

TECHNOLOGY IN MOTION



MACO RAIL-SYSTEMS

SLIDING HARDWARE



Catalogue 2017



Nº	Part number		Sash lifter
	Packing unit		Number of security cams (i.S.)
	Maximum sash weight		Sash lifter
Nº Tricoat	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.

Stamp:

Please print your name in capital letters

Date: _____ Signature: _____

MACO sales manager: _____





1 Technical and General Information



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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"

Technical and General Information

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 TRI-COAT-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, speeds 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

- 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)

Threshold with thermal break

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

Application range (dimensions apply to timber units only)

- a) Min. sash width: 630 mm
- b) Max. sash width: 2,200 mm
- c) Min. sash height: 745 mm
- d) Max. sash height: 2,870 mm
- e) Max. sash weight: 150 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 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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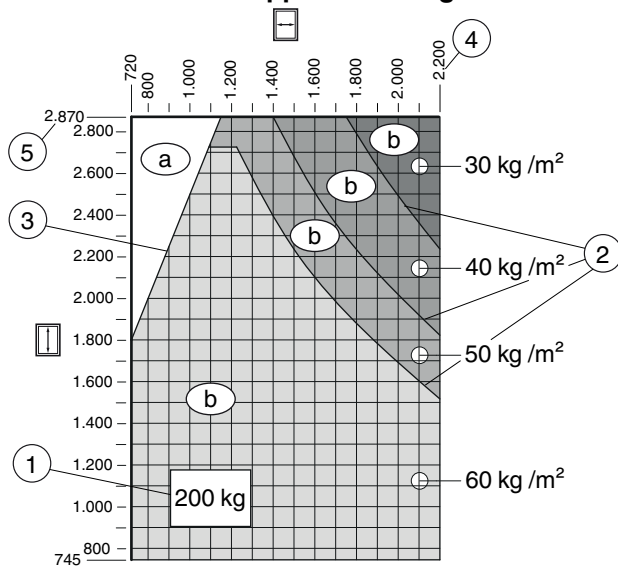
2 HS-ST

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

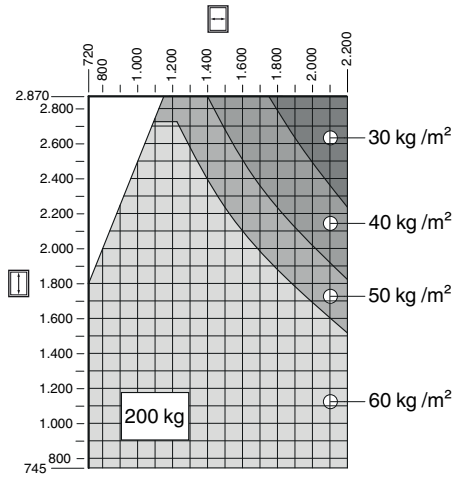
Specifications on the application diagram



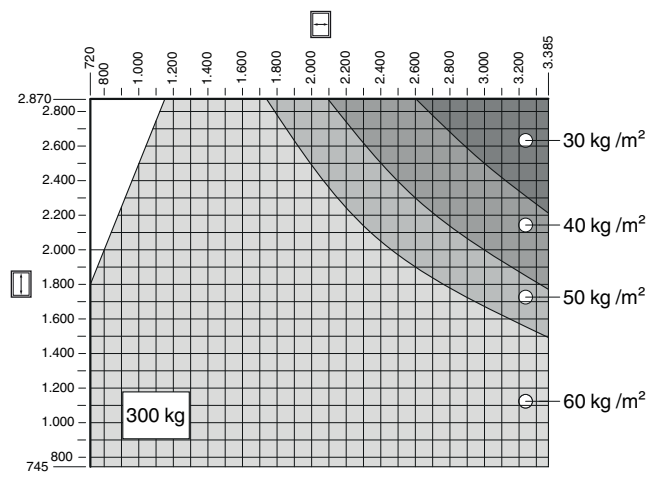
CAUTION: When fabricating lift & slide PVC profiles and aluminium profiles, the application ranges of the profile manufacturer must be observed. The application ranges of the profile manufacturer can limit the application ranges of the MACO lift & slide hardware.

