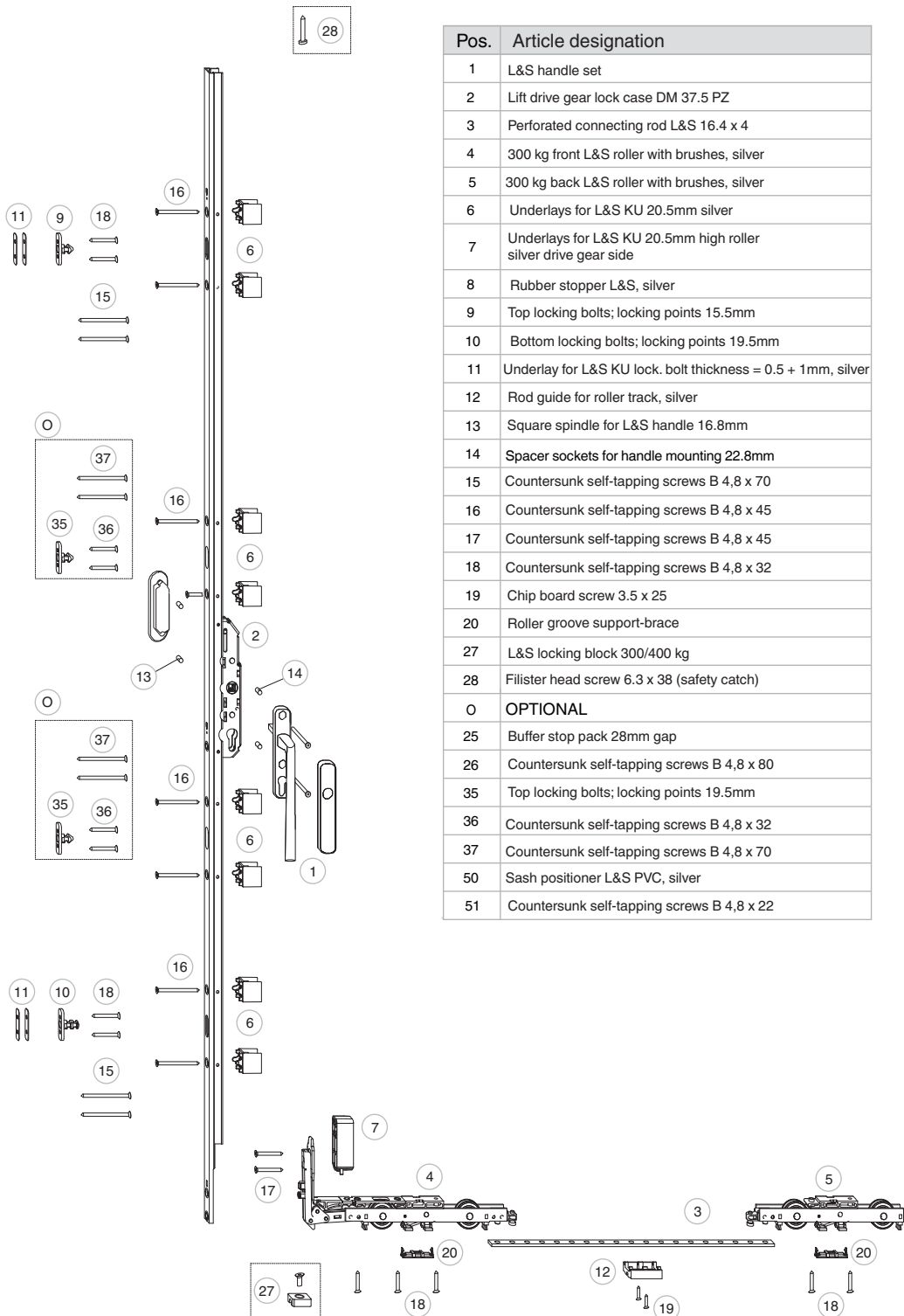
70					L&S drilling and milling jigs for drive gear drilling hole and Schüco finger pull					225025		
71					Marking gouge for L&S locking bolts Base plate hole spacing 22 mm					363159		
84					Jig for locking block					215582		

⁶⁾ Component colour black

⁷⁾ Use component colour black or silver

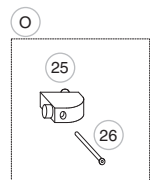


2.12.1.5 Inoutic HST 76 / sash HS 276

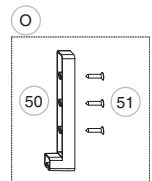


Pos.	Article designation
1	L&S handle set
2	Lift drive gear lock case DM 37.5 PZ
3	Perforated connecting rod L&S 16.4 x 4
4	300 kg front L&S roller with brushes, silver
5	300 kg back L&S roller with brushes, silver
6	Underlays for L&S KU 20.5mm silver
7	Underlays for L&S KU 20.5mm high roller silver drive gear side
8	Rubber stopper L&S, silver
9	Top locking bolts; locking points 15.5mm
10	Bottom locking bolts; locking points 19.5mm
11	Underlay for L&S KU lock. bolt thickness = 0.5 + 1mm, silver
12	Rod guide for roller track, silver
13	Square spindle for L&S handle 16.8mm
14	Spacer sockets for handle mounting 22.8mm
15	Countersunk self-tapping screws B 4,8 x 70
16	Countersunk self-tapping screws B 4,8 x 45
17	Countersunk self-tapping screws B 4,8 x 45
18	Countersunk self-tapping screws B 4,8 x 32
19	Chip board screw 3.5 x 25
20	Roller groove support-brace
27	L&S locking block 300/400 kg
28	Filister head screw 6.3 x 38 (safety catch)
O	OPTIONAL
25	Buffer stop pack 28mm gap
26	Countersunk self-tapping screws B 4,8 x 80
35	Top locking bolts; locking points 19.5mm
36	Countersunk self-tapping screws B 4,8 x 32
37	Countersunk self-tapping screws B 4,8 x 70
50	Sash positioner L&S PVC, silver
51	Countersunk self-tapping screws B 4,8 x 22

8



8





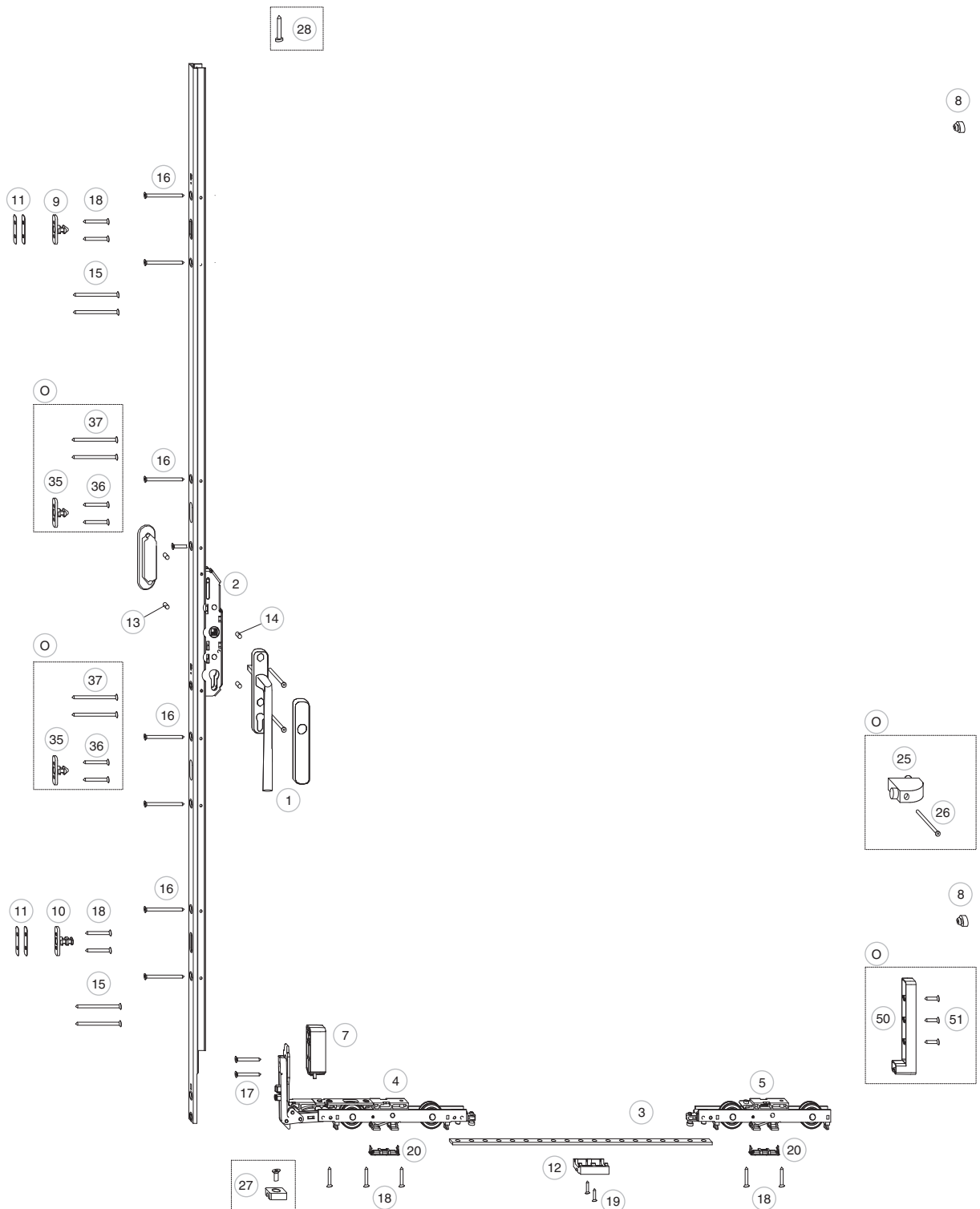
INOUSIC HST76 / sash HS 276

Pos.	Quantity for system		Article designation	Order number				
	A	C		white	silver	bronze	brown	
1	1	2	L&S handle set 12					
			L&S handle set with cover and short finger pull	103640	103638	103635	103637	
			L&S handle set with PZ cover and short finger pull	103646	103644	103641	103643	
2	1	2	Lift drive gear lock case DM 37.5 PZ	Size	GM	L	FH	
			FH = RAH - 153	1	406	1300	725 - 1330	¹⁾ 214415 214602 214612
				2	406	1700	1240 - 1730	¹⁾ 214416 214603 214613
				3	1006	2100	1640 - 2130	¹⁾ 214417 214604 214614
				4	1006	2500	2040 - 2530	¹⁾ 214418 214605 214615
				5	1006	2800	2440 - 2830	¹⁾ 214419 214606 214616
3	1	2	Perforated connecting rod L&S 16.4 x 4	Size	L	FB		
			Diagram A $FB = (RAB / 2) - 26$ Diagram C $FB = (RAB / 4) + 12$	1	692	730 - 1300	359639	
				2	1196	1240 - 1810	359640	
				3	1700	1740 - 2310	359641	
				4	2204	2250 - 2820	359642	
				5	2708	2750 - 3320	359643	
4 - 20	1	2	L&S PVC roller packing Inoutic Elite, Prestig 300KG silber				102954	
27 - 28	-	1	L&S PVC locking systems C, F and G silver				102948	
OPTIONAL								
25 - 26	1	1	L&S PVC buffer stop				102945 102946 ⁴⁾ 102947 ³⁾	
35 - 37	1	1	L&S PVC locking bolt, locking point 19.5 silver				102951	
50 - 51	1	2	Sash positioner L&S PVC, silver				102949	
INSTALLING TOOLS								
70			L&S drilling and routing jigs for drive gear drilling hole and Thyssen finger pull				214864	
71			Marking gauge for L&S locking bolts Base plate hole spacing 22 mm				363159	
72			Drilling jig for locking block				215582	

- ¹⁾ Use L&S drive-gears BS 37.5 PC in silver
³⁾ Use black colour
⁴⁾ Use black or silver component colour
Hardware design in Tricoat available on request



2.12.1.6 Inoutic HST 76 / sash HS 476





INOUSIC HST 76 / sash HS 476

Pos.	Quantity for system		Article designation	Order number							
	A	C		white	silver	bronze	brown				
1			HS handle								
	1	1	HS handle12 mit cover plate	Cover plate without punch	218399	218397	218394	218396			
				Cover plate PC	218405	218403	218400	218402			
	1	1	Set of screws and spindle	for HS handle with finger pull	104827						
				for HS handle interior and exterior	104831						
	1	1	Finger pull	long	36823	36820	37566	36822			
				short	358339	358341	358343	358340			
			short, routing depth 9 mm	369776	369773	369763	369772				
		HS handle 12 exterior PC without lugs		218418	218416	218413	218415				
2	1	2	Lift drive gear lock case BS 37.5 PC	Size	HH	L	FH				
			FH = RAH - 153	1	406,5	1300	735 - 1340	¹⁾	227360	¹⁾	¹⁾
				2	406,5	1700	1250 - 1740	¹⁾	227361	¹⁾	¹⁾
				3	1006,5	2100	1650 - 2140	¹⁾	227362	¹⁾	¹⁾
				4	1006,5	2500	2050 - 2540	¹⁾	227363	¹⁾	¹⁾
				5	1006,5	2800	2450 - 2840	¹⁾	227364	¹⁾	¹⁾
3	1	2	Perforated connecting rod HS 16.4 x 4	Size	L	FB					
			Diagram A $FB = (RAB / 2) - 26$ Diagram C $FB = (RAB / 4) + 12$	1	692	730 - 1300	359639				
				2	1196	1240 - 1810	359640				
				3	1700	1740 - 2310	359641				
				4	2204	2250 - 2820	359642				
				5	2708	2750 - 3320	359643				
4 - 20	1	2	Pack rollers HS PVC Inoutic HST 76 / HS 476 300 kg silver			104873					
27 - 28	-	1	HS PVC locking systems C, F, G Silver			102948					
OPTIONAL											
25 - 26	1	1	HS PVC buffer stop			102945	102946	⁴⁾	102947 ³⁾		
35 - 37	1	1	HS PVC locking bolt, locking point 19.5 silver			102951					
50 - 51	1	2	Sash positioner HS PVC, silver			102949					





INOUSIC HST 76 / sash HS 476

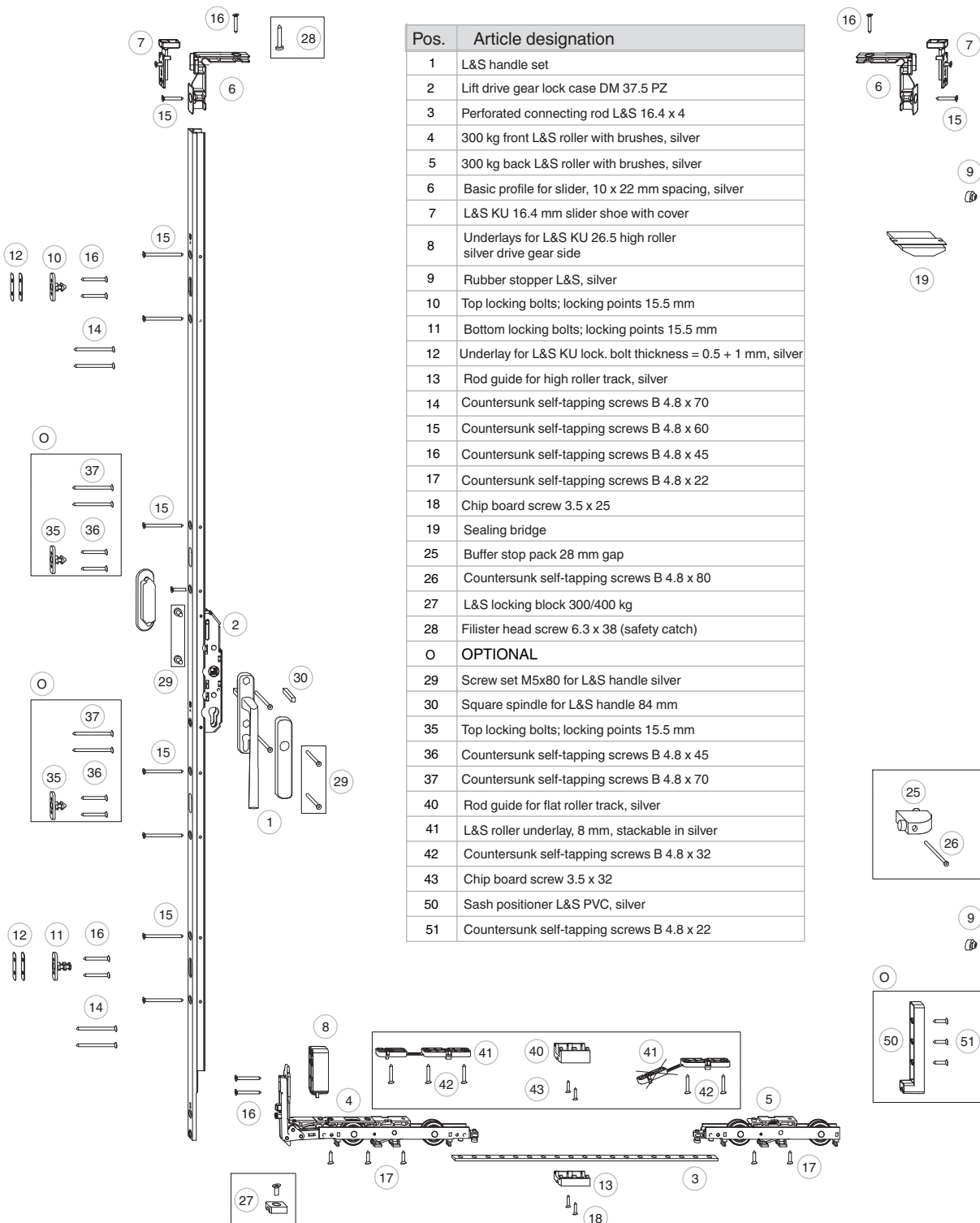
Pos.	Quantity for system		Article designation	Order number			
	A	C		white	silver	bronze	brown

INSTALLING TOOLS

70			HS-drilling and routing jigs for drive gear drilling hole and Thyssen finger pull				214864
83			Drilling jig for roller 300 kg				
	1		Drilling jig for roller 300 kg front				227487
	1		Drilling jig for roller 300 kg rear				227488
	1		Set of side gauges for drilling jig for roller 60 mm				104856
84			Drilling jig for HS drive gears size 1-5, for groove width 22 mm				227489
71			Marking punch for HS locking bolts Base plate hole pitch 22 mm				363159
72			Drilling jig for locking bolts				215582

- ¹⁾ Use HS drive gears BS 37.5 PC in silver
³⁾ Use black component colour
⁴⁾ Use black or silver component colour

2.12.1.7 Profine PremiDoor 70, 76 and 88



Pos.	Article designation
1	L&S handle set
2	Lift drive gear lock case DM 37.5 PZ
3	Perforated connecting rod L&S 16.4 x 4
4	300 kg front L&S roller with brushes, silver
5	300 kg back L&S roller with brushes, silver
6	Basic profile for slider, 10 x 22 mm spacing, silver
7	L&S KU 16.4 mm slider shoe with cover
8	Underlays for L&S KU 26.5 high roller silver drive gear side
9	Rubber stopper L&S, silver
10	Top locking bolts; locking points 15.5 mm
11	Bottom locking bolts; locking points 15.5 mm
12	Underlay for L&S KU lock. bolt thickness = 0.5 + 1 mm, silver
13	Rod guide for high roller track, silver
14	Countersunk self-tapping screws B 4.8 x 70
15	Countersunk self-tapping screws B 4.8 x 60
16	Countersunk self-tapping screws B 4.8 x 45
17	Countersunk self-tapping screws B 4.8 x 22
18	Chip board screw 3.5 x 25
19	Sealing bridge
25	Buffer stop pack 28 mm gap
26	Countersunk self-tapping screws B 4.8 x 80
27	L&S locking block 300/400 kg
28	Filister head screw 6.3 x 38 (safety catch)
O	OPTIONAL
29	Screw set M5x80 for L&S handle silver
30	Square spindle for L&S handle 84 mm
35	Top locking bolts; locking points 15.5 mm
36	Countersunk self-tapping screws B 4.8 x 45
37	Countersunk self-tapping screws B 4.8 x 70
40	Rod guide for flat roller track, silver
41	L&S roller underlay, 8 mm, stackable in silver
42	Countersunk self-tapping screws B 4.8 x 32
43	Chip board screw 3.5 x 32
50	Sash positioner L&S PVC, silver
51	Countersunk self-tapping screws B 4.8 x 22

HS-ST



PROFINE PremiDoor 70 / 76 / 88

Pos.	Quantity for system				Article designation	Order number							
	A	D	C	F		Champagne	Titan	white	silver	bronze	brown		
1					HS-Griff								
	1	2	2	4	HS handle 12 with cover plate	218395	218398	218399	218397	218394	218396		
					HS handle 12 with cover plate PC	218401	218404	218405	218403	218400	218402		
	1	2	2	4	L&S short Finger Pull	358342	358344	358339	358341	358343	358340		
					HS handle 12 set exterior PC without lugs	218414	218417	218418	218416	218413	218415		
	1	2	2	4	Set of screws and spindle for HS handle with finger pull	HS 70		104826					
						HS 76		104827					
				HS 88		104828							
				Set of screws and spindle for HS handle inside and outside	104831								
2	1	2	2	4	Lift drive gear lock case DM 37.5 PZ	Größe	HH	L	FH				
					PremiDoor 70 FH = RAH - 130 PremiDoor 76 / 88 FH = RAH - 132	1	408 [400]	1300	815 - 1420 [807 - 1412]	²⁾	214415	214602	214612
						2	408 [400]	1700	1330 - 1820 [1322 - 1812]	²⁾	214416	214603	214613
						3	1008 [1000]	2100	1730 - 2220 [1722 - 2212]	²⁾	214417	214604	214614
						4	1008 [1000]	2500	2130 - 2620 [2122 - 2612]	²⁾	214418	214605	214615
						5	1008 [1000]	2800	2530 - 2920 [2522 - 2912]	²⁾	214419	214606	214616
3	1	2	2	4	Perforated connecting rod L&S 16.4 x 4	size	L	FB					
					PremiDoor 70 Schema A, D FB = (RAB / 2) - 26 Schema C, F FB = (RAB + 40) / 4 PremiDoor 76 / 88 Schema A, D FB = (RAB / 2) - 31,5 Schema C, F FB = (RAB - 19) / 4	1	692	700 - 1270	359639				
						2	1196	1200 - 1770	359640				
						3	1700	1710 - 2270	359641				
						4	2204	2210 - 2780	359642				
						5	2708	2720 - 3280	359643				
4 - 18	1	2	2	4	L&S PVC roller pack Profine PremiDoor 300KG silber					102953 ⁸⁾			
19	-	1	-	2	Gasket bridge for PremiDoor 70	HS 70				454868			
25 - 26	2	2	4	4	L&S PVC buffer stop					102945	102946	⁷⁾	102947 ⁶⁾
27 - 28	-	-	1	1	L&S PVC locking systems C, F and G silver	HS 70				102948			

OPTIONAL

35 - 37	1	2	1	3	L&S PVC locking bolt, locking point 15.5 silver					102944		
40 - 43	1	2	2	4	Accessories for flat roller track, Profine PremiDoor silver					103143		
50 - 51	1	2	2	4	Sash positioner L&S PVC, silver					102949		

Accessories for RC2

	1	1	2	2	L&S RC2 package for Profine PremiDoor 88 to SH 2300	HS 88				105315		
	1	1	2	2	L&S hinge security provision package for Profine PremiDoor 88 SH >2300					105384		

SH 0-2300 = 1x 105315 / SH 2300-2800 = 1x 105315, 1x 105384 / SH >2800 = 1x 105315, 2x 105384

PROFINE PremiDoor 70 / 76 / 88

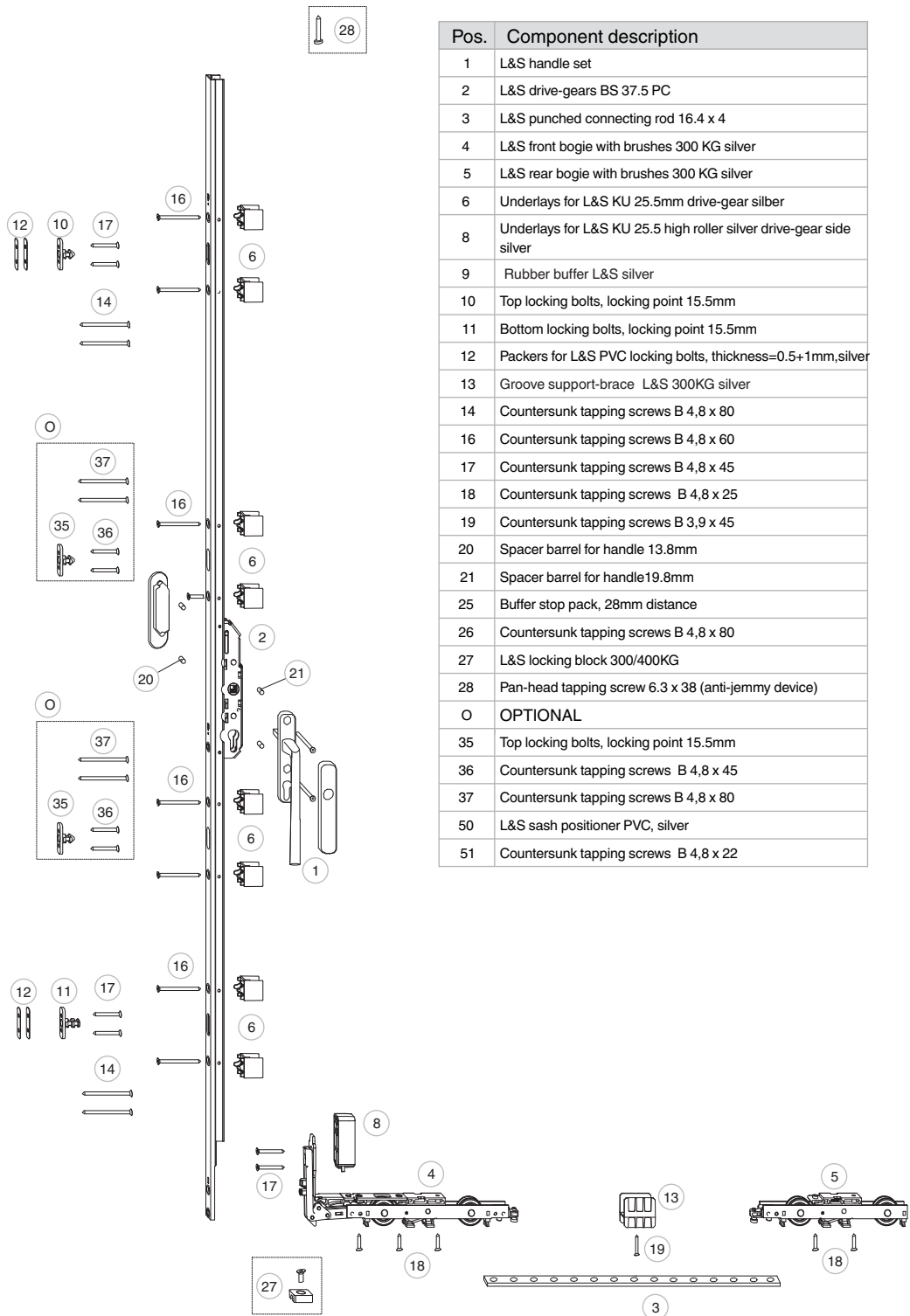
Installing Tools

		Profil		
80		L&S drilling and routing jigs for drive gear drilling hole and finger pull	HS 70	214862
			HS 88	225024
81		Marking gauge for L&S locking bolts Base plate hole spacing 22 mm		363159
		Drilling jig for locking bolt	Profil	
82	1	Drilling jig for locking block L&S drive-gear size 3	HS 70	224398
	1 - 2	Drilling jig extension for locking bolt ¹⁰⁾	HS 70	224399
83		Drilling jig for L&S standard drive gear screw holes		227489
		Drilling jig for roller 300 kg	Profil	
84	1	Drilling jig for roller 300 kg front	HS 76 / 88	227487
	1	Drilling jig for roller 300 kg rear	HS 76 / 88	227488
	1	Set of side gauges for drilling jig for roller 34 mm	HS 76 / 88	104852
85		Drilling jig for locking block		215582
86		Drilling jig for hinge security provision RC2 PremiDoor88		228581



- ²⁾ Use lift drive gear lockcase DM 37.5 PZ in silver
- ⁶⁾ Component colour black
- ⁷⁾ Use component colour black or silver
- ⁸⁾ When using the flat roller track, items 40 - 43 pack must also be ordered
- ¹⁰⁾ Application areas for flat roller track design
- [...] Hardware design in Tricoat available on request

2.12.1.8 Veka Slide 70 and 82



Pos.	Component description
1	L&S handle set
2	L&S drive-gears BS 37.5 PC
3	L&S punched connecting rod 16.4 x 4
4	L&S front bogie with brushes 300 KG silver
5	L&S rear bogie with brushes 300 KG silver
6	Underlays for L&S KU 25.5mm drive-gear silver
8	Underlays for L&S KU 25.5 high roller silver drive-gear side silver
9	Rubber buffer L&S silver
10	Top locking bolts, locking point 15.5mm
11	Bottom locking bolts, locking point 15.5mm
12	Packers for L&S PVC locking bolts, thickness=0.5+1mm,silver
13	Groove support-brace L&S 300KG silver
14	Countersunk tapping screws B 4,8 x 80
16	Countersunk tapping screws B 4,8 x 60
17	Countersunk tapping screws B 4,8 x 45
18	Countersunk tapping screws B 4,8 x 25
19	Countersunk tapping screws B 3,9 x 45
20	Spacer barrel for handle 13.8mm
21	Spacer barrel for handle 19.8mm
25	Buffer stop pack, 28mm distance
26	Countersunk tapping screws B 4,8 x 80
27	L&S locking block 300/400KG
28	Pan-head tapping screw 6.3 x 38 (anti-jemmy device)
O	OPTIONAL
35	Top locking bolts, locking point 15.5mm
36	Countersunk tapping screws B 4,8 x 45
37	Countersunk tapping screws B 4,8 x 80
50	L&S sash positioner PVC, silver
51	Countersunk tapping screws B 4,8 x 22



Veka Slide 70 / 82

Pos.	Quantity for system				Article designation	Order number						
	A	D	C	F		white	silver	bronze	brown			
1	1	2	2	4	L&S handle set 12	FS						
					L&S handle set with cover and short finger pull	70	103634	103632	103629	103631		
						82	103640	103638	103635	103637		
					L&S handle set with PZ cover and short finger pull	70	103652	103650	103647	103649		
					82	103646	103644	103641	103643			
2	1	2	2	4	Lift drive gear lock case DM 27,5 PZ	Size	GM	L	FH			
					Veka Slide 70 / 82 FH = RAH - 117	1	407	1300	770 - 1380	²⁾ 214410	214597	214607
						2	407	1700	1290 - 1780	²⁾ 214411	214598	214608
						3	1007	2100	1690 - 2180	²⁾ 214412	214599	214609
						4	1007	2500	2090 - 2580	²⁾ 214413	214600	214610
						5	1007	2800	2490 - 2880	²⁾ 214414	214601	214611
3	1	2	2	4	Perforated connecting rod L&S 16.4 x 4	Size	L	FB				
					Veka Slide 70 A,D FB = RAB / 2 - 17 C,F FB = RAB / 4 + 11	1	692	730 - 1300		359639		
						2	1196	1230 - 1800		359640		
					Veka Slide 82 A,D FB = RAB / 2 - 15 C,F FB = RAB / 4 + 13	3	1700	1740 - 2310		359641		
						4	2204	2240 - 2810		359642		
						5	2708	2750 - 3320		359643		
4 - 21	1	2	2	4	L&S PVC roller pack for Veka Slide 300KG silver					102956		
25 - 26	-	1	-	2	L&S PVC buffer stop				102945	102946 ⁷⁾	102947 ⁶⁾	
27 - 28	-	-	1	1	L&S PVC locking systems C, F and G silver					102948		

OPTIONAL

35 - 37	1	2	1	3	L&S PVC locking bolt, locking point 15.5 silver					102944
50 - 51	1	2	2	4	Sash positioner L&S PVC, silver					102949

INSTALLING TOOLS

70		L&S drilling and routing jigs for drive gear drilling hole and Veka Slide 70 finger pull	214865
		Marking gauge for L&S locking bolts Base plate hole spacing 82 mm	225023
71		Marking gauge for L&S locking bolts Base plate hole spacing 22 mm	363159
72		Drilling jig for locking block	215582

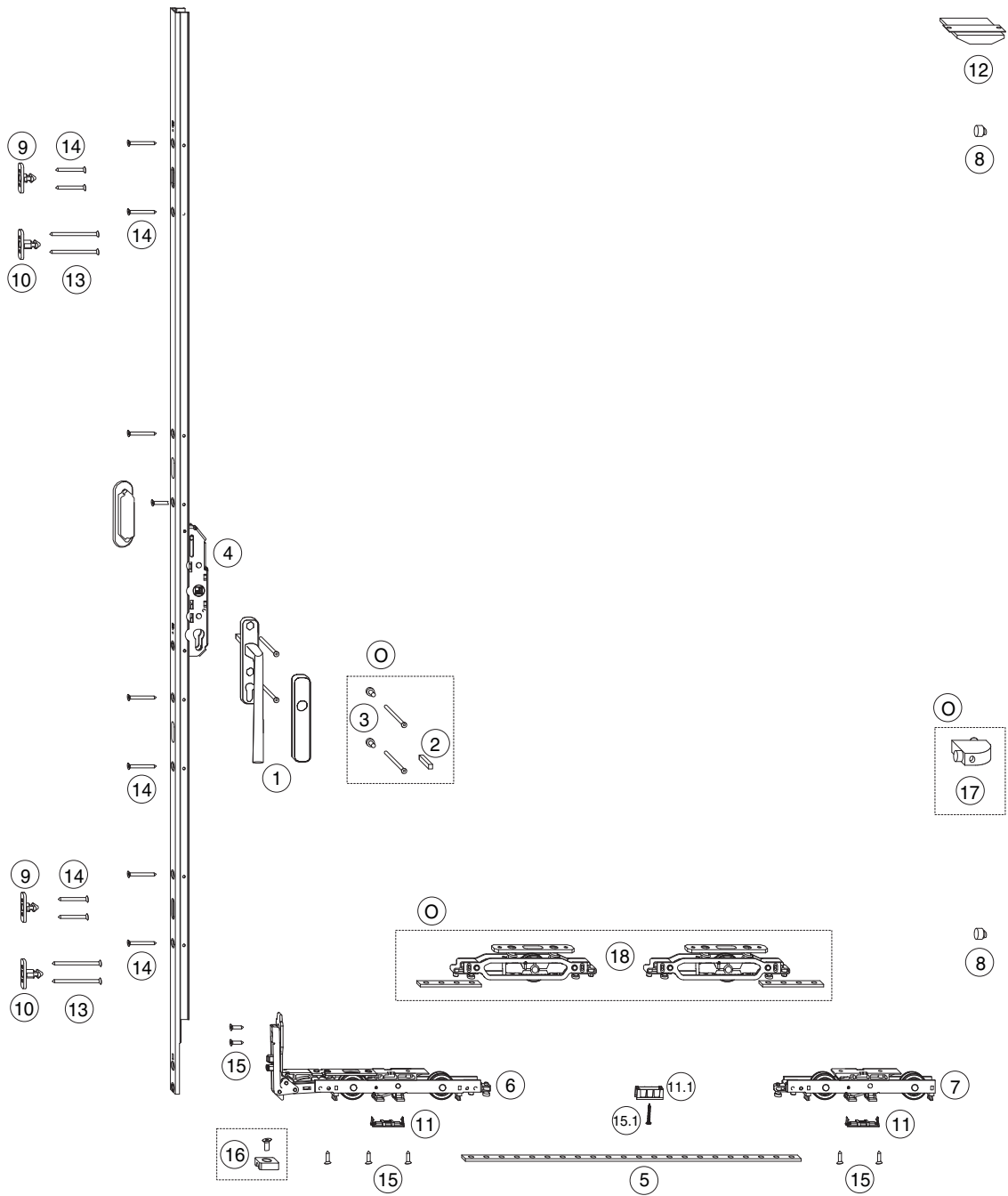
²⁾ Use L&S drive-gears BS 27.5 PC in silver Use

⁶⁾ black colour

⁷⁾ Use black or silver component colour Hardware design in Tricoat available on request



2.12.1.9 Profialis Passio 3600



Profialis Passio 3600




Pos.	Quantity for system		Article designation	Order number							
	A	C		white	silver	bronze	brown				
1	1	2	L&S handle 12								
			L&S handle with cover and short finger pull	103634	103632	103629	103631				
			L&S handle with PZ cover and short finger pull	103652	103650	103647	103649				
			L&S handle with cover ¹⁾	218399	218397	218394	218396				
			L&S handle with PZ cover ¹⁾	218405	218403	218400	218402				
		HS Griff mit Abdeckblende RZ ¹⁾	218411	218409	218406	218408					
2	1	2	Spindle for set with L&S finger pull 10 x 78 profile depth 56	300000							
3	1	2	Screw set M5 x 80 for L&S handle silver	101652							
4	1	2	Lift drive gear lock case DM 37,5 PZ	Size	HH	L	FH				
			FH = RAH - 136	1	406	1300	735 - 1345	²⁾	214415	214602	214612
				2	406	1700	1250 - 1745	²⁾	214416	214603	214613
				3	1006	2100	1630 - 2145	²⁾	214417	214604	214614
				4	1006	2500	2050 - 2545	²⁾	214418	214605	214615
				5	1006	2800	2450 - 2845	²⁾	214419	214606	214616
5	1	2	Perforated connecting rod L&S 16.4 x 4	Size	L	FB					
			System A $FB = (RAB / 2) - 18$ System C $FB = (RAB / 4) + 14$	1	692	725 - 1300		359639			
				2	1196	1230 - 1810		359640			
				3	1700	1730 - 2310		359641			
				4	2204	2230 - 2810		359642			
				5	2708	2740 - 3310		359643			
6	1	2	300 kg front L&S roller with brushes, silver	215137							
7	1	2	300 kg back L&S roller with brushes, silver	215136							
8	2	4	Rubber stopper L&S, silver	358379 (silber) 42146 (schwarz)							
9	2	-	Locking bolts for L&S aluminium profile Wymar P2600/3600	225647							
10	-	2	L&S PVC locking bolt, locking point 19.5 silver	217082							
11	2	4	L&S roller support 300/400 kg silver	363495							
11.1	1 - 2	2 - 4	L&S groove support-brace, 20 mm high for 300 kg, silver ³⁾	369761							
12	1	2	Sealing bridge HS Wymar black	368142							
13	-	4 - 8	Countersunk self-tapping screws B 4,8 x 60	104007							
14	8 - 12	10 - 16	Countersunk self-tapping screws B 4,8 x 45	104008							
15	7	14	Countersunk self-tapping screws B 4,8 x 19	104143							
15.1	1 - 2	2 - 4	Hardware bolt 4 x 25 Ø 7 mm silver 104403903	465816							
16	-	1	L&S locking block 300/400 kg silver	103060							
			Lift&slide operation sticker	49772; 750427; 750428							



Profialis Passio 3600

Pos.	Quantity for system		Article designation	Order number			
	A	C		white	silver	bronze	brown

SCREWS

13	-	-	Countersunk self-tapping screws B 4.8 x 60	104007		250
14	-	-	Countersunk self-tapping screws B 4.8 x 45	104008		250
15	-	-	Countersunk self-tapping screws B 4.8 x 19	104243		500

OPTIONAL

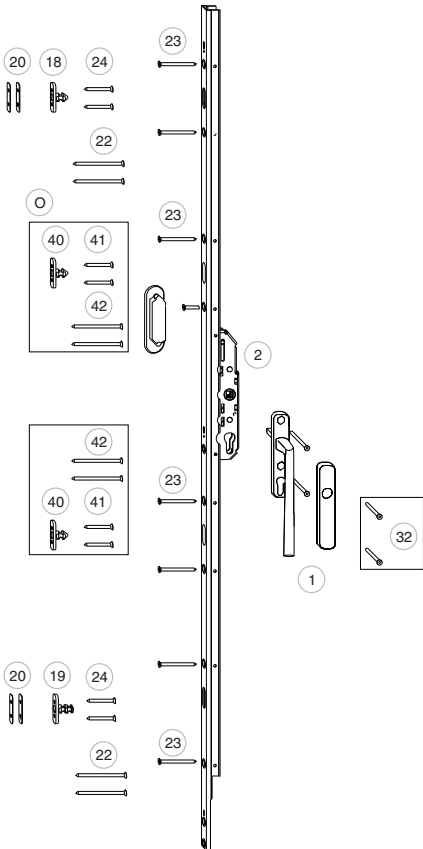
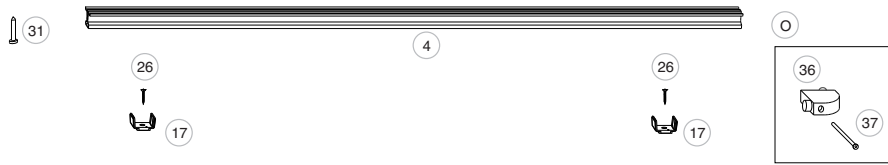
2	1	2	Spindle for set with L&S finger pull 10x78 profile strength 56	30000		
3	1	2	Screw set M5x80 for L&S handle silver	101652		
17	1	1	Buffer stop pack 23mm gap	42240	353341	- 42278 ⁴⁾
18	1	2	Package with additional roller L&L 400KG silver	103071		

INSTALLING TOOLS

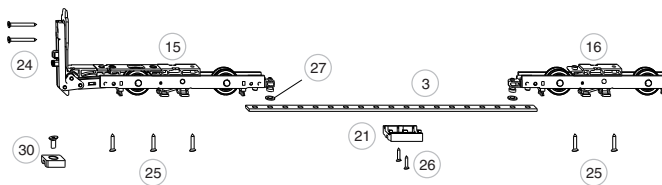
25		Marking gouge for L&S locking bolts Base plate hole spacing 22 mm	363159
26		Jig for locking block	215582

- ¹⁾ Also order items 2 and 3
- ²⁾ Use lift drive gear lockcase DM 37.5 PZ in silver
- ³⁾ Installing SW sliding sash > 1.800mm, 1 piece centred
- ⁴⁾ Component colour black