- 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

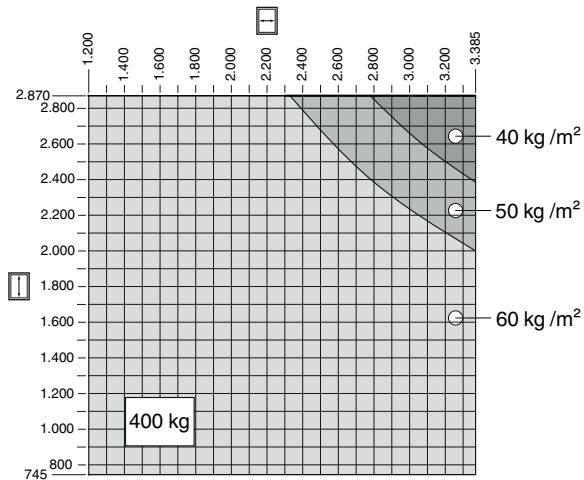
Application diagram 200 kg



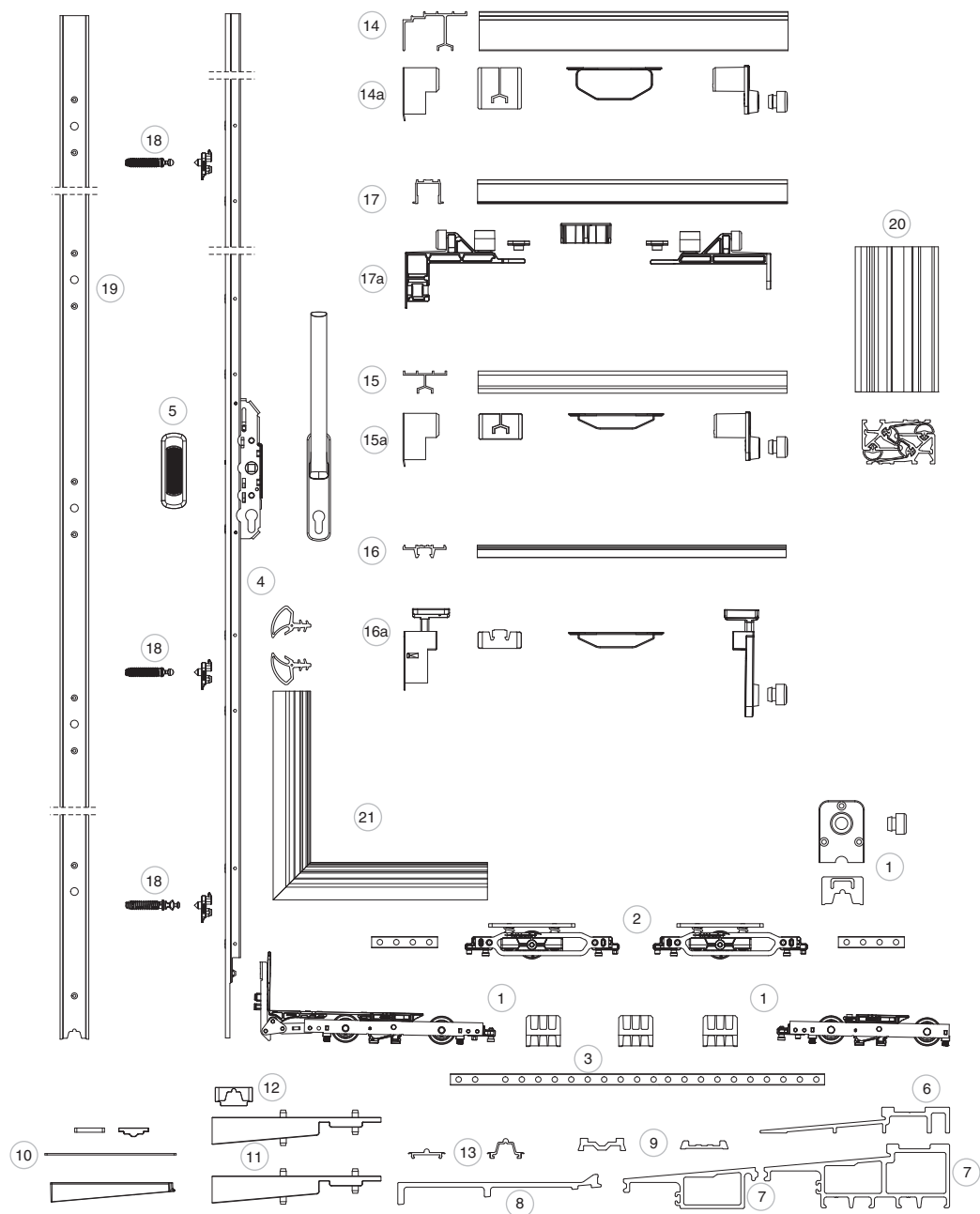
Application diagram 300 kg



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.

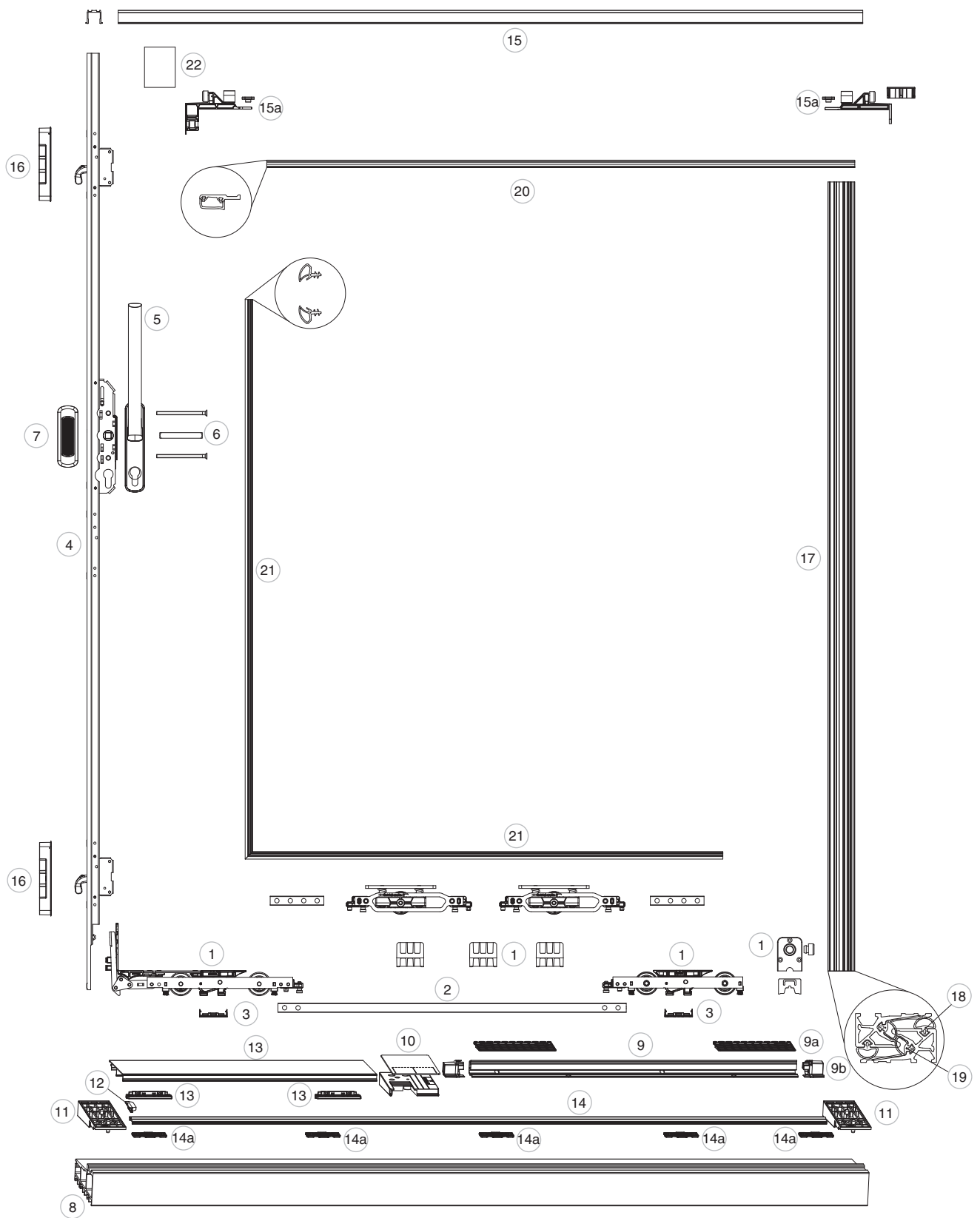
Observe all MACO restrictions regarding sash size limits (see application diagrams)!

The sash must not exceed 2.5 times the sash width.



Selection guide		Page
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6	2.9.1.1 Frame cover ALU and GRP	61
7	2.9.1.2 GRP basic profiles	61
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11	2.9.1.10.1 Connection plates	68
12	2.9.1.10.2 Seals for roller tracks	68
13	2.9.3 Roller tracks	75
17	2.9.4.1.1 Guide tracks flush-mounted	76
17a	2.9.4.1.2 Accessories for flush-mounted guide tracks	76
14	2.9.4.2.1 Guide tracks with cover	77
14a	2.9.4.2.2 Accessories for guide tracks with cover	77
15	2.9.4.3.1 Guide tracks universal low	78
15a	2.9.4.3.2 Accessories for guide track universal low	78
16	2.9.4.4.1 Guide tracks C	79
16a	2.9.4.4.2 Accessories for guide track C	79
18	2.9.5 Locks	83
19	2.9.6.3 Stop sealing profiles	84
20	2.10.1.1 Gasket track PVC 28 mm	85
21	2.10.2.1.1 Pack of DSE7400-7430 sash seals	87