2.12.1.10 Rehaugeneo with GRP threshold system

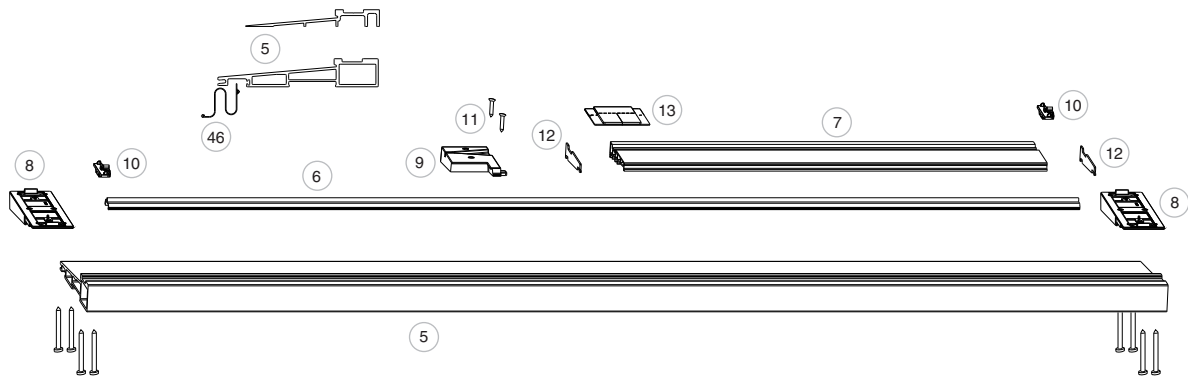


Pos.	Article designation
1	L&S handle set 12
2	Lift drive gear lock case DM 37.5 PZ
3	Perforated connecting rod L&S 16.4 x 4
4	Top guide track Rehaugeneo silver
15	300 kg front L&S roller with brushes, silver
16	300 kg back L&S roller with brushes, silver
17	Basic profile for slider Rehaugeneo, silver
18	Top locking bolts 14.5mm
19	Bottom locking bolts 14.5mm
20	Underlay for L&S KU lock. bolt thickness = 0.5 + 1mm, silver
21	Guides Rehaugeneo silver
22	Countersunk self-tapping screws B 4.8 x 80
23	Countersunk self-tapping screws B 4.8 x 60
24	Countersunk self-tapping screws B 4.8 x 45
25	Countersunk self-tapping screws B 4.8 x 25
26	Screws 4x25
27	M8 DIN433
30	L&S locking block 300/400 kg
31	Filister head screw 6.3 x 38 (safety catch)
O	OPTIONAL
32	Screw set M5x80 for L&S handle silver
36	Buffer stop pack 28mm gap
37	Countersunk self-tapping screws B 4.8 x 80
40	Top locking bolts; locking points 14.5mm
41	Countersunk self-tapping screws B 4.8 x 45
42	Countersunk self-tapping screws B 4.8 x 80
43	Screw set M5x80 for L&S handle silver

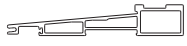







Pos.	Component description
5	MACO with GFK-threshold Silver
6	MACO Fiber Therm roller track 10 mm Silver
7	MACO intermediate profile PVC Rehau Geneo Silver
8	Connector plate for Fibertherm Rehau Geneo Silver
9	Cover cap for PVC intermediate profile 86-88/31mm (L/R)
10	Connection component roller track Rehau Geneo
11	Screw 4x25 7mm Silver
12	Seal for Maco PVC intermediate provile 86-88/31mm
13	Gasket plate for PVC intermediate profile Rehau Geneo
46	Connection of film, 200mm wide black



REHAU Geneo with GRP-threshold

Pos.	Quantity for system		Article designation	Order number							
	A	C		white	silver	bronze	brown				
1	1	2	L&S handle set 12								
			L&S handle set with cover and short finger pull	103816	103814	103811	103813				
			L&S handle set with PZ cover and short finger pull	103822	103820	103817	103819				
			L&S handle with cover ¹⁾	218399	218397	218394	218396				
		L&S handle with PZ cover ¹⁾	218405	218403	218400	218402					
2	1	2	Lift drive gear lock case DM 37.5 PZ	Size	GM	L	FH				
			 FH = RAH -123	1	404	1300	725 - 1335	²⁾	214415	214602	214612
				2	404	1700	1240 - 1735	²⁾	214416	214603	214613
				3	1004	2100	1640 - 2135	²⁾	214417	214604	214614
			 FH = RAH -106	4	1004	2500	2040 - 2535	²⁾	214418	214605	214615
			5	1004	2800	2440 - 2835	²⁾	214419	214606	214616	
3	1	2	Perforated connecting rod L&S 16.4 x 4	Size	L	FB					
				1	692	895 - 1285			359639		
			Diagram A FB = RAB / 2 -30,5	2	1196	1205 - 1785			359640		
			Diagram C FB = RAB / 4 +4,75	3	1700	1710 - 2290			359641		
				4	2204	2215 - 2795			359642		
			5	2708	2720 - 3300			359643			
4	1	2	Top guide Rehaus Geneo Silber		L						
					2500				466887		
			Diagram A L = RAB - 144		3500				466888		
			Diagram C L = RAB - 130		5000				466889		
				6500				466890			
5	1	2	Top guide Rehaus Geneo Silber		L						
					3000				466909		
				Basic profile 240 H = 42	3500				466910		
					4000				466911		
					5000				466912		
					6500				466913		
					9000				466914		
				Frame cover 200 H = 25	2500				462287		
					3500				462288		
				5000				462289			
				6500				462290			



REHAU Geneo with GRP-threshold

Pos.	Quantity for system		Article designation	L	Order number			
	A	C			white	silver	bronze	brown
6	1	1	MACO Fiber Therm Roller track 10mm Silver	L				
			Diagram A L = RAB - 144	2500		466895		
			Diagram C L = RAB - 130	3500		466896		
				5000		466897		
			6500		466898			
7	1	2	Maco intermediate profile PVC Rehau Geneo Silber	L				
			Diagram A L = RAB / 2 - 87	1500		466891		
			Diagram C L = RAB / 4 + 52	2000		466892		
				2500		466893		
			3500		466894			
8 - 11	1	1	Maco Fibertherm PVC accessories pack for Rehau Geneo Silber					104083
12-13	1	2	Foamed rubber for black le/ri Fibertherm for Rehau Geneo					104084
15-27	1	2	L&S PVC roller pack for Rehau Geneo 300KG silber					104085
30-31	-	1	L&S PVC locking systems C , F, G in silver					102948
OPTIONAL								
32	1	2	Screw set M5x80 for L&S handle silver					101652
33	1	2	Square spindle for L&S 86mm handle					365705
36-37	1	1	L&S PVC buffer stop		102945	102946	⁴⁾	102947 ³⁾
40-42	1	1	L&S PVC locking bolt, locking point 14.5mm silver					103180
46	1	1	Construction connection sheeting, 200 mm wide, black	L				
			L = RAB	2500		358713		
				3500		358714		
				5000		358715		
			7000		358716			
INSTALLING TOOLS								
50			L&S drilling and milling jigs for drive gear drilling hole and Rehau Geneo finger pull					215133
51			L&S jig for drilling Maco Fibertherm Rehau Geneo threshold					219796
52			Marking gouge for L&S locking bolts Base plate hole spacing 22 mm					363159
53			Jig for locking block					215582

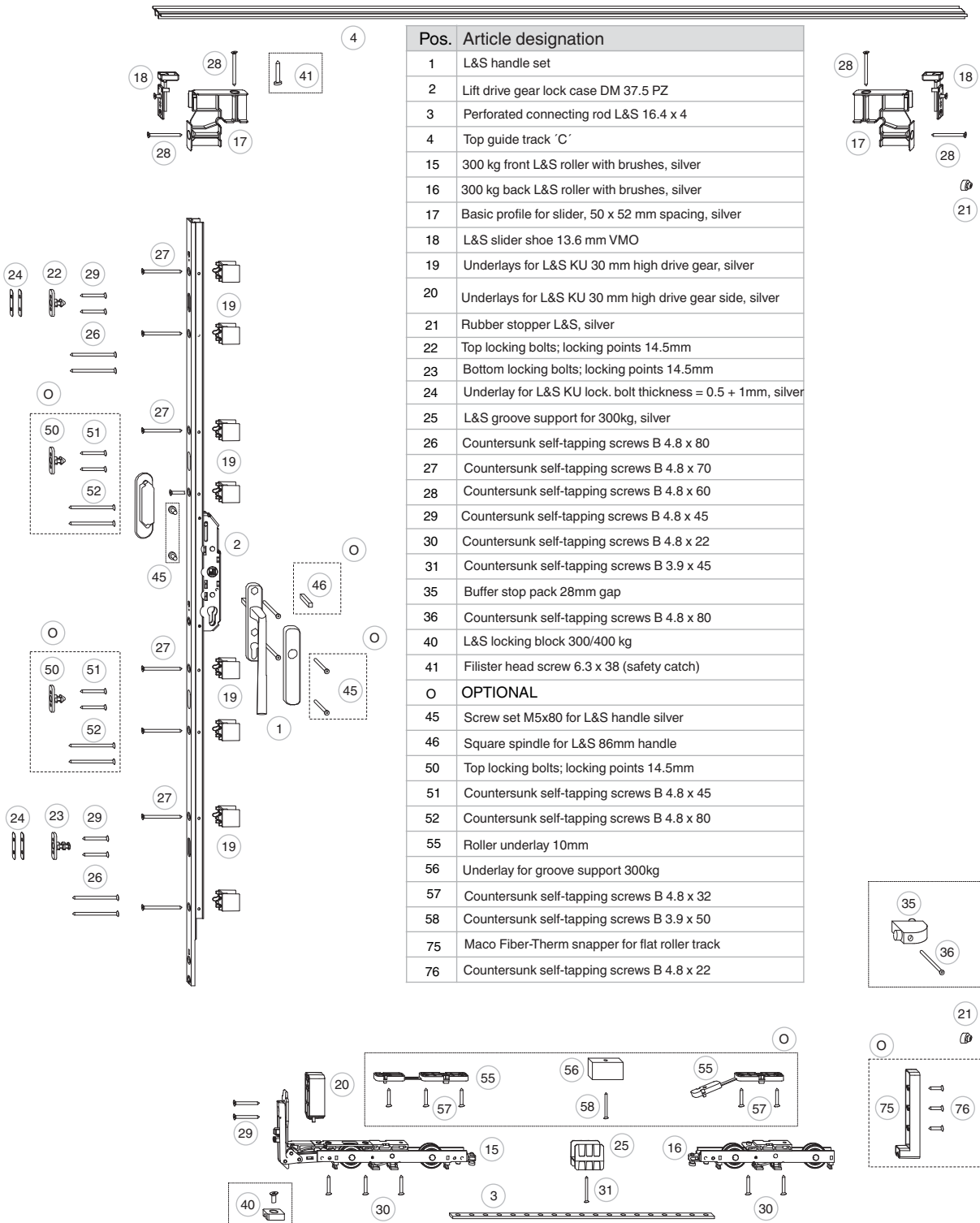
¹⁾ Also order items 32 and 33

³⁾ Component colour black

²⁾ L&S drive-gears BS 27.5 PC

⁴⁾ Use component colour black or silver
Hardware design in Tricoat available on request

2.12.1.11 Salamander ID with GRP threshold system

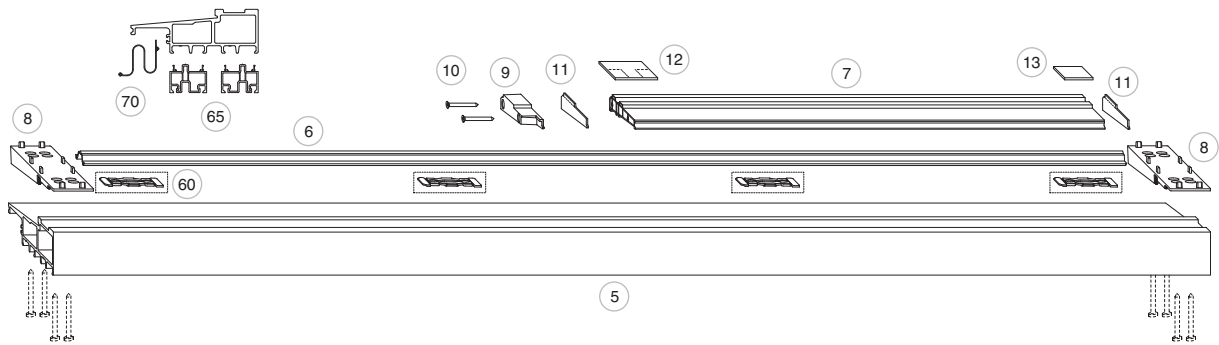


Pos.	Article designation
1	L&S handle set
2	Lift drive gear lock case DM 37.5 PZ
3	Perforated connecting rod L&S 16.4 x 4
4	Top guide track 'C'
15	300 kg front L&S roller with brushes, silver
16	300 kg back L&S roller with brushes, silver
17	Basic profile for slider, 50 x 52 mm spacing, silver
18	L&S slider shoe 13.6 mm VMO
19	Underlays for L&S KU 30 mm high drive gear, silver
20	Underlays for L&S KU 30 mm high drive gear side, silver
21	Rubber stopper L&S, silver
22	Top locking bolts; locking points 14.5mm
23	Bottom locking bolts; locking points 14.5mm
24	Underlay for L&S KU lock. bolt thickness = 0.5 + 1mm, silver
25	L&S groove support for 300kg, silver
26	Countersunk self-tapping screws B 4.8 x 80
27	Countersunk self-tapping screws B 4.8 x 70
28	Countersunk self-tapping screws B 4.8 x 60
29	Countersunk self-tapping screws B 4.8 x 45
30	Countersunk self-tapping screws B 4.8 x 22
31	Countersunk self-tapping screws B 3.9 x 45
35	Buffer stop pack 28mm gap
36	Countersunk self-tapping screws B 4.8 x 80
40	L&S locking block 300/400 kg
41	Filister head screw 6.3 x 38 (safety catch)
O	OPTIONAL
45	Screw set M5x80 for L&S handle silver
46	Square spindle for L&S 86mm handle
50	Top locking bolts; locking points 14.5mm
51	Countersunk self-tapping screws B 4.8 x 45
52	Countersunk self-tapping screws B 4.8 x 80
55	Roller underlay 10mm
56	Underlay for groove support 300kg
57	Countersunk self-tapping screws B 4.8 x 32
58	Countersunk self-tapping screws B 3.9 x 50
75	Maco Fiber-Therm snapper for flat roller track
76	Countersunk self-tapping screws B 4.8 x 22

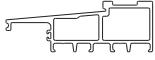





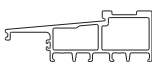



Pos.	Article designation
5	MACO Fiber Therm basic profile 180
6	MACO Fiber Therm roller track
7	MACO intermediate profile 68/28mm, silver
8	Connection plate
9	Cover for L&S intermediate profile, silver
10	4.2x50 A2 countersunk self-tapping screw
11	Side gasket for 2 mm intermediate profile
12	L&S centre gasket plate for 3mm PVC intermediate profile
13	Gasket plate
O	OPTIONAL
60	Maco Fiber-Therm snapper for flat roller track
65	Maco Fiber-Therm doubling profile, height 30mm
70	Anti-moisture foil



Salamander ID with GRP threshold

Pos.	Quantity for system				Article designation	Order number							
	A	G	C	K		white	silver	bronze	brown				
1	1	1	2	2	L&S handle set								
					L&S handle set with cover and short finger pull	103640	103638	103635	103637				
					L&S handle set with PZ cover and short finger pull	103646	103644	103641	103643				
					L&S handle with cover ¹⁾	218399	218397	218394	218396				
				L&S handle with PZ cover ¹⁾	218405	218403	218400	218402					
2	1	1	2	2	Lift drive gear lock case DM 37.5 PZ	Size	GM	L	FH				
					 FH = RAH -136	1	411 {401}	1300	810 - 1420 {800 - 1410}	²⁾	214415	214602	214612
						2	411 {401}	1700	1330 - 1820 {1320 - 1810}	²⁾	214416	214603	214613
						3	1011 {1001}	2100	1730 - 2220 {1720 - 2210}	²⁾	214417	214604	214614
					 FH = RAH -99	4	1011 {1001}	2500	2130 - 2620 {2120 - 2610}	²⁾	214418	214605	214615
					5	1011 {1001}	2800	2530 - 2920 {2520 - 2910}	²⁾	214419	214606	214616	
3	1	1	2	2	Perforated connecting rod L&S 16.4 x 4	Size	L	FB					
					Diagram A $FB = (RAB / 2) - 18$	1	692	720 - 1300			359639		
					Diagram G $FB = (RAB / 3) + 24$	2	1196	1225 - 1800			359640		
					Diagram C, K $FB = (RAB / 4) + 14$	3	1700	1730 - 2305			359641		
						4	2204	2235 - 2810			359642		
						5	2708	2740 - 3310			359643		
4	1	1	1	1	Top guide track 'C'			L					
					Diagram A and G $L = RAB - 128$			2500	²⁾	N20113	N20133	N20153	
					Diagram C $L = RAB - 110$			3500	²⁾	N20114	N20134	N20154	
					Diagram K $L = RAB - 147$			5000	²⁾	N20115	N20135	N20155	
							6500	²⁾	N20116	N20136	N20156		

Salamander ID with GRP-threshold

Pos.	Quantity for system				Article designation		L	Order number							
	A	G	C	K				white	silver	bronze					
5	1	1	1	1	MACO Fiber Therm basic profile 180 with hinge groove										
					L = RAB	 Basic profile 180 H = 62	2500	²⁾	465554	²⁾	²⁾				
							3000	²⁾	465555	²⁾	²⁾				
							3500	²⁾	465556	²⁾	²⁾				
							4000	²⁾	465557	²⁾	²⁾				
							4500	²⁾	465558	²⁾	²⁾				
							5000	²⁾	465559	²⁾	²⁾				
							5500	²⁾	465560	²⁾	²⁾				
							6000	²⁾	465561	²⁾	²⁾				
						6500	²⁾	466671	²⁾	²⁾					
						 Frame component 184 H = 25	2500	²⁾	462279	²⁾	²⁾				
							3500	²⁾	462280	²⁾	²⁾				
							6000	²⁾	462281	²⁾	²⁾				
							6500	²⁾	462282	²⁾	²⁾				
6	1	1	1	1		MACO Fiber Therm roller track									
					Diagram A and G L = RAB - 131 Diagram C L = RAB - 114 Diagram K L = RAB - 147	 High roller track	2500	²⁾	454814	²⁾	²⁾				
							3500	²⁾	454815	²⁾	²⁾				
							5000	²⁾	454816	²⁾	²⁾				
							6500	²⁾	466688	²⁾	²⁾				
						 Flat roller track Also order items 55-58 and 60	2500	²⁾	454810	²⁾	²⁾				
							3500	²⁾	454811	²⁾	²⁾				
							5000	²⁾	454812	²⁾	²⁾				
							6500	²⁾	466687	²⁾	²⁾				
	7	1	2	2		1	Maco PVC intermediate profile for fixed sashes, silver								
						Diagram A, C, G L = FB - 11 Diagram K L = FB Fix sash - 52	1500	²⁾	466013	²⁾	²⁾				
					2000		²⁾	466014	²⁾	²⁾					
					2500		²⁾	466015	²⁾	²⁾					
				3500	²⁾		466016	²⁾	²⁾						



Salamander ID with GRP-threshold

Pos.	Quantity for system				Article designation	Order number			
	A	G	C	K		white	silver	bronze	brown
8 - 10	1	1	1	1	Maco Fibertherm PVC accessories pack for Salamander ID in silver	103178			
11-13	1	2	2	2	Foamed rubber for Salamander ID black le/ri	103320			
15-31	1	1	2	2	L&S PVC roller pack for Salamander 300KG silver	103321 ⁸⁾			
35-36	-	-	-	2	L&S PVC buffer stop	102945	102946	⁷⁾	102947 ⁸⁾
40-41	-	1	1	-	L&S PVC locking systems C and F in silver	102948			

OPTIONAL

45	1	1	2	2	Screw set M5x80 for L&S handle silver	101652			
46	1	1	2	2	Square spindle for L&S 86mm handle	365705			
50-52	1	1	1	2	L&S PVC locking bolt, locking point 14.5mm silver	103180			
55-58	1	1	2	2	Accessories for flat roller track, Salamander silver	103181			
60	3 pcs. / m				Maco Fiber-Therm snapper for flat roller track	356613			
65	2	2	2	2	Maco Fibertherm doubling profile, height 30 mm L=6,000mm white	454867			
70	1	1	1	1	Anti-moisture foil, 200 mm wide, black	L			
						2500	358713		
						3500	358714		
						5000	358715		
					7000	358716			
75-76	1	1	2	2	Sash positioner L&S PVC, silver	102949			

INSTALLING TOOLS

80		L&S drilling and milling jigs for drive gear drilling hole and Salamander finger pull	215132
81		L&S jig for drilling Maco Fibertherm Salamander threshold	215182
82		Marking gouge for L&S locking bolts Base plate hole spacing 22 mm	363159
83		Maco Fiber-Therm jig for flat roller track	206231
84		Jig for locking block	215582

¹⁾ Also order items 45 and 46

²⁾ Use items in silver

⁶⁾ Component colour black

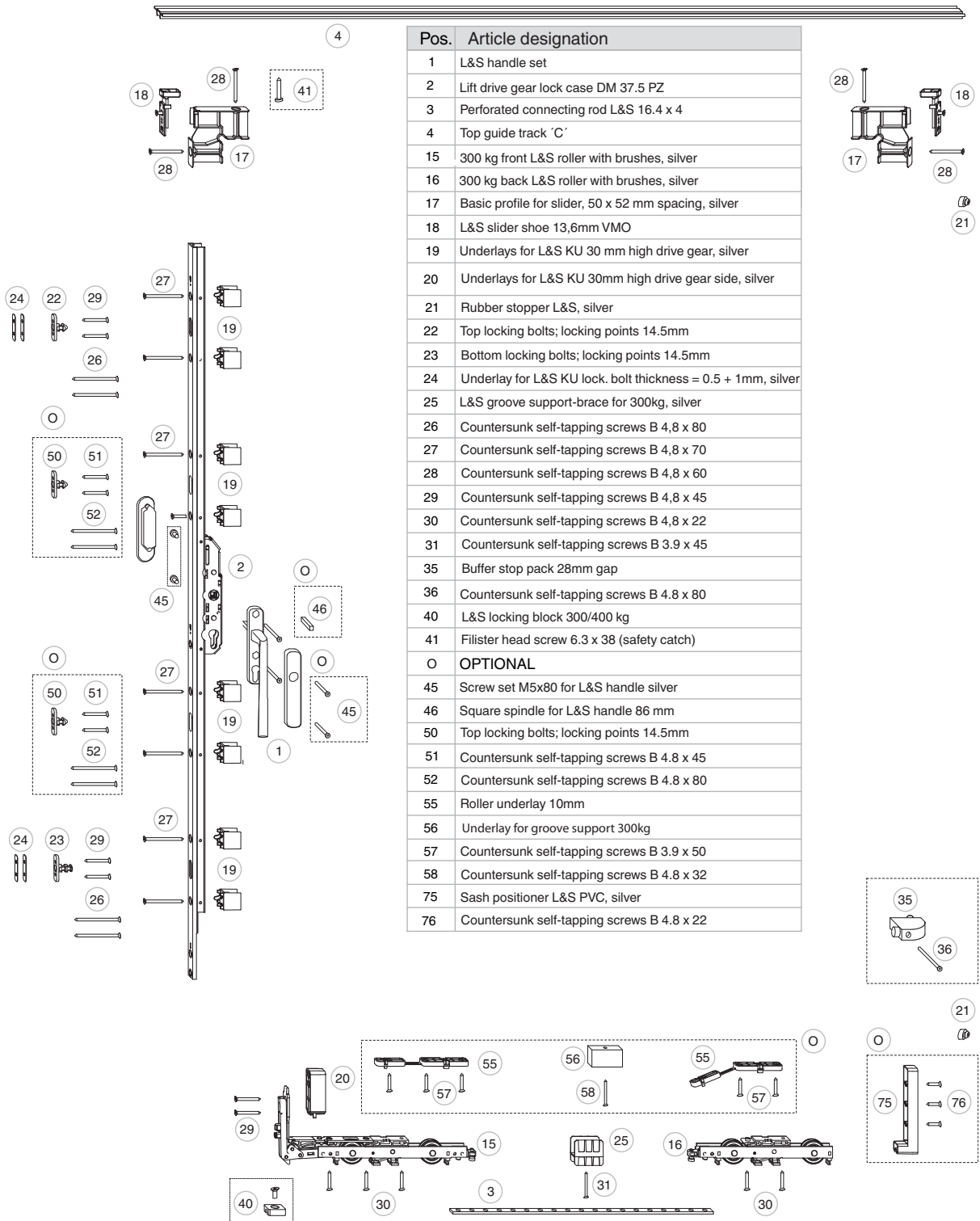
⁷⁾ Use component colour black or silver

⁸⁾ When using the flat roller track, items 55 - 58 pack must also be ordered

{...} Application areas for flat roller track design
Hardware design in Tricoat available on request



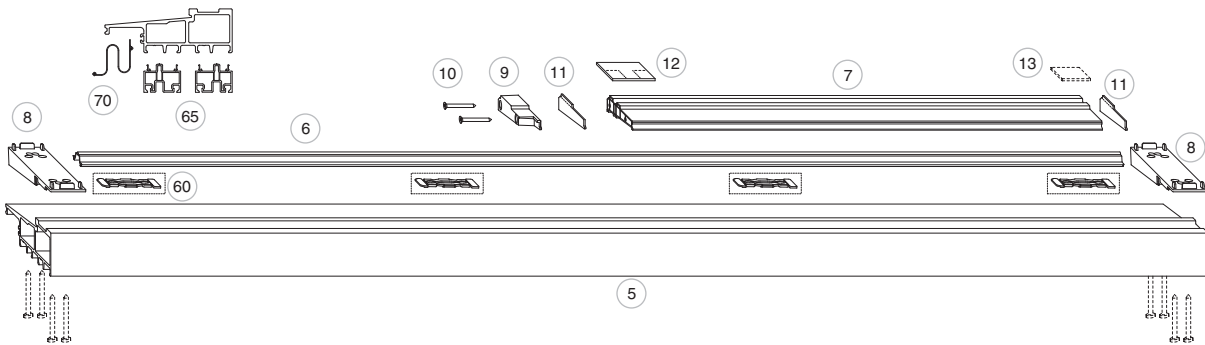
2.12.1.12 Gealan 8000 with GRP-threshold



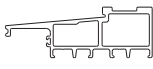

Pos.	Article designation
1	L&S handle set
2	Lift drive gear lock case DM 37.5 PZ
3	Perforated connecting rod L&S 16.4 x 4
4	Top guide track 'C'
15	300 kg front L&S roller with brushes, silver
16	300 kg back L&S roller with brushes, silver
17	Basic profile for slider, 50 x 52 mm spacing, silver
18	L&S slider shoe 13,6mm VMO
19	Underlays for L&S KU 30 mm high drive gear, silver
20	Underlays for L&S KU 30mm high drive gear side, silver
21	Rubber stopper L&S, silver
22	Top locking bolts; locking points 14.5mm
23	Bottom locking bolts; locking points 14.5mm
24	Underlay for L&S KU lock. bolt thickness = 0.5 + 1mm, silver
25	L&S groove support-brace for 300kg, silver
26	Countersunk self-tapping screws B 4,8 x 80
27	Countersunk self-tapping screws B 4,8 x 70
28	Countersunk self-tapping screws B 4,8 x 60
29	Countersunk self-tapping screws B 4,8 x 45
30	Countersunk self-tapping screws B 4,8 x 22
31	Countersunk self-tapping screws B 3,9 x 45
35	Buffer stop pack 28mm gap
36	Countersunk self-tapping screws B 4.8 x 80
40	L&S locking block 300/400 kg
41	Filister head screw 6.3 x 38 (safety catch)
O	OPTIONAL
45	Screw set M5x80 for L&S handle silver
46	Square spindle for L&S handle 86 mm
50	Top locking bolts; locking points 14.5mm
51	Countersunk self-tapping screws B 4.8 x 45
52	Countersunk self-tapping screws B 4.8 x 80
55	Roller underlay 10mm
56	Underlay for groove support 300kg
57	Countersunk self-tapping screws B 3.9 x 50
58	Countersunk self-tapping screws B 4.8 x 32
75	Sash positioner L&S PVC, silver
76	Countersunk self-tapping screws B 4.8 x 22





Pos.	Article designation
5	MACO Fiber Therm basic profile 180
6	MACO Fiber Therm roller track
7	MACO intermediate profile 68/28mm, silver
8	Connection plate
9	Cover for L&S intermediate profile, silver
10	4.2x50 A2 countersunk self-tapping screw
11	Side gasket for 2mm intermediate profile
12	L&S centre gasket plate for 3mm PVC intermediate profile
13	Gasket plate
0	OPTIONAL
60	Maco Fiber-Therm snapper for flat roller track
65	Maco Fiber-Therm doubling profile, height 30mm
70	Anti-moisture foil



Gealan 8000 with GRP-threshold

Pos.	Quantity for system			Article designation	Order number							
	A	C	K		white	silver	bronze	brown				
1	1	2	2	L&S handle set								
				L&S handle set with cover and short finger pull	103640	103638	103635	103637				
				L&S handle set with PZ cover and short finger pull	103646	103644	103641	103643				
				L&S handle with cover ¹⁾	218399	218397	218394	218396				
			L&S handle with PZ cover ¹⁾	218405	218403	218400	218402					
2	1	2	2	Lift drive gear lock case DM 37.5 PZ	Size	GM	L	FH				
				 FH = RAH - 127	1	411 {401}	1300	810 - 1420 {800 - 1410}	²⁾	214415	214602	214612
				 FH = RAH - 90	2	411 {401}	1700	1320 - 1820 {1310 - 1810}	²⁾	214416	214603	214613
					3	1011 {1001}	2100	1720 - 2220 {1710 - 2210}	²⁾	214417	214604	214614
					4	1011 {1001}	2500	2120 - 2620 {2110 - 2610}	²⁾	214418	214605	214615
				5	1011 {1001}	2800	2520 - 2920 {2510 - 2910}	²⁾	214419	214606	214616	
3	1	2	2	Perforated connecting rod L&S 16.4 x 4	Size	L	FB					
				Diagram A $FB = (RAB / 2) - 11,5$	1	692	720 - 1300			359639		
				Diagram C, K $FB = (RAB / 4) + 17$	2	1196	1225 - 1800			359640		
					3	1700	1730 - 2305			359641		
					4	2204	2235 - 2810			359642		
				5	2708	2740 - 3310			359643			
4	1	1	1	Top guide track 'C'		L						
				Diagram A $L = RAB - 119$		2500		²⁾	N20113	N20133	N20153	
				Diagram C $L = RAB - 108$		3500		²⁾	N20114	N20134	N20154	
				Diagram K $L = RAB - 128$		5000		²⁾	N20115	N20135	N20155	
					6500		²⁾	N20116	N20136	N20156		

Gealan 8000 with GRP-threshold

Pos.	Quantity for system			Article designation		Order number				
	A	C	K			white	silver	bronze	brown	
5	1	1	1	MACO Fiber Therm basic profile 180 with hinge groove	L					
				L = RAB Basic profile 180  H = 62	2500	²⁾	465554	²⁾	²⁾	
					3000	²⁾	465555	²⁾	²⁾	
					3500	²⁾	465556	²⁾	²⁾	
					4000	²⁾	465557	²⁾	²⁾	
					4500	²⁾	465558	²⁾	²⁾	
					5000	²⁾	465559	²⁾	²⁾	
					5500	²⁾	465560	²⁾	²⁾	
					6000	²⁾	465561	²⁾	²⁾	
				6500	²⁾	466671	²⁾	²⁾		
				Frame component 184  H = 25	2500	²⁾	462279	²⁾	²⁾	
					3500	²⁾	462280	²⁾	²⁾	
					5000	²⁾	462281	²⁾	²⁾	
					6500	²⁾	462282	²⁾	²⁾	
6	1	1	1	MACO Fiber Therm roller track	L					
				Diagram A L = RAB - 114 Diagram C L = RAB - 108 Diagram K L = RAB - 120	High roller track	2500	²⁾	454814	²⁾	²⁾
						3500	²⁾	454815	²⁾	²⁾
						5000	²⁾	454816	²⁾	²⁾
						6500	²⁾	466688	²⁾	²⁾
				Flat roller track Also order items 55-58 and 60	2500	²⁾	454810	²⁾	²⁾	
					3500	²⁾	454811	²⁾	²⁾	
					5000	²⁾	454812	²⁾	²⁾	
			6500		²⁾	466687	²⁾	²⁾		
7	1	2	1	Maco PVC intermediate profile for fixed sashes, silver	L					
				Diagram A, C L = FB - 13 Diagram K L = FB fix sashed- 52	1500	²⁾	466013	²⁾	²⁾	
					2000	²⁾	466014	²⁾	²⁾	
					2500	²⁾	466015	²⁾	²⁾	
			3500		²⁾	466016	²⁾	²⁾		



Gealan 8000 with GRP-threshold

Pos.	Quantity for system			Article designation	Order number			
	A	C	K		white	silver	bronze	brown
8 - 10	1	1	1	Maco Fibertherm PVC accessories pack for Gealan 8000 in silver	103179			
11-13	1	2	2	Foamed rubber for black le/ri	103320			
15-31	1	2	2	L&S PVC roller pack for Gealan 300KG silver	103321 ⁸⁾			
35-36	-	-	2	L&S PVC buffer stop	102945	102946 ⁷⁾	102947 ⁶⁾	
40-41	-	1	-	L&S PVC locking systems C , F, G in silver	102948			

OPTIONAL

45	1	2	2	Screw set M5x80 for L&S handle silver	101652			
46	1	2	2	Square spindle for L&S 86mm handle	365705			
50-52	1	1	2	L&S PVC locking bolt, locking point 14.5mm silver	103180			
55-58	1	2	2	Accessories for flat roller track, Gealan silver	103181			
60	3 pcs. / m			Maco Fiber-Therm snapper for flat roller track	356613			
65	2	2	2	Maco Fibertherm doubling profile, height 30 mm L=6,000mm white	454867			
70	1	1	1	Construction connection sheeting, 200 mm wide, black	L			
				L = RAB	2500	358713		
					3500	358714		
					5000	358715		
			7000		358716			
75-76	1	2	2	Sash positioner L&S PVC, silver	102949			

INSTALLING TOOLS

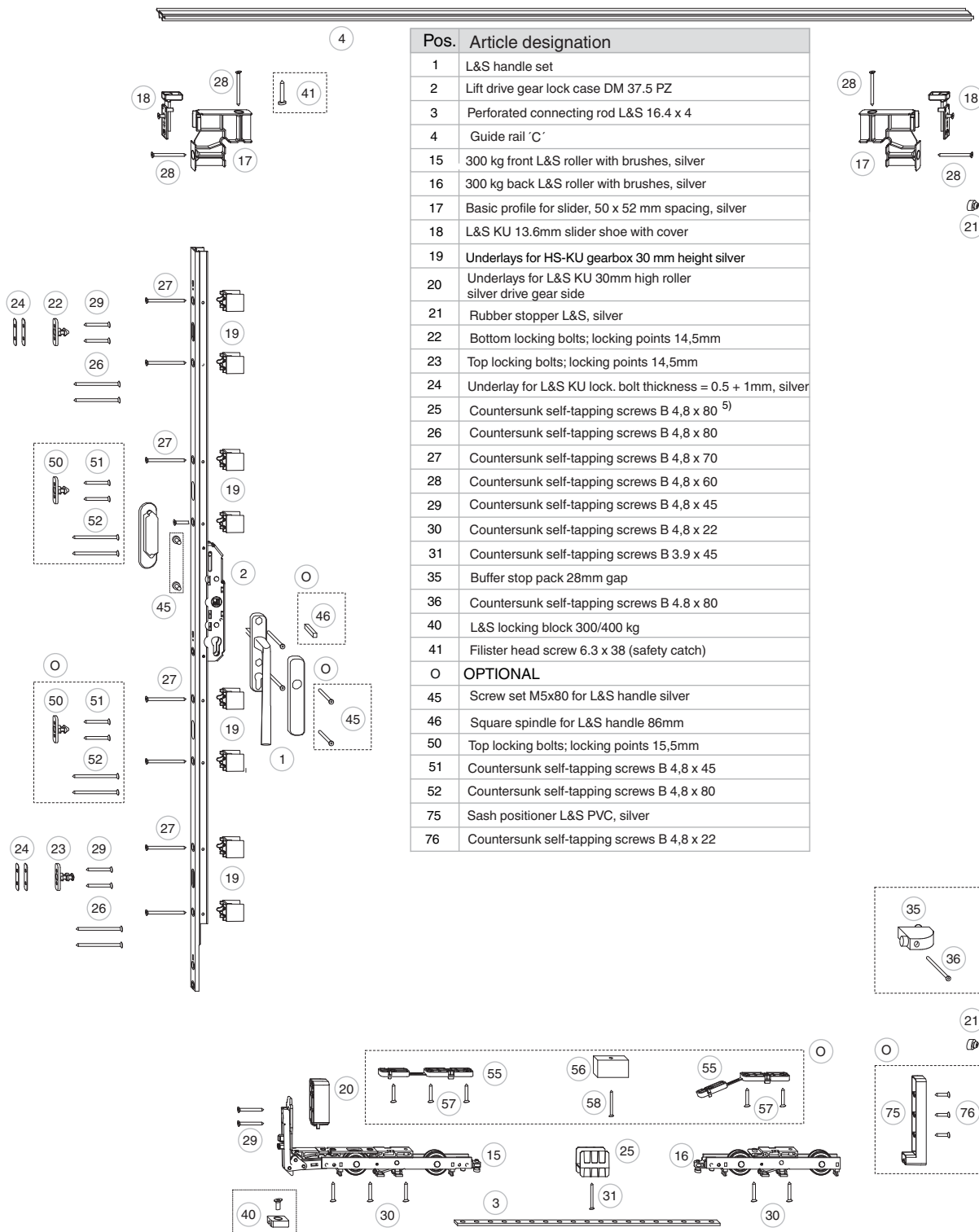
80				L&S drilling and milling jigs for drive gear drilling hole and Gealan 8000 finger pull	215131			
81				L&S jig for drilling Maco Fibertherm Gealan 8000 threshold	215181			
82				Marking gouge for L&S locking bolts Base plate hole spacing 22 mm	363159			
83				Maco Fiber-Therm jig for flat roller track	206231			
84				Jig for locking block	215582			

- ¹⁾ Also order items 45 and 46
²⁾ Use items in silver
⁶⁾ Component colour black
⁷⁾ Use component colour black or silver
⁸⁾ When using the flat roller track, items 55 - 58 pack must also be ordered

{...} Application areas for flat roller track design
 Hardware design in Tricoat available on request

2.12.1.13 Gealan 8000 without threshold

HS-ST



Pos.	Article designation
1	L&S handle set
2	Lift drive gear lock case DM 37.5 PZ
3	Perforated connecting rod L&S 16.4 x 4
4	Guide rail 'C'
15	300 kg front L&S roller with brushes, silver
16	300 kg back L&S roller with brushes, silver
17	Basic profile for slider, 50 x 52 mm spacing, silver
18	L&S KU 13.6mm slider shoe with cover
19	Underlays for HS-KU gearbox 30 mm height silver
20	Underlays for L&S KU 30mm high roller silver drive gear side
21	Rubber stopper L&S, silver
22	Bottom locking bolts; locking points 14,5mm
23	Top locking bolts; locking points 14,5mm
24	Underlay for L&S KU lock. bolt thickness = 0.5 + 1mm, silver
25	Countersunk self-tapping screws B 4,8 x 80 ⁵⁾
26	Countersunk self-tapping screws B 4,8 x 80
27	Countersunk self-tapping screws B 4,8 x 70
28	Countersunk self-tapping screws B 4,8 x 60
29	Countersunk self-tapping screws B 4,8 x 45
30	Countersunk self-tapping screws B 4,8 x 22
31	Countersunk self-tapping screws B 3.9 x 45
35	Buffer stop pack 28mm gap
36	Countersunk self-tapping screws B 4,8 x 80
40	L&S locking block 300/400 kg
41	Filister head screw 6.3 x 38 (safety catch)
O	OPTIONAL
45	Screw set M5x80 for L&S handle silver
46	Square spindle for L&S handle 86mm
50	Top locking bolts; locking points 15,5mm
51	Countersunk self-tapping screws B 4,8 x 45
52	Countersunk self-tapping screws B 4,8 x 80
75	Sash positioner L&S PVC, silver
76	Countersunk self-tapping screws B 4,8 x 22



Gealan 8000 without GPR-threshold

Pos.	Pieces in diagram			Component description	Order number						
	A	C	K		white	silver	bronze	brown			
1	1	2	2	L&S handle set							
				L&S handle with cover plate and recessed grip, short	103640	103638	103635	103637			
				L&S handle with cover plate PC and recessed grip, short	103646	103644	103641	103643			
				L&S handle with cover plate ¹⁾	218399	218397	218394	218396			
			L&S handle with cover plate PZ ¹⁾	218405	218403	218400	218402				
2	1	2	2	L&S drive-gears BS 37.5 PC	Size	GM	L	FH			
				FH = RAH - 128	1	411	1300	810 - 1420	²⁾ 214415	214602	214612
					2	411	1700	1320 - 1820	²⁾ 214416	214603	214613
					3	1011	2100	1720 - 2220	²⁾ 214417	214604	214614
					4	1011	2500	2120 - 2620	²⁾ 214418	214605	214615
			5		1011	2800	2520 - 2920	²⁾ 214419	214606	214616	
3	1	2	2	L&S punched connecting rod 16,4 x 4	Size	L	FB				
				Diagram A $FB = (RAB / 2) - 11,5$ Diagram C, K $FB = (RAB / 4) + 17$	1	692	720 - 1300	359639			
					2	1196	1225 - 1800	359640			
					3	1700	1730 - 2305	359641			
					4	2204	2235 - 2810	359642			
			5		2708	2740 - 3310	359643				
4	1	1	1	Guide rail 'C'		L					
				Diagram A $L = RAB - 119$ Diagram C $L = RAB - 108$ Diagram K $L = RAB - 128$	2500	²⁾	N20113	N20133	N20153		
					3500	²⁾	N20114	N20134	N20154		
					5000	²⁾	N20115	N20135	N20155		
			6500		²⁾	N20116	N20136	N20156			



Gealan 8000 without GPR-threshold

Pos.	Quantity for system			Article designation	Order number			
	A	C	K		white	silver	bronze	brown
15-31	1	2	2	L&S PVC roller pack for Gealan 300KG silver	103321			
35-36	-	-	2	L&S PVC buffer stop	102945	102946	⁷⁾	102947 ⁶⁾
40-41	-	1	-	L&S PVC locking systems C , F, G in silver	102948			

OPTIONAL

45	1	2	2	Screw set M5x80 for L&S handle silver	101652			
46	1	2	2	Square spindle for L&S 86mm handle	365705			
50-52	1	1	2	L&S PVC locking bolt, locking point 14.5mm silver	103180			
75-76	1	2	2	Sash positioner L&S PVC, silver	102949			