2.3 L&S-Panorama timber: Hardware overview

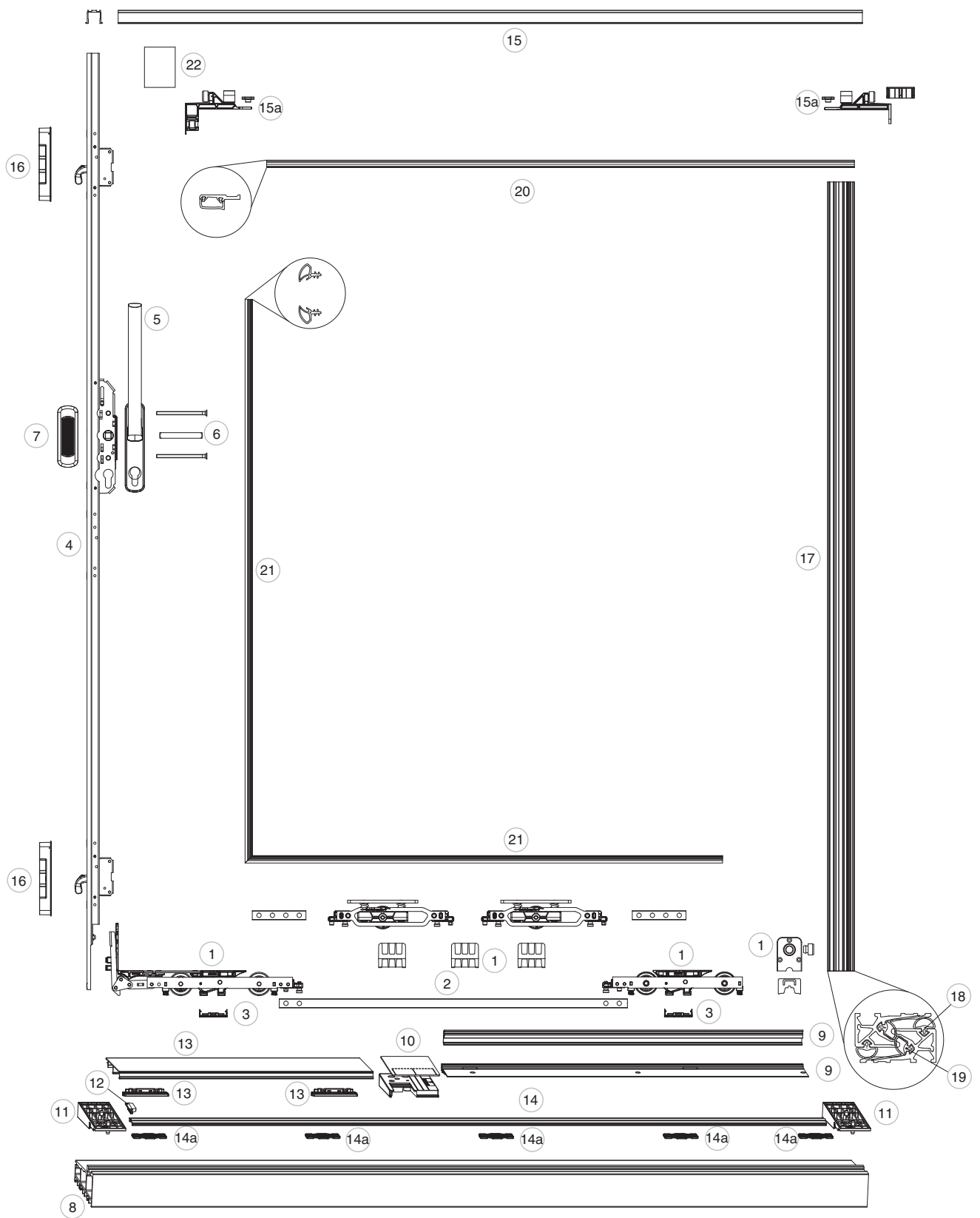




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5	2.8.3.2.7 HS handle 12 with cover plate	54
6	2.8.3.3.1 Set of screws and spindle — HS handle 12	58
7	2.8.3.3.3 Short finger pulls	59
8	2.9.1.2.3 Basic profile 180, special design SWITZERLAND	62
9	2.9.1.5 Tracks for frameless fixed glazing Timber	65
9a	2.9.1.7 Glass gripping for threshold for frameless fixed glazing	66
9b	2.9.1.8 Inch for glass reception board Timber	66
10	2.9.1.9.3 Packaging for gasket plates	67
11	2.9.1.10.1 Connection plates	68
12	2.9.1.10.2 Seals for roller tracks	68
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
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



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



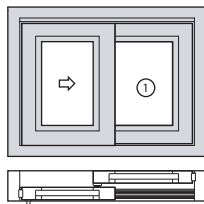


Selection guide		Page
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3	2.8.1.2.4 Roller supports for roller	38
4	2.8.2.2.3 HS hook drive gear BS 37.5 PC	41
5	2.8.3.2.7 HS handle 12 with cover plate	54
6	2.8.3.3.1 Set of screws and spindle — HS handle 12	58
7	2.8.3.3.3 Short finger pulls	59
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11	2.9.1.10.1 Connection plates	68
12	2.9.1.10.2 Seals for roller tracks	68
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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
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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

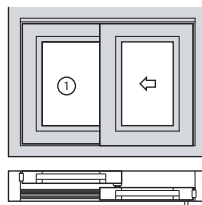


2.5 HS-ST hardware list

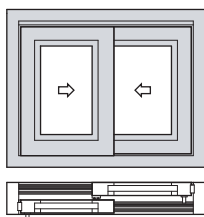
A DIN Left



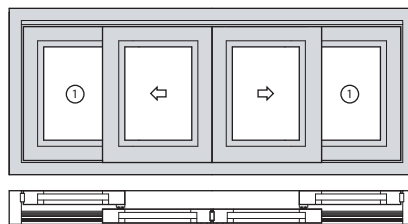
A DIN Right



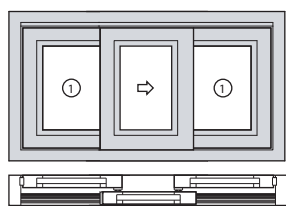
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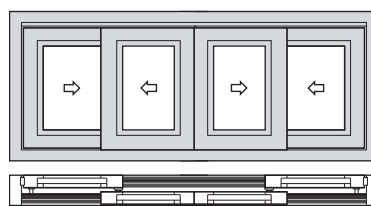
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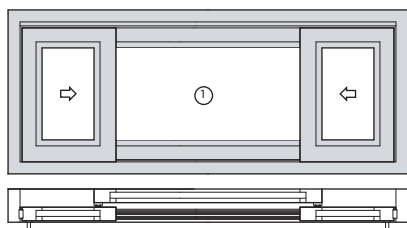
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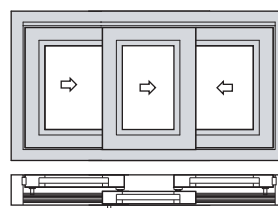
F