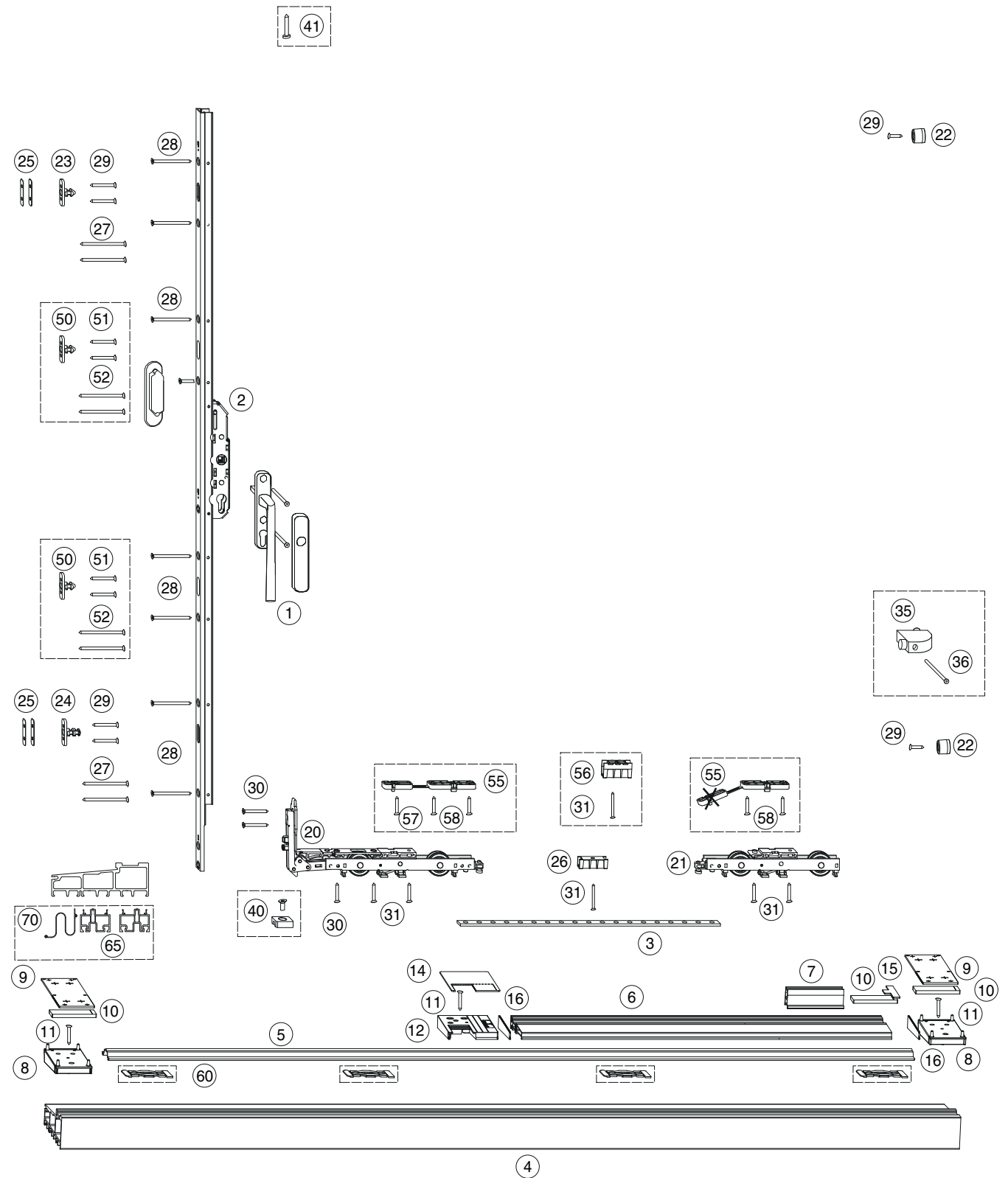
INSTALLING TOOLS

80				L&S drilling and milling jigs for drive gear drilling hole and Gealan 8000 finger pull	215131			
82				Marking gouge for L&S locking bolts Base plate hole spacing 22 mm	363159			
84				Jig for locking block	215582			



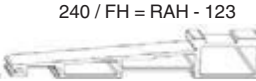
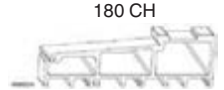
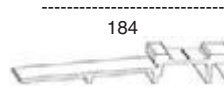

- ¹⁾ Also order items 45 and 46
²⁾ Use items in silver
⁶⁾ Component colour black
⁷⁾ Use component colour black or silver
 Hardware design in Tricoat available on request



2.12.1.14 Gealan S9000



Gealan 9000 with GRP-threshold

Pos.	Quantity for system				Article designation	Order number							
	A	C	G	K		champagne	titanium	white	silver	bronze	brown		
1					HS handle								
	1	2	1	2	HS handle 12 with cover plate	218395	218398	218399	218397	218394	218396		
					HS handle 12 with cover plate PC	218401	218404	218405	218403	218400	218402		
	1	2	1	2	L&S short Finger Pull	358342	358344	358339	358341	358343	358340		
					HS handle 12 set exterior PC without lugs	218414	218417	218418	218416	218413	218415		
1	2	1	2	Set of screws and spindle	for HS handle with finger pull			104827					
					for HS handle inside and outside			104831					
2	1	2	1	2	Lift drive gear lock case DM 37.5 PZ	Size	HH	L	SH				
					180 CH / FH = RAH - 143 	1	410 {400}	1300	755 - 1360 {745 - 1350}	2)	214415	214602	214612
					184 / FH = RAH - 106 	2	410 {400}	1700	1270 - 1760 {1260 - 1750}	2)	214416	214603	214613
					240 / FH = RAH - 123 	3	1010 {1000}	2100	1670 - 2160 {1660 - 2150}	2)	214417	214604	214614
						4	1010 {1000}	2500	2070 - 2560 {2060 - 2550}	2)	214418	214605	214615
						5	1010 {1000}	2800	2470 - 2860 {2460 - 2850}	2)	214419	214606	214616
3	1	2	1	2	Connection rod L&S 16,4x4	Größe	L	FB					
						1	692	730 - 1310	359639				
					Schema A $FB = (RAB / 2) - 32,5$	2	1196	1235 - 1810	359640				
					Schema C $FB = (RAB / 4) + 3,5$	3	1700	1740 - 2315	359641				
						4	2204	2245 - 2820	359642				
						5	2708	2750 - 3320	359643				
4	1	1	1	1	MACO GFK threshold with slot-in groove	L = RAB	L		180 CH	240	184		
					180 CH 		2500	-	466034	-	462279		
					184 		3000	-	466035	466909	-		
					240 		3500	-	466036	466910	462280		
							4000	-	466037	466911	-		
							4500	-	466038	-	-		
							5000	-	466039	466912	462281		
							5500	-	466040	-	-		
					6000	-	466041	-	-				
					6500	-	466673	466913	462282				



Gealan 9000 with GRP-threshold

Pos.	Quantity for system				Article designation	Order number					
	A	C	G	K		champagne	titanium	white	silver	bronze	brown
5	1	1	1	1	MACO Fiber-Therm roller track 2.5 mm asymmetrical		L				
					Schema A L = RAB - 153 Schema C L = RAB - 146	High roller track	2500	2)	468766	2)	2)
							3500	2)	468911	2)	2)
							5000	2)	468912	2)	2)
							6500	2)	468913	2)	2)
					Low roller track Also order items 55-58 and 60	2500	2)	468765	2)	2)	
						3500	2)	468908	2)	2)	
						5000	2)	468909	2)	2)	
				6500		2)	468910	2)	2)		
6	1	2	1	1	MACO PVC intermediate profile		L				
					Schema A L = (RAB / 2) - 109 Schema C L = (RAB / 4) - 109	1500	2)	468763	2)	2)	
						2000	2)	468905	2)	2)	
						2500	2)	468906	2)	2)	
				3500		2)	468907	2)	2)		
7	2 pcs / running metre + 1				HS surface-mounted track for fixed sash Gealan S9000 L=100mm		468764				
8-11	1	1	1	1	Maco Fibertherm PVC accessories package for Gealan S9000		104842				
12-17					Sealing plate set Gealan S9000						
	1	1	1	1	Standard profile	left	104843				
		1				right	104844				
	1	1	1	1	Design profile	left	104845				
		1				right	104846				
20-32	1	2	1	2	L&S PVC roller pack for Gealan S9000 300KG silver		104862 ⁸⁾				
40-41	-	1	-	-	L&S PVC locking systems C, F and G in silver		102948				
OPTIONAL											
35-36	2	4	2	4	L&S PVC buffer stop		102945	102946	7)	102947 ⁶⁾	
50-52	1	1	1	2	L&S PVC locking bolt, locking point 14.5mm silver		103180				
55-58	1	2	1	2	Accessories for flat roller track, Gealan silver		104863				
60	3 pcs / tuning meter				Maco Fiber-Therm snapper for flat roller track		356613				
65	2	2	2	2	Maco Fibertherm doubling profile, height 30 mm L=6,000mm white		454867				
70	1	1	1	1	Construction connection sheeting, 200 mm wide, black		L				
					L = RAB	2500	358713				
						3500	358714				
						5000	358715				
				7000		358716					



Gealan 9000 with GRP-threshold

Pos.	Quantity for system				Article Designation	Order number					
	A	C	G	K		champagne	titanium	white	silver	bronze	brown

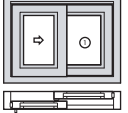
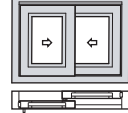
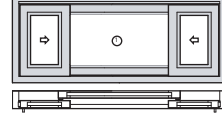
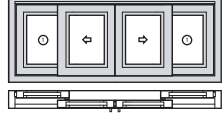
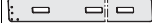
INSTALLING TOOLS

80					L&S drilling and milling jigs for drive gear drilling hole and Gealan S9000 finger pull							227626
81					L&S jig for drilling Maco Fibertherm Gealan S9000 threshold							227627
82					Marking gouge for L&S locking bolts Base plate hole spacing 22 mm							363159
83					Drilling jig for L&S standard drive gear screw holes							227489
84					Drilling jig for roller 300 kg							
		1			Drilling jig for roller 300 kg front							227487
		1			Drilling jig for roller 300 kg rear							227488
			1		Set of side gauges for drilling jig for roller 22 mm							104848
85					Maco Fiber-Therm jig for flat roller track							206231
86					Jig for locking block							215582

- 2) Use items in silver
- 6) Component colour black
- 7) Use component colour black or silver
- 8) When using the flat roller track, items 55 - 58 pack must also be ordered
- {...} Application areas for flat roller track design



2.12.2 Hook strikers for PVC profiles

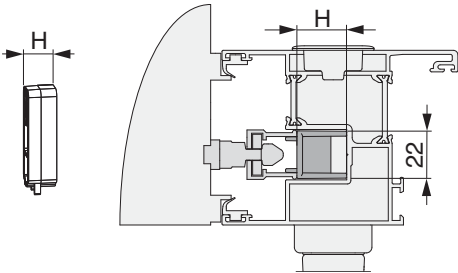
	A	D	K	C	Jig
					
Alphacan HST Vision	228422				-
Aluplast HST 70	228409				-
Aluplast HST 85	228408			228409	370874
Gealan S8000	228412				370875
Gealan S9000	228412				370875
Inoutic HST76 - Sash HS276	228416				-
Ital Plastick DA 82	228422				370874
Profine PremiDoor 70	228407			228409	370874
Profine PremiDoor 76	228418			228419	370876
Profine Premidoor 88	228417			228419	370876
Salamander ID	228411				370875
Schüco Corona CT70	228422				370874
Schüco ThermoSlide SI82	228421			228420	-
Veka Slide 70	228413				370875
Veka Slide 82	228413				370875

2.13 Accessories for PVC - and Alu Profile

2.13.1 Sash components:


2.13.1.1 Rollers

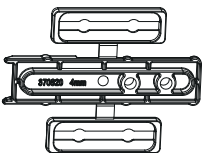
2.13.1.1.1 Accessories and individual components for roller



364647

2.13.1.1.1.1 Vertical packers for 300 kg roller front

	H			No	No Tricoat
silver	10	for front HS roller	10	366455	
	16,5	for front HS roller	10	370433	
	18,5	for front HS roller	10	370931	
	20,5	for front HS roller	10	361270	
	22	for front HS roller	10	364647	
	25,5	for front HS roller	10	361271	
			100	366873	
	26,5	for front HS roller	10	361272	
	29	for front HS roller	10	367669	
	30	for front HS roller	10	361273	
			100	366874	
	32	for front HS roller	10	361274	
	36	for front HS roller	10	361275	



370820


2.13.1.1.1.2 Vertical support for ALU profile Feal

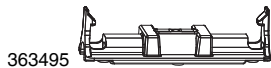
packer Feal for HS carriage and locking bolt silver

		No	No Tricoat
	10	370820	




363821

2.13.1.1.1.3 Horizontal packers for 300 kg roller		H		No	No Tricoat
silver	3	for front and back roller	20	370305	
	5	for front and back roller	20	367500	
	6	for front and back roller	20	363819	
	8	for front and back roller	20	363820	
	10	for front and back roller	20	363821	

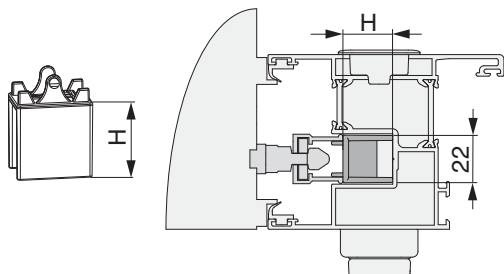


363495


2.13.1.1.1.4 Roller supports for roller			No	No Tricoat
support for 200 kg for HS roller silver		50	370317	
support for 300 kg for HS roller silver		50	363495	

2.13.1.2 Drive gears

2.13.1.2.1 Accessories and individual components for drive gear

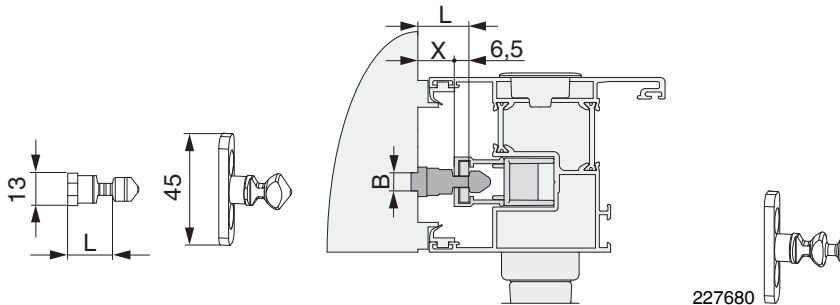


369363

2.13.1.2.1.1 Packer for drive gear	H		No	No Tricoat
silver	4	100	370821	
	10	200	371176	
		10	366456	
	14	10	369363	
		200	371177	
	16,5	10	370432	
	18,5	10	370930	
	20,5	200	371178	
		10	361276	
	22	200	371179	
		100	364646	
	25,5	10	361277	
		200	366875	
	30	10	361278	
		200	366876	
	32	10	361279	
	36	10	361280	

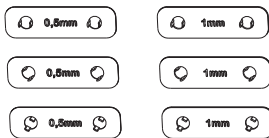
2.13.2 Frame components

2.13.2.1 Locks



2.13.2.1.1 Locking bolts

	L	W		No	No Tricoat	
silver	10	3,8	20	228657		
	10,5	5	20	225647		
		9,1	50	218307		
	11,5	13	20	228878		
	12	7,9	20	217215		
		13	20	217086		
	14,5	13	20	216029		
	15,5	13	20	217084		
	17,5	13	20	227679		
	19,5	13	20	217082		
	21,5	13	20	217080	226821	
	25,5	13	20	228470		
	PVC with night vent	10,5	5	20	227935	
			9,1	50	218308	
		12	7,9	20	217216	
			13	20	217087	
		14,5	13	20	216030	
15,5		13	20	217085		
17,5		13	20	227680		
19,5		13	20	217083		
21,5		13	20	217081	226822	
25,5		13	20	228471		
26,5	13	20	217079			
M12 for HS doors standard			10	364581	365971	
M12 for HS doors standard L=55mm			10	365370		
M12 for HS doors with night-vent L=61,5mm			10	365371		
M8 standard			100	364580		



364727

2.13.2.1.2 Packers for locking bolts

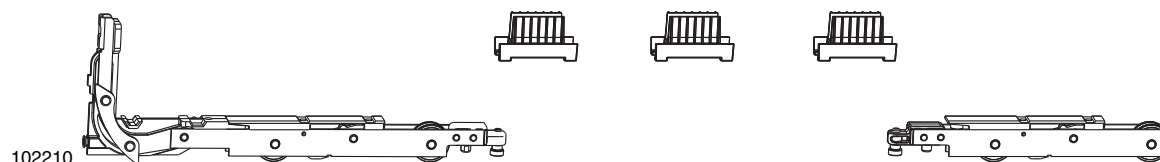
		No	No Tricoat
packer for HS locking bolt silver	20	364727	

2.14 Special parts for Netherlands

2.14.1 Sash components:

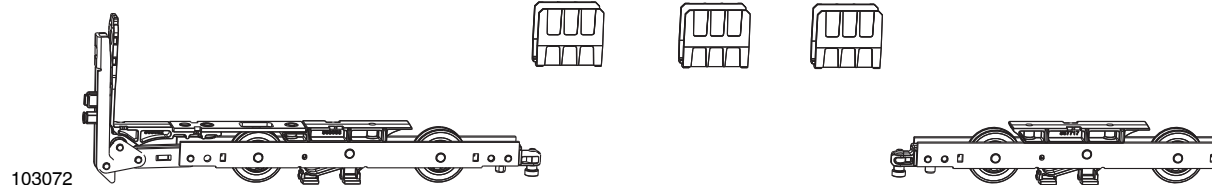
2.14.1.1 Rollers

2.14.1.1.1 Roller sets and connecting rods



2.14.1.1.1.1 Roller set 200 kg

roller pack	without guide track NL	silver	200	1	No	No Tricoat
-------------	------------------------	--------	-----	---	-----------	----------------------



2.14.1.1.1.2 Roller set 300 kg

roller pack	without guide track and with brushes NL	silver	300	1	No	No Tricoat
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2.14.1.1.2 Accessories and individual components for roller



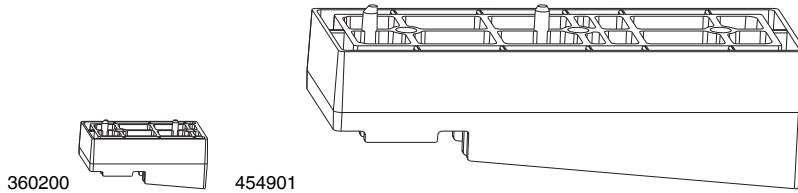
2.14.1.1.2.1 Rod guides and groove supports

groove support-brace for 200 kg	for 18x20 mm routing			10	No	No Tricoat
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2.14.2 Frame components

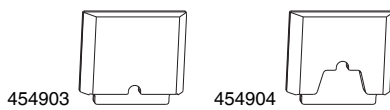
2.14.2.1 Thresholds

2.14.2.1.1 Individual components for threshold




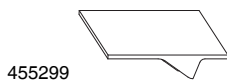
2.14.2.1.1.1 Connection plates

				No	No Tricoat
connecting plate for Netherlands	115/67	silver	10	360200	
	123/67	silver	10	454899	
	140/67	silver	10	454900	
	190/67, 3-sashed	silver	10	454901	
	226/67, 3-sashed	silver	10	454902	
	115/67	black	10	362980	
	123/67	black	10	362981	
	140/67	black	10	362982	
	190/67, 3-sashed	black	10	362983	
	226/67, 3-sashed	black	10	362984	




2.14.2.1.1.2 Seals for roller tracks

				No	No Tricoat
accessories for flat roller track	for Netherlands	black	10	465549	
		silver	10	454903	
accessories for high roller track	for Netherlands	black	10	465548	
		silver	10	454904	



455299


2.14.2.1.1.3 Centre seals for 2 active sashes

				No	No Tricoat
centre gasket for 2 active sashes for Netherlands	56/11	silver	10	455299	
	68/11	silver	10	455300	



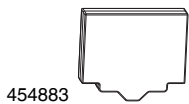
357695

2.14.2.1.1.4 Gasket plates and clip-on gaskets for diagram E and L

				No	No Tricoat
MACO Fiber-Therm sealing plate for Netherlands	68/11 & 56/11	silver	10	357697	
		black	10	362979	
attachment gasket for sealing plate for Netherlands	56/11, 3-sashed	silver	10	357695	
	68/11, 3-sashed	silver	10	357696	
	56/11, 3-sashed	black	10	363012	
	68/11, 3-sashed	black	10	363013	



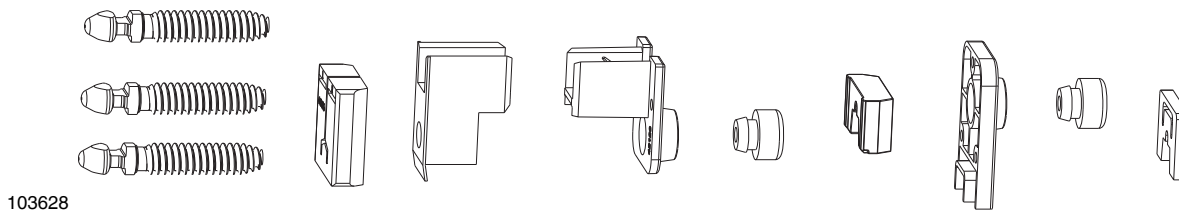
2.14.2.1.1.5 Gasket plates					No	No Tricoat
MACO Fiber-Therm sealing plate for Netherlands	56/11, 2-sashed	silver	10		357693	
	68/11, 2-sashed	silver	10		357694	
	56/11, 2-sashed	black	10		362977	
	68/11, 2-sashed	black	100		362978	



2.14.2.1.1.6 Seals for inactive sash					No	No Tricoat
for Netherlands for fixed sash		black	10		465550	
		grey	10		454883	

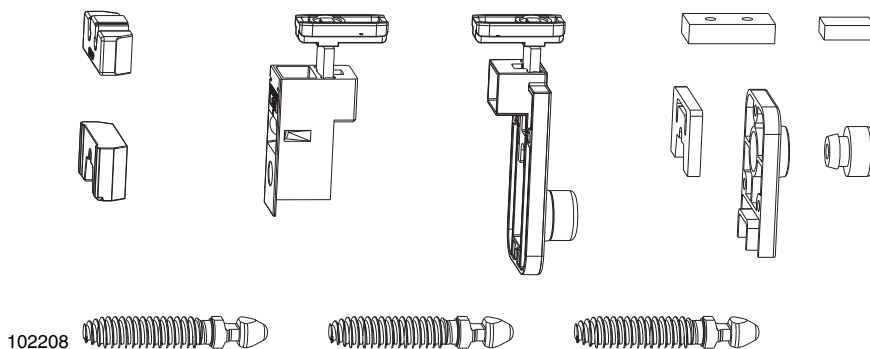
2.14.2.2 Guide tracks

2.14.2.2.1 Guide tracks with cover



2.14.2.2.1.1 Accessories for guide tracks with cover					No	No Tricoat
accessories for top guide track with locking bolt NL	with cover and low universal	black	1		103628	

2.14.2.2.2 Guide tracks C



2.14.2.2.2.1 Accessories for guide track C					No	No Tricoat
accessories for top guide track with locking bolt NL	diagram A 68/28mm	mod.C	black	20	102208	
accessories for top guide track without locking bolt NL	diagram A 68/28mm	mod.C	black	10	102209	



2.14.2.3 Accessories for frame components



2.14.2.3.1 Locking blocks



No

No
Tricoat

locking block HS 300/400 silver

20

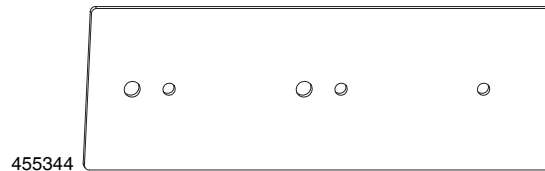
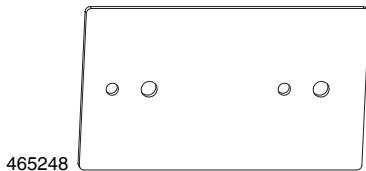
103060

103695

2.14.3 Sash/frame components

2.14.3.1 Seals

2.14.3.1.1 Accessories and individual seal components



2.14.3.1.1.1 Foamed rubber seals



No

No
Tricoat

foamed rubber

black

115/67

10

465248

123/67

100

455342

140/67

100

455343

190/67, 3-sashed

100

455344

226/67, 3-sashed

100

455345

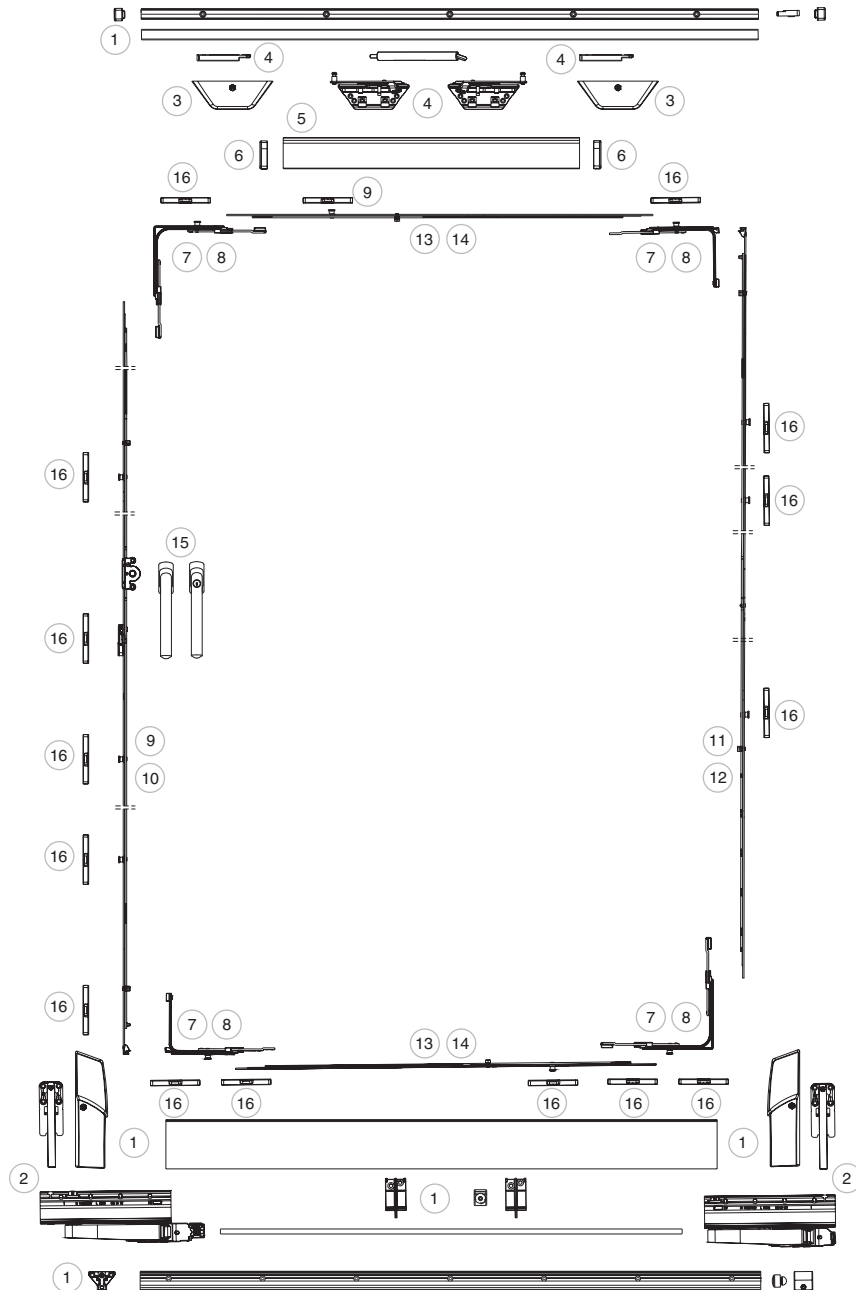


3 SKB-S

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3 SKB-S

3.1 SKB-S hardware overview



Tilt&Slide SKB hardware is suitable for implementing tilt&slide windows and doors for all standard profiles made of timber, PVC or timber/aluminium

The active sash must not exceed a total weight of 160 kg.

The SRW width must be between 620 - 1650 mm, and the SRH height between 840-2450 mm.

The sash must not exceed 2.5 times the sash width.



Selection guide			Page
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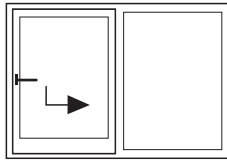


3.2 Diagrams SKB-S - Hardware itemisation

2-sashed unit:

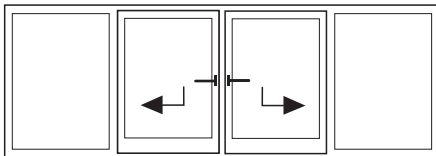
1 sliding sash, 1 fixed glazing; DIN left-handed

1 sliding sash left, 1 turn&tilt sash right, without dummy multi-
on



4-sashed unit / diagram C:

2 central sliding sashes, 2 outer fixed glazings



Order text

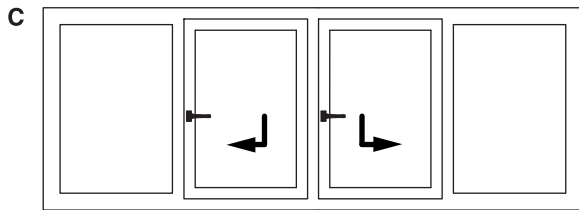
1	Left-handed roller pack
1	Profile set for sash and frame
1	Scissors-slider pack
1	Corner element set or SKB-S
1	T&T drive-gear FHH
1	Height connector
2	Width connector
1	Tilt striker plate
-	Striker plates (for 4 mm air gap: 1 striker plate for pull-in wedge)
1	Sash lifter
-	Striker plate sEH
1	Handles

Order text

1	Right-handed roller pack
1	Left-handed roller pack
2	Profile sets for sash and frame
2	Scissors-slider pack
2	Corner element set or SKB-S
2	T&T drive-gears
2	Height connectors
4	Width connector
-	Striker plates (for 4 mm air gap: 2 striker plates for pull-in wedge)
1	Sash lifter
-	Striker plates EH (for 4 mm air gap: 1 striker plate EH bi-directional locking)
2	Handles

4-sashed unit (asymmetrical):

2 central sliding sashes, 2 outer fixed glazings



Order text

- | | |
|---|--|
| 1 | Right-handed roller pack |
| 1 | Left-handed roller pack |
| 2 | Profile sets for sash and frame |
| 2 | Scissors-slider pack |
| 1 | Corner element set or SKB-S corner element set |
| 1 | Corner centre lock |
| 1 | 180° end-piece |
| 1 | 180° end-piece EH |
| 2 | Drive gears FHH |
| 1 | Height connector |
| 4 | Width connector |
| 1 | Tilt striker plate |
| - | Striker plates (for 4 mm air gap: 1 striker plate for pull-in wedge) |
| 2 | Sash lifters |
| 5 | Striker plates EH (for 4 mm air gap: 1 striker plate EH bidirectional locking) |
| 2 | Handles |



3.3 Operating and maintenance instruction SKB-S

Inserting the sash

a) Insert the scissor backset from below into the centre slider openings until these snap into place with an audible "click" **1**. Correctly secured position of the screw-in backsets in the sliders **2**. Pullpress down the scissor arms to check that the connections are secure **3**.

b) When installed correctly, the security slider on the side straps is flush with the edges of the slider housing.

CAUTION: If the scissor backsets do not snap in properly, the window sash will not be held securely and may fall out. Serious personal injuries may result.

c) Activate the lever lock **4**. Move the lever lock **5** on both rollers back until they snap into place at the marked position **6**.

CAUTION: If the lever lock is not (or not correctly) in place at the marked position, the window sash will not be secured properly. Serious personal injuries may result.

We strongly recommend window and door buyers to have their windows and doors installed by authorised specialists.

The same care and maintenance instructions apply to all window types that are not specifically mentioned in these instructions (e.g. System C tilt and slide windows)!

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E-Mail: enquiry@macouk.net
www.maco.uk.com

Order No: 750495_DE
Date created: October 2008
Date changed: January 2011
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Safety and maintenance instructions

Risk of injury (e.g. catching one's fingers) in the opening gap between the sash and frame.

Risk of falling.

Avoid additional loading of the sash.

Be sure to prevent any obstructions in the opening gap between the sash and the frame.

General advice for your windows

A good window can do more than just let in light: It is a design element, and at the same time a component that must satisfy demanding technical requirements. Apart from the important care of the fittings components, you should also constantly check the surface, the glazing, and the gaskets, and immediately repair defective areas. Use only water with a mild soap solution for cleaning purposes; no caustic agents!

Do not paint over the fittings!

Inserting and removing the sash

Specialists must pay particular attention to the following points, since the installation no longer lies within the sphere of influence of the fittings manufacturer!

Window adjustments

Settings and adjustments for the fittings (including inserting and removing the sashes) must only be carried out by specialists.

Setting the MULTITREND sash lifter:
Loosen the TX 15 screw, adjust the height, and fasten.

Setting the MULTIMATIC sash lifter:
Set to the required height by turning the adjusting screw (TX 15).

Should mishandling occur despite the device being installed: Press the sash lifter; the handle can then be moved into desired position.

Correct the parallel setting of the roller

a) Loosen the connecting rod on the roller at the handle side
b) Push the connecting rod to the left or right to position **2** the rear roller parallel to the roller unit on the handle side **1**
c) Fix the connecting rod

Regulating the height of the roller

a) Raise the adjustment lock
b) Adjust the height (-4 mm; +2 mm)
c) Reposition the adjustment lock

Correct the sash entry

Compression

Less gasket-compression
Original position with the flat surface faced towards the eccentric cam
More gasket-compression

Locking cam / S. cam

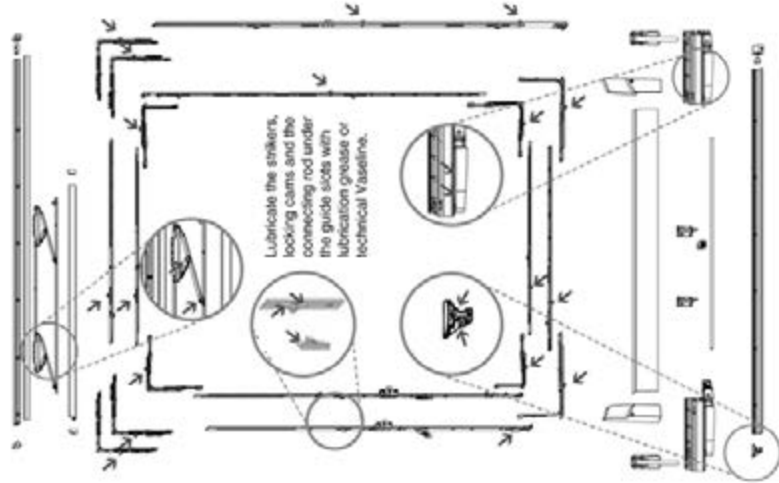


TECHNOLOGY IN MOTION

Maintenance

In order to maintain the operability of the Tilt&Slide fittings (T&S 'SKB') for windows and balcony-doors, the following maintenance work is to be carried out at least once a year:

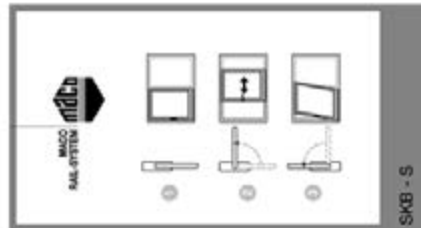
- Security relevant fittings components are to be examined at regular intervals for wear and tear.
- All movable parts and locking points of the Tilt&Slide fittings are to be greased. ✓
- Only cleaning and maintenance agents, which do not damage the corrosion protection of the fittings components, are to be used.



Product liability advice

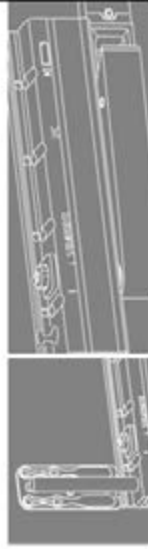
- Your windows / balcony-doors have been equipped with high-quality Tilt&Slide fittings. The operation is straightforward and trouble-free; nevertheless you should read through these instructions carefully and adhere to the operation advice.
- In your own interest, please do not forget to read the safety and neglect instructions!
- Keep these operation and maintenance instructions safe in case needed and also inform other users of the instructions contents.
- Check as to whether an operation sticker has been applied to the window or if one is necessary.
- In order to ensure that your windows are operational for years to come, please adhere to the operation and maintenance instructions!

Operation



- 1 Close
- 2 Open/Slide
- 3 Tilt

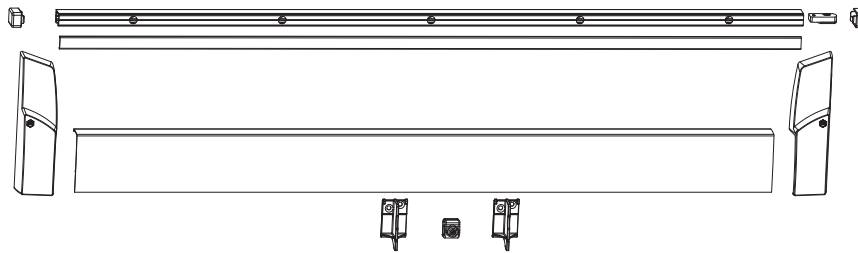
MACO RAIL-SYSTEMS SLIDING FITTINGS







Operation and maintenance
instructions
Tilt&Slide fittings

T&S
Standard version

3.4 Sash/frame components

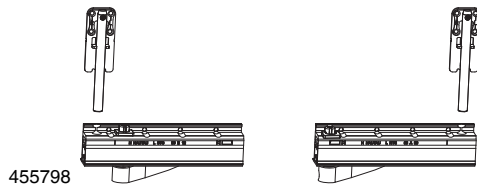


3.4.1 Profile Packs			L			 Tricoat	
profile set: frame and sash SKB	silver	size 1	620 - 900	1.930	1	466052 ¹	
		size 2	901 - 1.050	2.230	1	466053 ¹	
		size 3	1.051 - 1.250	2.630	1	466054 ¹	
		size 4	1.251 - 1.450	3.030	1	466055 ¹	
		size 5	1.451 - 1.650	3.430	1	466056 ¹	
	cream white RAL 9001	size 1	620 - 900	1.930	1	466076 ¹	
		size 2	901 - 1.050	2.230	1	466077 ¹	
		size 3	1.051 - 1.250	2.630	1	466078 ¹	
		size 4	1.251 - 1.450	3.030	1	466079 ¹	
		size 5	1.451 - 1.650	3.430	1	466080 ¹	
	white	size 1	620 - 900	1.930	1	466058 ¹	
		size 2	901 - 1.050	2.230	1	466059 ¹	
		size 3	1.051 - 1.250	2.630	1	466060 ¹	
		size 4	1.251 - 1.450	3.030	1	466061 ¹	
		size 5	1.451 - 1.650	3.430	1	466062 ¹	
	brown	size 1	620 - 900	1.930	1	466064 ¹	
		size 2	901 - 1.050	2.230	1	466065 ¹	
		size 3	1.051 - 1.250	2.630	1	466066 ¹	
		size 4	1.251 - 1.450	3.030	1	466067 ¹	
		size 5	1.451 - 1.650	3.430	1	466068 ¹	
	bronze SKB	size 1	620 - 900	1.930	1	466070 ¹	
		size 2	901 - 1.050	2.230	1	466071 ¹	
		size 3	1.051 - 1.250	2.630	1	466072 ¹	
		size 4	1.251 - 1.450	3.030	1	466073 ¹	
		size 5	1.451 - 1.650	3.430	1	466074 ¹	

¹ Contents: 1 x guide track, 1 x guide cover, 2 x guide cover caps, 1 x top buffer stop, 2 x scissor-stay sliders, 1 x slider release, 2 x scissor stay arm cover caps, 1 x roller cover strip, 1 x left roller cover cap, 1 x right roller cover cap, 1 x connecting rod, 1 x roller track, 1 x control module, 1 x bottom buffer stop, 1 x cover support bracket for roller cover strip (2 pcs. from size 5), 1 x connecting-rod support-block (from size 5)

3.5 Sash components

3.5.1 Roller Packs



455798

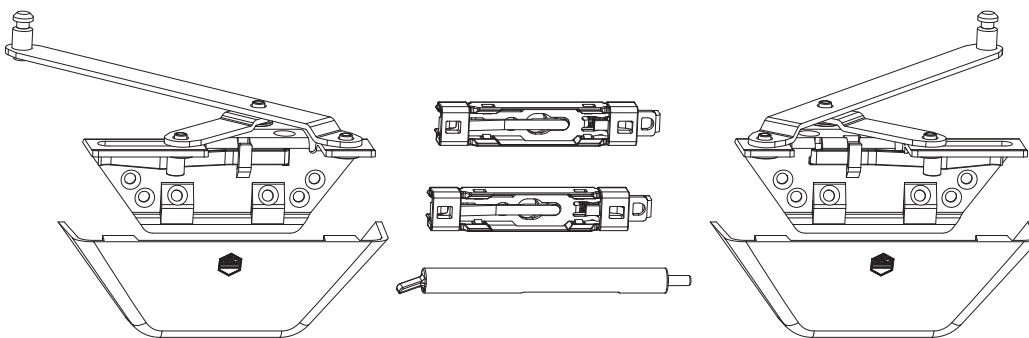
3.5.1.1 Roller Packs

					 Tricoat
roller pack	right	160	1	455799 ¹	
	left	160	1	455798 ¹	

¹ Contents: 1 x drive-gear sided roller, 1 x hinge-sided roller, 2 x reinforcement brackets

3.5.2 Scissor stays

3.5.2.1 Scissor stay pack



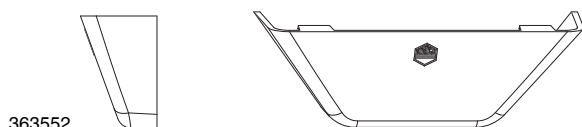
103076

3.5.2.1.1 Scissor slider pack for SKB-S/SE

						 Tricoat
scissor-slider SKB-S/SE adjustable	left/right	silver	620 - 1.650	1	103073 ¹	103589 ¹
		brown	620 - 1.650	1	103075 ¹	103590 ¹
		white	620 - 1.650	1	103074 ¹	103593 ¹
		cream white RAL 9001	620 - 1.650	1	103077 ¹	
				1	103592 ¹	
		bronze SKB	620 - 1.650	1	103076 ¹	103591 ¹

¹ Contents: 1x scissor slider right, 1x scissor slider left, 2x cover cap for scissor slider

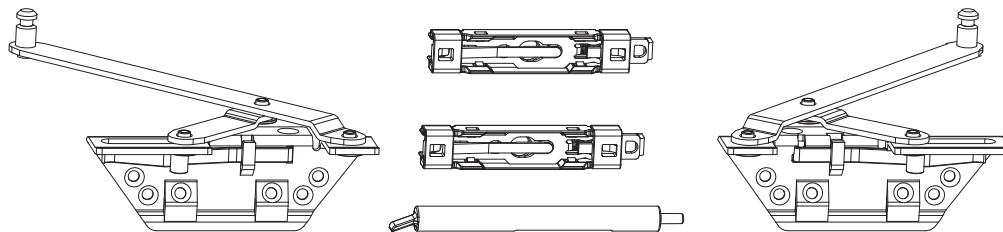
3.5.2.2 Accessories and individual components for scissor stays



363552

3.5.2.2.1 Cover caps for SKB-S/SE scissors-slider

				 Tricoat
silver		10	363552	
cream white RAL 9001		10	363556	
white		10	363553	
brown		10	363554	
bronze SKB		10	363555	



103843

3.5.2.2.2 Scissor slider for SKB-S/SE



No

No
Tricoat

scissor-slider SKB-S/SE adjustable

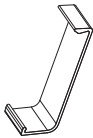
left/right silver

620 - 1.650

1

103843

104052



366588

3.5.2.2.3 Cover strip for SKB-S/SE scissors-slider

L



No

No
Tricoat

silver

1.700

1

366588

brown

1.700

1

366589

white

1.700

1

366592

cream white RAL 9001

1.700

1

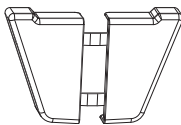
366591

bronze SKB

1.700

1

366590



366593

3.5.2.2.4 Cover strip cap for scissor slider SKB-S/SE (left + right)



No

No
Tricoat

silver

10

366593

brown

10

366595

white

10

366594

cream white RAL 9001

10

366597

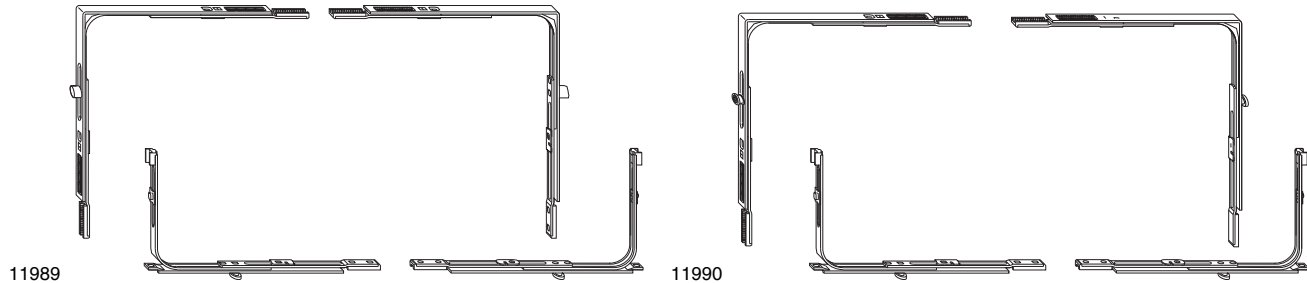
bronze SKB

10


366596

3.5.3 Corner elements

3.5.3.1 Corner elements MULTI TREND



3.5.3.1.1 Pack corner elements SKB-S MULTI TREND

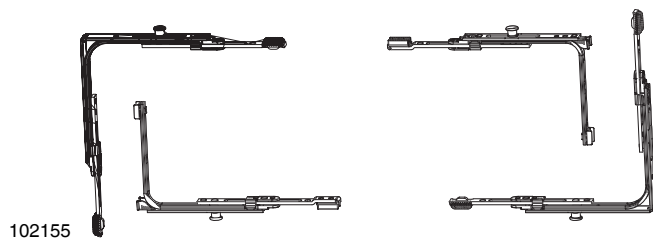
			No	No Tricoat
corner element set MULTI TREND				
	silver	1	11989 ¹	
EH	silver	1	11990 ²	

¹ Packaging contents: 2 corner elements, 2 corner centre locks each with 1 i.S. cam


² Packaging contents: 2 corner elements each with 1 i.S. cam, 2 corner centre locks each with 1 i.S. cam



3.5.3.2 Corner elements for MULTI MATIC



3.5.3.2.1 Pack of corner elements SKB-S/SE and PAS MULTI MATIC

			No	No Tricoat
corner element set MULTI MATIC				
	silver	1	102155 ¹	102298 ¹

¹ Contents: 2 x MM corner elements with 1 i.S., 2 x vertical corner elements with 1 i.S. with serrated carrier








3.5.4 Drive gears

3.5.4.1 Drive gears MULTI TREND



52405








3.5.4.1.1 T&T drive gears BS 15 FHH VZ

								No	No Tricoat
silver	size 3	15	1	500	1.001 - 1.250	1	20	52405	
	size 4B	15	1	500	1.251 - 1.500	1	10	52817	
	size 5B	15	1	500	1.501 - 1.750	1	10	52818	
	size 4	15	1	600	1.251 - 1.500	1	10	52406	
	size 5	15	1	700	1.501 - 1.750	1	10	52407	
	size 6	15	2	1.050	1.851 - 2.100	1	10	52408	
	size 6A	15	2	1.050	1.651 - 1.850	1	10	55158	
	size 7	15	2	1.050	2.101 - 2.350	1	10	52410	



55995








3.5.4.1.2 T&T drive gears BS 15 FHH i.S.

								No	No Tricoat
silver	size 3	15	1	500	1.001 - 1.250	1	20	55995	
	size 4	15	1	600	1.251 - 1.500	1	10	55996	
	size 5	15	1	700	1.501 - 1.750	1	10	55997	
	size 6	15	2	1.050	1.851 - 2.100	1	10	55998	
	size 7	15	2	1.050	2.101 - 2.350	1	10	55999	



58443

3.5.4.1.3 T&T drive gears lockable special-BS for PC FHH i.S.






								No	No Tricoat
silver	size 6	25	2	1.050	1.851 - 2.100	1	10	58443 ¹	
	size 7	25	2	1.050	2.101 - 2.350	1	10	52825 ¹	
	size 6	40	2	1.050	1.851 - 2.100	1	5	52830 ¹	
	size 7	40	2	1.050	2.101 - 2.350	1	5	52831 ¹	

¹ Can also be supplied in quantities less than one packaging unit.