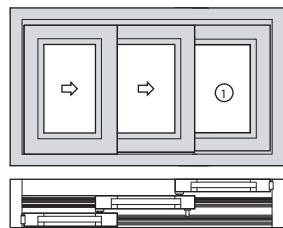
K



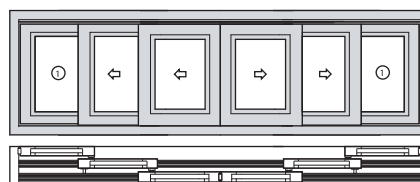
H



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



Product liability advice

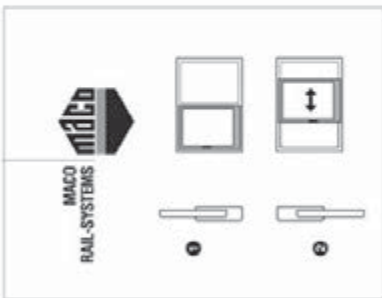
- Your windows and doors have been equipped with a high-quality lift & slide fittings. Their operation is straightforward and trouble-free; nevertheless you should read these instructions carefully and adhere to the operation advice.
- In your own interest, please read these operation and maintenance 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!

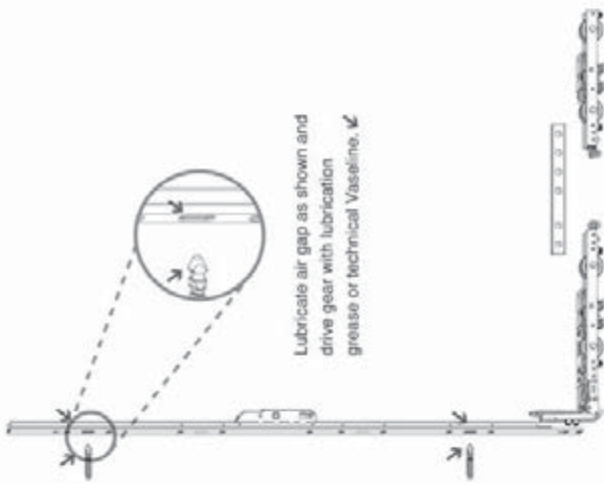
Maintenance

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!

Operation





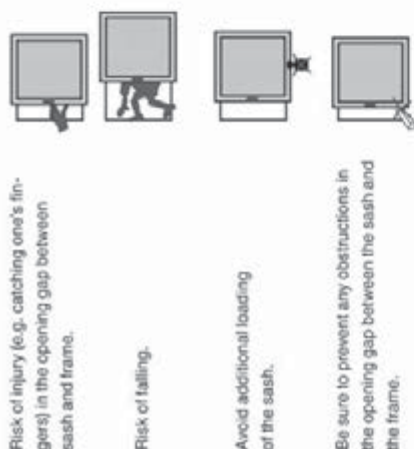
MACO RAIL-SYSTEMS SLIDING FITTINGS



Operation and maintenance instructions

Lift & slide fittings

Safety and maintenance instructions



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.

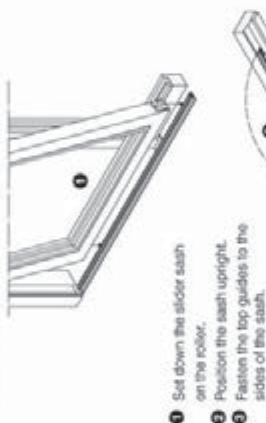
Use only water with a mild soap solution for cleaning purposes; no corrosive cleaning agents!

Do not paint over the fittings!

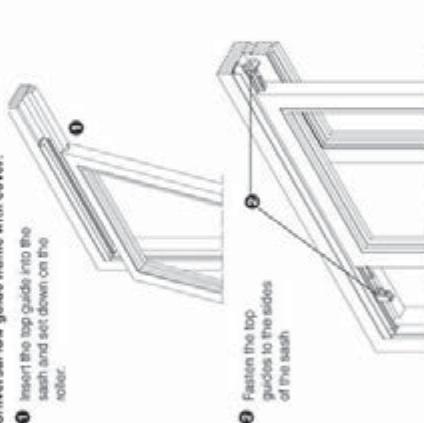
Inserting the slider sash

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

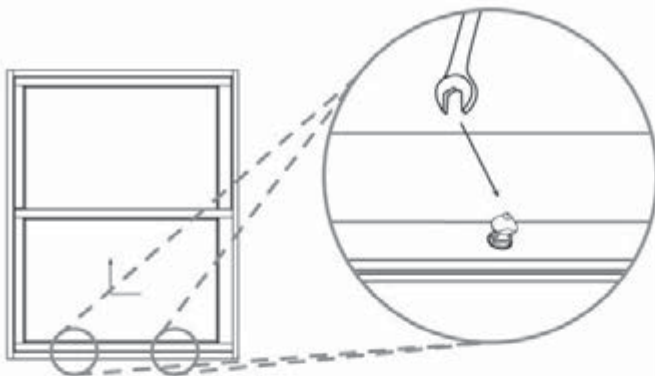


Universal low guide frame with cover:



Window adjustments

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

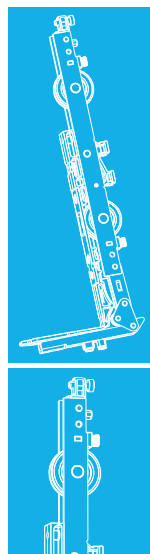


The same care and maintenance instructions apply to all window types that are not specifically mentioned in these instructions (e.g. System C lift & slide windows)!

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October 2008
Date changed:
February 2011
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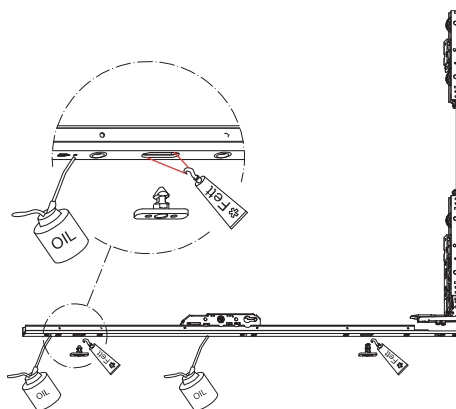


Operation and maintenance
instructions Lift&Slide fittings

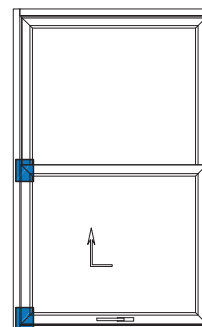
Maintenance

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!



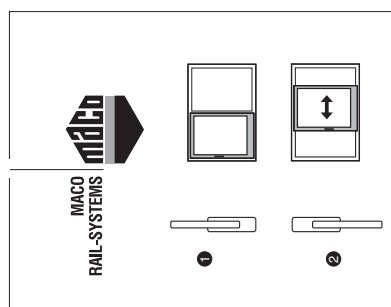
2. Security relevant fittings components are to be examined at regular intervals for wear and tear!



Product liability advice

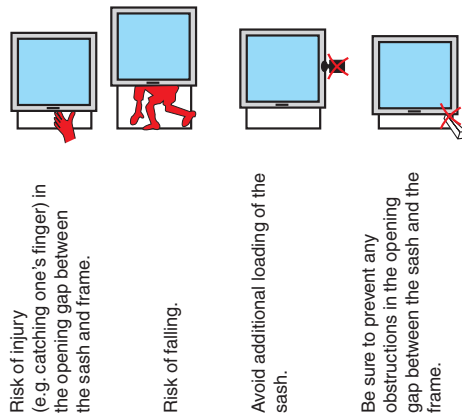
- Your windows and doors have been equipped with a high-quality turn&tilt hardware. The operation is straightforward and trouble-free; nevertheless you should read through these instructions carefully and adhere to the operation advice.
- In your interests, please do not forget to observe the safety 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

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.

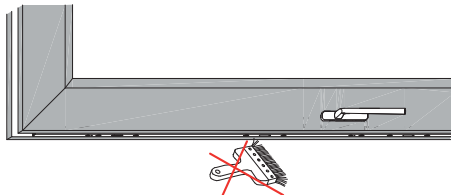
Apart from the essential care of the fittings components, you should also constantly check the surface finish, the glazing, and the seals and immediately repair any defective areas.

Use only a mild soap solution (no corrosive agents) for cleaning purposes!

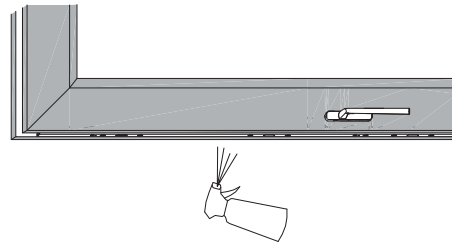
Do not paint over the fittings!

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)!

MACO
RAIL-SYSTEMS



HS-ST

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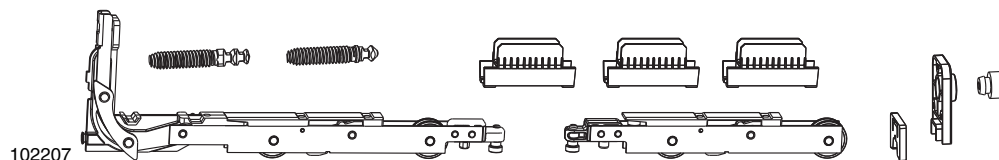
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2.8 Sash components:

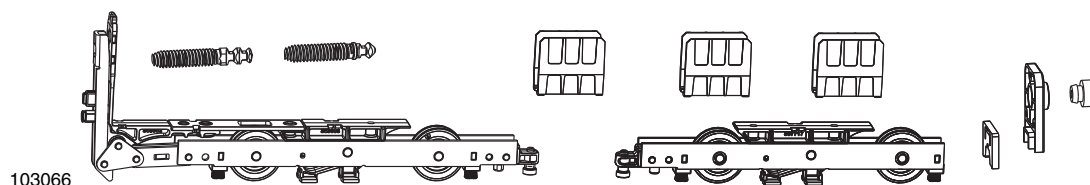
2.8.1 Rollers

2.8.1.1 Roller sets and connecting rods



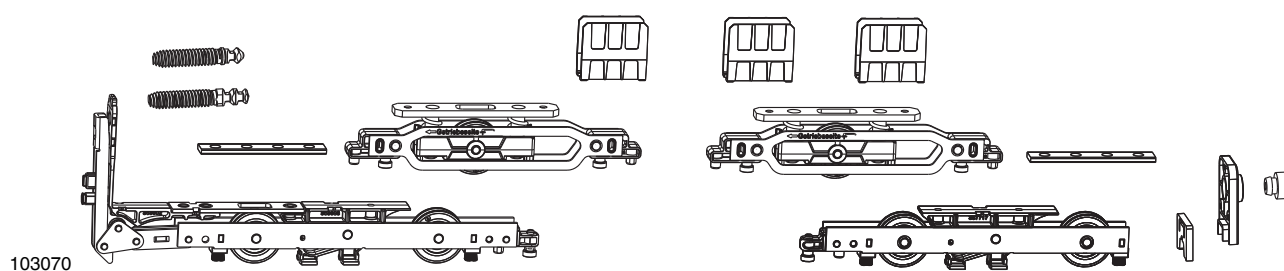
2.8.1.1.1 Roller set 200 kg

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



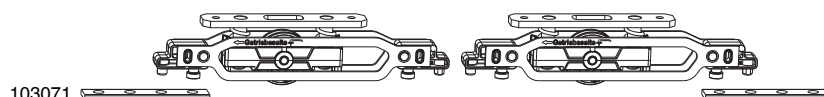
2.8.1.1.2 Roller set 300 kg

			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

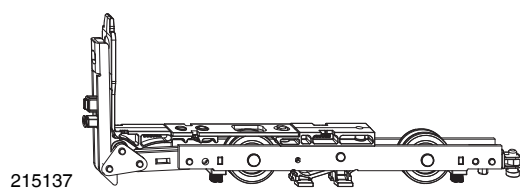
2.8.1.1.5 Connecting rods			L		No	No Tricoat
fully punched connecting rod HS 16.4x4	silver	720 - 3.385	3.240	10	361173 ^{1,2}	
	Tricoat	720 - 3.385	2.784	1		367616 ^{1,2}
punched connecting rod HS 16.4x4	silver	720 - 1.300	692	10	359639 ^{1,2}	360551 ^{1,2}
		1.225 - 1.800	1.196	10	359640 ^{1,2}	360552 ^{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



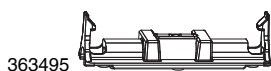
2.8.1.2.1 Individual components for roller					 Tricoat		
roller	with brushes	300	behind	silver	10	215136	223357
			centre	silver	10	215138	223358
			in front	silver	10	215137	223356
	without brushes	200	behind	silver	10	210492	211462
			in front	silver	10	210491	211461
		300	behind	silver	10	214689	223354
			centre	silver	10	214691	223355
			in front	silver	10	214690	223353



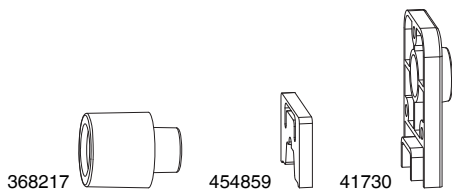
2.8.1.2.2 Rod guides and groove supports			No	No Tricoat
groove support-brace for 200 kg		10	359801	
groove support-brace for 300 kg		10	359802	



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.



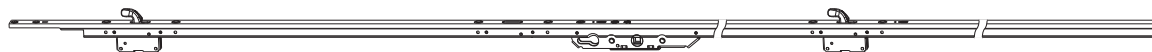
2.8.2.1.2 HS drive gear BS 27.5 RC

				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.



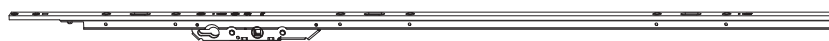
224154



2.8.2.1.3 HS hook drive gear BS 27.5 PC				L			Nº	Nº Tricoat
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

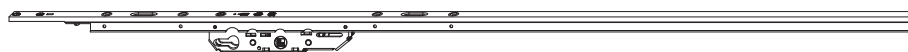


2.8.2.1.4 HS Hook Drive Gear Scheme C DM 27,5				L			Nº	Nº Tricoat
silver		735 - 1.960	400	1.300	10	5	228122 ¹	
		1.835 - 2.860	1.000	2.300	10	5	228124 ¹	

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			Nº	Nº Tricoat
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

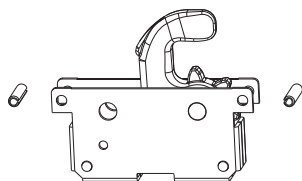
**2.8.2.2.4 HS Hook Drive Gear Scheme C DM 37,5****L****No****No**
Tricoat

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.