52971

3.5.4.1.4 Turn-only drive gears BS 15 FHH without locking cam

						No	No Tricoat
silver	size 4	15	600	1.251 - 1.500	10	52971	
	size 6	15	1.050	1.851 - 2.100	10	52973	
	size 7	15	1.050	2.101 - 2.350	10	52974	



3.5.4.2 Drive gears MULTI MATIC



3.5.4.2.1 T&T drive gears BS 15 FHH i.S.								No	No Tricoat
silver	1090	15	1	400	841 - 1.090	1	20	201734	207451*
	1340	15	1	500	1.091 - 1.340	1	10	201735	207452*
	1590	15	2	600	1.341 - 1.590	1	10	201739	207453*
	1700	15	2	700	1.591 - 1.700	1	10	207301	207454*
	1950	15	3	1.050	1.701 - 1.950	1	10	201740	207455*
	2200	15	3	1.050	1.951 - 2.200	1	10	201741	207456*
	2450	15	4	1.050	2.201 - 2.450	1	10	201742	207457*



3.5.4.2.2 T&T drive gears lockable special-BS for PC FHH i.S.								No	No Tricoat
silver	1950	25	3	1.050	1.701 - 1.950	1	10	205602	207524
		40	3	1.050	1.701 - 1.950	1	10	206984	207533
	2200	25	3	1.050	1.951 - 2.200	1	10	205571	207525
		40	3	1.050	1.951 - 2.200	1	10	205631	207534
	2450	25	4	1.050	2.201 - 2.450	1	10	205623	207526
		40	4	1.050	2.201 - 2.450	1	10	205632	207535



3.5.4.2.3 Turn-only drive gears BS 15 FHH without locking cam						No	No Tricoat
silver	1090	15	400	841 - 1.090	20	205547	211218
	1340	15	500	1.091 - 1.340	10	205548	211221
	1590	15	600	1.341 - 1.590	10	205549	211222
	1700	15	700	1.591 - 1.700	10	207304	211225
	1950	15	1.050	1.701 - 1.950	10	205545	211217
	2200	15	1.050	1.951 - 2.200	10	205550	211223
	2450	15	1.050	2.201 - 2.450	10	205551	211224





3.5.4.2.4 Turn-only drive gears diagram C with welded-on striker plate						No	No Tricoat
silver	1950	30	1.050	1.701 - 1.950	10	209968	210945
		40	1.050	1.701 - 1.950	10	207014	
		45	1.050	1.701 - 1.950	10	207015	
	2200	40	1.050	1.951 - 2.200	10	210943	
	2450	40	1.050	2.201 - 2.450	10	210944	



* Availability and delivery time on request.

3.5.5 Height connectors





3.5.5.1 Height connectors SKB-S/SE MULTI TREND i.S. with pull-in wedge						No	No Tricoat
fixed handle height with 2 i.S.	silver	size 3	1.000 - 1.250	10	57418		
		size 4	1.251 - 1.500	10	57419		
		size 5	1.501 - 1.750	10	57420		
fixed handle height with 3 i.S.	silver	size 6	1.851 - 2.100	10	57421		
		size 6A	1.661 - 1.850	10	57422		
		size 7	2.101 - 2.350	10	57423		





3.5.5.2 Height connectors SKB-S/SE and PAS MULTI MATIC i.S.						No	No Tricoat
with 1 i.S.	silver	1090	841 - 1.090	10	210335	211234	
		1340	1.091 - 1.340	10	210336	211235	
with 2 i.S.	silver	1590	1.341 - 1.590	10	210337	211236	
		1700	1.591 - 1.700	10	210338	211237	
with 3 i.S.	silver	1950	1.701 - 1.950	10	210339	211238	
		2200	1.951 - 2.200	10	210340	211239	
with 4 i.S.	silver	2450	2.201 - 2.450	10	210341	211240	

3.5.6 Width connectors

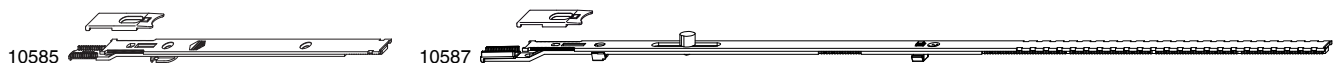



3.5.6.1 Width connector SKB-S/SE MULTI TREND i.S.						No	No Tricoat
with 1 i.S.	silver	size 1	620 - 900	20	210529		
		size 2	901 - 1.150	20	210530		
		size 3	1.151 - 1.400	20	210531		
with 2 i.S.	silver	size 4	1.401 - 1.650	20	210532		



3.5.6.2 Width connector SKB-S/SE and PAS MULTI MATIC i.S. with pull-in wedge						No	No Tricoat
with 1 i.S.	silver	620 - 900	20	210380	211229		
		901 - 1.150	20	210381	211231		
		1.151 - 1.400	20	210382	211232		
with 2 i.S.	silver	1.401 - 1.650	10	210383	211233		

3.5.7 Extension piece




3.5.7.1 Extension piece SKB-S/SE MULTI TREND			L		No	No Tricoat
extension piece not croppable		250	silver	20	10585¹	
extension piece croppable to 400/250 mm with 1 VZ		600	silver	20	10587¹	

¹ Can also be supplied in quantities less than one packaging unit.



206197 

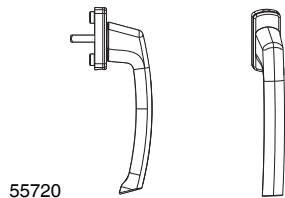
3.5.7.2 Extension piece SKB-S/SE and PAS MULTI MATIC			L		No	No Tricoat
faceplate extension MM, extendable		silver	235	20	206197	207445*
	with 1 i.S.	silver	235	20	201750	207444*









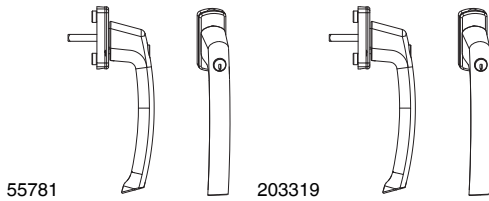
3.5.8 Handles

3.5.8.1 Handles SKB-S/SE and PAS

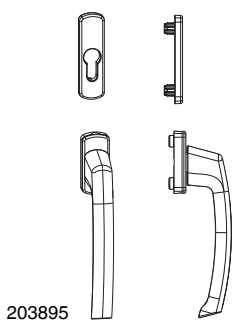
3.5.8.1.1 HARMONY design



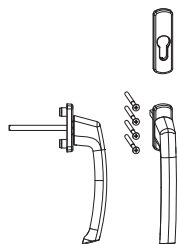
3.5.8.1.1.1 Lugs 10/12								No	No Tricoat
black brown RAL 8022	58		28	7	anodised	10	24658		
		pin 32	28	7	anodised	10	21269		
		pin 35	28	7	anodised	10	203310		
bronze	58	pin 32	28	7	anodised	10	21470		
		pin 35	28	7	anodised	10	203305		
		without pin	28		anodised	10	24432		
bronze SKB	58		28	7	anodised	10	203890		
		pin 32	28	7	anodised	10	203888		
		pin 35	28	7	anodised	10	203889		
champagne	58		28	7	anodised	10	24433		
		pin 32	28	7	anodised	10	21465		
		pin 35	28	7	anodised	10	203304		
silver	58		28	7	anodised	10	59045		
		pin 32	28	7	anodised	10	55720		
		pin 35	28	7	anodised	10	203307		
		pin 38	28	7	anodised	10	227029		
silver (white rosette)	58		28	7	anodised	10	220632		
		pin 32	28	7	anodised	10	22248		
		pin 35	28	7	anodised	10	203308		
titanium	58		28	7	anodised	10	24434		
		pin 32	28	7	anodised	10	21466		
		pin 35	28	7	anodised	10	203306		
traffic white RAL 9016	58		28	7	powder coated	10	24435		
		pin 32	28	7	powder coated	10	21471		
		pin 35	28	7	powder coated	10	203309		
		pin 38	28	7	powder coated	10	227030		











3.5.8.1.1.2 Lugs 10/12 with locking cylinder									No	No Tricoat
black brown RAL 8022	58		28	7	anodised	10			220634	
	pin 32		28	7	anodised	10			21270	
	pin 35		28	7	anodised	10			203322	
bronze	58		28	7	anodised	10			59049	
	pin 32		28	7	anodised	10			21476	
	pin 35		28	7	anodised	10			203317	
bronze SKB	58		28	7	anodised	10			203893	
	pin 32		28	7	anodised	10			203891	
	pin 35		28	7	anodised	10			203892	
champagne	58		28	7	anodised	10			59051	
	pin 32		28	7	anodised	10			21473	
	pin 35		28	7	anodised	10			203316	
silver	58		28	7	anodised	10			59048	
	pin 32		28	7	anodised	10			55781	
	pin 35		28	7	anodised	10			203319	
	pin 38		28	7	anodised	10			227031	
silver (white rosette)	58		28	7	anodised	10			220633	
	pin 32		28	7	anodised	10			22288	
	pin 35		28	7	anodised	10			203320	
titanium	58		28	7	anodised	10			59050	
	pin 32		28	7	anodised	10			21474	
	pin 35		28	7	anodised	10			203318	
traffic white RAL 9016	58		28	7	powder coated	10			59046	
	pin 32		28	7	powder coated	10			21484	
	pin 35		28	7	powder coated	10			203321	
	pin 38		28	7	powder coated	10			227032	



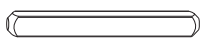
3.5.8.1.1.3 Interior handles lugs 12								No	No Tricoat
black brown RAL 8022	PC	58	28	7	anodised	10		203904	
bronze	PC	58	28	7	anodised	10		203900	
bronze SKB	PC	58	28	7	anodised	10		203901	
champagne	PC	54	28	7	anodised	10		203897	
silver	PC	54	28	7	anodised	10		203896	
silver (white rosette)	PC	54	28	7	anodised	10		203895	
titanium	PC	58	28	7	anodised	10		203902	
traffic white RAL 9016	PC	58	28	7	powder coated	10		203903	









203894

3.5.8.1.1.4 High exterior handles lugs 12									
black brown RAL 8022	PC	64-73	54	26	7	anodised	10	202626	
		max. 90	54	26	7	anodised	10	213336	
bronze	PC	64-73	54	26	7	anodised	10	202625	
		max. 90	54	26	7	anodised	10	213335	
bronze SKB	PC	64-73	54	26	7	anodised	10	203894	
		max. 90	54	26	7	anodised	10	213340	
champagne	PC	64-73	54	26	7	anodised	10	202627	
		max. 90	54	26	7	anodised	10	213337	
silver	PC	64-73	54	26	7	anodised	10	202624	
		max. 90	54	26	7	anodised	10	213334	
titanium	PC	64-73	54	26	7	anodised	10	202628	
		max. 90	54	26	7	anodised	10	213338	
traffic white RAL 9016	PC	64-73	54	26	7	powder coated	10	202630	
		max. 90	54	26	7	powder coated	10	213339	

39013

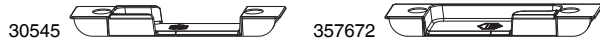



3.5.8.1.2 Spindles		L						
spindle		52	26	7	20	39013		
		56	30	7	100	39029		
		61	35	7	20	30717		
		64	38	7	20	94228		
		69	43	7	200	39014		
		76	50	7	20	30765		

3.6 Frame components

3.6.1 Striker plates


3.6.1.1 Striker plates for 4 mm air gap



3.6.1.1.1 Striker plates for 4 mm air gap						No	No Tricoat
silver	striker plate for 4 mm air gap			200		30545	355132
	striker plate for 4 mm air gap, 13 mm offset	- 1 mm gasket-compression	right	200		357671¹	359251¹
			left	200		357672¹	359252¹
			right	200		363020¹	
			left	200		363021¹	


¹ Use the left striker for the right RS element and vice-versa

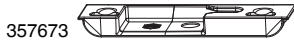



3.6.1.1.2 Sash lifter MM 4 mm air gap						No	No Tricoat
silver	lifting component MM for 4 mm air gap	with door catch	right	20		206113¹	207678¹
			left	20		206114¹	207679¹
	lifting component MM for 4 mm air gap, 13 mm offset	with door catch	right	20		214543¹	
			left	20		214544¹	
	lifting component MM for 4 mm air gap		right	100		356504¹	357924¹
			left	100		356505¹	357925¹
	lifting component MM for 4 mm air gap, 13 mm offset		right	100		357675¹	367294¹
			left	100		357676¹	367295¹

¹ Use the left striker for the right RS element and vice-versa

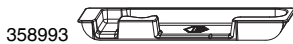



3.6.1.1.3 Sash lifter MT 4 mm air gap						No	No Tricoat
silver	lifting component for 4 mm air gap, 13 mm offset	with door catch	right	20		209339	
			left	20		209346	
	lifting component for 4 mm air gap	with door catch		20		29586	
	lifting component for 4 mm air gap, 13 mm offset			100		358435	
	lifting component for 4 mm air gap			100		95117	



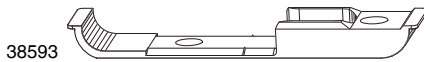
3.6.1.1.4 Striker plates i.S. for 4 mm air gap					No	No Tricoat
silver	striker plate i.S. for 4 mm air gap, 13 mm offset	angled screw-fixing	right	100	357673¹	359253¹
			left	100	357674¹	359254¹
	striker plate i.S. for 4 mm air gap without reinforcement rings	angled screw-fixing	right	100	357958¹	
			left	100	357959¹	
	striker plate i.S. for 4 mm air gap, 13 mm offset	angled screw-fixing	right	100	360102¹	
			left	100	360103¹	
	striker plate i.S. for 4 mm air gap	angled screw-fixing	right	100	96305¹	
			left	100	96306¹	
		angled screw-fixing	right	100	96565¹	355826¹
			left	100	96566¹	355827¹


¹ Use the left striker for the right RS element and vice-versa



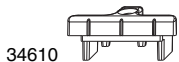
3.6.1.1.5 Tilt striker plates 4 mm air gap					No	No Tricoat
silver	tilt striker for 4 mm air gap		right and left	100	30274¹	355134¹
			horizontal i.S. tilt striker for 4 mm air gap, 13 mm offset	angled screw-fixing	right	100
	tilt striker for 4 mm air gap, 13 mm offset		left	100	357679¹	365090¹
			right	100	358993¹	365091¹
	horizontal i.S. tilt striker for 4 mm air gap	angled screw-fixing	left	100	358994¹	365092¹
			right	100	96200¹	204964¹
			left	100	96201¹	204965¹


¹ Use the left striker for the right RS element and vice-versa




3.6.1.1.6 Pull-in wedge					No	No Tricoat
silver	pull-in wedge for 4 mm air gap	for SKB		50	38593	355870

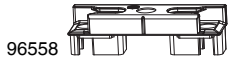
3.6.1.2 Striker plates for opposite Eurogroove



3.6.1.2.1 Striker plates for opposite Eurogroove					No	No Tricoat
silver	striker plate opposite Eurogroove	- 1 mm gasket-compression		200	34606	
				200	34610	354028



3.6.1.2.2 Striker plates for opposite Eurogroove					No	No Tricoat
silver	lifting component MM opposite Eurogroove		right	100	355923	
			left	100	355924	



3.6.1.2.3 Striker plates i.S. for opposite Eurogroove				No	No Tricoat
silver	striker plate i.S. opposite Eurogroove	- 0.8 mm gasket-compression	100	96558	358862

3.6.1.3 Striker plates 12 mm air gap hardware groove 6/8/4



3.6.1.3.1 Striker plates 12 mm air gap hardware groove 6/8/4				No	No Tricoat
silver	striker plate for hardware groove 6/8/4		200	34921	355443
		- 1 mm gasket-compression	200	34979	355901



3.6.1.3.2 Sash lifters MM 12 mm air gap hardware groove 6/8/4				No	No Tricoat
silver	lifting component MM for hardware groove 6/8/4		right 100	363175	
			left 100	363176	



3.6.1.3.3 Sash lifters MM 12 mm air gap hardware groove 6/8/4				No	No Tricoat
silver	lifting component for hardware groove 6/8/4		100	95114	



3.6.1.3.4 Striker plates i.S. 12 mm air gap hardware groove 6/8/4				No	No Tricoat
silver	striker plate i.S. for hardware groove 6/8/4	- 1 mm gasket-compression	100	96263	
		angled screw-fixing	100	96563	355863



3.6.1.3.5 Tilt striker plates 12 mm air gap for hardware groove 6/8/4				No	No Tricoat
silver	tilt striker for hardware groove 6/8/4		right and left 100	33932	355558*

3.6.1.4 Striker plates 12 air gap hardware groove 7/8/4




3.6.1.4.1 Striker plates 12 air gap hardware groove 7/8/4				No	No Tricoat
silver	striker plate for hardware groove 7/8/4	angled screw-fixing	200	34522	360626
			200	34902	201481*
		- 1 mm gasket-compression	200	34969	201465



* Availability and delivery time on request.


356775 

3.6.1.4.2 Sash lifters MM 12 mm air gap hardware groove 7/8/4						No	No Tricoat
silver	lifting component MM for hardware groove 7/8/4	angled screw-fixing	right	100		356774	357928*
			left	100		356775	357929*


95164 

3.6.1.4.3 Sash lifters MT 12 mm air gap hardware groove 7/8/4						No	No Tricoat
silver	lifting component for hardware groove 7/8/4			100		95164	


201484 

3.6.1.4.4 Shootbolt striker plates 12 mm air gap hardware groove 7/8/4						No	No Tricoat
Tricoat	shootbolt striker hardware groove	2 slots		100			201484*

96564 


3.6.1.4.5 Striker plates i.S. 12 mm air gap hardware groove 7/8/4						No	No Tricoat
silver	striker plate i.S. for hardware groove 7/8/4	angled screw-fixing	- 0.8 mm gasket-compression	100		360564	364248
			- 1 mm gasket-compression	100		96264	358450*
				100		96564	352994*
	striker plate i.S. for hardware groove 7/8/4 without reinforcement rings	angled screw-fixing		100		363486	

33970 


3.6.1.4.6 Tilt striker plates 12 mm air gap for hardware groove 7/8/4						No	No Tricoat
silver	tilt striker for hardware groove 7/8/4		right	100		33970	201473
			left	100		33971	201470

3.6.1.5 Striker plates 12 mm air gap 18 mm Euro-rebate

34943  34980 


3.6.1.5.1 Striker plates 12 mm air gap 18 mm Euro-rebate						No	No Tricoat
silver	striker plate Euro-rebate 18 mm	double screw fixing		200		34943	201476*
		angled screw-fixing		200		34980	355135
			- 1 mm gasket-compression	200		357844	
			+ 1 mm gasket-compression	200		359769	

356298 


3.6.1.5.2 Sash lifters MM 12 mm air gap 18 mm Euro-rebate						No	No Tricoat
silver	lifting component MM Euro-rebate 18 mm	angled screw-fixing	right	100		356298	357918
			left	100		356299	357919

* Availability and delivery time on request.



3.6.1.5.3 Sash lifters MM 12 mm air gap 18 mm Euro-rebate					No	No Tricoat
silver	lifting component Euro-rebate 18 mm	angled screw-fixing		100	95113	




3.6.1.5.4 Striker plates i.S. 12 mm air gap 18 mm Euro-rebate					No	No Tricoat
silver	striker plate i.S. Euro-rebate 18 mm without reinforcement rings	angled screw-fixing		100	355606	358991*
	striker plate i.S. Euro-rebate 18 mm	angled screw-fixing	+ 1 mm gasket-compression	100	359770	
			- 0.7 mm gasket-compression	100	96660	362849
				100	96860	97544*




3.6.1.5.5 Tilt striker plates 12 mm air gap 18 mm Euro-rebate					No	No Tricoat
silver	tilt striker Euro-rebate 18 mm			100	33981	201486

3.6.1.6 Striker plates for 12 mm air gap 20 mm Euro-rebate




3.6.1.6.1 Striker plates for 12 mm air gap 20 mm Euro-rebate					No	No Tricoat
silver	striker plate Euro-rebate 20 mm	angled screw-fixing		200	34981	355797*
	striker plate Euro-rebate 20 mm without reinforcement rings	angled screw-fixing		200	34986	
	striker plate Euro-rebate 20 mm	angled screw-fixing	- 1 mm gasket-compression	200	355396	366379
	striker plate HG Euro-rebate 20 mm	angled screw-fixing		200	361960	366432




3.6.1.6.2 Sash lifters MM 12 mm air gap 20 mm Euro-rebate					No	No Tricoat
silver	lifting component MM Euro-rebate 20 mm	angled screw-fixing	right	100	356326	357920*
			left	100	356327	357921*



3.6.1.6.3 Sash lifters MT 12 mm air gap 20 mm Euro-rebate					No	No Tricoat
silver	lifting component Euro-rebate 20 mm	angled screw-fixing		100	95116	




96561

3.6.1.6.4 Striker plates i.S. 12 mm air gap 20 mm Euro-rebate					No	No Tricoat
silver	striker plate i.S. Euro-rebate 20 mm	angled screw-fixing		100	96561	355865*
	striker plate i.S. Euro-rebate 20 mm without reinforcement rings	angled screw-fixing	- 0.7 mm gasket-compression	100	96641	
	striker plate i.S. Euro-rebate 20 mm	angled screw-fixing	- 0.7 mm gasket-compression	100	96779	359370
				100	96861	360293*




363300

3.6.1.6.5 Striker plates 12 mm air gap 20 mm Euro-rebate					No	No Tricoat	
silver	tilt striker Euro-rebate 20 mm			right and left	100	363300	355798

3.6.1.7 Striker plates 12 air gap 24 mm Euro-rebate




34934

3.6.1.7.1 Striker plates 12 air gap 24 mm Euro-rebate					No	No Tricoat
silver	striker plate 24mm rebate depth, 13mm offset	angled screw-fixing		200	34934	359575*
	striker plate HG 24mm rebate depth, 13mm offset	angled screw-fixing	- 1 mm gasket-compression	200	359297	361346*
	striker plate 24mm rebate depth, 13mm offset without reinforcement rings	angled screw-fixing		200	360849	
				100	362812	




356333

3.6.1.7.2 Sash lifters MM 12 mm air gap 24 mm Euro-rebate					No	No Tricoat	
silver	lifting component MM 24mm rebate depth, 13mm offset	angled screw-fixing		right	100	356333	357922*
				left	100	356334	357923*



95934

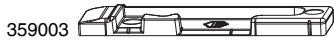
3.6.1.7.3 Sash lifters MM 12 mm air gap 24 mm Euro-rebate					No	No Tricoat	
silver	lifting component 24mm rebate depth, 13mm offset	angled screw-fixing			100	95934	




364952

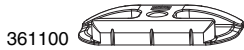
3.6.1.7.4 Striker plates i.S. 12 mm air gap 24 mm Euro-rebate					No	No Tricoat
silver	striker plate i.S. 24mm rebate depth, 13mm offset	angled screw-fixing		100	364952	366635
	without reinforcement rings		- 1 mm gasket-compression	100	364953	366636


* Availability and delivery time on request.

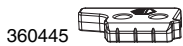



3.6.1.7.5 Tilt striker plates 12 mm air gap 24 mm Euro-rebate					No	No Tricoat
silver	tilt striker 24mm rebate depth, 13mm offset	right	100	359003	359570*	
		left	100	359004	359571*	

3.6.1.8 Striker plates 12 mm air gap 30 mm Euro-rebate




3.6.1.8.1 Striker plates 12 mm air gap 30 mm Euro-rebate					No	No Tricoat
silver	striker plate 30mm rebate depth, 13mm offset	angled screw-fixing	200	360443	362304	
	striker plate HG 30mm rebate depth, 13mm offset	angled screw-fixing	200	361100		




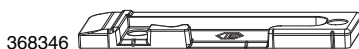
3.6.1.8.2 Sash lifters MM 12 mm air gap 30 mm Euro-rebate					No	No Tricoat
silver	lifting component MM 30mm rebate depth, 13mm offset	angled screw-fixing	right 100	360445	368095	
			left 100	360446	368096	




3.6.1.8.3 Sash lifters MT 12 mm air gap 30 mm Euro-rebate					No	No Tricoat
silver	lifting component Euro-rebate 26 mm	angled screw-fixing	100	95326		



3.6.1.8.4 Striker plates i.S. 12 mm air gap 30 mm Euro-rebate					No	No Tricoat
silver	striker plate i.S. 30mm rebate depth, 13mm offset	angled screw-fixing	100	360444	362305	

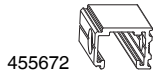


3.6.1.8.5 Tilt striker plates 12 mm air gap 30 mm Euro-rebate					No	No Tricoat
silver	tilt striker timber 30mm rebate depth 12mm air gap 13mm offset	left	200	368346		
		right	200	368345		




3.7 SKB accessories

3.7.1 Profiles in stock lengths for SKB and PAS




455672

3.7.1.1 Guide tracks	L		No	No Tricoat
silver	6.070	10	455672	
brown	6.070	10	467089	
bronze SKB	6.070	10	467088	




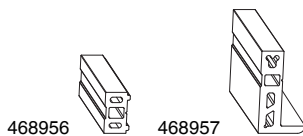
455673

3.7.1.2 Cover for top guide tracks	L		No	No Tricoat
silver	6.080	50	455673	
brown	6.080	50	455675	
white	6.080	50	455674	
cream white RAL 9001	6.080	50	455677	
bronze SKB	6.080	50	455676	




455664

3.7.1.3 Roller tracks	L		No	No Tricoat
silver	6.070	10	455664	
brown	6.070	10	455665	
bronze SKB	6.070	10	455666	



468956


468957

3.7.1.4 Packer for roller tracks and guide tracks		No	No Tricoat
packer 9 mm for guide track SKB/PAS L=3.035mm silver	5	468956 ¹	
packer 9 mm for roller track SKB/PAS L=3.035mm silver	5	468957 ¹	

¹ Can be used from overload strength 24 mm.




465181

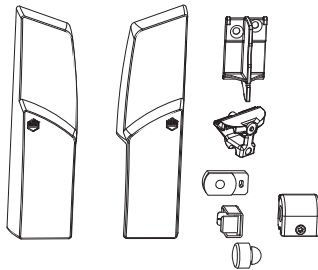
3.7.1.5 Roller cover strip	L		No	No Tricoat
silver	5.170	10	455667	
	2.036	10	465181	
brown	5.170	10	455669	
	2.036	10	465183	
white	5.170	10	455668	
	2.036	10	465182	
cream white RAL 9001	5.170	10	455671	
	2.036	10	465185	
bronze SKB	5.170	10	455670	
	2.036	10	465184	



455683

3.7.1.6 Connecting rod	L		No	No Tricoat
connecting rod SKB Ø = 10 mm	3.600	1	455683	

3.7.2 Accessories and individual components SKB and PAS



455648

3.7.2.1 Bag of accessories for SKB and PAS

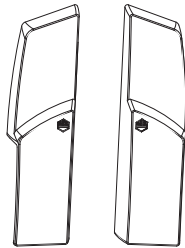


No

No
Tricoat

silver	20	455648 ¹	
cream white RAL 9001	40	455662 ¹	
white	20	455649 ¹	
brown	40	455650 ¹	
bronze SKB	40	455651 ¹	

¹ Contents: 1x cover cap for roller, left, 1x cover cap for roller, right, 1x cover cap for left scissor stay, 1x cover cap for right scissor stay, 2x routing cover caps, 1x control module, 1x bottom stop buffer, 1x to stop buffer.



102237

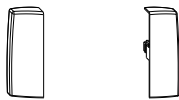
3.7.2.2 Set of cover caps for rollers with reinforcement



No

No
Tricoat

silver	10	102237	
cream white RAL 9001	10	102241	
white	10	102238	
brown	10	102239	
bronze SKB	10	102240	



465351

3.7.2.3 Set of cover caps for rollers without reinforcement



No

No
Tricoat

silver	for 100kg version	10	465351	
cream white RAL 9001	for 100kg version	10	465353	
white	for 100kg version	10	465349	
brown	for 100kg version	10	465350	
bronze SKB	for 100kg version	10	465352	



467763

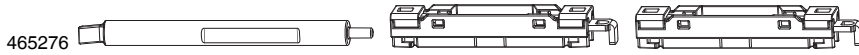
3.7.2.4 Cover caps for guide tracks



No

No
Tricoat

set of cover caps for guide track left/right silver	10	467763	
set of cover caps for guide track left/right white	10	467764	



3.7.2.5 Bag of accessories for guide tracks



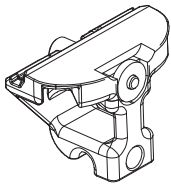
No

No
Tricoat

accessories pack for guide track SKB-S/SE/Z

1

465276



455653

3.7.2.6 Control module



No

No
Tricoat

control module SKB adjustable for diagram D

silver

10

455653¹

brown

10

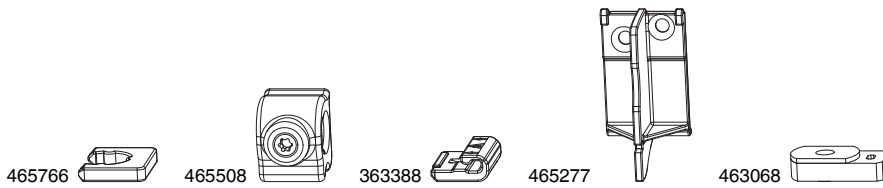
455657¹

bronze SKB

10

455655¹

¹ Only for diagram D



3.7.2.7 Individual components SKB and PAS



No

No
Tricoat

anti-twist device for height adjustment roller SKB

100

465766

rod guide for connecting rod SKB

1

465508

safety catch roller SKB

10

363388

SKG - clip for drive gear SKB

100

467893

support bracket for track cover roller SKB

1

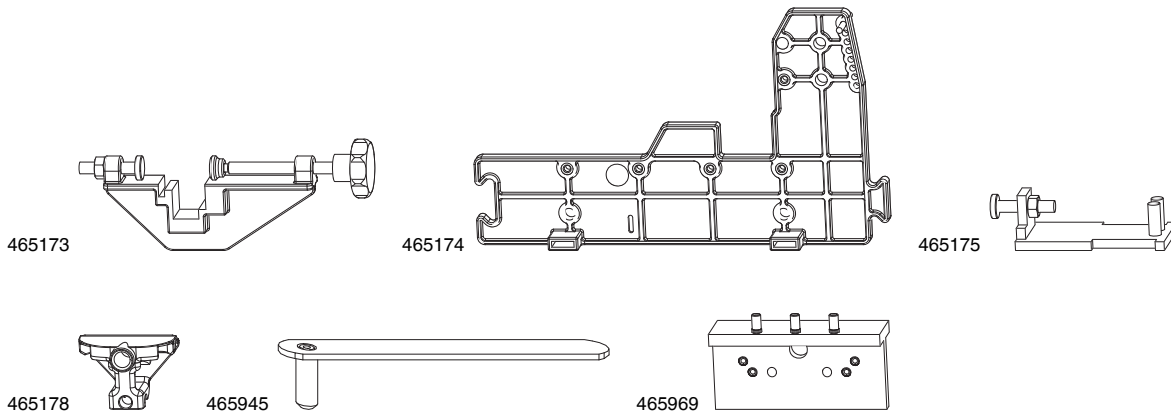
465277

top buffer stop for guide track SKB

50

463068

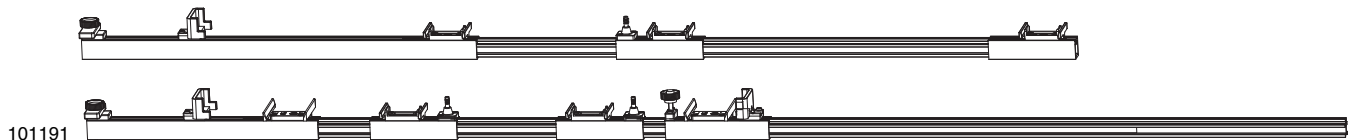
3.8 Jigs



3.8.1 Jigs		No	No Tricoat
clamping jig for positioning the SKB guide track and roller track	1	465173	
jig for aligning screw holes centrally on SKB rollers	1	465174	
installation jig for SKB control module	1	465175	
drill jig for movable SKB control module diagram D	1	465178 ¹	
jig for aligning screw holes centrally on SKB guide track	1	465945	
drill jig for scissor-slider SKB-S/SE	1	465969	

¹ Only for diagram D

3.8.2 Positioning jigs

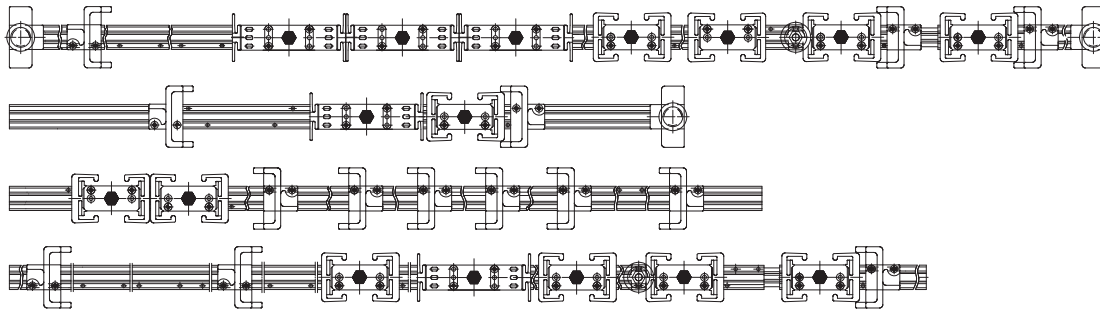


3.8.2.1 Positioning jigs for width connectors/height connectors MULTI TREND		No	No Tricoat
striker positioning jig set for width connector SKB-S for 48 mm retainer bottom and top	1	101191	
striker positioning jig set for width connector SKB-S for 50 mm retainer bottom and top	1	101192	
jig for height connector SKB-S/SE with retainer for 34943	1	14583	



3.8.2.2 Positioning jigs for width connectors MULTI MATIC			No	No Tricoat
striker positioning jig for width connector SKB-S/SE with 50 mm retainer top	620 - 1.650	1	211010 ¹	
striker positioning jig for width connector SKB-S bottom with 50 mm retainer	620 - 1.650	1	211267 ¹	

¹ Jigs suitable for drive-gears and height connectors.



10362

3.8.2.3 Positioning jigs for Multi Trend drive gear



No

No
Tricoat

striker positioning jig for drive gear FHH with 48 mm retainer

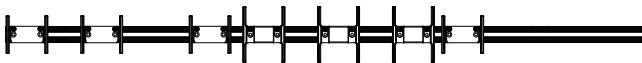
1

10362

striker positioning jig for drive gear FHH with retainer for 12 mm Euro-rebate timber

1

10363



204774

3.8.2.4 Positioning jigs for drive gear/height connector MULTI MATIC



No

No
Tricoat

striker positioning jig MM for drive gear FHH with 48 mm retainer

661 - 1.340

1

204774¹

1.341 - 1.700

1

204775¹

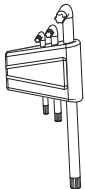
striker positioning jig MM for drive gear FHH for doors with 48 mm retainer

1.701 - 2.450

1

204776¹

¹ Jigs suitable for drive-gears and height connectors.



460339

3.8.3 Jig accessories



No

No
Tricoat

set of Torx screwdrivers TX15 + TX25 + TX40

1

460339





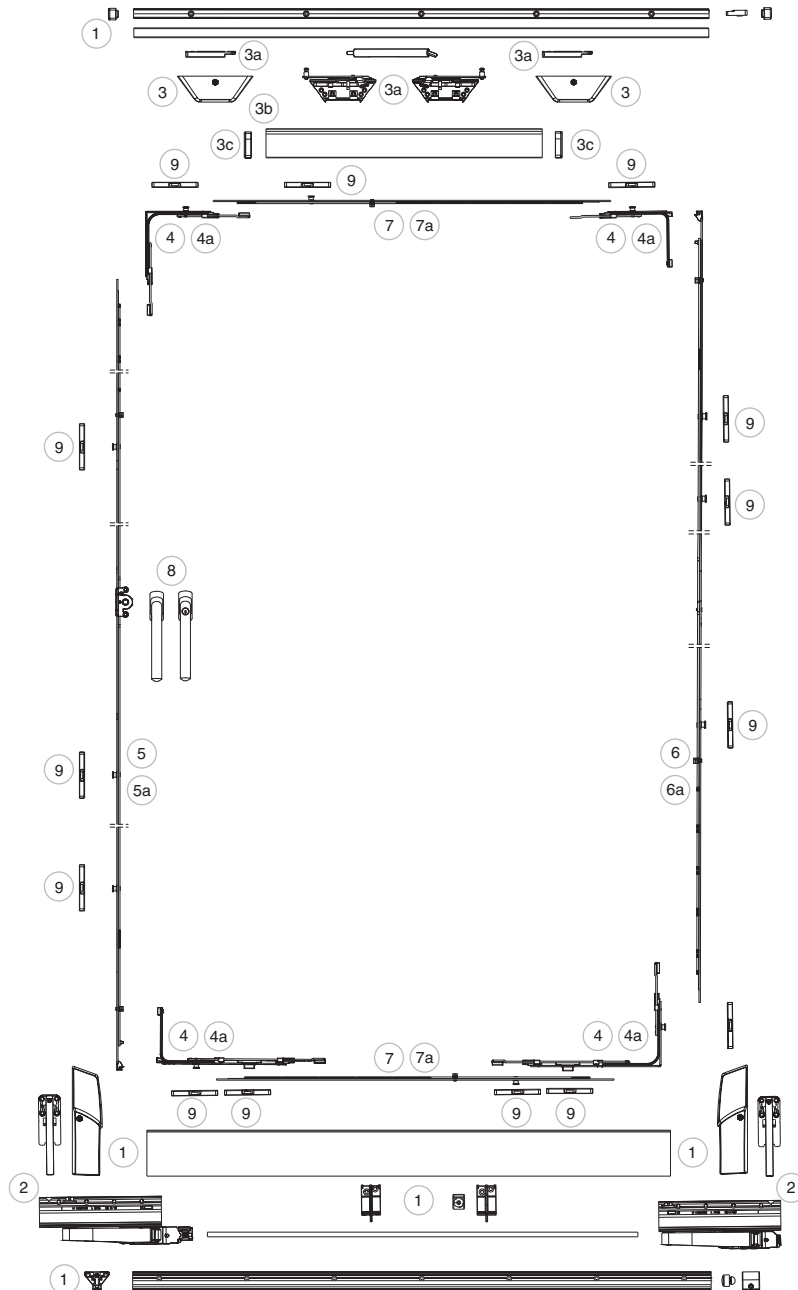
4 SKB-SE

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4 SKB-SE

4.1 SKB-SE: hardware overview



The 'SKB-SE' tilt&slide hardware is suitable for the implementation of tilt&slide windows and doors for all conventional window profiles made of timber, PVC or timber/alu.

The active sash must not exceed a total weight of 160 kg.

The SRW width must be between 650-1650 mm, and the SRH height between 840-2450 mm.

The sash must not exceed 2.5 times the sash width.



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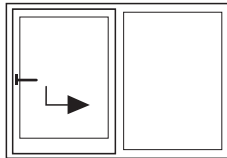


4.2 Diagrams SKB-SE - Hardware itemisation

2-sashed unit:

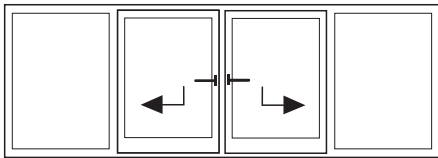
1 sliding sash, 1 fixed glazing; DIN left-handed

1 sliding sash left, 1 turn&tilt sash right, without dummy multi-
on



4-sashed unit / diagram C:

2 central sliding sashes, 2 outer fixed glazings



Order text

1	Left-handed roller pack
1	Profile set for sash and frame
1	Scissors-slider pack
1	Corner element set or SKB-SE corner element set, left
1	Turn-only drive gear FHH
1	Height connector
2	Width connector
1	SKB-SE/Z retaining device set
-	Striker plates (for 4 mm air gap: 1 striker plate for pull-in wedge and 1 SKB-SE tilt striker plate, 4 mm air gap)
1	Handles

Order text

1	Right-handed roller pack
1	Left-handed roller pack
2	Profile sets for sash and frame
2	Scissors-slider pack
1	Corner element set or SKB-SE corner element set, left
1	Corner element set or SKB-SE corner element set, right
2	Turn-Only espagnolette FHH
2	Height connectors
4	Width connector
2	SKB-SE/Z striker plate set
-	Striker plates (for 4 mm air gap: 2 striker plates for pull-in wedge and 1 SKB-SE tilt striker plate, 4 mm air gap)
2	Handles

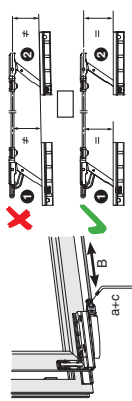
4.3 Operating and maintenance instructions SKB-SE

Window adjustments

Settings and adjustments for the fittings (including inserting and removing the sashes) must only be carried out by specialists.

Correct the parallel setting of the roller

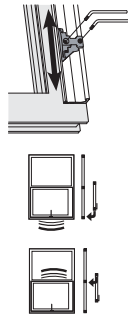
- Loosen the connecting rod on the roller at the handle side
- Push the connecting rod to the left or right to position the rear roller parallel to the roller unit
- Fix the connecting rod



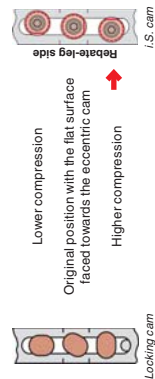
Regulating the height of the roller

- Lift off the adjusting device TX 40
- Set the height (+4 mm, -2 mm)
- Reattach the adjusting device

Correct the sash entry



Compression



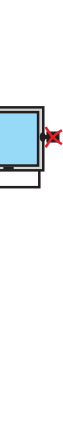
Safety and neglect instruction

Risk of injury (e.g. catching one's finger) in the opening gap between the sash and frame.



Risk of falling.

Avoid additional loading of the sash.



Be sure to prevent any obstructions in the opening gap between the sash and the frame.

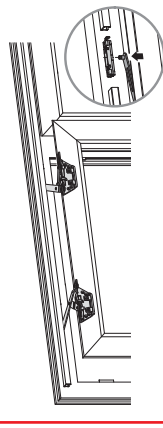


General advice for your windows

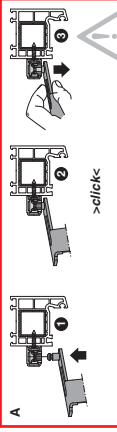
A good window can do more than just let in light: It is a design element, and at the same time a component that must satisfy demanding technical requirements. Apart from the essential care of the fittings components, you should also constantly check the surface finish, the glazing, and the seals and immediately repair any defective areas. Use only water with a mild soap solution for cleaning purposes non-corrosive. Do not paint over the fittings!

Inserting and removing the sash

Specialists must pay particular attention to the following points - since the installation no longer lies within the sphere of influence of the fittings manufacturer!



Inserting the sash



a.) Insert the scissor backsets into the centre slider openings until they snap into the sliders (audible click)! Correctly fastened position of the fixing pin in the sliders! Pull/press down the scissor arms to check that the connections are secure!

b.) When installed correctly, the security slider on the side snaps in flush with the edges of the slider housing.

CAUTION: If the scissor backsets do not snap in properly, the window sash will not be held securely and may fall out. Serious personal injuries may result.

c.) Activate the lever lock! Move the lever lock on both rollers back until they snap into place at the marked position.

CAUTION: If the lever lock is not (or not correctly) in place at the marked position, the window sash will not be secured properly. Serious personal injuries may result.

We strongly recommend window and door buyers, to have their windows and doors installed by authorised specialists.

The same care and maintenance instructions apply to all window types that are not specifically mentioned in these instructions (e.g. System C slide & tilt windows).

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Date created: October 2008
Change date: January 2011
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TECHNOLOGY IN MOTION

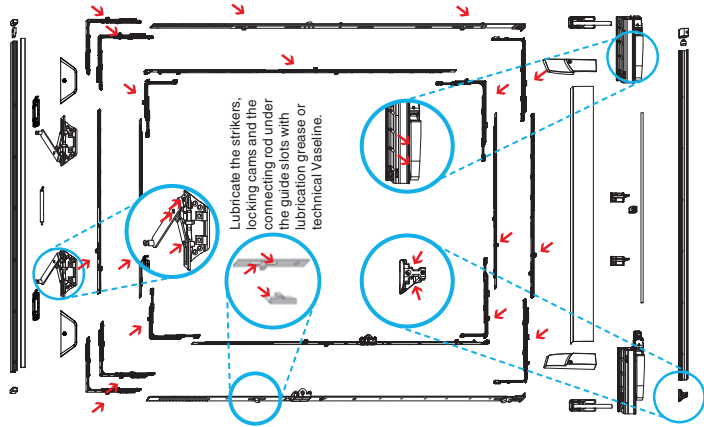
Maintenance

To maintain the functionality of slide & tilt fittings (SKB) for windows and French door sashes, the following maintenance work must be performed annually:

- Safety-relevant fittings must be checked for wear
- Lubricate all movable parts and locking points of the slide & tilt fittings. ↴
- Use only those types of cleaning and maintenance agents that do not affect the corrosion protection of the fittings components!

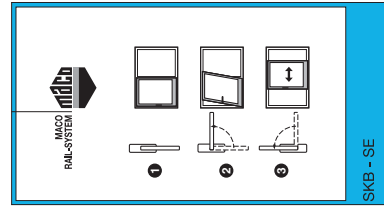
Product liability advice

- Your windows and doors have been equipped with a high-quality slide & tilt fitting. The operation is straightforward and trouble-free; nevertheless you should read through these instructions carefully and adhere to the advice on operation.
- In your interests, please do not forget to observe the safety and neglect instructions!
- Keep these operation and maintenance instructions safe in case needed and also inform other users of the contents of these instructions.
- Check as to whether an operation sticker has been applied to the window or if one is necessary.
- In order to ensure that your windows are operational for years to come, please adhere to the care and maintenance instructions!

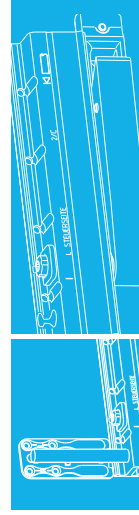


Operation

- 1 close
- 2 tilt
- 3 open/close



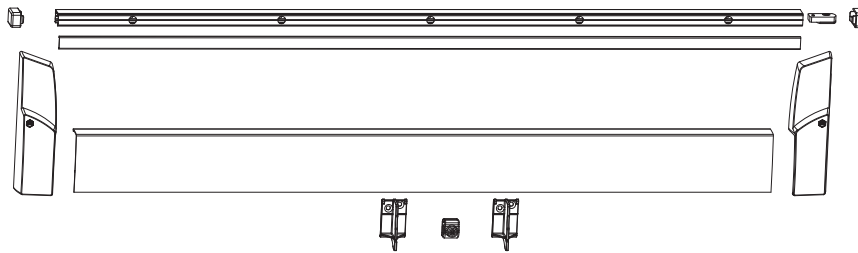
MACO RAIL SYSTEMS SLIDING FITTINGS



Operation and maintenance instructions slide & tilt fittings

SKB
Self-engaging

4.4 Sash/frame components

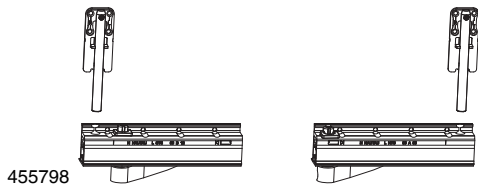


4.4.1 Profile Packs			L		No	No Tricoat	
profile set: frame and sash SKB	silver	size 1	620 - 900	1.930	1	466052¹	
		size 2	901 - 1.050	2.230	1	466053¹	
		size 3	1.051 - 1.250	2.630	1	466054¹	
		size 4	1.251 - 1.450	3.030	1	466055¹	
		size 5	1.451 - 1.650	3.430	1	466056¹	
	cream white RAL 9001	size 1	620 - 900	1.930	1	466076¹	
		size 2	901 - 1.050	2.230	1	466077¹	
		size 3	1.051 - 1.250	2.630	1	466078¹	
		size 4	1.251 - 1.450	3.030	1	466079¹	
		size 5	1.451 - 1.650	3.430	1	466080¹	
	white	size 1	620 - 900	1.930	1	466058¹	
		size 2	901 - 1.050	2.230	1	466059¹	
		size 3	1.051 - 1.250	2.630	1	466060¹	
		size 4	1.251 - 1.450	3.030	1	466061¹	
		size 5	1.451 - 1.650	3.430	1	466062¹	
	brown	size 1	620 - 900	1.930	1	466064¹	
		size 2	901 - 1.050	2.230	1	466065¹	
		size 3	1.051 - 1.250	2.630	1	466066¹	
		size 4	1.251 - 1.450	3.030	1	466067¹	
		size 5	1.451 - 1.650	3.430	1	466068¹	
	bronze SKB	size 1	620 - 900	1.930	1	466070¹	
		size 2	901 - 1.050	2.230	1	466071¹	
		size 3	1.051 - 1.250	2.630	1	466072¹	
		size 4	1.251 - 1.450	3.030	1	466073¹	
		size 5	1.451 - 1.650	3.430	1	466074¹	

¹ Contents: 1 x guide track, 1 x guide cover, 2 x guide cover caps, 1 x top buffer stop, 2 x scissor-stay sliders, 1 x slider release, 2 x scissor stay arm cover caps, 1 x roller cover strip, 1 x left roller cover cap, 1 x right roller cover cap, 1 x connecting rod, 1 x roller track, 1 x control module, 1 x bottom buffer stop, 1 x cover support bracket for roller cover strip (2 pcs. from size 5), 1 x connecting-rod support-block (from size 5)

4.5 Sash components

4.5.1 Roller Packs



4.5.1.1 Roller Packs

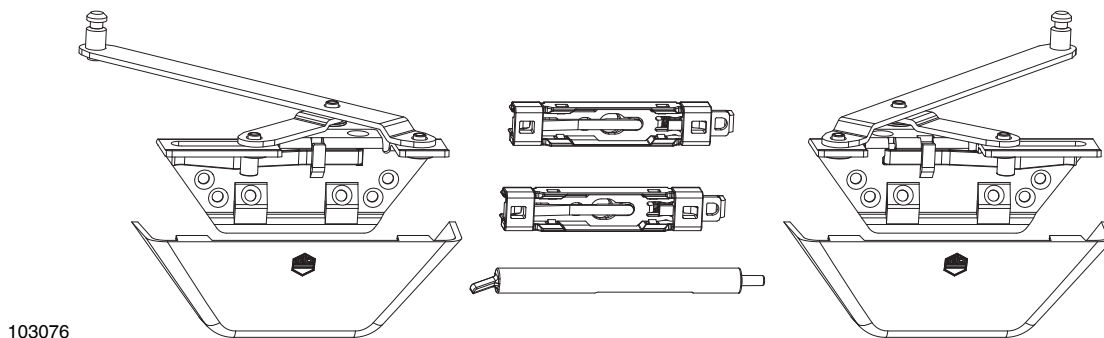
roller pack

					 Tricoat
	right	160	1	455799¹	
	left	160	1	455798¹	

¹ Contents: 1 x drive-gear sided roller, 1 x hinge-sided roller, 2 x reinforcement brackets

4.5.2 Scissor stays

4.5.2.1 Scissor stay pack



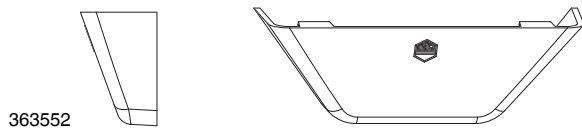
103076

4.5.2.1.1 Scissor slider pack for SKB-S/SE

						 Tricoat
scissor-slider SKB-S/SE adjustable	left/right	silver	620 - 1.650	1	103073¹	103589
		brown	620 - 1.650	1	103075¹	103590
		white	620 - 1.650	1	103074¹	103593
		cream white RAL 9001	620 - 1.650	1	103077¹	103592
		bronze SKB	620 - 1.650	1	103076¹	103591


¹ Contents: 1x scissor slider right, 1x scissor slider left, 2x cover cap for scissor slider

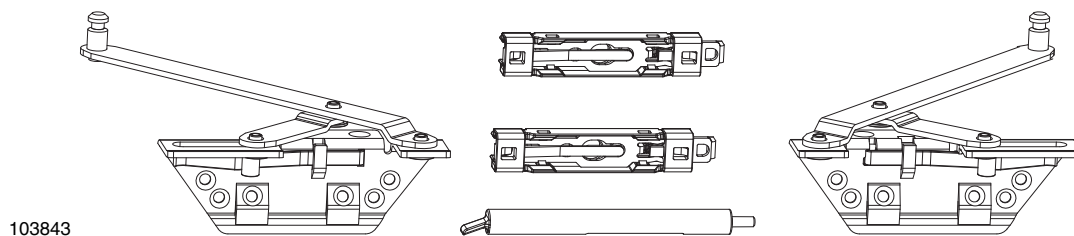
4.5.2.2 Accessories and individual components for scissor stays



363552



4.5.2.2.1 Cover caps for SKB-S/SE scissors-slider

		No	No Tricoat
silver	10	363552	
cream white RAL 9001	10	363556	
white	10	363553	
brown	10	363554	
bronze SKB	10	363555	



103843


4.5.2.2.2 Scissor slider for SKB-S/SE

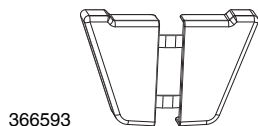
					No	No Tricoat
scissor-slider SKB-S/SE adjustable	left/right	silver	620 - 1.650	1	103843	104052



366588


4.5.2.2.3 Cover strip for SKB-S/SE scissors-slider

	L		No	No Tricoat
silver	1.700	1	366588	
brown	1.700	1	366589	
white	1.700	1	366592	
cream white RAL 9001	1.700	1	366591	
bronze SKB	1.700	1	366590	



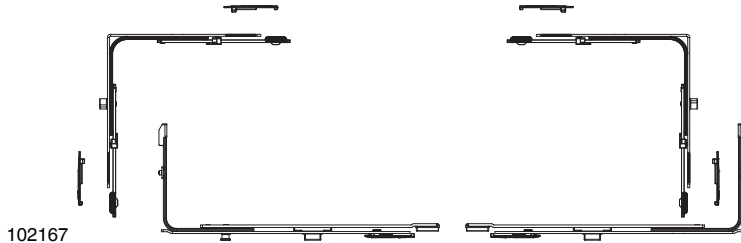
366593

4.5.2.2.4 Cover strip cap for scissor slider SKB-S/SE (left + right)

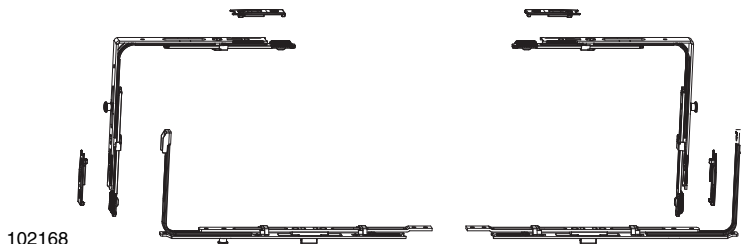
		No	No Tricoat
silver	10	366593	
brown	10	366595	
white	10	366594	
cream white RAL 9001	10	366597	
bronze SKB	10	366596	

4.5.3 Corner elements

4.5.3.1 Corner elements MULTI TREND



102167



102168

4.5.3.1.1 Pack corner elements SKB-SE MULTI TREND



No

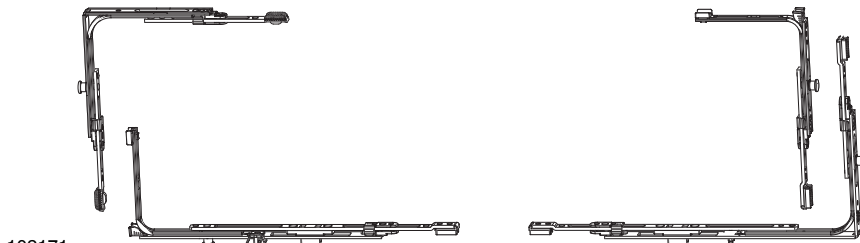
No
Tricoat

corner element set MULTI TREND				No	No Tricoat
right		silver	1	102169 ¹	
	EH	silver	1	102170 ²	
left		silver	1	102167 ¹	
	EH	silver	1	102168 ²	

¹ Packaging contents: 2 corner elements, 2 corner centre locks with snapper catch with 1 i.S. cam

² Packaging contents: 2 corner elements each with 1 i.S. cam, 2 corner centre locks with snapper catch with 1 i.S. cam

4.5.3.2 Corner elements for MULTI MATIC



102171

4.5.3.2.1 Pack of corner elements SKB-SE MULTI MATIC



No

No
Tricoat






corner element set MULTI MATIC				No	No Tricoat
	right	silver	1	102172 ¹	102300
	left	silver	1	102171	102299

¹ Contents: 1 x MM corner element with 1 i.S., vertical corner element with 1 i.S. with serrated carrier, 1 x hinge-sided corner element with snapper catch, 1 x drive-gear sided corner drive with snapper catch





4.5.4 Drive gears

4.5.4.1 Drive gears MULTI TREND








4.5.4.1.1 Turn-only drive gears BS 15 FHH VZ							No	No Tricoat
silver	size 3	15	1	500	1.001 - 1.250	20	55137	
	size 4	15	1	600	1.251 - 1.500	10	55138	
	size 5	15	1	700	1.501 - 1.750	10	55139	
	size 6	15	2	1.050	1.851 - 2.100	10	55218	
	size 6A	15	2	1.050	1.651 - 1.850	10	55882	
	size 7	15	2	1.050	2.101 - 2.350	10	55219	







4.5.4.1.2 Turn-only drive gears BS 15 FHH without locking cam						No	No Tricoat
silver	size 4	15	600	1.251 - 1.500	10	52971	
	size 6	15	1.050	1.851 - 2.100	10	52973	
	size 7	15	1.050	2.101 - 2.350	10	52974	

4.5.4.2 Drive gears MULTI MATIC







4.5.4.2.1 Turn-only drive gears BS 15 FHH i.S.							No	No Tricoat
silver	1090	15	1	400	841 - 1.090	20	201834	211244
	1340	15	1	500	1.091 - 1.340	10	201835	210073
	1590	15	2	600	1.341 - 1.590	10	201836	211245
	1700	15	2	700	1.591 - 1.700	10	207302	211246
	1950	15	3	1.050	1.701 - 1.950	10	201837	211247
	2200	15	3	1.050	1.951 - 2.200	10	201838	210074
	2450	15	4	1.050	2.201 - 2.450	10	201839	210075





4.5.4.2.2 Turn-only drive gears BS 15 FHH without locking cam						No	No Tricoat
silver	1090	15	400	841 - 1.090	20	205547	211218
	1340	15	500	1.091 - 1.340	10	205548	211221
	1590	15	600	1.341 - 1.590	10	205549	211222
	1700	15	700	1.591 - 1.700	10	207304	211225
	1950	15	1.050	1.701 - 1.950	10	205545	211217
	2200	15	1.050	1.951 - 2.200	10	205550	211223
	2450	15	1.050	2.201 - 2.450	10	205551	211224





4.5.4.2.3 Turn-only drive gears diagram C with welded-on striker plate						No	No Tricoat
silver	1950	30	1.050	1.701 - 1.950	10	209968	210945
		40	1.050	1.701 - 1.950	10	207014	
		45	1.050	1.701 - 1.950	10	207015	
	2200	40	1.050	1.951 - 2.200	10	210943	
	2450	40	1.050	2.201 - 2.450	10	210944	

4.5.5 Height connectors





4.5.5.1 Height connectors SKB-S/SE MULTI TREND i.S. with pull-in wedge						No	No Tricoat
fixed handle height with 2 i.S.	silver	size 3	1.000 - 1.250	10	57418		
		size 4	1.251 - 1.500	10	57419		
		size 5	1.501 - 1.750	10	57420		
fixed handle height with 3 i.S.	silver	size 6	1.851 - 2.100	10	57421		
		size 6A	1.661 - 1.850	10	57422		
		size 7	2.101 - 2.350	10	57423		





4.5.5.2 Height connectors SKB-S/SE and PAS MULTI MATIC i.S.						No	No Tricoat
with 1 i.S.	silver	1090	841 - 1.090	10	210335	211234	
		1340	1.091 - 1.340	10	210336	211235	
with 2 i.S.	silver	1590	1.341 - 1.590	10	210337	211236	
		1700	1.591 - 1.700	10	210338	211237	
with 3 i.S.	silver	1950	1.701 - 1.950	10	210339	211238	
		2200	1.951 - 2.200	10	210340	211239	
with 4 i.S.	silver	2450	2.201 - 2.450	10	210341	211240	

4.5.6 Width connectors

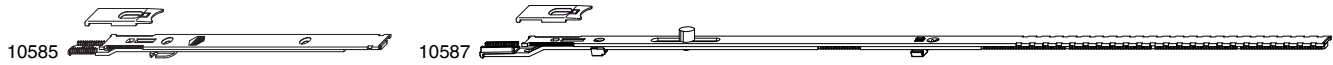


4.5.6.1 Width connector SKB-S/SE MULTI TREND i.S.						No	No Tricoat
with 1 i.S.	silver	size 1	620 - 900	20	210529		
		size 2	901 - 1.150	20	210530		
		size 3	1.151 - 1.400	20	210531		
with 2 i.S.	silver	size 4	1.401 - 1.650	20	210532		




4.5.6.2 Width connector SKB-S/SE and PAS MULTI MATIC i.S. with pull-in wedge						No	No Tricoat
with 1 i.S.	silver	620 - 900	20	210380	211229		
		901 - 1.150	20	210381	211231		
		1.151 - 1.400	20	210382	211232		
with 2 i.S.	silver	1.401 - 1.650	10	210383	211233		

4.5.7 Extension piece




4.5.7.1 Extension piece SKB-S/SE MULTI TREND

	L			No	No Tricoat
extension piece not croppable	250	silver	20	10585 ¹	
extension piece croppable to 400/250 mm with 1 VZ	600	silver	20	10587 ¹	

¹ Can also be supplied in quantities less than one packaging unit.



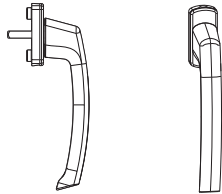
4.5.7.2 Extension piece SKB-S/SE and PAS MULTI MATIC

		L		No	No Tricoat
faceplate extension MM, extendable	silver	235	20	206197	207445*
with 1 i.S.	silver	235	20	201750	207444*







4.5.8 Handles

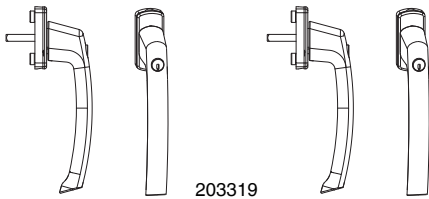
4.5.8.1 Handles SKB-S/SE and PAS

4.5.8.1.1 HARMONY design

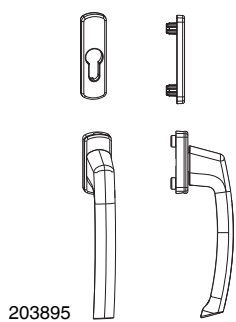


55720

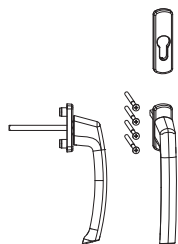
4.5.8.1.1.1 Lugs 10/12								No	No Tricoat
black brown RAL 8022	58		28	7		anodised	10	24658	
		pin 32	28	7		anodised	10	21269	
		pin 35	28	7		anodised	10	203310	
bronze	58	pin 32	28	7		anodised	10	21470	
		pin 35	28	7		anodised	10	203305	
		without pin	28			anodised	10	24432	
bronze SKB	58		28	7		anodised	10	203890	
		pin 32	28	7		anodised	10	203888	
		pin 35	28	7		anodised	10	203889	
champagne	58		28	7		anodised	10	24433	
		pin 32	28	7		anodised	10	21465	
		pin 35	28	7		anodised	10	203304	
silver	58		28	7		anodised	10	59045	
		pin 32	28	7		anodised	10	55720	
		pin 35	28	7		anodised	10	203307	
silver (white rosette)	58	pin 38	28	7		anodised	10	227029	
			28	7		anodised	10	220632	
		pin 32	28	7		anodised	10	22248	
titanium	58	pin 35	28	7		anodised	10	203308	
			28	7		anodised	10	24434	
		pin 32	28	7		anodised	10	21466	
traffic white RAL 9016	58	pin 35	28	7		anodised	10	203306	
			28	7		powder coated	10	24435	
		pin 32	28	7		powder coated	10	21471	
		pin 35	28	7		powder coated	10	203309	
		pin 38	28	7		powder coated	10	227030	











4.5.8.1.1.2 Lugs 10/12 with locking cylinder									No	No Tricoat
black brown RAL 8022	58		28	7	anodised	10			220634	
		pin 32	28	7	anodised	10			21270	
		pin 35	28	7	anodised	10			203322	
bronze	58		28	7	anodised	10			59049	
		pin 32	28	7	anodised	10			21476	
		pin 35	28	7	anodised	10			203317	
bronze SKB	58		28	7	anodised	10			203893	
		pin 32	28	7	anodised	10			203891	
		pin 35	28	7	anodised	10			203892	
champagne	58		28	7	anodised	10			59051	
		pin 32	28	7	anodised	10			21473	
		pin 35	28	7	anodised	10			203316	
silver	58		28	7	anodised	10			59048	
		pin 32	28	7	anodised	10			55781	
		pin 35	28	7	anodised	10			203319	
		pin 38	28	7	anodised	10			227031	
silver (white rosette)	58		28	7	anodised	10			220633	
		pin 32	28	7	anodised	10			22288	
		pin 35	28	7	anodised	10			203320	
titanium	58		28	7	anodised	10			59050	
		pin 32	28	7	anodised	10			21474	
		pin 35	28	7	anodised	10			203318	
traffic white RAL 9016	58		28	7	powder coated	10			59046	
		pin 32	28	7	powder coated	10			21484	
		pin 35	28	7	powder coated	10			203321	
		pin 38	28	7	powder coated	10			227032	



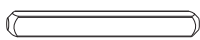
4.5.8.1.1.3 Interior handles lugs 12								No	No Tricoat
black brown RAL 8022	PC	58	28	7	anodised	10		203904	
bronze	PC	58	28	7	anodised	10		203900	
bronze SKB	PC	58	28	7	anodised	10		203901	
champagne	PC	54	28	7	anodised	10		203897	
silver	PC	54	28	7	anodised	10		203896	
silver (white rosette)	PC	54	28	7	anodised	10		203895	
titanium	PC	58	28	7	anodised	10		203902	
traffic white RAL 9016	PC	58	28	7	powder coated	10		203903	









203894

4.5.8.1.1.4 High exterior handles lugs 12									
black brown RAL 8022	PC	64-73	54	26	7	anodised	10	202626	
		max. 90	54	26	7	anodised	10	213336	
bronze	PC	64-73	54	26	7	anodised	10	202625	
		max. 90	54	26	7	anodised	10	213335	
bronze SKB	PC	64-73	54	26	7	anodised	10	203894	
		max. 90	54	26	7	anodised	10	213340	
champagne	PC	64-73	54	26	7	anodised	10	202627	
		max. 90	54	26	7	anodised	10	213337	
silver	PC	64-73	54	26	7	anodised	10	202624	
		max. 90	54	26	7	anodised	10	213334	
titanium	PC	64-73	54	26	7	anodised	10	202628	
		max. 90	54	26	7	anodised	10	213338	
traffic white RAL 9016	PC	64-73	54	26	7	powder coated	10	202630	
		max. 90	54	26	7	powder coated	10	213339	

39013




4.5.8.1.2 Spindles		L						
spindle		52	26	7	20	39013		
		56	30	7	100	39029		
		61	35	7	20	30717		
		64	38	7	20	94228		
		69	43	7	200	39014		
		76	50	7	20	30765		

4.6 Frame components

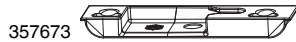
4.6.1 Striker plates


4.6.1.1 Striker plates for 4 mm air gap



4.6.1.1.1 Striker plates for 4 mm air gap					No	No Tricoat
silver	striker plate for 4 mm air gap			200	30545	355132
	striker plate for 4 mm air gap, 13 mm offset	- 1 mm gasket-compression	right	200	357671 ¹	359251 ¹
			left	200	357672 ¹	359252 ¹
			right	200	363020 ¹	
			left	200	363021 ¹	


¹ Use the left striker for the right RS element and vice-versa




4.6.1.1.2 Striker plates i.S. for 4 mm air gap					No	No Tricoat
silver	striker plate i.S. for 4 mm air gap, angled screw-fixing 13 mm offset		right	100	357673 ¹	359253 ¹
			left	100	357674 ¹	359254 ¹
	striker plate i.S. for 4 mm air gap angled screw-fixing without reinforcement rings		right	100	357958 ¹	
			left	100	357959 ¹	
	striker plate i.S. for 4 mm air gap, angled screw-fixing 13 mm offset	- 1 mm gasket-compression	right	100	360102 ¹	
			left	100	360103 ¹	
	striker plate i.S. for 4 mm air gap	- 1 mm gasket-compression	right	100	96305 ¹	
			left	100	96306 ¹	
	angled screw-fixing		right	100	96565 ¹	355826 ¹
			left	100	96566 ¹	355827 ¹

¹ Use the left striker for the right RS element and vice-versa



4.6.1.1.3 Pull-in wedge					No	No Tricoat
silver	pull-in wedge for 4 mm air gap	for SKB		50	38593	355870




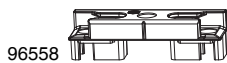
4.6.1.1.4 Latching plate set SKB-SE/Z for 4 mm air gap					No	No Tricoat
silver	retaining device set SKB-SE for 4 mm air gap, 13 mm offset		left	50	465623	
			right	50	465624	
	retaining device set SKB-SE for 4 mm air gap, 9 mm offset			50	465625	

4.6.1.2 Striker plates for opposite Eurogroove




34610

4.6.1.2.1 Striker plates for opposite Eurogroove				No	No Tricoat
silver	striker plate opposite Eurogroove	- 1 mm gasket-compression	200	34606	
			200	34610	354028



96558

4.6.1.2.2 Striker plates i.S. for opposite Eurogroove				No	No Tricoat
silver	striker plate i.S. opposite Eurogroove	- 0.8 mm gasket-compression	100	96558	358862

4.6.1.3 Striker plates 12 mm air gap hardware groove 6/8/4




34921

4.6.1.3.1 Striker plates 12 mm air gap hardware groove 6/8/4				No	No Tricoat
silver	striker plate for hardware groove 6/8/4		200	34921	355443
		- 1 mm gasket-compression	200	34979	355901



96563


4.6.1.3.2 Striker plates i.S. 12 mm air gap hardware groove 6/8/4				No	No Tricoat
silver	striker plate i.S. for hardware groove 6/8/4	- 1 mm gasket-compression	100	96263	
		angled screw-fixing	100	96563	355863

4.6.1.4 Striker plates 12 air gap hardware groove 7/8/4



34522

34969

4.6.1.4.1 Striker plates 12 air gap hardware groove 7/8/4				No	No Tricoat
silver	striker plate for hardware groove 7/8/4	angled screw-fixing	200	34522	360626
			200	34902	201481*
		- 1 mm gasket-compression	200	34969	201465




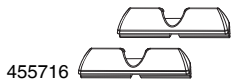
201484


4.6.1.4.2 Shootbolt striker plates 12 mm air gap hardware groove 7/8/4				No	No Tricoat
Tricoat	shootbolt striker hardware groove	2 slots	100		201484*

* Availability and delivery time on request.




4.6.1.4.3 Striker plates i.S. 12 mm air gap hardware groove 7/8/4					No	No Tricoat
silver	striker plate i.S. for hardware angled screw-fixing groove 7/8/4	- 0.8 mm gasket-compression	100	360564	364248	
		- 1 mm gasket-compression	100	96264	358450*	
	striker plate i.S. for hardware angled screw-fixing groove 7/8/4 without reinforcement rings	100	96564	352994*		
			100	363486		




4.6.1.4.4 Retaining device set SKB-SE/Z for hardware groove 7/8/4					No	No Tricoat
silver	retaining device set SKB-SE/Z for hardware groove 7/8/4		50	455716	465312	

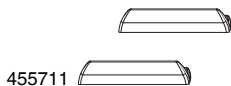
4.6.1.5 Striker plates 12 mm air gap 18 mm Euro-rebate




4.6.1.5.1 Striker plates 12 mm air gap 18 mm Euro-rebate					No	No Tricoat
silver	striker plate Euro-rebate 18 mm	double screw fixing	200	34943	201476*	
		angled screw-fixing	200	34980	355135	
		- 1 mm gasket-compression	200	357844		
		+ 1 mm gasket-compression	200	359769		



4.6.1.5.2 Striker plates i.S. 12 mm air gap 18 mm Euro-rebate					No	No Tricoat
silver	striker plate i.S. Euro-rebate 18 mm without reinforcement rings	angled screw-fixing	100	355606	358991*	
		angled screw-fixing	+ 1 mm gasket-compression	100	359770	
	angled screw-fixing	- 0.7 mm gasket-compression	100	96660	362849	
			100	96860	97544*	




4.6.1.5.3 Retaining devices 12 mm air gap 18 mm Euro-rebate					No	No Tricoat
silver	retaining device set SKB-SE/Z Euro-rebate 18 mm		50	455711	465309	



4.6.1.6 Striker plates for 12 mm air gap 20 mm Euro-rebate


34981 

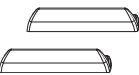
4.6.1.6.1 Striker plates for 12 mm air gap 20 mm Euro-rebate

					No	No Tricoat
silver	striker plate Euro-rebate 20 mm	angled screw-fixing		200	34981	355797*
	striker plate Euro-rebate 20 mm without reinforcement rings	angled screw-fixing		200	34986	
	striker plate Euro-rebate 20 mm	angled screw-fixing	- 1 mm gasket-compression	200	355396	366379
	striker plate HG Euro-rebate 20 mm	angled screw-fixing		200	361960	366432


96561 

4.6.1.6.2 Striker plates i.S. 12 mm air gap 20 mm Euro-rebate

					No	No Tricoat
silver	striker plate i.S. Euro-rebate 20 mm	angled screw-fixing		100	96561	355865*
	striker plate i.S. Euro-rebate 20 mm without reinforcement rings	angled screw-fixing	- 0.7 mm gasket-compression	100	96641	
				100	96779	359370
	striker plate i.S. Euro-rebate 20 mm	angled screw-fixing	- 0.7 mm gasket-compression	100	96861	360293*

455714 


4.6.1.6.3 Retaining devices 12 mm air gap 20 mm Euro-rebate


					No	No Tricoat
silver	retaining device set SKB-SE/Z Euro-rebate 20 mm			50	455714	465311

4.6.1.7 Striker plates 12 air gap 24 mm Euro-rebate


34934 

4.6.1.7.1 Striker plates 12 air gap 24 mm Euro-rebate

					No	No Tricoat
silver	striker plate 24mm rebate depth, 13mm offset	angled screw-fixing		200	34934	359575*
			- 1 mm gasket-compression	200	359297	361346*
	striker plate HG 24mm rebate depth, 13mm offset	angled screw-fixing		200	360849	
	striker plate 24mm rebate depth, 13mm offset without reinforcement rings	angled screw-fixing		100	362812	


364952 

4.6.1.7.2 Striker plates i.S. 12 mm air gap 24 mm Euro-rebate

					No	No Tricoat
silver	striker plate i.S. 24mm rebate depth, 13mm offset	angled screw-fixing		100	364952	366635
	without reinforcement rings		- 1 mm gasket-compression	100	364953	366636

465939 

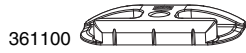
4.6.1.7.3 Retaining devices 12 mm air gap 24 mm Euro-rebate

					No	No Tricoat
silver	retaining device set SKB-SE/Z Euro-rebate 24 mm			50	465939	466603

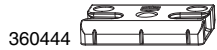
* Availability and delivery time on request.



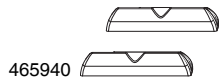
4.6.1.8 Striker plates 12 mm air gap 30 mm Euro-rebate



4.6.1.8.1 Striker plates 12 mm air gap 30 mm Euro-rebate				No	No Tricoat
silver	striker plate 30mm rebate depth, 13mm offset	angled screw-fixing	200	360443	362304
	striker plate HG 30mm rebate depth, 13mm offset	angled screw-fixing	200	361100	



4.6.1.8.2 Striker plates i.S. 12 mm air gap 30 mm Euro-rebate				No	No Tricoat
silver	striker plate i.S. 30mm rebate depth, 13mm offset	angled screw-fixing	100	360444	362305

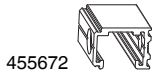


4.6.1.8.3 Retaining devices 12 mm air gap 30 mm Euro-rebate				No	No Tricoat
silver	retaining device set SKB-SE/Z Euro-rebate 30 mm		50	465940	




4.7 SKB accessories

4.7.1 Profiles in stock lengths for SKB and PAS




455672

4.7.1.1 Guide tracks	L		No	No Tricoat
silver	6.070	10	455672	
brown	6.070	10	467089	
bronze SKB	6.070	10	467088	




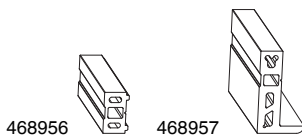
455673

4.7.1.2 Cover for top guide tracks	L		No	No Tricoat
silver	6.080	50	455673	
brown	6.080	50	455675	
white	6.080	50	455674	
cream white RAL 9001	6.080	50	455677	
bronze SKB	6.080	50	455676	




455664

4.7.1.3 Roller tracks	L		No	No Tricoat
silver	6.070	10	455664	
brown	6.070	10	455665	
bronze SKB	6.070	10	455666	



468956


468957

4.7.1.4 Packer for roller tracks and guide tracks		No	No Tricoat
packer 9 mm for guide track SKB/PAS L=3.035mm silver	5	468956¹	
packer 9 mm for roller track SKB/PAS L=3.035mm silver	5	468957¹	

¹ Can be used from overload strength 24 mm




465181

4.7.1.5 Roller cover strip	L		No	No Tricoat
silver	5.170	10	455667	
	2.036	10	465181	
brown	5.170	10	455669	
	2.036	10	465183	
white	5.170	10	455668	
	2.036	10	465182	
cream white RAL 9001	5.170	10	455671	
	2.036	10	465185	
bronze SKB	5.170	10	455670	
	2.036	10	465184	

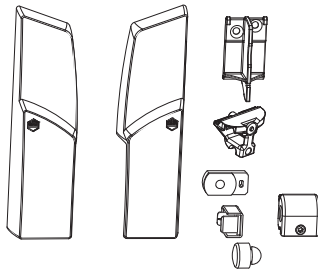


455683

4.7.1.6 Connecting rod	L		No	No Tricoat
connecting rod SKB Ø = 10 mm	3.600	1	455683	



4.7.2 Accessories and individual components SKB and PAS



455648

4.7.2.1 Bag of accessories for SKB and PAS

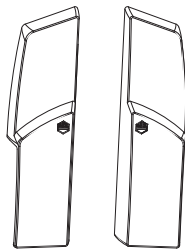


No

No
Tricoat

silver	20	455648 ¹	
cream white RAL 9001	40	455662 ¹	
white	20	455649 ¹	
brown	40	455650 ¹	
bronze SKB	40	455651 ¹	

¹ Contents: 1x cover cap for roller, left, 1x cover cap for roller, right, 1x cover cap for left scissor stay, 1x cover cap for right scissor stay, 2x routing cover caps, 1x control module, 1x bottom stop buffer, 1x to stop buffer.



102237

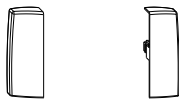
4.7.2.2 Set of cover caps for rollers with reinforcement



No

No
Tricoat

silver	10	102237	
cream white RAL 9001	10	102241	
white	10	102238	
brown	10	102239	
bronze SKB	10	102240	



465351

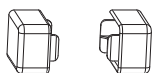
4.7.2.3 Set of cover caps for rollers without reinforcement



No

No
Tricoat

silver	for 100kg version	10	465351	
cream white RAL 9001	for 100kg version	10	465353	
white	for 100kg version	10	465349	
brown	for 100kg version	10	465350	
bronze SKB	for 100kg version	10	465352	



467763

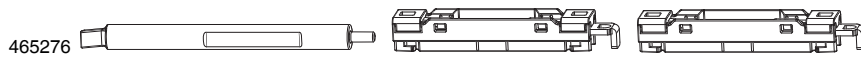
4.7.2.4 Cover caps for guide tracks



No

No
Tricoat

set of cover caps for guide track left/right silver	10	467763	
set of cover caps for guide track left/right white	10	467764	



4.7.2.5 Bag of accessories for guide tracks



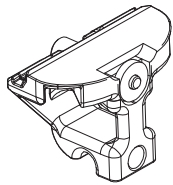
No

No
Tricoat

accessories pack for guide track SKB-S/SE/Z

1

465276



455653

4.7.2.6 Control module



No

No
Tricoat

control module SKB adjustable for diagram D

silver

10

455653¹

brown

10

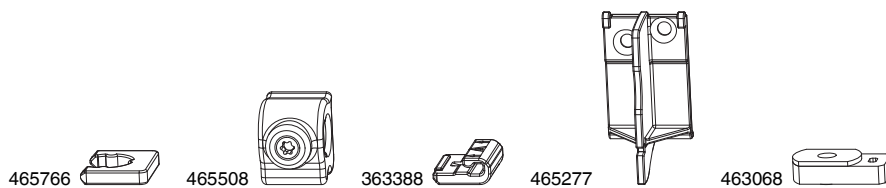
455657¹

bronze SKB

10

455655¹

¹ Only for diagram D



465766

465508

363388

465277

463068

4.7.2.7 Individual components SKB and PAS



No

No
Tricoat

anti-twist device for height adjustment roller SKB

100

465766

rod guide for connecting rod SKB

1

465508

safety catch roller SKB

10

363388

SKG - clip for drive gear SKB

100

467893

support bracket for track cover roller SKB

1

465277

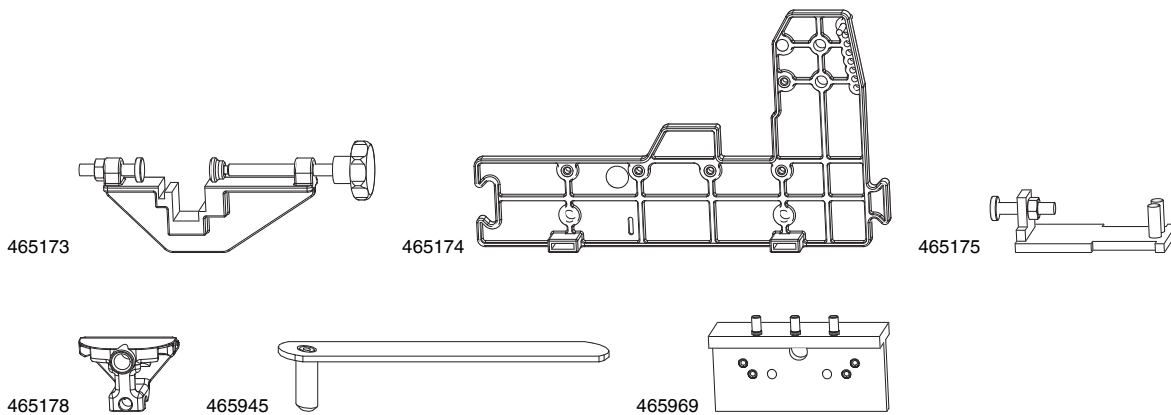
top buffer stop for guide track SKB


50

463068



4.8 Jigs

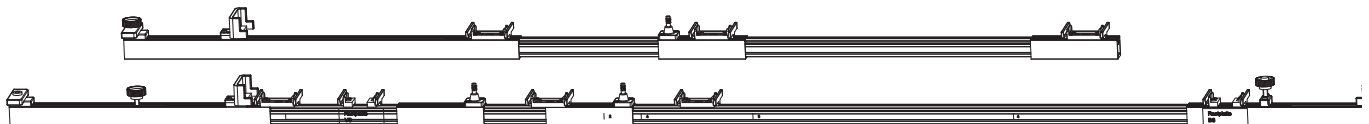



4.8.1 Jigs		No	No Tricoat
clamping jig for positioning the SKB guide track and roller track	1	465173	
jig for aligning screw holes centrally on SKB rollers	1	465174	
installation jig for SKB control module	1	465175	
drill jig for movable SKB control module diagram D	1	465178 ¹	
routing template for SKB-SE retaining device for 4 mm air gap	1	465626	
jig for aligning screw holes centrally on SKB guide track	1	465945	
drill jig for scissor-slider SKB-S/SE	1	465969	

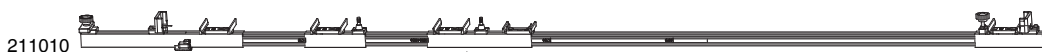
¹ Only for diagram D



4.8.2 Positioning jigs

102303

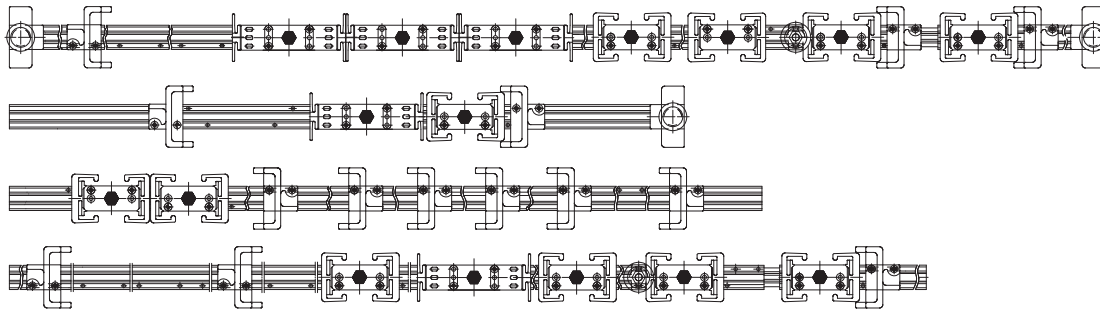


4.8.2.1 Positioning jigs for width connectors/height connectors MULTI TREND		No	No Tricoat
striker positioning jig set for width connector SKB-SE for 48 mm retainer bottom and top	1 ¹	102303	
striker positioning jig set for width connector SKB-SE for 50 mm retainer bottom and top	1 ¹	102304	
jig for height connector SKB-S/SE with retainer for 34943	1	14583	



4.8.2.2 Positioning jigs for width connectors MULTI MATIC			No	No Tricoat
striker positioning jig for width connector SKB-S/SE with 50 mm retainer top	620 - 1.650	1	211010 ¹	
striker positioning jig for width connector SKB-SE bottom with 50 mm retainer	620 - 1.650	1	211268 ¹	

¹ Jigs suitable for drive-gears and height connectors.



10362

4.8.2.3 Positioning jigs for Multi Trend drive gear



No

No
Tricoat

striker positioning jig for drive gear FHH with 48 mm retainer

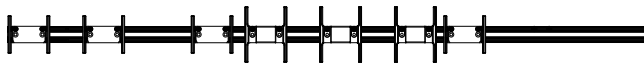
1

10362

striker positioning jig for drive gear FHH with retainer for 12 mm Euro-rebate timber

1

10363



204774

4.8.2.4 Positioning jigs for drive gear/height connector MULTI MATIC



No

No
Tricoat

striker positioning jig MM for drive gear FHH with 48 mm retainer

661 - 1.340

1

204774¹

1.341 - 1.700

1

204775¹

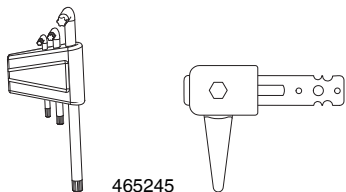
striker positioning jig MM for drive gear FHH for doors with 48 mm retainer

1.701 - 2.450

1

204776¹

¹ Jigs suitable for drive-gears and height connectors.



460339

465245

4.8.3 Jig accessories



No

No
Tricoat

set of Torx screwdrivers TX15 + TX25 + TX40

1


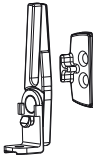
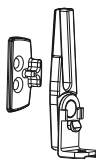
460339

clamp for routing jig for SKB

1

465245

4.9 Profile data sheet accessories for SKB-SE/Z

			
Profile	SKB-SE/Z striker plate set	SKB-Z mishandling-device left	SKB-Z mishandling-device right
Veka Topline MD/AD	455699	455723	455722
Softline 70 AD/MD	455699	455723	455722
Brüggemann AD/MD	455699	455723	455722
Inoutic AD/MD 100/2000AD	455700	455727	455726
Arcade/Elit/Prestige	455700	455727	455726
Aluplast Ideal 4000/5000/6000/8000	455701	455729	455728
Dimex Komfort 6.0	455701	455729	455728
Schüco Corona AS/MD	455701	455729	455728
Rehau S730/Brillant/Thermo Design	455702	455729	455728
Gealan S3000/S7000/S8000	455703	455731	455730
KBE System 70	455703	455731	455730
Kömmerling Gold	455703	455731	455730
Trocal Innonova 70 AD/MD	455704	455733	455732
Alu Fusion/Comfort	455704	455733	455732
Knipping 4010	455704	455733	455732
Kömmerling Eurodur Futur	455705	455735	455734
Kömmerling Eurodur MPF	455705	455735	455734
Kömmerling Eurodur 3S	455705	455735	455734
Aluplast Ideal 2000/3000	455706	455729	455728
Dimex Acord	455706	455729	455728
LB PAD	455706	455729	455728
Schüco Corona CT70/Si82/AD/MD	455706	455729	455728
Gealan S6000	455707	455731	455730
Deceuninck Mondial/Klassik	455707	455731	455730
Komarek Serie Riva 6	455707	455731	455730
Trocal Innonova 2000	455708	455737	455736
Knipping Innonova 70	455708	455737	455736
Knipping SK 4000	455708	455737	455736
Roplasto 6001 MD	455709	455747	455746
Heroal 065	455709	455747	455746
Rehau S702/S705/S707/S709	455709	455747	455746
Edil Plastix/MBU; Milani-Resine	455709	455747	455746
Bröckelmann LK (KSB220)	455709	455747	455746
KBE MD	455710	455749	455748
Deceuninck Mondial 2000	455712	455751	455750
Wymar 2000	455712	455751	455750
Salamander Design 2D und 3D	455713	455753	455752
Salamander Design MD	455713	455753	455752
Aluplast Intertec WD	455715	455755	455754
Trocal Confort	455718	455757	455756
Alphacan System Class	455719	455759	455758
Actual 500	455720	455761	455760

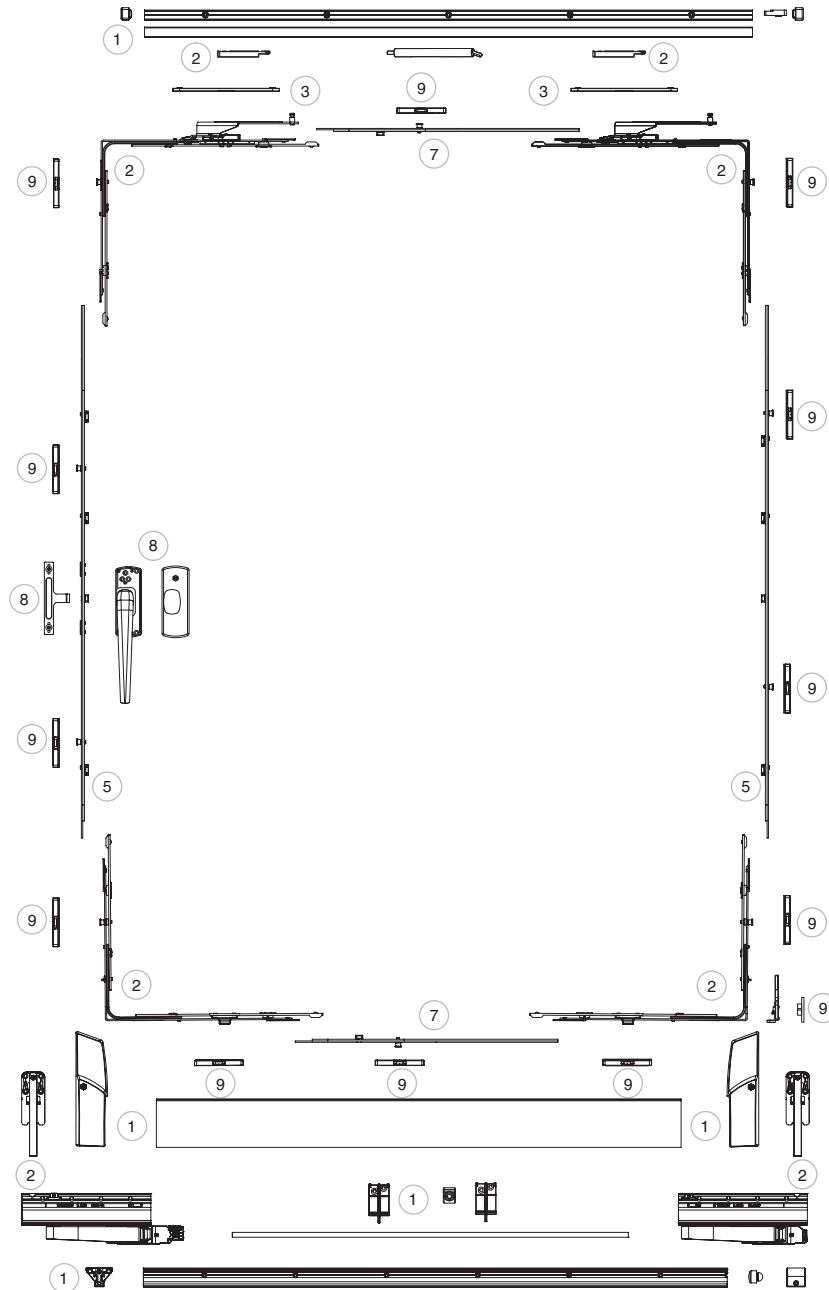


5 SKB-Z

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5 SKB-Z

5.1 Hardware Overview SKB-Z



The 'SKB-Z' tilt&slide hardware is suitable for the implementation of tilt&slide windows and doors with positive control and is suitable for all conventional window profiles made of timber, PVC or timber/aluminium.

A tandem roller must be used for a sash weight above 160 kg.

The active sash must not exceed a total weight of 200 kg.

160 kg: SRW 720 - 2000mm / SRH 900 - 2700mm

200 kg: SRW 960 - 2000mm / SRH 900 - 2700mm

The sash must not exceed 2.5 times the sash width.



Selection guide			Page
①	5.4.1	Profile Packs	213
②	5.5.1.1	Basic pack SKB-Z 160 kg	214
③	5.5.2.1.1	Covers for SKB-Z scissor stay arm	216
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⑧	5.5.6.1	Handle sets SKB-Z	223
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5.2 Diagrams SKB-Z - Hardware itemisation

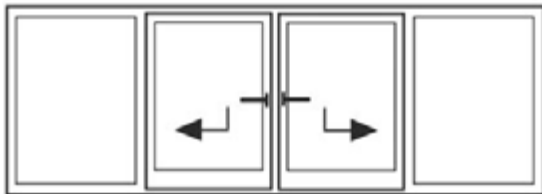
2-sashed unit:

1 sliding sash, 1 fixed glazing; DIN left-handed



4-sashed unit:

2 sliding sashes (with handles), 2 fixed glazings



Order text

- 1 Left-handed basic carton
- 1 Profile set for sash and frame
- 1 SKB-Z cover caps for scissor stay arm
- 1 SKB-Z drive-gear set
- 1 SKB-Z width connector set
- 1 SKB-SE/Z retaining device set
- Striker plates
- 1 SKB-Z handle set
- 1 SKB-Z mishandling-device pack (optional)

Order text

- 1 Basic carton pack for diagram C
- 2 Profile sets for sash and frame
- 2 SKB-Z cover caps for scissor stay arm
- 1 SKB-Z drive-gear set
- 1 SKB-Z width connector set for diagram C
- 2 SKB-Z width connector sets
- 2 SKB-SE/Z striker plate set
- Striker plates
- 2 Handle packs
- 2 SKB-Z mishandling-device pack (optional)

5.3 Operating and maintenance instructions SKB-Z

Safety and neglect instruction

Risk of injury
(e.g. catching one's fingers) in the opening gap between sash and frame.

Risk of falling.

Avoid additional loading of the sash.

Be sure to prevent any obstructions in the opening gap between the sash and the frame.

General advice for your windows

A good window can do more than just let in light: it is a design element, and at the same time a component that must satisfy demanding technical requirements. Apart from the essential care of the fittings components, you should also constantly check the surface finish, the glazing, and the gaskets and immediately repair any defective areas. Use only water with a mild soap solution for cleaning purposes no caustic agents!

Do not paint over the fittings!

Window adjustments

Settings and adjustments for the fittings (including inserting and removing the sashes) must only be carried out by specialists.

Three heights

- Raise the adjustment lock TX 40
- Adjust the height (+4 mm, -2 mm)
- Reposition the adjustment lock

Correct the parallel setting of the roller

- Loosen the connecting rod on the roller at the handle side
- Push the connecting rod to the left or right to position the rear roller parallel to the roller unit on the handle side
- Fix the connecting rod

Correct the sash entry

Compression

Less gasket-compression
Original position with the flat surface faced towards the eccentric cam
More gasket-compression

Locking cam
Rebate side
i.S. cam

Inserting and removing the sash

Specialists must pay particular attention to the following points, since the installation no longer lies within the sphere of influence of the fittings manufacturer!

- Insert the scissor backset from below into the centre slider openings until these snap into place with an audible "click"! Correctly secured position of the screw-in backsets in the sliders
- Pullpress down the scissor arms to check that the connections are secure

b.) When installed correctly, the security slider on the side snaps in flush with the edges of the slider housing.

CAUTION: If the scissor backsets do not snap in properly, the window sash will not be held securely and may fall out. Serious personal injuries may result.

- Activate the lever lock! Move the lever lock on both rollers back until they snap into place at the marked position

CAUTION: If the lever lock is not (or not correctly) in place at the marked position, the window sash will not be secured properly. Serious personal injuries may result.

We strongly recommend window and door buyers, to have their windows and doors installed by authorised specialists.

The same care and maintenance instructions apply to all window types that are not specifically mentioned in these instructions (e.g. System C slide & tilt windows!)

MAYER & CO BESCHLÄGE GMBH
ALPENSTRAßE 173
A-5020 SALZBURG
TEL: +43 (0)662 6196-0
FAX: +43 (0)662 6196-1449
E-Mail: mace@maco.at
www.maco.at

MACO DOOR & WINDOW HARDWARE (U.K.) LTD
CASTLE ROAD, EUROLINK BUSINESS CENTRE
SITTINGBOURNE, KENT
TEL +44 (0)1795 433900
FAX +44 (0)1795 433902
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www.maco.uk.com

Order No. 750497_EN
Date created: October 2008
Change date: February 2011
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TECHNOLOGY IN MOTION

Maintenance

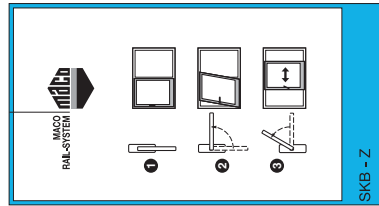
To maintain the functionality of slide & tilt fittings (SKB) for windows and French door sashes, the following maintenance work must be performed annually:

- Safety-relevant fittings must be checked for wear regularly.
- Lubricate all movable parts and locking points of the slide & tilt fittings. ↴
- Use only those types of cleaning and maintenance agents that do not affect the corrosion protection of the fittings components!

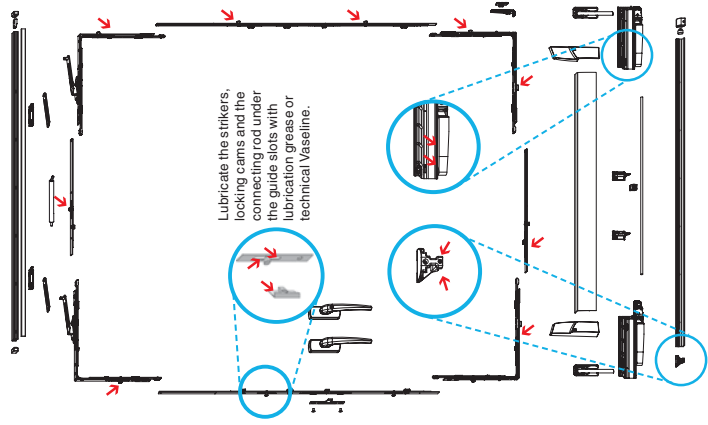
Product liability advice

- Your windows and doors have been equipped with a high-quality slide & tilt fittings. Their operation is straightforward and trouble-free; nevertheless you should read these instructions carefully and adhere to the operation advice.
In your own interest, please do not forget to read the safety and neglect instructions!
- Keep these operation and maintenance instructions safe in case needed and also inform other users of the contents of these instructions.
- Check as to whether an operation sticker has been applied to the window or if one is necessary.
- In order to ensure that your windows are operational for years to come, please adhere to the care and maintenance instructions!

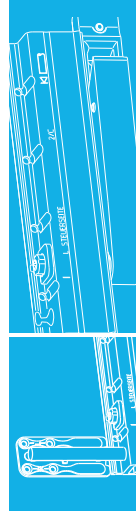
Operation



- 1 Closed
- 2 Tilt
- 3 Open/slide



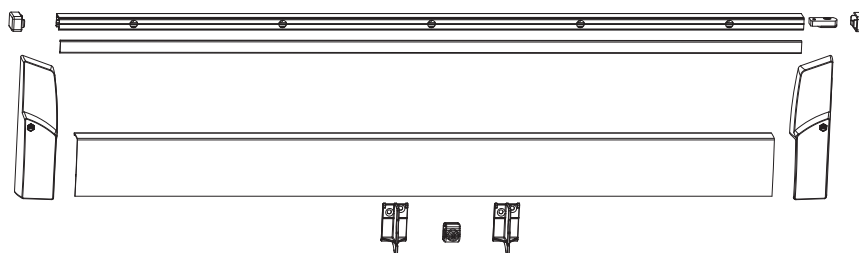
**MACO
RAIL-SYSTEMS
SLIDING FITTINGS**



Operation and maintenance instructions
Slide & tilt fittings

SKB
Positive control

5.4 Sash/frame components



466052

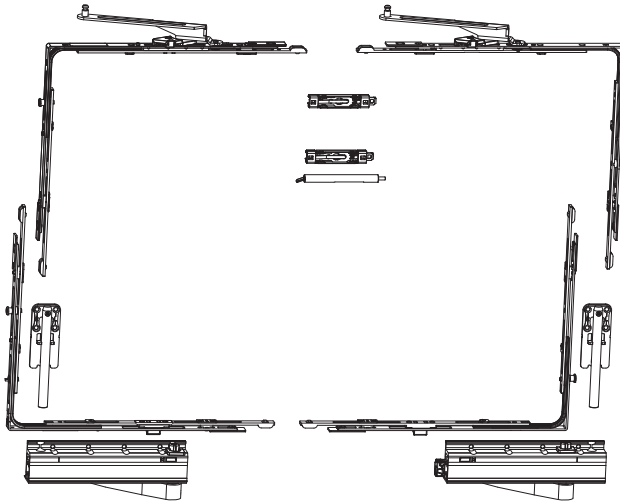


5.4.1 Profile Packs			L		No	No Tricoat	
profile set: frame and sash SKB	silver	size 1	620 - 900	1.930	1	466052 ¹	
		size 2	901 - 1.050	2.230	1	466053 ¹	
		size 3	1.051 - 1.250	2.630	1	466054 ¹	
		size 4	1.251 - 1.450	3.030	1	466055 ¹	
		size 5	1.451 - 1.650	3.430	1	466056 ¹	
		size 6	1.651 - 2.000	4.130	1	466057 ¹	
	cream white RAL 9001	size 1	620 - 900	1.930	1	466076 ¹	
		size 2	901 - 1.050	2.230	1	466077 ¹	
		size 3	1.051 - 1.250	2.630	1	466078 ¹	
		size 4	1.251 - 1.450	3.030	1	466079 ¹	
		size 5	1.451 - 1.650	3.430	1	466080 ¹	
		size 6	1.651 - 2.000	4.130	1	466081 ¹	
	white	size 1	620 - 900	1.930	1	466058 ¹	
		size 2	901 - 1.050	2.230	1	466059 ¹	
		size 3	1.051 - 1.250	2.630	1	466060 ¹	
		size 4	1.251 - 1.450	3.030	1	466061 ¹	
		size 5	1.451 - 1.650	3.430	1	466062 ¹	
		size 6	1.651 - 2.000	4.130	1	466063 ¹	
	brown	size 1	620 - 900	1.930	1	466064 ¹	
		size 2	901 - 1.050	2.230	1	466065 ¹	
		size 3	1.051 - 1.250	2.630	1	466066 ¹	
		size 4	1.251 - 1.450	3.030	1	466067 ¹	
		size 5	1.451 - 1.650	3.430	1	466068 ¹	
		size 6	1.651 - 2.000	4.130	1	466069 ¹	
bronze SKB	size 1	620 - 900	1.930	1	466070 ¹		
	size 2	901 - 1.050	2.230	1	466071 ¹		
	size 3	1.051 - 1.250	2.630	1	466072 ¹		
	size 4	1.251 - 1.450	3.030	1	466073 ¹		
	size 5	1.451 - 1.650	3.430	1	466074 ¹		
	size 6	1.651 - 2.000	4.130	1	466075 ¹		

¹ Contents: 1 x guide track, 1 x guide cover, 2 x guide cover caps, 1 x top buffer stop, 2 x scissor-stay sliders, 1 x slider release, 2 x scissor stay arm cover caps, 1 x roller cover strip, 1 x left roller cover cap, 1 x right roller cover cap, 1 x connecting rod, 1 x roller track, 1 x control module, 1 x bottom buffer stop, 1 x cover support bracket for roller cover strip (2 pcs. from size 5), 1 x connecting-rod support-block (from size 5)

5.5 Sash components

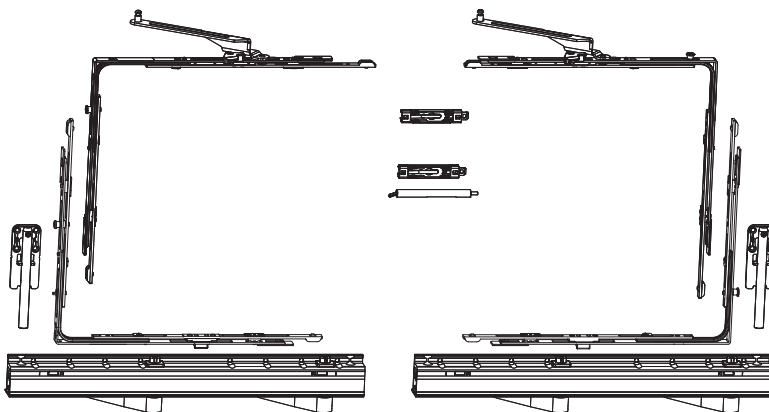
5.5.1 Roller Packs



455506

5.5.1.1 Basic pack SKB-Z 160 kg				kg	cube	No	No Tricoat
right	160kg	13mm offset	silver	160	1	455508 ¹	
		9mm offset	silver	160	1	455509 ¹	
left	160kg	13mm offset	silver	160	1	455506 ¹	
		9mm offset	silver	160	1	455507 ¹	

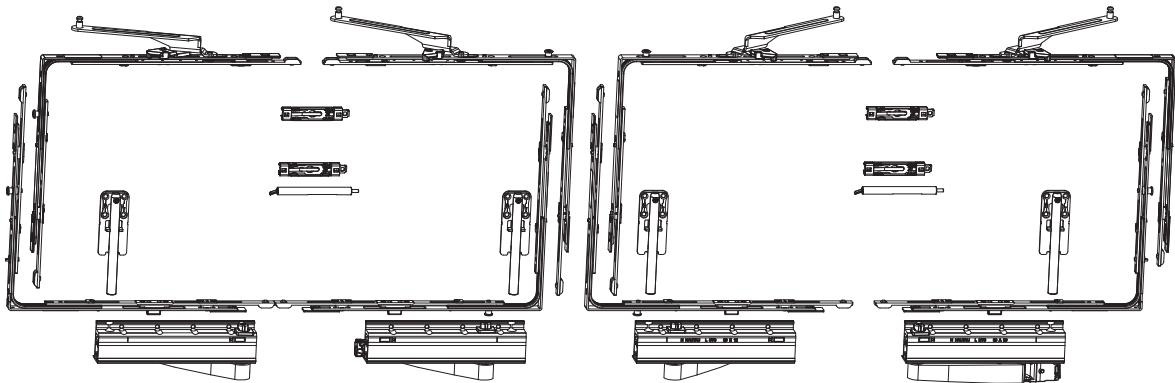
¹ Contents: 1 x drive-gear sided roller, 1 x hinge-sided roller, 2 x reinforcement brackets, 2 x bottom corner elements with snapper catch, 2 x top corner elements with scissor stay



455510

5.5.1.2 Basic pack SKB-Z 200 kg				kg	cube	No	No Tricoat
right	200kg	13mm offset	silver	200	1	455511 ¹	
		9mm offset	silver	200	1	455513 ¹	
left	200kg	13mm offset	silver	200	1	455510 ¹	
		9mm offset	silver	200	1	455512 ¹	

¹ Contents: 1 x drive-gear sided tandem roller, 1 x hinge-sided tandem roller, 2 x reinforcement brackets, 2 x bottom corner elements with snapper catch, 2 x top corner elements with scissor stay



455514

5.5.1.3 Basic pack SKB-Z for diagram C 160 kg



for diagram C 160kg

13mm offset

silver

160

1

455514¹

9mm offset

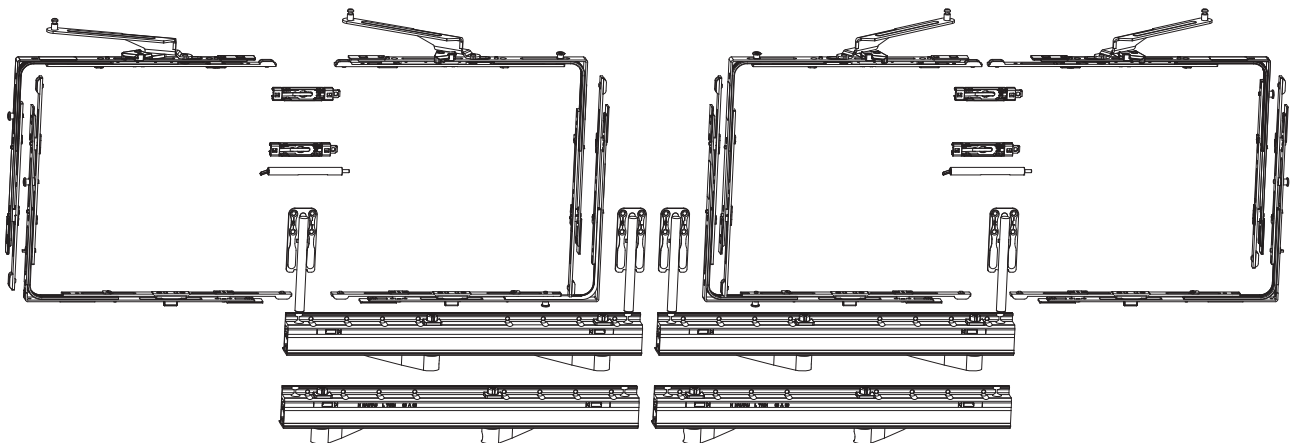
silver

160

1

455515¹

¹ Contents: 1 x left drive-gear sided roller, 1 x left hinge-sided roller, 1 x right drive-gear sided roller, 1 x right drive-gear sided roller, 4 x reinforcement brackets, 2 x coupling bars, 4 x corner elements with snapper catch, 4 x corner elements with scissor stay



465372

5.5.1.4 Basic pack SKB-Z for diagram C 200 kg



for diagram C 200 kg

13mm offset

silver

200

1

465372¹

9mm offset

silver

200

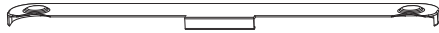
1

465373¹

¹ Contents: 1 x tandem roller on drive gear side left, 1 x tandem roller on hinge side left, 1 x tandem roller on drive gear side right, 1 x tandem roller on hinge side rights, 4 x reinforcement, 2 x connecting strap, 4 x corner element with snapper, 4 x corner element with scissor stay

5.5.2 Scissor stays

5.5.2.1 Accessories and individual components for scissor stays



455652 

5.5.2.1.1 Covers for SKB-Z scissor stay arm



No

No
Tricoat

silver	25	455654 ¹	
cream white RAL 9001	25	455660 ¹	
white	25	455652 ¹	
brown	25	455656 ¹	
bronze SKB	25	455658 ¹	

¹ Contents: 2 x cover caps

5.5.3 Drive gears

5.5.3.1 Drive gears SKB-Z



455525

5.5.3.1.1 Drive gear set SKB-Z BS 0

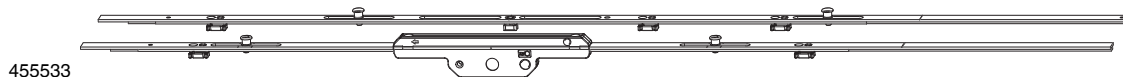


No

No
Tricoat

silver	size	BS	0	450	900 - 1.100	0	5	455523 ¹	
	size 1	BS 0	0	450	900 - 1.100	0	5	455523 ¹	
	size 2	BS 0	1	450	1.101 - 1.300	1	5	455524 ¹	
	size 3	BS 0	4	650	1.301 - 1.500	2	5	455525 ¹	
	size 4	BS 0	4	650	1.501 - 1.700	2	5	455526 ¹	
	size 5	BS 0	4	950	1.701 - 1.900	2	5	455527 ¹	
	size 6	BS 0	4	950	1.901 - 2.100	2	5	455528 ¹	
	size 7	BS 0	4	950	2.101 - 2.300	2	5	455529 ¹	
	size 8	BS 0	4	950	2.301 - 2.400	2	5	455530 ¹	

¹ Contents: 1 x drive-gear, 1 x height connector



455533

5.5.3.1.2 Drive gear set SKB-Z BS 17.5



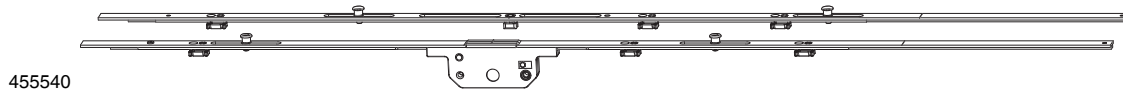
No

No
Tricoat

silver	size	BS	17.5	450	900 - 1.100	0	5	455531 ¹	
	size 1	BS 17.5	0	450	900 - 1.100	0	5	455531 ¹	
	size 2	BS 17.5	2	450	1.101 - 1.300	1	5	455532 ¹	
	size 3	BS 17.5	4	650	1.301 - 1.500	2	5	455533 ¹	
	size 4	BS 17.5	4	650	1.501 - 1.700	2	5	455534 ¹	
	size 5	BS 17.5	4	950	1.701 - 1.900	2	5	455535 ¹	
	size 6	BS 17.5	4	950	1.901 - 2.100	2	5	455536 ¹	
	size 7	BS 17.5	4	950	2.101 - 2.300	2	5	455537 ¹	
	size 8	BS 17.5	4	950	2.301 - 2.400	2	5	455538 ¹	

¹ Contents: 1 x drive-gear, 1 x height connector

5.5.3.1.3 Drive gear set SKB-Z BS 30



455540

5.5.3.1.3.1 Drive gear set SKB-Z BS 30



No

No
Tricoat

silver	size	BS	30	450	900 - 1.100	0	5	465732 ¹	
	size 1	BS 30	0	450	900 - 1.100	0	5	465732 ¹	
	size 2	BS 30	2	450	1.101 - 1.300	1	5	455539 ¹	
	size 3	BS 30	4	650	1.301 - 1.500	2	5	455540 ¹	
	size 4	BS 30	4	650	1.501 - 1.700	2	5	455541 ¹	
	size 5	BS 30	4	950	1.701 - 1.900	2	5	455542 ¹	
	size 6	BS 30	4	950	1.901 - 2.100	2	5	455543 ¹	
	size 7	BS 30	4	950	2.101 - 2.300	2	5	455544 ¹	
	size 8	BS 30	4	950	2.301 - 2.400	2	5	455545 ¹	

¹ Contents: 1 x drive-gear, 1 x height connector



455546

5.5.3.1.3.2 Drive gear set SKB-Z BS 30 lockable PC								No	No Tricoat
silver	size 5	BS 30	4	950	1.701 - 1.900	2	5	455546 ¹	
	size 6	BS 30	4	950	1.901 - 2.100	2	5	455547 ¹	
	size 7	BS 30	4	950	2.101 - 2.300	2	5	455548 ¹	
	size 8	BS 30	4	950	2.301 - 2.400	2	5	455549 ¹	

¹ Contents: 1 x drive-gear, 1 x height connector



455550

5.5.3.1.3.3 Drive gear set SKB-Z BS 30 for diagram C							No	No Tricoat
silver	size 2	BS 30	450	1.101 - 1.300	5	455550 ¹		
	size 3	BS 30	650	1.301 - 1.500	5	455551 ¹		
	size 4	BS 30	650	1.501 - 1.700	5	455552 ¹		
	size 5	BS 30	950	1.701 - 1.900	5	455553 ¹		
	size 6	BS 30	950	1.901 - 2.100	5	455554 ¹		
	size 7	BS 30	950	2.101 - 2.300	5	455555 ¹		
	size 8	BS 30	950	2.301 - 2.400	5	455556 ¹		

¹ Contents: 1 x drive-gear, 1 x height connector

5.5.3.1.4 Drive gear set SKB-Z BS 35



455557

5.5.3.1.4.1 Drive gear set SKB-Z BS 35							No	No Tricoat	
silver	size 1	BS 35	0	450	900 - 1.100	0	5	465970 ¹	
	size 2	BS 35	2	450	1.101 - 1.300	1	5	465971 ¹	
	size 3	BS 35	4	650	1.301 - 1.500	2	5	465972 ¹	
	size 4	BS 35	4	650	1.501 - 1.700	2	5	465973 ¹	
	size 5	BS 35	4	950	1.701 - 1.900	2	5	455557 ¹	
	size 6	BS 35	4	950	1.901 - 2.100	2	5	455558 ¹	
	size 7	BS 35	4	950	2.101 - 2.300	2	5	455559 ¹	
	size 8	BS 35	4	950	2.301 - 2.400	2	5	455560 ¹	

¹ Contents: 1 x drive-gear, 1 x height connector



455561

5.5.3.1.4.2 Drive gear set SKB-Z BS 35 lockable PC							No	No Tricoat	
silver	size 5	BS 35	4	950	1.701 - 1.900	2	5	455561 ¹	
	size 6	BS 35	4	950	1.901 - 2.100	2	5	455562 ¹	
	size 7	BS 35	4	950	2.101 - 2.300	2	5	455563 ¹	
	size 8	BS 35	4	950	2.301 - 2.400	2	5	455564 ¹	

¹ Contents: 1 x drive-gear, 1 x height connector



455565



5.5.3.1.4.3 Drive gear set SKB-Z BS 35 for diagram C



No

No
Tricoat

silver	size	BS							
	size 2	BS 35	450	1.101 - 1.300	5	465982¹			
	size 3	BS 35	650	1.301 - 1.500	5	465983¹			
	size 4	BS 35	650	1.501 - 1.700	5	465984¹			
	size 5	BS 35	950	1.701 - 1.900	5	455565¹			
	size 6	BS 35	950	1.901 - 2.100	5	455566¹			
	size 7	BS 35	950	2.101 - 2.300	5	455567¹			
	size 8	BS 35	950	2.301 - 2.400	5	455568¹			

¹ Contents: 1 x drive-gear, 1 x height connector

5.5.3.1.5 Drive gear set SKB-Z BS 40

455571



5.5.3.1.5.1 Drive gear set SKB-Z BS 40



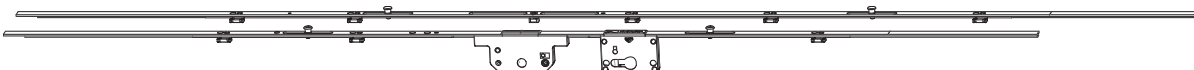
No

No
Tricoat

silver	size	BS							
	size 1	BS 40	0	450	900 - 1.100	0	5	455569¹	
	size 2	BS 40	2	450	1.101 - 1.300	1	5	455570¹	
	size 3	BS 40	4	650	1.301 - 1.500	2	5	455571¹	
	size 4	BS 40	4	650	1.501 - 1.700	2	5	455572¹	
	size 5	BS 40	4	950	1.701 - 1.900	2	5	455573¹	
	size 6	BS 40	4	950	1.901 - 2.100	2	5	455574¹	
	size 7	BS 40	4	950	2.101 - 2.300	2	5	455575¹	
	size 8	BS 40	4	950	2.301 - 2.400	2	5	455576¹	

¹ Contents: 1 x drive-gear, 1 x height connector

455577



5.5.3.1.5.2 Drive gear set SKB-Z BS 40 lockable PC



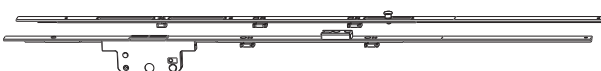
No

No
Tricoat

silver	size	BS							
	size 5	BS 40	4	950	1.701 - 1.900	2	5	455577¹	
	size 6	BS 40	4	950	1.901 - 2.100	2	5	455578¹	
	size 7	BS 40	4	950	2.101 - 2.300	2	5	455579¹	
	size 8	BS 40	4	950	2.301 - 2.400	2	5	455580¹	

¹ Contents: 1 x drive-gear, 1 x height connector

455581



5.5.3.1.5.3 Drive gear set SKB-Z BS 40 for diagram C



No

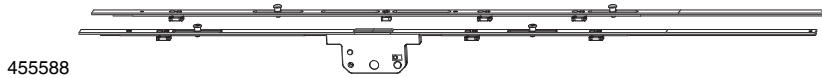
No
Tricoat

silver	size	BS							
	size 2	BS 40	450	1.101 - 1.300	5	455581¹			
	size 3	BS 40	650	1.301 - 1.500	5	455582¹			
	size 4	BS 40	650	1.501 - 1.700	5	455583¹			
	size 5	BS 40	950	1.701 - 1.900	5	455584¹			
	size 6	BS 40	950	1.901 - 2.100	5	455585¹			
	size 7	BS 40	950	2.101 - 2.300	5	455586¹			
	size 8	BS 40	950	2.301 - 2.400	5	455587¹			







¹ Contents: 1 x drive-gear, 1 x height connector



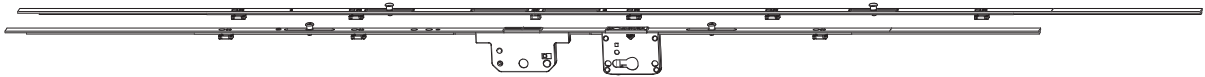
5.5.3.1.6 Drive gear set SKB-Z BS 45









455588

5.5.3.1.6.1 Drive gear set SKB-Z BS 45								No	No Tricoat
silver	size 1	BS 45	0	450	900 - 1.100	0	5	465974 ¹	
	size 2	BS 45	2	450	1.101 - 1.300	1	5	465975 ¹	
	size 3	BS 45	4	650	1.301 - 1.500	2	5	465976 ¹	
	size 4	BS 45	4	650	1.501 - 1.700	2	5	465977 ¹	
	size 5	BS 45	4	950	1.701 - 1.900	2	5	455588 ¹	
	size 6	BS 45	4	950	1.901 - 2.100	2	5	455589 ¹	
	size 7	BS 45	4	950	2.101 - 2.300	2	5	455590 ¹	
	size 8	BS 45	4	950	2.301 - 2.400	2	5	455591 ¹	

¹ Contents: 1 x drive-gear, 1 x height connector







455592

5.5.3.1.6.2 Drive gear set SKB-Z BS 45 lockable PC								No	No Tricoat
silver	size 5	BS 45	4	950	1.701 - 1.900	2	5	455592 ¹	
	size 6	BS 45	4	950	1.901 - 2.100	2	5	455593 ¹	
	size 7	BS 45	4	950	2.101 - 2.300	2	5	455594 ¹	
	size 8	BS 45	4	950	2.301 - 2.400	2	5	455595 ¹	

¹ Contents: 1 x drive-gear, 1 x height connector

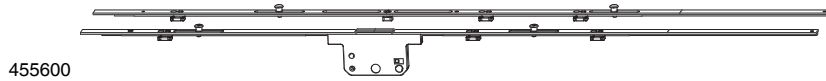


455596

5.5.3.1.6.3 Drive gear set SKB-Z BS 45 for diagram C						No	No Tricoat
silver	size 2	BS 45	450	1.101 - 1.300	5	465985 ¹	
	size 3	BS 45	650	1.301 - 1.500	5	465986 ¹	
	size 4	BS 45	650	1.501 - 1.700	5	465987 ¹	
	size 5	BS 45	950	1.701 - 1.900	5	455596 ¹	
	size 6	BS 45	950	1.901 - 2.100	5	455597 ¹	
	size 7	BS 45	950	2.101 - 2.300	5	455598 ¹	
	size 8	BS 45	950	2.301 - 2.400	5	455599 ¹	

¹ Contents: 1 x drive-gear, 1 x height connector

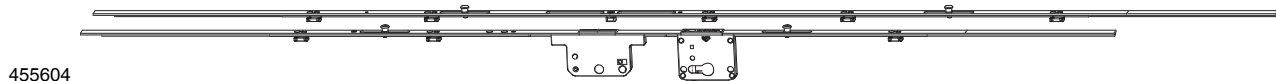
5.5.3.1.7 Drive gear set SKB-Z BS 50



455600

5.5.3.1.7.1 Drive gear set SKB-Z BS 50								No	No Tricoat
silver	size 1	BS 50	0	450	900 - 1.100	0	5	465978 ¹	
	size 2	BS 50	2	450	1.101 - 1.300	1	5	465979 ¹	
	size 3	BS 50	4	650	1.301 - 1.500	2	5	465980 ¹	
	size 4	BS 50	4	650	1.501 - 1.700	2	5	465981 ¹	
	size 5	BS 50	4	950	1.701 - 1.900	2	5	455600 ¹	
	size 6	BS 50	4	950	1.901 - 2.100	2	5	455601 ¹	
	size 7	BS 50	4	950	2.101 - 2.300	2	5	455602 ¹	
	size 8	BS 50	4	950	2.301 - 2.400	2	5	455603 ¹	

¹ Contents: 1 x drive-gear, 1 x height connector



455604

5.5.3.1.7.2 Drive gear set SKB-Z BS 50 lockable PC								No	No Tricoat
silver	size 5	BS 50	4	950	1.701 - 1.900	2	5	455604 ¹	
	size 6	BS 50	4	950	1.901 - 2.100	2	5	455605 ¹	
	size 7	BS 50	4	950	2.101 - 2.300	2	5	455606 ¹	
	size 8	BS 50	4	950	2.301 - 2.400	2	5	455607 ¹	

¹ Contents: 1 x drive-gear, 1 x height connector



455608

5.5.3.1.7.3 Drive gear set SKB-Z BS 50 for diagram C						No	No Tricoat
silver	size 2	BS 50	450	1.101 - 1.300	5	465988 ¹	
	size 3	BS 50	650	1.301 - 1.500	5	465989 ¹	
	size 4	BS 50	650	1.501 - 1.700	5	465990 ¹	
	size 5	BS 50	950	1.701 - 1.900	5	455608 ¹	
	size 6	BS 50	950	1.901 - 2.100	5	455609 ¹	
	size 7	BS 50	950	2.101 - 2.300	5	455610 ¹	
	size 8	BS 50	950	2.301 - 2.400	5	455611 ¹	

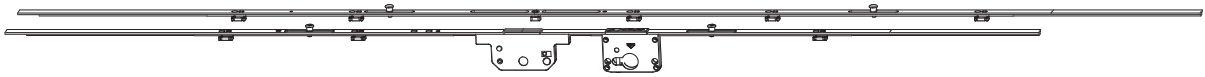
¹ Contents: 1 x drive-gear, 1 x height connector



455790

5.5.3.1.8 Lockable drive gear set SKB-Z BS 30 mm with RC								No	No Tricoat
silver	size 5	BS 30	4	950	1.701 - 1.900	2	5	455790 ¹	
	size 6	BS 30	4	950	1.901 - 2.100	2	5	455791 ¹	
	size 7	BS 30	4	950	2.101 - 2.300	2	5	455792 ¹	
	size 8	BS 30	4	950	2.301 - 2.400	2	5	455793 ¹	

¹ Contents: 1 x drive-gear, 1 x height connector



455794

5.5.3.1.9 Drive gear set SKB-Z BS 40 lockable RC

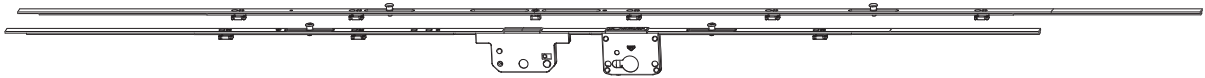


No

No
Tricoat

silver	size 5	BS 40	4	950	1.701 - 1.900	2	5	455794¹
	size 6	BS 40	4	950	1.901 - 2.100	2	5	455795¹
	size 7	BS 40	4	950	2.101 - 2.300	2	5	455796¹
	size 8	BS 40	4	950	2.301 - 2.400	2	5	455797¹

¹ Contents: 1 x drive-gear, 1 x height connector



466597

5.5.3.1.10 Drive gear set SKB-Z BS 45 lockable RC



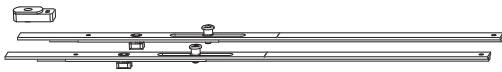
No

No
Tricoat

silver	size 5	BS 45	4	950	1.701 - 1.900	2	5	466597¹
	size 6	BS 45	4	950	1.901 - 2.100	2	5	466598¹
	size 7	BS 45	4	950	2.101 - 2.300	2	5	466599¹
	size 8	BS 45	4	950	2.301 - 2.400	2	5	466600¹

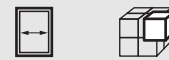
¹ Contents: 1 x drive-gear, 1 x height connector

5.5.4 Width connectors



455519

5.5.4.1 Width connector set SKB-Z



No

No
Tricoat

with 1 i.S.	silver	size 1	720 - 1.050	5	455519^{1,2}
		size 2	1.051 - 1.250	5	465739²
		size 3	1.251 - 1.450	5	455520²
with 2 i.S.	silver	size 4	1.451 - 1.650	5	465740²
		size 5	1.651 - 1.850	5	465741²
		size 6	1.851 - 2.000	5	465742²

¹ Bei 200 kg FB = 960 - 1050mm

² Contents: 2 x width connectors

5.5.5 Extension piece



455612



465256

5.5.5.1 Extension piece SKB-Z

L



No

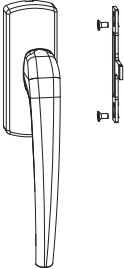
No
Tricoat

SKB-Z extension piece with 1 contact sensor	200	silver	10	465387
SKB-Z extension piece croppable to 200 mm with 1 i.S.	400	silver	10	455612
extension for lever-operated drive-gear T&S-PC croppable to 200 mm	400	silver	10	465256



5.5.6 Handles

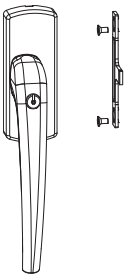
5.5.6.1 Handle sets SKB-Z

5.5.6.1.1 Standard design





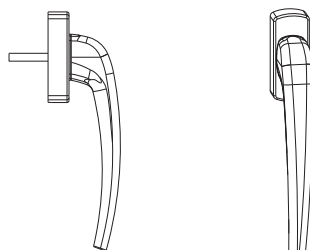
455685

5.5.6.1.1.1 Handle set SKB-Z with gear				No	No Tricoat
bronze SKB	right	without pin	1	455688	
	left	without pin	1	455687	
brown	right	without pin	1	455686	
	left	without pin	1	455685	
cream white RAL 9001	right	without pin	1	455690	
	left	without pin	1	455689	
silver	right	without pin	1	455692	
	left	without pin	1	455691	
titanium	right	without pin	1	455696	
	left	without pin	1	455695	
white	right	without pin	1	455694	
	left	without pin	1	455693	






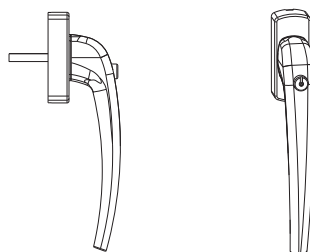
455762

5.5.6.1.1.2 Handle set SKB-Z with gear with locking cylinder				No	No Tricoat
bronze SKB	right	without pin	1	455765	
	left	without pin	1	455764	
brown	right	without pin	1	455763	
	left	without pin	1	455762	
cream white RAL 9001	right	without pin	1	455767	
	left	without pin	1	455766	
silver	right	without pin	1	455769	
	left	without pin	1	455768	
titanium	right	without pin	1	465375	
	left	without pin	1	465374	
white	right	without pin	1	455771	
	left	without pin	1	455770	






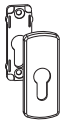
455772

5.5.6.1.1.3 Handle set SKB-Z interior		 	No	No Tricoat
bronze SKB	pin 45	8 1	455773	
brown	pin 45	8 1	455772	
cream white RAL 9001	pin 45	8 1	465347	
silver	pin 45	8 1	455774	
titanium	pin 45	8 1	465376	
white	pin 45	8 1	455775	






455776

5.5.6.1.1.4 Handle set SKB-Z interior with locking cylinder		 	No	No Tricoat
bronze SKB	pin 45	8 1	455777	
brown	pin 45	8 1	455776	
cream white RAL 9001	pin 45	8 1	465348	
silver	pin 45	8 1	455778	
titanium	pin 45	8 1	465377	
white	pin 45	8 1	455779	






455780

5.5.6.1.1.5 Handle set SKB-Z interior for PC				No	No Tricoat
bronze SKB	pin 112	8	1	455781	
brown	pin 112	8	1	455780	
cream white RAL 9001	pin 112	8	1	455782	
silver	pin 112	8	1	455783	
titanium	pin 112	8	1	465379	
white	pin 112	8	1	455784	






455785

5.5.6.1.1.6 Handle set SKB-Z exterior for PC				No	No Tricoat
bronze SKB	without pin	8	1	455786	
brown	without pin	8	1	455785	
cream white RAL 9001	without pin	8	1	455787	
silver	without pin	8	1	455788	
titanium	without pin	8	1	465378	
white	without pin	8	1	455789	





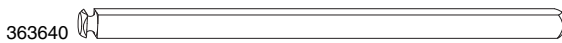
11164



5.5.6.1.1.7 Cover plate for interior RC				No	No Tricoat
silver	anodised		20	11316	
titanium	anodised		20	11166	
traffic white RAL 9016	coated		20	11164	

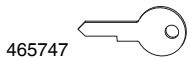



11152

5.5.6.1.1.8 Cover plate for exterior RC			No	No Tricoat
silver	anodised	20	11156	
titanium	anodised	20	11159	
traffic white RAL 9016	coated	20	11152	



5.5.6.1.2 Spindle	L			No	No Tricoat
spindle	162	8	50	363640	

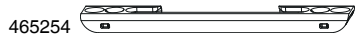


5.5.6.1.3 Spare key for SKB-Z Key locking handle		No	No Tricoat
key for locking handle for SKB-Z	20	465747	


5.6 Frame components

5.6.1 Striker plates

5.6.1.1 Striker plates for 4 mm air gap




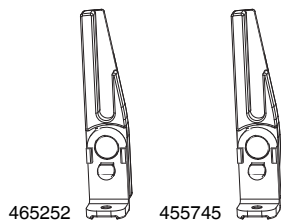
5.6.1.1.1 Striker plates SKB-Z 4 mm air gap

				No	No Tricoat
silver	striker plate EH for 4 mm air gap, 9 mm offset	SKB-Z	100	465254	
	striker plate EH for 4 mm air gap, 13 mm offset	SKB-Z	100	465255	




5.6.1.1.2 Latching plate set SKB-SE/Z for 4 mm air gap

				No	No Tricoat
silver	retaining device set SKB-Z for 4 mm air gap, 9 mm offset		50	455717	
	retaining device set SKB-Z for 4 mm air gap, 13 mm offset		50	465253	
	retaining device set SKB-Z for 4 mm air gap, 9 mm offset	for diagram C	50	465930	
	retaining device set SKB-Z for 4 mm air gap, 13 mm offset	for diagram C	50	465931	




5.6.1.1.3 Pack of mishandling devices SKB-Z for 4 mm air gap

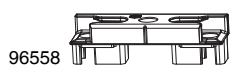
				No	No Tricoat
SKB-Z mishandling-device pack	for 4 mm air gap, 13 mm offset	left	silver	10	465252
		right	silver	10	465251
	for 4 mm air gap, 9 mm offset	left	silver	25	455745
		right	silver	25	455744

5.6.1.2 Striker plates for opposite Eurogroove




5.6.1.2.1 Striker plates for opposite Eurogroove

				No	No Tricoat
silver	striker plate opposite Eurogroove	- 1 mm gasket-compression	200	34606	
			200	34610	354028




5.6.1.2.2 Striker plates i.S. for opposite Eurogroove

				No	No Tricoat
silver	striker plate i.S. opposite Eurogroove	- 0.8 mm gasket-compression	100	96558	358862

5.6.1.3 Striker plates 12 mm air gap hardware groove 6/8/4




34921

5.6.1.3.1 Striker plates 12 mm air gap hardware groove 6/8/4						No	No Tricoat
silver	striker plate for hardware groove 6/8/4			200		34921	355443
			- 1 mm gasket-compression	200		34979	355901



96563


5.6.1.3.2 Striker plates i.S. 12 mm air gap hardware groove 6/8/4						No	No Tricoat
silver	striker plate i.S. for hardware groove 6/8/4		- 1 mm gasket-compression	100		96263	
	angled screw-fixing			100		96563	355863

5.6.1.4 Striker plates 12 air gap hardware groove 7/8/4




34522

34969

5.6.1.4.1 Striker plates 12 air gap hardware groove 7/8/4						No	No Tricoat
silver	striker plate for hardware groove 7/8/4		angled screw-fixing	200		34522	360626
				200		34902	201481*
			- 1 mm gasket-compression	200		34969	201465




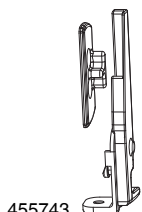
96564

5.6.1.4.2 Striker plates i.S. 12 mm air gap hardware groove 7/8/4						No	No Tricoat
silver	striker plate i.S. for hardware groove 7/8/4		angled screw-fixing	- 0.8 mm gasket-compression	100	360564	364248
				- 1 mm gasket-compression	100	96264	358450*
					100	96564	352994*
	striker plate i.S. for hardware groove 7/8/4 without reinforcement rings		angled screw-fixing		100	363486	




455716

5.6.1.4.3 Retaining device set SKB-SE/Z for hardware groove 7/8/4						No	No Tricoat
silver	retaining device set SKB-SE/Z for hardware groove 7/8/4			50		455716	465312




455743

5.6.1.4.4 Mishandling device set SKB-Z for hardware groove 7/8/4						No	No Tricoat
SKB-Z mishandling-device	for hardware groove 7/8/4		left	silver	25	455743	
pack			right	silver	25	455742	


* Availability and delivery time on request.

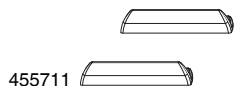
5.6.1.5 Striker plates 12 mm air gap 18 mm Euro-rebate




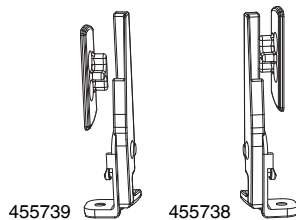
5.6.1.5.1 Striker plates 12 mm air gap 18 mm Euro-rebate					No	No Tricoat
silver	striker plate Euro-rebate 18 mm	double screw fixing		200	34943	201476*
		angled screw-fixing		200	34980	355135
			- 1 mm gasket-compression	200	357844	
			+ 1 mm gasket-compression	200	359769	




5.6.1.5.2 Striker plates i.S. 12 mm air gap 18 mm Euro-rebate					No	No Tricoat
silver	striker plate i.S. Euro-rebate 18 mm without reinforcement rings	angled screw-fixing		100	355606	358991*
				+ 1 mm gasket-compression	100	359770
	striker plate i.S. Euro-rebate 18 mm	angled screw-fixing		100	96660	362849
				100	96860	97544*




5.6.1.5.3 Retaining devices 12 mm air gap 18 mm Euro-rebate					No	No Tricoat
silver	retaining device set SKB-SE/Z Euro-rebate 18 mm			50	455711	465309



5.6.1.5.4 Mishandling device set SKB-Z for 18 mm Euro-rebate					No	No Tricoat
SKB-Z mishandling-device pack	Euro-rebate 18 mm	left	silver	25	455739	
		right	silver	25	455738	


5.6.1.6 Striker plates for 12 mm air gap 20 mm Euro-rebate

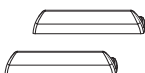


5.6.1.6.1 Striker plates for 12 mm air gap 20 mm Euro-rebate					No	No Tricoat
silver	striker plate Euro-rebate 20 mm	angled screw-fixing		200	34981	355797*
		angled screw-fixing without reinforcement rings		200	34986	
	striker plate Euro-rebate 20 mm	angled screw-fixing		200	355396	366379
	striker plate HG Euro-rebate 20 mm	angled screw-fixing		200	361960	366432




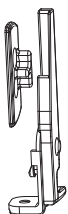
96561

5.6.1.6.2 Striker plates i.S. 12 mm air gap 20 mm Euro-rebate					N^o	N^o Tricoat
silver	striker plate i.S. Euro-rebate 20 mm	angled screw-fixing		100	96561	355865*
	striker plate i.S. Euro-rebate 20 mm without reinforcement rings	angled screw-fixing	- 0.7 mm gasket-compression	100	96641	
	striker plate i.S. Euro-rebate 20 mm	angled screw-fixing	- 0.7 mm gasket-compression	100	96779	359370
				100	96861	360293*



455714

5.6.1.6.3 Retaining devices 12 mm air gap 20 mm Euro-rebate					N^o	N^o Tricoat
silver	retaining device set SKB-SE/Z Euro-rebate 20 mm			50	455714	465311




455741

5.6.1.6.4 Mishandling device set SKB-Z for 20 mm Euro-rebate					N^o	N^o Tricoat
SKB-Z mishandling-device pack	Euro-rebate 20 mm	left	silver	25	455741	
		right	silver	25	455740	

5.6.1.7 Striker plates 12 air gap 24 mm Euro-rebate



34934

5.6.1.7.1 Striker plates 12 air gap 24 mm Euro-rebate					N^o	N^o Tricoat
silver	striker plate 24mm rebate depth, 13mm offset	angled screw-fixing		200	34934	359575*
	striker plate HG 24mm rebate depth, 13mm offset	angled screw-fixing	- 1 mm gasket-compression	200	359297	361346*
	striker plate 24mm rebate depth, 13mm offset without reinforcement rings	angled screw-fixing		100	362812	




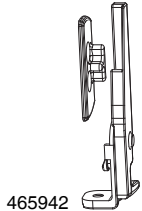
364952


5.6.1.7.2 Striker plates i.S. 12 mm air gap 24 mm Euro-rebate					N^o	N^o Tricoat
silver	striker plate i.S. 24mm rebate depth, 13mm offset without reinforcement rings	angled screw-fixing		100	364952	366635
			- 1 mm gasket-compression	100	364953	366636

* Availability and delivery time on request.

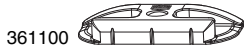
465939 


5.6.1.7.3 Retaining devices 12 mm air gap 24 mm Euro-rebate						No	No Tricoat
silver	retaining device set SKB-SE/Z Euro-rebate 24 mm			50	465939	466603	

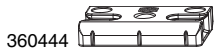



5.6.1.7.4 Mishandling device set SKB-Z for 24 mm Euro-rebate						No	No Tricoat
SKB-Z mishandling-device pack	Euro-rebate 24 mm	left	silver	10	465942		
		right	silver	10	465941		

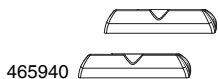
5.6.1.8 Striker plates 12 mm air gap 30 mm Euro-rebate




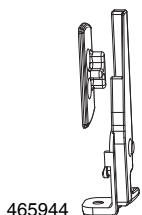
5.6.1.8.1 Striker plates 12 mm air gap 30 mm Euro-rebate						No	No Tricoat
silver	striker plate 30mm rebate depth, 13mm offset		angled screw-fixing	200	360443	362304	
	striker plate HG 30mm rebate depth, 13mm offset		angled screw-fixing	200	361100		




5.6.1.8.2 Striker plates i.S. 12 mm air gap 30 mm Euro-rebate						No	No Tricoat
silver	striker plate i.S. 30mm rebate depth, 13mm offset		angled screw-fixing	100	360444	362305	



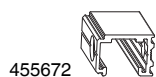
5.6.1.8.3 Retaining devices 12 mm air gap 30 mm Euro-rebate						No	No Tricoat
silver	retaining device set SKB-SE/Z Euro-rebate 30 mm			50	465940		




5.6.1.8.4 Mishandling device set SKB-Z for 30 mm Euro-rebate						No	No Tricoat
SKB-Z mishandling-device pack	Euro-rebate 30 mm	left	silver	10	465944		
		right	silver	10	465943		


5.7 SKB accessories

5.7.1 Profiles in stock lengths for SKB and PAS




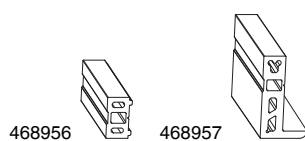
5.7.1.1 Guide tracks	L		No	No Tricoat
silver	6.070	10	455672	
brown	6.070	10	467089	
bronze SKB	6.070	10	467088	




5.7.1.2 Cover for top guide tracks	L		No	No Tricoat
silver	6.080	50	455673	
brown	6.080	50	455675	
white	6.080	50	455674	
cream white RAL 9001	6.080	50	455677	
bronze SKB	6.080	50	455676	



5.7.1.3 Roller tracks	L		No	No Tricoat
silver	6.070	10	455664	
brown	6.070	10	455665	
bronze SKB	6.070	10	455666	




5.7.1.4 Packer for roller tracks and guide tracks		No	No Tricoat
packer 9 mm for guide track SKB/PAS L=3.035mm silver	5	468956¹	
packer 9 mm for roller track SKB/PAS L=3.035mm silver	5	468957¹	

¹ Can be used from overload strength 24 mm.




465181

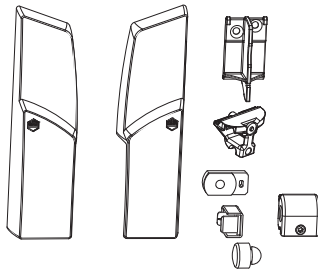
5.7.1.5 Roller cover strip	L		No	No Tricoat
silver	5.170	10	455667	
	2.036	10	465181	
brown	5.170	10	455669	
	2.036	10	465183	
white	5.170	10	455668	
	2.036	10	465182	
cream white RAL 9001	5.170	10	455671	
	2.036	10	465185	
bronze SKB	5.170	10	455670	
	2.036	10	465184	



455683

5.7.1.6 Connecting rod	L		No	No Tricoat
connecting rod SKB Ø = 10 mm	3.600	1	455683	

5.7.2 Accessories and individual components SKB and PAS



455648

5.7.2.1 Bag of accessories for SKB and PAS

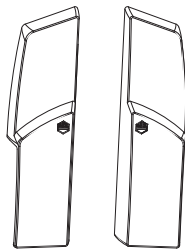


No

No
Tricoat

silver	20	455648 ¹	
cream white RAL 9001	40	455662 ¹	
white	20	455649 ¹	
brown	40	455650 ¹	
bronze SKB	40	455651 ¹	

¹ Contents: 1x cover cap for roller, left, 1x cover cap for roller, right, 1x cover cap for left scissor stay, 1x cover cap for right scissor stay, 2x routing cover caps, 1x control module, 1x bottom stop buffer, 1x to stop buffer.



102237

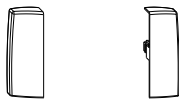
5.7.2.2 Set of cover caps for rollers with reinforcement



No

No
Tricoat

silver	10	102237	
cream white RAL 9001	10	102241	
white	10	102238	
brown	10	102239	
bronze SKB	10	102240	



465351

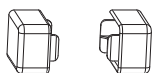
5.7.2.3 Set of cover caps for rollers without reinforcement



No

No
Tricoat

silver	for 100kg version	10	465351	
cream white RAL 9001	for 100kg version	10	465353	
white	for 100kg version	10	465349	
brown	for 100kg version	10	465350	
bronze SKB	for 100kg version	10	465352	



467763

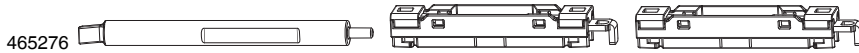
5.7.2.4 Cover caps for guide tracks



No

No
Tricoat

set of cover caps for guide track left/right silver	10	467763	
set of cover caps for guide track left/right white	10	467764	



5.7.2.5 Bag of accessories for guide tracks



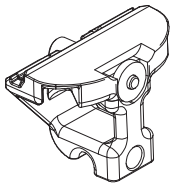
No

No
Tricoat

accessories pack for guide track SKB-S/SE/Z

1

465276



455653

5.7.2.6 Control module



No

No
Tricoat

control module SKB adjustable for diagram D

silver

10

455653¹

brown

10

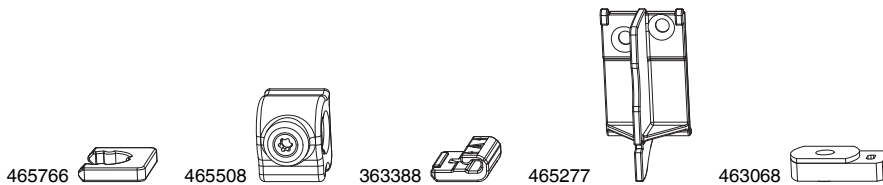
455657¹

bronze SKB

10

455655¹

¹ Only for diagram D



5.7.2.7 Individual components SKB and PAS



No

No
Tricoat

anti-twist device for height adjustment roller SKB

100

465766

rod guide for connecting rod SKB

1

465508

safety catch roller SKB

10

363388

SKG - clip for drive gear SKB

100

467893

support bracket for track cover roller SKB

1

465277

top buffer stop for guide track SKB

50

463068



455697

5.7.2.8 Connecting strap for handle set SKB-Z with gear



No

No
Tricoat

for 13mm offset

50

455698¹

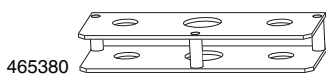
for 9mm offset

50

455697²

¹ Rebate thicknesses from 15-25 mm

² Rebate thicknesses from 15-24 mm



465380

5.7.2.9 Anti-drill plate SKB-Z



No

No
Tricoat

anti-drill plate SKB-Z BS 17.5

1

465380

anti-drill plate SKB-Z BS 30

1

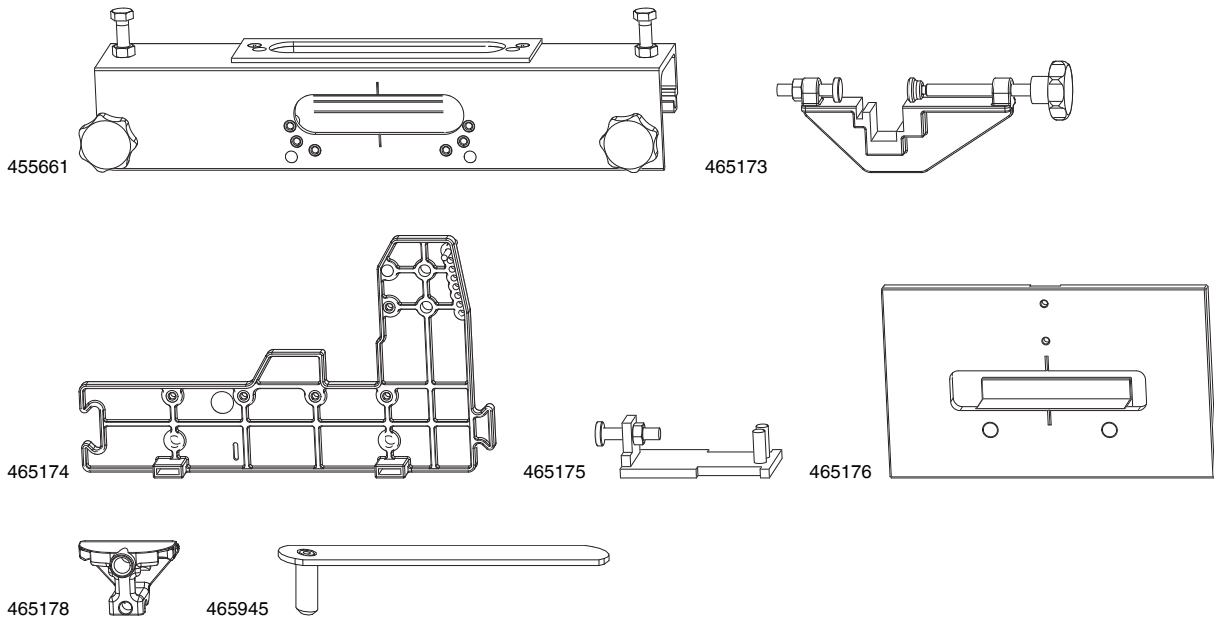
465381

anti-drill plate SKB-Z BS 40

1

465382

5.8 Jigs



5.8.1 Jigs

		No	No Tricoat
jig for routing scissors-stay and SKB-Z handles	1	455661	
jig for lockable drive gear SKB for BS 17.5 - 50	1	465150	
clamping jig for positioning the SKB guide track and roller track	1	465173	
jig for aligning screw holes centrally on SKB rollers	1	465174	
installation jig for SKB control module	1	465175	
routing template for SKB-Z retaining device for 4 mm air gap	1	465176	
routing template for mishandling device SKB-Z for 4 mm air gap	1	465177	
drill jig for movable SKB control module diagram D	1	465178¹	
jig for aligning screw holes centrally on SKB guide track	1	465945	

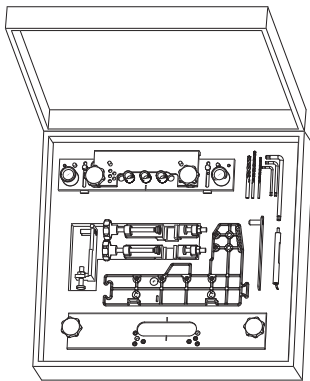
¹ Only for diagram D

5.8.2 Positioning jigs



5.8.2.1 Positioning jigs SKB-Z

				No	No Tricoat
striker positioning jig for drive gear and height connector SKB-Z with 50 mm retainer	900 - 1.700		1	211611	
	1.701 - 2.400		1	211612	
striker positioning jig for width connector SKB-Z with 50 mm retainer		851 - 2.000	1	214759	



455659

5.8.3 Case with jigs



No

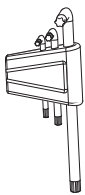
No
Tricoat

jig case for SKB

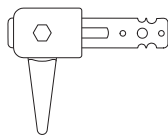
1

455659¹

¹ Contents: Routing jig for scissor stays and SKB-Z handles, jig for SKB lockable drive-gear for BS 17.5 - 50, clamping jig to position the SKB guide tracks and roller tracks, jig to centre the screw holes for SKB rollers, installation jig for SKB control module, drill bit centring device, slider release, drill 3.2 mm, drill 4 mm, routing cutter 6 mm, Torx wrench T25, Torx wrench T40



460339



465245

5.8.4 Jig accessories



No

No
Tricoat

set of Torx screwdrivers TX15 + TX25 + TX40

1


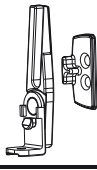
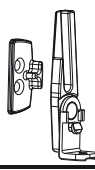
460339

clamp for routing jig for SKB

1

465245

5.9 Profile data sheet accessories for SKB-SE/Z

			
Profile	SKB-SE/Z striker plate set	SKB-Z mishandling-device left	SKB-Z mishandling-device right
Veka Topline MD/AD	455699	455723	455722
Softline 70 AD/MD	455699	455723	455722
Brüggemann AD/MD	455699	455723	455722
Inoutic AD/MD 100/2000AD	455700	455727	455726
Arcade/Elit/Prestige	455700	455727	455726
Aluplast Ideal 4000/5000/6000/8000	455701	455729	455728
Dimex Komfort 6.0	455701	455729	455728
Schüco Corona AS/MD	455701	455729	455728
Rehau S730/Brillant/Thermo Design	455702	455729	455728
Gealan S3000/S7000/S8000	455703	455731	455730
KBE System 70	455703	455731	455730
Kömmerling Gold	455703	455731	455730
Trocal Innonova 70 AD/MD	455704	455733	455732
Alu Fusion/Comfort	455704	455733	455732
Knipping 4010	455704	455733	455732
Kömmerling Eurodur Futur	455705	455735	455734
Kömmerling Eurodur MPF	455705	455735	455734
Kömmerling Eurodur 3S	455705	455735	455734
Aluplast Ideal 2000/3000	455706	455729	455728
Dimex Acord	455706	455729	455728
LB PAD	455706	455729	455728
Schüco Corona CT70/Si82/AD/MD	455706	455729	455728
Gealan S6000	455707	455731	455730
Deceuninck Mondial/Klassik	455707	455731	455730
Komarek Serie Riva 6	455707	455731	455730
Trocal Innonova 2000	455708	455737	455736
Knipping Innonova 70	455708	455737	455736
Knipping SK 4000	455708	455737	455736
Roplasto 6001 MD	455709	455747	455746
Heroal 065	455709	455747	455746
Rehau S702/S705/S707/S709	455709	455747	455746
Edil Plastix/MBU; Milani-Resine	455709	455747	455746
Bröckelmann LK (KSB220)	455709	455747	455746
KBE MD	455710	455749	455748
Deceuninck Mondial 2000	455712	455751	455750
Wymar 2000	455712	455751	455750
Salamander Design 2D und 3D	455713	455753	455752
Salamander Design MD	455713	455753	455752
Aluplast Intertec WD	455715	455755	455754
Trocal Confort	455718	455757	455756
Alphacan System Class	455719	455759	455758
Actual 500	455720	455761	455760

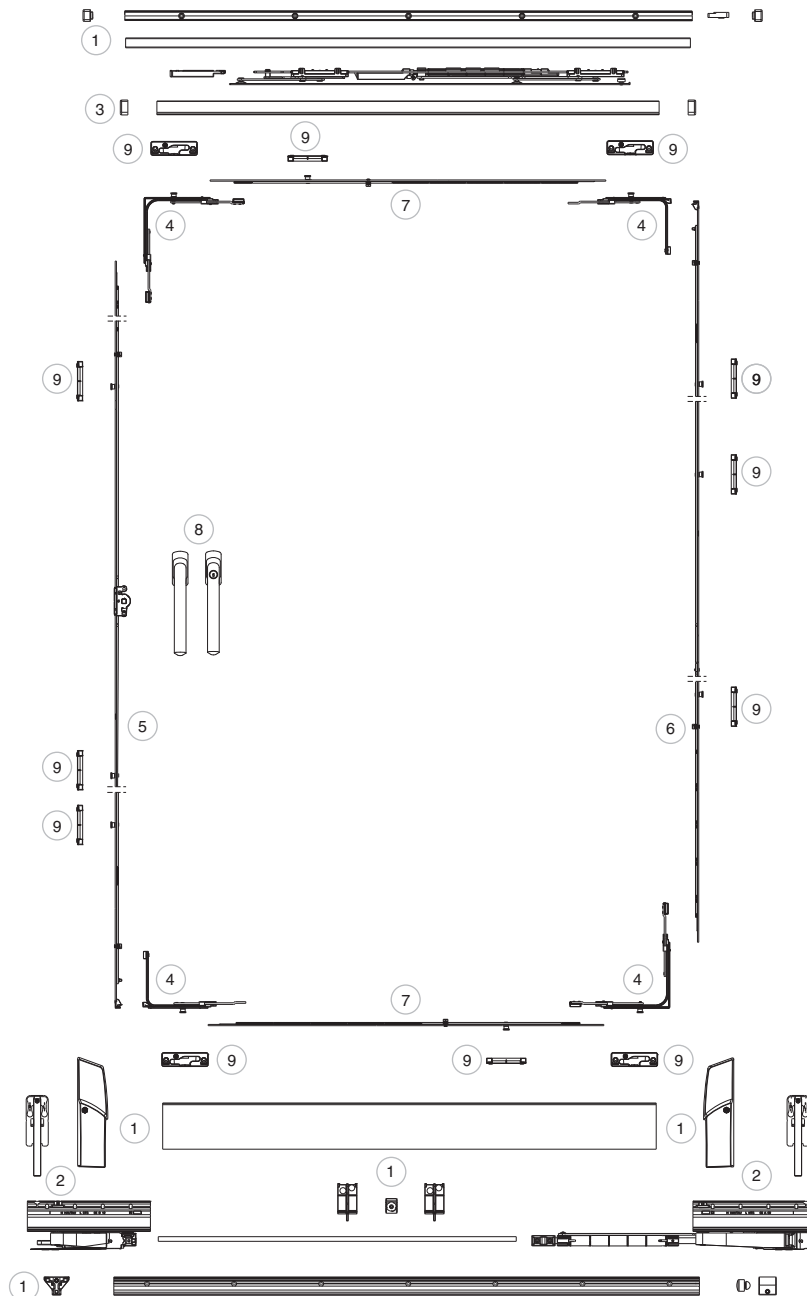


6 PAS

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6 PAS

6.1 PAS: hardware overview



The parallel-stop slide hardware PAS is suitable for implementing parallel-slide windows and doors for all standard window profiles made of timber, PVC or timber/aluminium.

A tandem roller must be used for a sash weight above 160 kg.

The active sash must not exceed a total weight of 200 kg.

160 kg: SRW 750 - 2000mm / SRH 841 - 2685mm

200 kg: SRW 1150 - 2000mm / SRH 841 - 2685mm

The sash must not exceed 2.5 times the sash width.

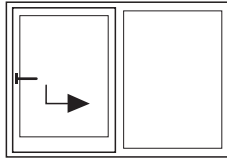


Selection guide			Page
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6.2 Diagrams PAS - Hardware itemisation

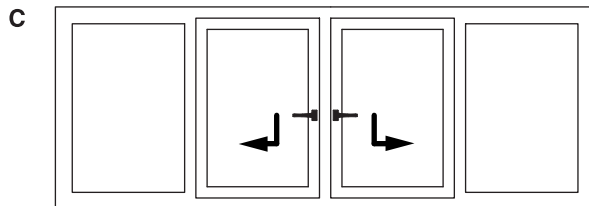
2-sashed unit:

1 sliding sash, 1 fixed glazing



4-sashed unit:

2 central sliding sashes, 2 outer fixed glazings



Order text

- | | |
|---|--------------------------------|
| 1 | Left-handed roller pack |
| 1 | Profile set for sash and frame |
| 1 | PAS scissor slider package |
| 1 | Corner element set |
| 1 | Turn-only drive gear FHH |
| 1 | Height connector |
| 2 | Width connector |
| | Striker plates |
| 4 | Striker plates for PAS |
| 1 | Handles |

Order text

- | | |
|---|---------------------------------|
| 1 | Left-handed roller pack |
| 1 | Right-handed roller pack |
| 2 | Profile sets for sash and frame |
| 2 | PAS scissor slider package |
| 2 | Corner element sets |
| 2 | Turn-only drive gear FHH |
| 2 | Height connectors |
| 4 | Width connector |
| | Striker plates |
| 8 | Striker plates for PAS |
| 2 | Handles |

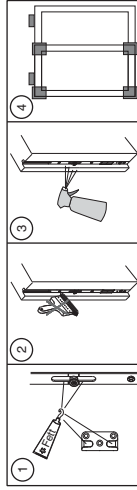
6.3 Operating and maintenance instructions PAS



TECHNOLOGY IN MOTION

Details of operation / maintenance

The following maintenance work has to be carried out every year so that the function of the **Parallel Sliding Door System (PAS)** can be preserved.

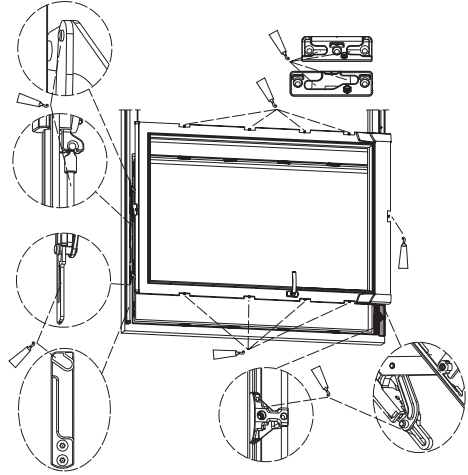


1. Grease all moving parts and contact surfaces.
Do not use: lubricating oils, rust dissolver silicone sprays etc.! Grease only with lubricating grease or technical Vaseline!



2. Do not paint fittings!
3. Only use cleaning and care products which don't affect the anti-corrosive protection of the fittings!
4. Check security-relevant fittings for wear at regular intervals! ■

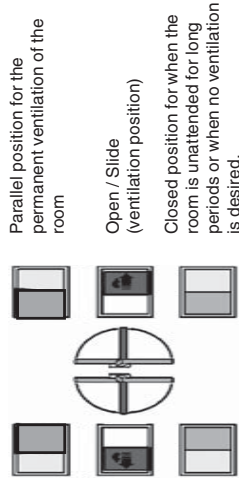
Lubrication points



Details of product liability

- Your windows or doors are equipped with a high-quality **Parallel Sliding Door System (PAS)**. The handling is easy and problem-free, nevertheless you should read these instructions very carefully and follow the notes of operation. For your own interest: please do not forget to read the 'risks and failure' notes!
- Keep these operations and maintenance instructions and inform other users about the contents of these instructions.
- Check whether the operation sticker is present within the packaging.
- Please take due care of the product and follow maintenance instructions to enjoy an enduring high quality PAS system.

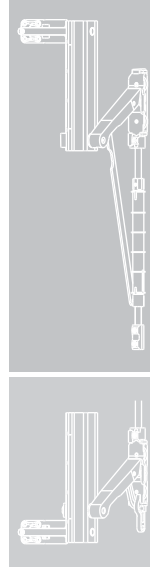
Operation



General tips for your windows

A good window can be more than a means of letting in air and light: It is an aesthetic element and simultaneously a component on which high technical demands are placed upon it. Intermittently check fittings, surface integrity, glazing and gaskets, and repair any defects found immediately.

MACO
RAIL-SYSTEMS
SLIDING HARDWARE

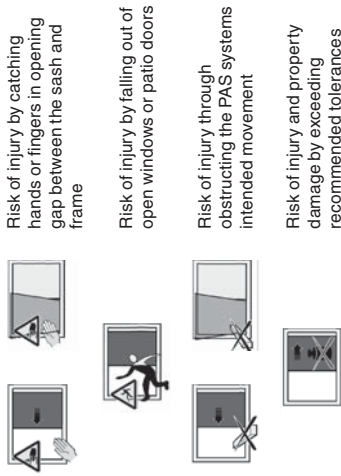


Parallel Sliding Door System

TIMBER / PVC



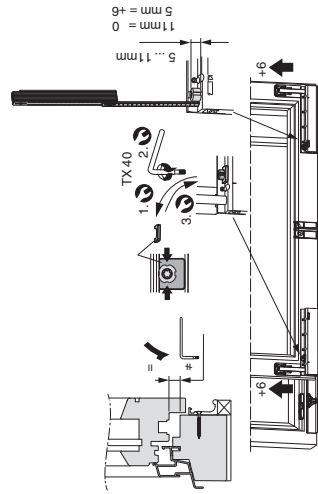
Details of risks and failure



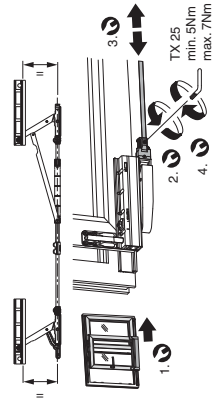
Adjustment work on the sash

Adjustment work as well as the clipping in and out of the sash has to be carried out by authorized experts only.

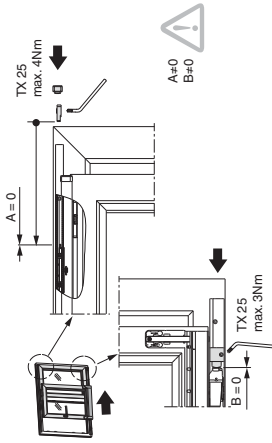
Horizontal adjustment of sash



Parallel Adjustment of running gear

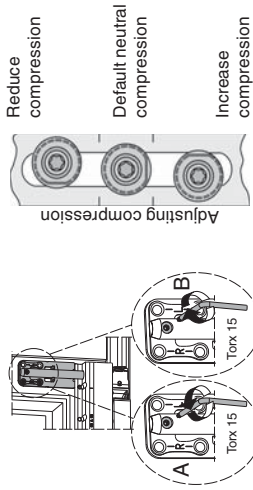


Adjustment of fittings



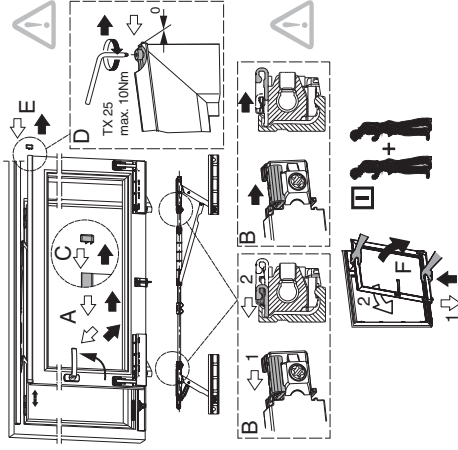
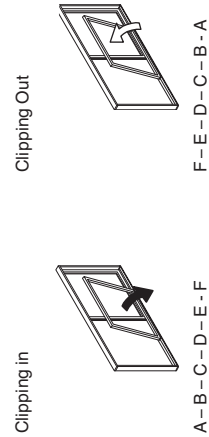
Adjustment of reinforcement parts compression

A - Releases compression
B - Adds compression



Clipping in or out of Casement

Special attention must be paid to the following instructions by the installer because the assembly is no longer the fitting manufacturer's responsibility beyond this point!



Activate the leverage protector (anti-jemmy)!
Slide (1) until the two running gears behind clicks in the highlighted position (2).

ATTENTION:

If the leverage-protector is clicked in wrongly or not at all the casement isn't safeguarded sufficiently.
Major bodily injuries could happen.

We recommend that buyers of window and door elements have the installation and assembly of the elements carried out by authorized experts.

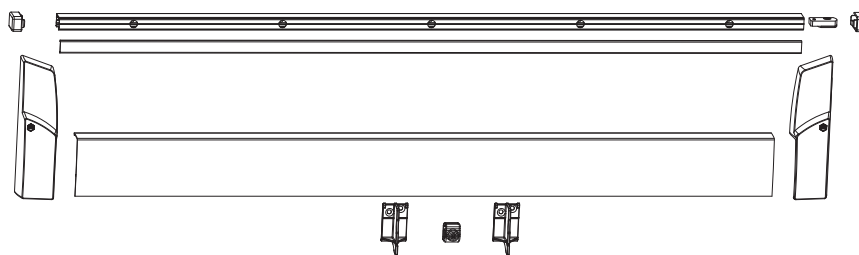
The same care and maintenance notes also apply to all window types which are not mentioned in this instruction (e.g. tilt and slide window, scheme C)

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www.macouk.net

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6.4 Sash/frame components



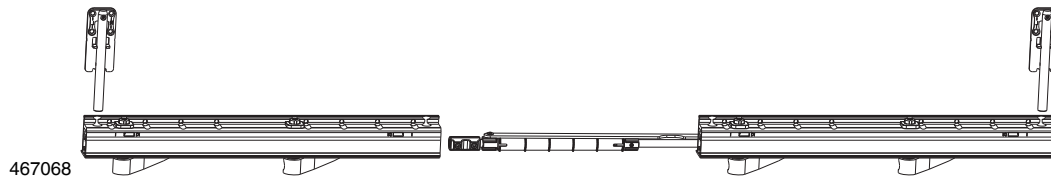
466052

6.4.1 Profile Packs			L		No	No Tricoat	
profile set: frame and sash SKB	silver	size 1	620 - 900	1.930	1	466052¹	
		size 2	901 - 1.050	2.230	1	466053¹	
		size 3	1.051 - 1.250	2.630	1	466054¹	
		size 4	1.251 - 1.450	3.030	1	466055¹	
		size 5	1.451 - 1.650	3.430	1	466056¹	
		size 6	1.651 - 2.000	4.130	1	466057¹	
	cream white RAL 9001	size 1	620 - 900	1.930	1	466076¹	
		size 2	901 - 1.050	2.230	1	466077¹	
		size 3	1.051 - 1.250	2.630	1	466078¹	
		size 4	1.251 - 1.450	3.030	1	466079¹	
		size 5	1.451 - 1.650	3.430	1	466080¹	
		size 6	1.651 - 2.000	4.130	1	466081¹	
	white	size 1	620 - 900	1.930	1	466058¹	
		size 2	901 - 1.050	2.230	1	466059¹	
		size 3	1.051 - 1.250	2.630	1	466060¹	
		size 4	1.251 - 1.450	3.030	1	466061¹	
		size 5	1.451 - 1.650	3.430	1	466062¹	
		size 6	1.651 - 2.000	4.130	1	466063¹	
	brown	size 1	620 - 900	1.930	1	466064¹	
		size 2	901 - 1.050	2.230	1	466065¹	
		size 3	1.051 - 1.250	2.630	1	466066¹	
		size 4	1.251 - 1.450	3.030	1	466067¹	
		size 5	1.451 - 1.650	3.430	1	466068¹	
		size 6	1.651 - 2.000	4.130	1	466069¹	
bronze SKB	size 1	620 - 900	1.930	1	466070¹		
	size 2	901 - 1.050	2.230	1	466071¹		
	size 3	1.051 - 1.250	2.630	1	466072¹		
	size 4	1.251 - 1.450	3.030	1	466073¹		
	size 5	1.451 - 1.650	3.430	1	466074¹		
	size 6	1.651 - 2.000	4.130	1	466075¹		


¹ Contents: 1 x guide track, 1 x guide cover, 2 x guide cover caps, 1 x top buffer stop, 2 x scissor-stay sliders, 1 x slider release, 2 x scissor stay arm cover caps, 1 x roller cover strip, 1 x left roller cover cap, 1 x right roller cover cap, 1 x connecting rod, 1 x roller track, 1 x control module, 1 x bottom buffer stop, 1 x cover support bracket for roller cover strip (2 pcs. from size 5), 1 x connecting-rod support-block (from size 5)

6.5 Sash components

6.5.1 Roller Packs



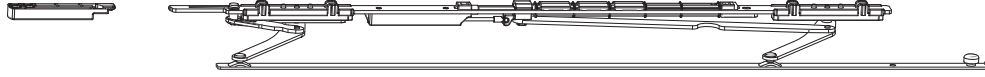
6.5.1.1 Roller Packs


		kg		No	No Tricoat
roller pack	right	160	1	466778¹	
		200	1	467069	
	left	160	1	466777¹	
		200	1	467068	

¹ Contents: 1 x drive-gear sided roller, 1 x hinge-sided roller, 2 x reinforcement brackets

6.5.2 Scissor stays

6.5.2.1 Scissor stay pack





466779 





6.5.2.1.1 Scissor slider pack for PAS

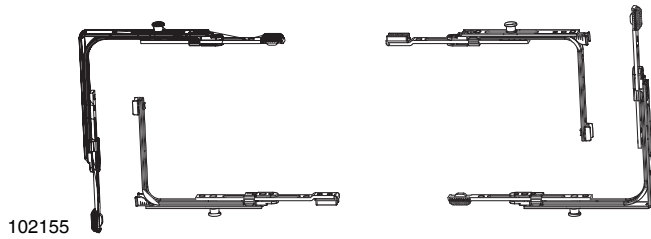
					No	No Tricoat
PAS scissor slider and track cover pack	right	silver	750 - 900	5	466782¹	
			901 - 1.250	5	466783¹	
			1.251 - 1.650	5	466784¹	
			1.651 - 2.000	5	467071¹	
		brown	750 - 900	5	466794¹	
			901 - 1.250	5	466795¹	
			1.251 - 1.650	5	466796¹	
			1.651 - 2.000	5	467075¹	
		white	750 - 900	5	466788¹	
			901 - 1.250	5	466789¹	
	1.251 - 1.650		5	466790¹		
	1.651 - 2.000		5	467073¹		
	cream white RAL 9001	750 - 900	5	466806¹		
		901 - 1.250	5	466807¹		
		1.251 - 1.650	5	466808¹		
		1.651 - 2.000	5	467079¹		
	bronze SKB	750 - 900	5	466800¹		
		901 - 1.250	5	466801¹		
		1.251 - 1.650	5	466802¹		
		1.651 - 2.000	5	467077¹		
left	silver	750 - 900	5	466779¹		
		901 - 1.250	5	466780¹		
		1.251 - 1.650	5	466781¹		
		1.651 - 2.000	5	467070¹		
	brown	750 - 900	5	466791¹		
		901 - 1.250	5	466792¹		
		1.251 - 1.650	5	466793¹		
		1.651 - 2.000	5	467074¹		
	white	750 - 900	5	466785¹		
		901 - 1.250	5	466786¹		
		1.251 - 1.650	5	466787¹		
		1.651 - 2.000	5	467072¹		
	cream white RAL 9001	750 - 900	5	466803¹		
		901 - 1.250	5	466804¹		
		1.251 - 1.650	5	466805¹		
		1.651 - 2.000	5	467078¹		
bronze SKB	750 - 900	5	466797¹			
	901 - 1.250	5	466798¹			
	1.251 - 1.650	5	466799¹			
	1.651 - 2.000	5	467076¹			



¹ Contents: 1 x scissor slider PAS, 1 x control element for scissor slider, 1 x cover strip 13 mm, 1 x cover cap left for cover strip, 1 x cover cap right for cover strip

6.5.3 Corner elements

6.5.3.1 Corner elements for MULTI MATIC



102155

6.5.3.1.1 Pack of corner elements SKB-S/SE and PAS MULTI MATIC



No

No
Tricoat

corner element set MULTI MATIC

silver

1

102155¹

102298

¹ Contents: 2 x MM corner elements with 1 i.S., 2 x vertical corner elements with 1 i.S. with serrated carrier






6.5.4 Drive gears

6.5.4.1 Drive gears MULTI MATIC

201834







6.5.4.1.1 Turn-only drive gears BS 15 FHH i.S.

						No	No Tricoat	
silver	1090	15	1	400	841 - 1.090	20	201834	211244
	1340	15	1	500	1.091 - 1.340	10	201835	210073
	1590	15	2	600	1.341 - 1.590	10	201836	211245
	1700	15	2	700	1.591 - 1.700	10	207302	211246
	1950	15	3	1.050	1.701 - 1.950	10	201837	211247
	2200	15	3	1.050	1.951 - 2.200	10	201838	210074
	2450	15	4	1.050	2.201 - 2.450	10	201839	210075

205547







6.5.4.1.2 Turn-only drive gears BS 15 FHH without locking cam

					No	No Tricoat	
silver	1090	15	400	841 - 1.090	20	205547	211218
	1340	15	500	1.091 - 1.340	10	205548	211221
	1590	15	600	1.341 - 1.590	10	205549	211222
	1700	15	700	1.591 - 1.700	10	207304	211225
	1950	15	1.050	1.701 - 1.950	10	205545	211217
	2200	15	1.050	1.951 - 2.200	10	205550	211223
	2450	15	1.050	2.201 - 2.450	10	205551	211224

209968





6.5.4.1.3 Turn-only drive gears diagram C with welded-on striker plate

					No	No Tricoat	
silver	1950	30	1.050	1.701 - 1.950	10	209968	210945
		40	1.050	1.701 - 1.950	10	207014	
		45	1.050	1.701 - 1.950	10	207015	
	2200	40	1.050	1.951 - 2.200	10	210943	
	2450	40	1.050	2.201 - 2.450	10	210944	



6.5.5 Height connectors

210335 

6.5.5.1 Height connectors SKB-S/SE and PAS MULTI MATIC i.S.					No	No Tricoat
with 1 i.S.	silver	1090	841 - 1.090	10	210335	211234
		1340	1.091 - 1.340	10	210336	211235
with 2 i.S.	silver	1590	1.341 - 1.590	10	210337	211236
		1700	1.591 - 1.700	10	210338	211237
with 3 i.S.	silver	1950	1.701 - 1.950	10	210339	211238
		2200	1.951 - 2.200	10	210340	211239
with 4 i.S.	silver	2450	2.201 - 2.450	10	210341	211240


6.5.6 Width connectors

210381 

6.5.6.1 Width connector SKB-S/SE and PAS MULTI MATIC i.S. with pull-in wedge					No	No Tricoat
with 1 i.S.	silver	620 - 900	20	210380	211229	
		901 - 1.150	20	210381	211231	
		1.151 - 1.400	20	210382	211232	
with 2 i.S.	silver	1.401 - 1.650	10	210383	211233	

6.5.7 Extension piece

206197 

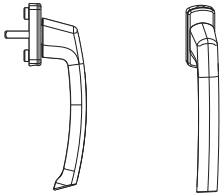
6.5.7.1 Extension piece SKB-S/SE and PAS MULTI MATIC			L		No	No Tricoat
faceplate extension MM, extendable	silver	235	20	206197	207445*	
	with 1 i.S.	silver	235	20	201750	207444*

* Availability and delivery time on request.







6.5.8 Handles

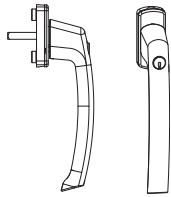
6.5.8.1 Handles SKB-S/SE and PAS

6.5.8.1.1 HARMONY design



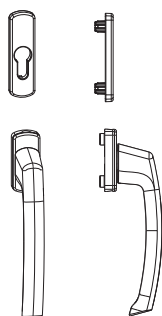
55720

6.5.8.1.1.1 Lugs 10/12							No	No Tricoat
black brown RAL 8022	58		28	7	anodised	10	24658	
		pin 32	28	7	anodised	10	21269	
		pin 35	28	7	anodised	10	203310	
bronze	58	pin 32	28	7	anodised	10	21470	
		pin 35	28	7	anodised	10	203305	
		without pin	28		anodised	10	24432	
bronze SKB	58		28	7	anodised	10	203890	
		pin 32	28	7	anodised	10	203888	
		pin 35	28	7	anodised	10	203889	
champagne	58		28	7	anodised	10	24433	
		pin 32	28	7	anodised	10	21465	
		pin 35	28	7	anodised	10	203304	
silver	58		28	7	anodised	10	59045	
		pin 32	28	7	anodised	10	55720	
		pin 35	28	7	anodised	10	203307	
		pin 38	28	7	anodised	10	227029	
silver (white rosette)	58		28	7	anodised	10	220632	
		pin 32	28	7	anodised	10	22248	
		pin 35	28	7	anodised	10	203308	
titanium	58		28	7	anodised	10	24434	
		pin 32	28	7	anodised	10	21466	
		pin 35	28	7	anodised	10	203306	
traffic white RAL 9016	58		28	7	powder coated	10	24435	
		pin 32	28	7	powder coated	10	21471	
		pin 35	28	7	powder coated	10	203309	
		pin 38	28	7	powder coated	10	227030	



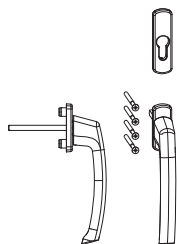
55781

6.5.8.1.1.2 Lugs 10/12 with locking cylinder								No	No Tricoat
black brown RAL 8022	58		28	7	anodised	10	220634		
		pin 32	28	7	anodised	10	21270		
		pin 35	28	7	anodised	10	203322		
bronze	58		28	7	anodised	10	59049		
		pin 32	28	7	anodised	10	21476		
		pin 35	28	7	anodised	10	203317		
bronze SKB	58		28	7	anodised	10	203893		
		pin 32	28	7	anodised	10	203891		
		pin 35	28	7	anodised	10	203892		
champagne	58		28	7	anodised	10	59051		
		pin 32	28	7	anodised	10	21473		
		pin 35	28	7	anodised	10	203316		
silver	58		28	7	anodised	10	59048		
		pin 32	28	7	anodised	10	55781		
		pin 35	28	7	anodised	10	203319		
		pin 38	28	7	anodised	10	227031		
silver (white rosette)	58		28	7	anodised	10	220633		
		pin 32	28	7	anodised	10	22288		
		pin 35	28	7	anodised	10	203320		
titanium	58		28	7	anodised	10	59050		
		pin 32	28	7	anodised	10	21474		
		pin 35	28	7	anodised	10	203318		
traffic white RAL 9016	58		28	7	powder coated	10	59046		
		pin 32	28	7	powder coated	10	21484		
		pin 35	28	7	powder coated	10	203321		
		pin 38	28	7	powder coated	10	227032		









203895




6.5.8.1.1.3 Interior handles lugs 12							No	No Tricoat
black brown RAL 8022	PC	58	28	7	anodised	10	203904	
bronze	PC	58	28	7	anodised	10	203900	
bronze SKB	PC	58	28	7	anodised	10	203901	
champagne	PC	54	28	7	anodised	10	203897	
silver	PC	54	28	7	anodised	10	203896	
silver (white rosette)	PC	54	28	7	anodised	10	203895	
titanium	PC	58	28	7	anodised	10	203902	
traffic white RAL 9016	PC	58	28	7	powder coated	10	203903	



203894

6.5.8.1.1.4 High exterior handles lugs 12								No	No Tricoat
black brown RAL 8022	PC	64-73	54	26	7	anodised	10	202626	
		max. 90	54	26	7	anodised	10	213336	
bronze	PC	64-73	54	26	7	anodised	10	202625	
		max. 90	54	26	7	anodised	10	213335	
bronze SKB	PC	64-73	54	26	7	anodised	10	203894	
		max. 90	54	26	7	anodised	10	213340	
champagne	PC	64-73	54	26	7	anodised	10	202627	
		max. 90	54	26	7	anodised	10	213337	
silver	PC	64-73	54	26	7	anodised	10	202624	
		max. 90	54	26	7	anodised	10	213334	
titanium	PC	64-73	54	26	7	anodised	10	202628	
		max. 90	54	26	7	anodised	10	213338	
traffic white RAL 9016	PC	64-73	54	26	7	powder coated	10	202630	
		max. 90	54	26	7	powder coated	10	213339	

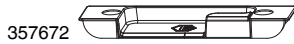
39013 


6.5.8.1.2 Spindles		L				No	No Tricoat
spindle		52	26	7	20	39013	
		56	30	7	100	39029	
		61	35	7	20	30717	
		64	38	7	20	94228	
		69	43	7	200	39014	
		76	50	7	20	30765	

6.6 Frame components

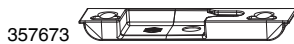
6.6.1 Striker plates

6.6.1.1 Striker plates for 4 mm air gap



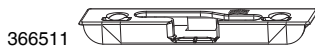
6.6.1.1.1 Striker plates for 4 mm air gap					No	No Tricoat
silver	striker plate for 4 mm air gap, 13 mm offset	- 1 mm gasket-compression	right	200	357671 ¹	359251 ¹
			left	200	357672 ¹	359252 ¹
			right	200	363020 ¹	
			left	200	363021 ¹	


¹ Use the left striker for the right RS element and vice-versa



6.6.1.1.2 Striker plates i.S. for 4 mm air gap					No	No Tricoat
silver	striker plate i.S. for 4 mm angled screw-fixing air gap, 13 mm offset	- 1 mm gasket-compression	right	100	357673 ¹	359253 ¹
			left	100	357674 ¹	359254 ¹
			right	100	360102 ¹	
			left	100	360103 ¹	


¹ Use the left striker for the right RS element and vice-versa




6.6.1.1.3 Striker plates PAS 4 mm air gap					No	No Tricoat
silver	striker plate for PAS 4mm air gap 13mm offset		left	100	366512	
			right	100	366511	

6.6.1.2 Striker plates 12 mm air gap 18 mm Euro-rebate

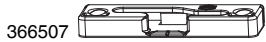


6.6.1.2.1 Striker plates 12 mm air gap 18 mm Euro-rebate					No	No Tricoat
silver	striker plate Euro-rebate 18 mm	double screw fixing		200	34943	201476*
			angled screw-fixing	200	34980	355135
			- 1 mm gasket-compression	200	357844	
			+ 1 mm gasket-compression	200	359769	



6.6.1.2.2 Striker plates i.S. 12 mm air gap 18 mm Euro-rebate					No	No Tricoat
silver	striker plate i.S. Euro-rebate 18 mm without reinforcement rings	angled screw-fixing		100	355606	358991*
	striker plate i.S. Euro-rebate 18 mm	angled screw-fixing	+ 1 mm gasket-compression	100	359770	
			- 0.7 mm gasket-compression	100	96660	362849
			100	96860	97544*	


* Availability and delivery time on request.




6.6.1.2.3 Striker plates PAS 12 mm air gap 22 mm Euro-rebate					No	No Tricoat
silver	striker plate for PAS timber 22mm rebate depth 12mm air gap 13mm offset	right	100		366507	
		left	100		366508	

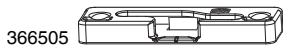
6.6.1.3 Striker plates 12 air gap 24 mm Euro-rebate




6.6.1.3.1 Striker plates 12 air gap 24 mm Euro-rebate					No	No Tricoat
silver	striker plate 24mm rebate depth, 13mm offset	angled screw-fixing	200		34934	359575*
		- 1 mm gasket-compression	200		359297	361346*
	striker plate HG 24mm rebate depth, 13mm offset	angled screw-fixing	200		360849	
	striker plate 24mm rebate depth, 13mm offset without reinforcement rings	angled screw-fixing	100		362812	

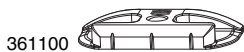



6.6.1.3.2 Striker plates i.S. 12 mm air gap 24 mm Euro-rebate					No	No Tricoat
silver	striker plate i.S. 24mm rebate depth, 13mm offset	angled screw-fixing	100		364952	366635
	without reinforcement rings	- 1 mm gasket-compression	100		364953	366636




6.6.1.3.3 Striker plates PAS 12 mm air gap 24 mm Euro-rebate					No	No Tricoat
silver	striker plate for PAS timber 24mm rebate depth 12mm air gap 13mm offset	- 0.8 mm gasket-compression	right	100	369408	
			left	100	369409	
			left	100	366506	
			right	100	366505	

6.6.1.4 Striker plates 12 mm air gap 30 mm Euro-rebate

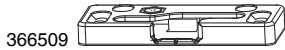


6.6.1.4.1 Striker plates 12 mm air gap 30 mm Euro-rebate					No	No Tricoat
silver	striker plate 30mm rebate depth, 13mm offset	angled screw-fixing	200		360443	362304
	striker plate HG 30mm rebate depth, 13mm offset	angled screw-fixing	200		361100	



6.6.1.4.2 Striker plates i.S. 12 mm air gap 30 mm Euro-rebate					No	No Tricoat
silver	striker plate i.S. 30mm rebate depth, 13mm offset	angled screw-fixing	100		360444	362305

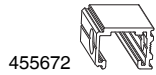





6.6.1.4.3 Striker plates PAS 12 mm air gap 30 mm Euro-rebate					No	No Tricoat
silver	striker plate for PAS timber 30mm rebate depth 12mm air gap 13mm offset	left	100		366510	
	striker plate for PAS 30mm rebate depth, 13mm offset with positioning pins 12 x 3 mm	right	100		368275	
		left	100		368276	
	striker plate for PAS timber 30mm rebate depth 12mm air gap 13mm offset	right	100		366509	


6.7 SKB accessories

6.7.1 Profiles in stock lengths for SKB and PAS




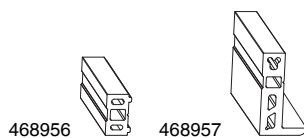
6.7.1.1 Guide tracks	L		No	No Tricoat
silver	6.070	10	455672	
brown	6.070	10	467089	
bronze SKB	6.070	10	467088	




6.7.1.2 Cover for top guide tracks	L		No	No Tricoat
silver	6.080	50	455673	
brown	6.080	50	455675	
white	6.080	50	455674	
cream white RAL 9001	6.080	50	455677	
bronze SKB	6.080	50	455676	



6.7.1.3 Roller tracks	L		No	No Tricoat
silver	6.070	10	455664	
brown	6.070	10	455665	
bronze SKB	6.070	10	455666	




6.7.1.4 Packer for roller tracks and guide tracks		No	No Tricoat
packer 9 mm for guide track SKB/PAS L=3.035mm silver	5	468956 ¹	
packer 9 mm for roller track SKB/PAS L=3.035mm silver	5	468957 ¹	

¹ Can be used from overload strength 24 mm




465181

6.7.1.5 Roller cover strip	L		No	No Tricoat
silver	5.170	10	455667	
	2.036	10	465181	
brown	5.170	10	455669	
	2.036	10	465183	
white	5.170	10	455668	
	2.036	10	465182	
cream white RAL 9001	5.170	10	455671	
	2.036	10	465185	
bronze SKB	5.170	10	455670	
	2.036	10	465184	




455683

6.7.1.6 Connecting rod	L		No	No Tricoat
connecting rod SKB Ø = 10 mm	3.600	1	455683	




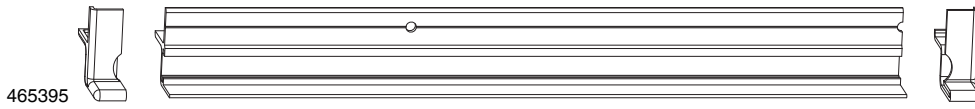
466726


6.7.1.7 Track cover 13 mm	L		No	No Tricoat
silver	5.220	10	466726	
brown	5.220	10	466728	
white	5.220	10	466727	
cream white RAL 9001	5.220	10	466730	
bronze SKB	5.220	10	466729	



465390

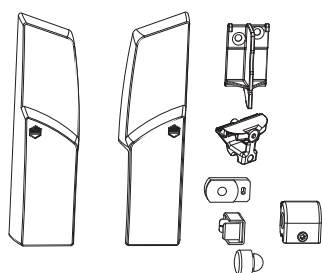
6.7.1.8 Track cover 20 mm	L		No	No Tricoat
silver	5.170	10	465390	
brown	5.170	10	465392	
white	5.170	10	465391	
cream white RAL 9001	5.170	10	465394	
bronze SKB	5.170	10	465393	




6.7.1.9 Track cover set 20 mm	L		No	No Tricoat
silver	1.650	10	465395 ¹	
brown	1.650	10	465397 ¹	
white	1.650	10	465396 ¹	
cream white RAL 9001	1.650	10	465399 ¹	
bronze SKB	1.650	10	465398 ¹	

¹ 1 x Track cover, 1 x cover cap left, 1 x cover cap right

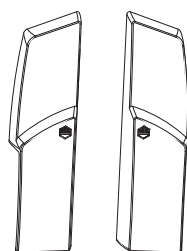
6.7.2 Accessories and individual components SKB and PAS




455648

6.7.2.1 Bag of accessories for SKB and PAS		No	No Tricoat
silver	20	455648 ¹	
cream white RAL 9001	40	455662 ¹	
white	20	455649 ¹	
brown	40	455650 ¹	
bronze SKB	40	455651 ¹	

¹ Contents: 1x cover cap for roller, left, 1x cover cap for roller, right, 1x cover cap for left scissor stay, 1x cover cap for right scissor stay, 2x routing cover caps, 1x control module, 1x bottom stop buffer, 1x to stop buffer.




102237

6.7.2.2 Set of cover caps for rollers with reinforcement		No	No Tricoat
silver	10	102237	
cream white RAL 9001	10	102241	
white	10	102238	
brown	10	102239	
bronze SKB	10	102240	




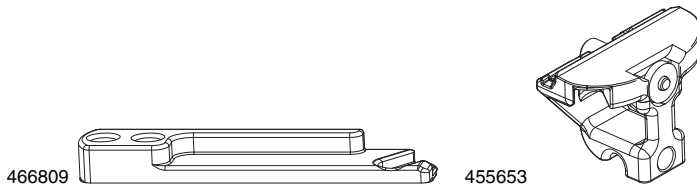
465351

6.7.2.3 Set of cover caps for rollers without reinforcement		No	No Tricoat
silver for 100kg version	10	465351	
cream white RAL 9001 for 100kg version	10	465353	
white for 100kg version	10	465349	
brown for 100kg version	10	465350	
bronze SKB for 100kg version	10	465352	




467763

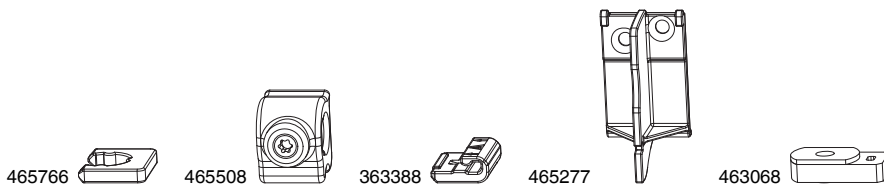
6.7.2.4 Cover caps for guide tracks		No	No Tricoat
set of cover caps for guide track left/right silver	10	467763	
set of cover caps for guide track left/right white	10	467764	




6.7.2.5 Control module

					No	No Tricoat
control element scissor-slider PAS	left	silver		10	466809	
	right	silver		10	466810	
control module SKB adjustable	for diagram D					
		silver		10	455653¹	
		brown		10	455657¹	
		bronze SKB		10	455655¹	

¹ Only for diagram D




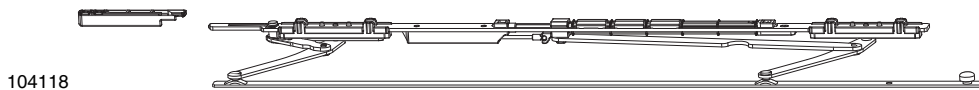
6.7.2.6 Individual components SKB and PAS

					No	No Tricoat
anti-twist device for height adjustment roller SKB				100	465766	
rod guide for connecting rod SKB				1	465508	
safety catch roller SKB				10	363388	
SKG - clip for drive gear SKB				100	467893	
support bracket for track cover roller SKB				1	465277	
top buffer stop for guide track SKB				50	463068	





6.7.2.7 Travel restrictor 90° for PAS with 9 mm offset

					No	No Tricoat
surface mounted PVC travel restrictor 90° surface-mounted silver				200	357081	
surface mounted PVC travel restrictor 90° surface-mounted Tricoat				200	357887	



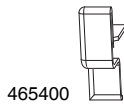
6.7.2.8 Package scissor slider TRICOAT

						No	No Tricoat
scissor slider PAS package	right	Tricoat	750 - 900	1		104118¹	
			901 - 1.250	1		104119¹	
			1.251 - 1.650	1		104120¹	
left	Tricoat	750 - 900	1		104115¹		
		901 - 1.250	1		104116¹		
		1.251 - 1.650	1		104117¹		

¹ 1 x scissor slider PAS, 1 x control element for scissor slider

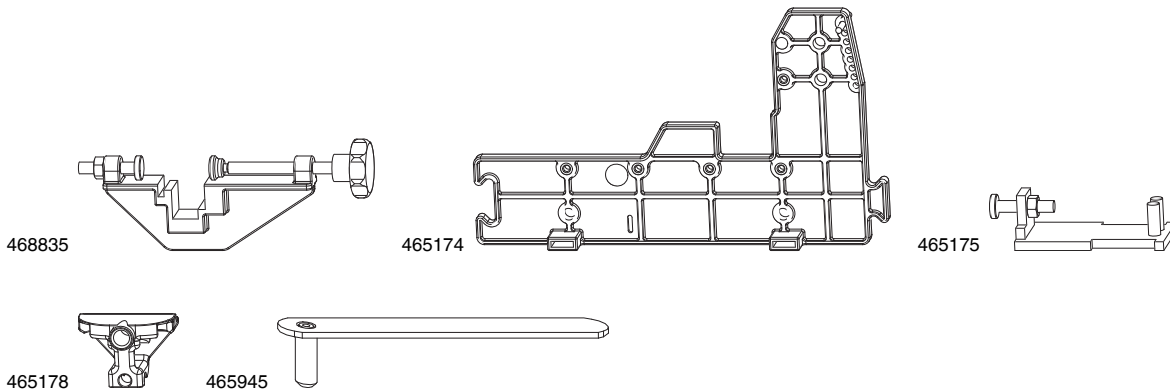


6.7.2.9 Cover caps for track cover 13 mm			No	No Tricoat
silver	right	50	466732	
	left	50	466731	
brown	right	50	466736	
	left	50	466735	
white	right	50	466734	
	left	50	466733	
cream white RAL 9001	right	50	466740	
	left	50	466739	
bronze SKB	right	50	466738	
	left	50	466737	



6.7.2.10 Cover caps for track cover 20 mm			No	No Tricoat
silver	right	10	465401	
	left	10	465400	
brown	right	10	465405	
	left	10	465404	
white	right	10	465403	
	left	10	465402	
cream white RAL 9001	right	10	465409	
	left	10	465408	
bronze SKB	right	10	465407	
	left	10	465406	

6.8 Jigs



6.8.1 Jigs		No	No Tricoat
clamping jig for positioning the SKB guide track and roller track	1	468835	
jig for aligning screw holes centrally on SKB rollers	1	465174	
installation jig for SKB control module	1	465175	
drill jig for movable SKB control module diagram D	1	465178¹	
jig for aligning screw holes centrally on SKB guide track	1	465945	

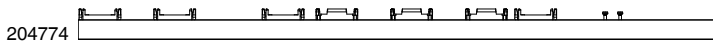
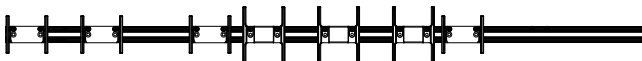
¹ Only for diagram D

6.8.2 Positioning jigs



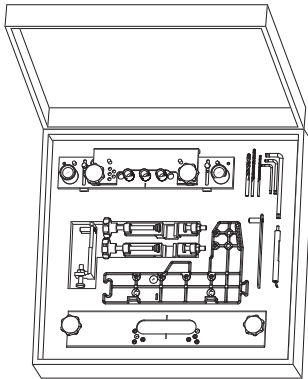
6.8.2.1 Positioning jigs for width connectors MULTI MATIC			No	No Tricoat
striker positioning jig MM PAS for width connector top and bottom	620 - 1.650	1	219313¹	

¹ Jigs suitable for drive-gears and height connectors.



6.8.2.2 Positioning jigs for drive gear/height connector MULTI MATIC			No	No Tricoat
striker positioning jig MM for drive gear FHH with 48 mm retainer	661 - 1.340	1	204774¹	
	1.341 - 1.700	1	204775¹	
striker positioning jig MM for drive gear FHH for doors with 48 mm retainer	1.701 - 2.450	1	204776¹	

¹ Jigs suitable for drive-gears and height connectors.



466817

6.8.3 Case with jigs



No

No
Tricoat

jig case for PAS

1

466817



460339

6.8.4 Jig accessories



No

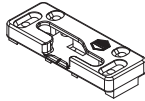
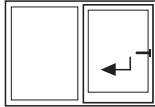
No
Tricoat

set of Torx screwdrivers TX15 + TX25 + TX40

1

460339

6.9 Striker plates for PAS

		
Alphacan System 70/80	367348	367347
Alphacan System MD Plus	367372	367371
Aluplast energeto 5000	367352	367351
Aluplast Ideal 3000	367364	367362
Aluplast Ideal 4000	367352	367351
Aluplast Ideal 5000	367352	367351
Aluplast Ideal 6000	367352	367351
Aluplast Ideal 8000	367352	367351
Gealan S3000	367356	367355
Gealan S7000	367356	367355
Gealan S8000	367356	367355
Inoutic Eforte	367350	367349
Inoutic MD	367350	367349
Inoutic MD100	367350	367349
Inoutic Prestige	367350	367349
KBE 88+	367374	367373
KBE System 70	367374	367373
Kömmerling 88+	367360	367359
Kömmerling Eurodur Futur Classic	367360	367359
Kömmerling Eurodur Futur MD Exklusiv	367360	367359
Rehau Brillant Design	367354	367353
Rehau Geneo	367374	367373
Rehau Thermo Design	367354	367353
Schüco Corona AS	367352	367351
Schüco Corona CT70	367364	367362
Schüco Corona Si82 MD	367364	367362
SIP System Salamander Design 3D	367370	367369
SIP System Salamander Streamline	367370	367369
Trocal 88+	367368	367367
Trocal A5/M5	367358	367357
Trocal Innonova 2000	367368	367367
Trocal InnoNova70AD	367358	367357
Veka Softline 70 AD	367348	367347
Veka Softline 70 MD	367348	367347
Veka Softline 82 MD	367348	367347
Veka Topline AD	367348	367347
Wymar 3000	367346	367345





7 Locking Monitoring

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7 Locking Monitoring

54795 

7.1 Locking and Tilt Monitoring for Multi Trend



No

No
Tricoat

silver extension piece not croppable 130

20

54795

465387 

7.2 Faceplate extension for SKB-Z



No

No
Tricoat

silver SKB-Z extension piece 200

10

465387

201755 

7.3 Faceplate extension for Multi Matic



No


No
Tricoat

silver faceplate extension MM, extendable

20

201755

209921*

363177 

7.4 Magnetic Switch for Locking and Tilt Monitoring via VdS B/C



No

No
Tricoat

grey

reed contact RHS for central heating control 15 m cable (0.14 mm²)

10

363181

reed contact RHS for central heating control 6 m cable (0.14 mm²)

10

363180

reed contact RVS for locking and tilt monitoring 10 m cable (0.14 mm²)

10

363178

reed contact RVS for locking and tilt monitoring 15 m cable (0.14 mm²)

10

363179¹

reed contact RVS for locking and tilt monitoring 6 m cable (0.14 mm²)

10

363177

¹ Reed contact for lock monitoring RVS cable 15 m is not approved by VdS

455427 

455426 

7.5 Magnetic Switch for Locking Monitoring via VdS C



No

No
Tricoat

silver

magnetic contact for combined opening and locking monitoring 6 m cable (0.14 mm²)

10

455427

screw-in magnetic contact VS for locking and tilt monitoring 6 m cable (0.14 mm²)

10

455426

363182 

7.6 Injection-moulded part for Reed Contact



No

No
Tricoat

white

injection-moulded part for dry reed contact Type 7 RVS (PVC)¹

10

370482

injection-moulded part for dry reed contact type 1 RVS (PVC)¹

10

363182

injection-moulded part for dry reed contact type 2 RVS (PVC)¹

10

363183

injection-moulded part for dry reed contact type 3 RVS (PVC)¹

10

363184

injection-moulded part for dry reed contact type 4 RVS (PVC)¹

10

363185

injection-moulded part for dry reed contact type 5 RVS (PVC+timber)¹

10

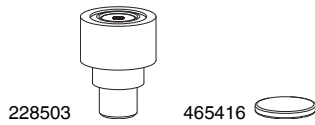
363186

injection-moulded part for dry reed contact type 6 RVS (PVC)¹

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363187

¹ To select the correct injection-moulded part please refer to the latest profile data sheet.



7.7 Spigot for closure monitoring



No

No
Tricoat

	contact sensor cam short 10x13.4	100	228503
blank	magnetic disc Ø 8x1 mm	200	465416



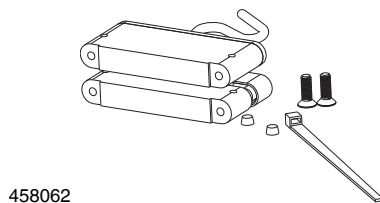
7.8 Adapter with contactor



No

No
Tricoat

	adaptor with contact sensor for HS drive gear	1	227702
silver	adaptor with contact sensor	50	57425



7.9 Electronic Cable Junction without Contacts for Sliding Elements



No

No
Tricoat

	electronic transmitter without contacts for alarm glass and glass breakage sensors	1	458062
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7.10 Cable Junction Accessories for Sliding Elements



No

No
Tricoat




white	construction case set for electronic cable junction without contacts	1	455431
	fixing frame for electronic cable junction without contacts	1	455429
brown	construction case set for electronic cable junction without contacts	1	455432
	fixing frame for electronic cable junction without contacts	1	455430






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101308	10	77	101975	1	47	103633	1	50
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101318	1	67	102169	1	188	103641	1	51
101319	10	79	102170	1	188	103642	1	51
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101652	10	60	102209	10	145	103648	1	51
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101680	10	89	102237	10	174,202,234,260	103651	1	51
101681	10	89	102238	10	174,202,234,260	103652	1	51
101682	10	89	102239	10	174,202,234,260	103653	1	52
101692	1	46	102240	10	174,202,234,260	103654	1	52
101693	1	47	102241	10	174,202,234,260	103655	1	52
101727	1	47	102298	1	157,248	103656	1	52
101731	1	47	102299	1	188	103657	1	52
101732	1	47	102300	1	188	103658	1	52
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101734	1	47	102304	1	204	103660	1	52
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101737	1	46	102310	1	36	103662	1	52
101738	1	46	102328	1	143	103663	1	52
101739	1	46	102721	20	84	103664	1	52
101740	1	46	102729	1	66	103665	1	53
101741	1	46	102730	1	67	103666	1	53
101742	1	46	102740	1	66	103667	1	53
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101745	1	46	102886	10	70	103670	1	53
101746	1	46	102887	10	70	103671	1	53
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101752	10	77	103065	1	36	103675	1	53
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101755	10	78	103068	1	36	103678	1	54
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101834	1	44	103074	1	155,186	103684	1	54
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