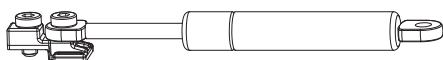
2.8.2.3 Accessories and individual components for drive gear

104296

**2.8.2.3.1 Hook casing for hook drive gear****No****No**
Tricoat

hook case for HS hook drive gear silver	10	104296	
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104204



2.8.2.3.2 Drive gear damper



No

No
Tricoat

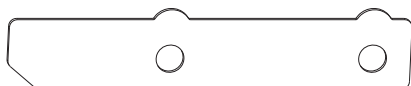
retrofit drive gear damper HS

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

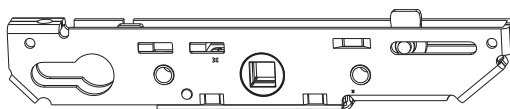
5

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

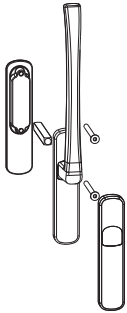
10

226693



2.8.3 Handles

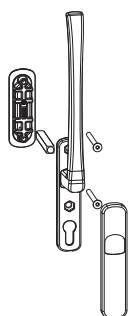
2.8.3.1 HS handle sets



13341

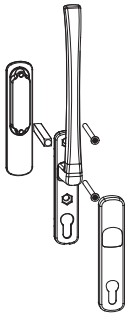


2.8.3.1.1 with cover plate and long finger pull						No	No Tricoat
black brown RAL 8022	71	56 68	10	anodised	1	13340	
bronze	71	56 68	10	anodised	1	13281	
champagne	71	56 68	10	anodised	1	13337	
silver	71	56 68	10	anodised	1	13339	
titanium	71	56 68	10	anodised	1	11761	
traffic white RAL 9016	71	56 68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



101841

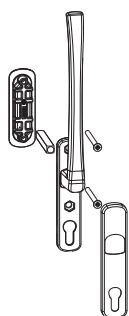
2.8.3.1.2 with cover plate and short finger pull								No	No Tricoat
black brown RAL 8022	71	56	10	anodised	1			101863	
		68	10	anodised	1			101864	
		max. 110	10	anodised	1			101963	
bronze	71	56	10	anodised	1			101834	
		68	10	anodised	1			101835	
		max. 110	10	anodised	1			101961	
champagne	71	56	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

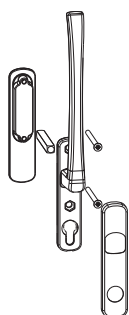
2.8.3.1.3 with cover plate PC and long finger pull							No	No Tricoat
black brown RAL 8022	71	56	10	anodised	1		11766	
		68	10	anodised	1		10594	
		max. 110	10	powder coated	1		103907	
bronze	71	56	10	anodised	1		10623	
		68	10	anodised	1		10592	
		max. 110	10	anodised	1		103903	
champagne	71	56	10	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	





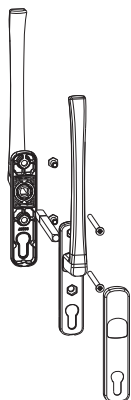
101851

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	



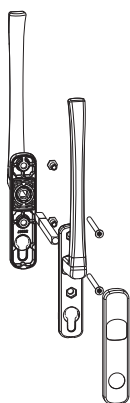
101736

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	



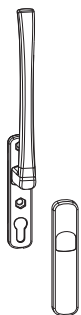
13343

2.8.3.1.6 with interior and exterior cover plate PC							
black brown RAL 8022	71	68	10	anodised	1	13344	
		max. 110	10	anodised	1	101975	
bronze	71	68	10	anodised	1	10142	
		max. 110	10	anodised	1	101973	
champagne	71	68	10	anodised	1	13346	
		max. 110	10	anodised	1	101974	
silver	71	68	10	anodised	1	13343	
		max. 110	10	anodised	1	101976	
titanium	71	68	10	anodised	1	10647	
		max. 110	10	anodised	1	101977	
traffic white RAL 9016	71	68	10	powder coated	1	10353	
		max. 110	10	powder coated	1	101978	



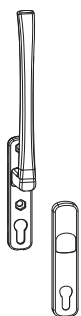
101731

2.8.3.1.7 with interior and exterior cover plate RC							
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	

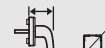


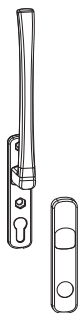
28576

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

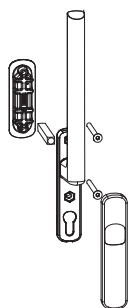


No

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

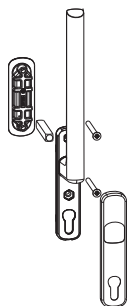
2.8.3.2.1 HS handle 12 with cover plate and short finger pull



No

No
Tricoat

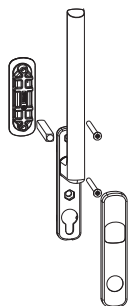
black brown RAL 8022	72	68	10	anodised	1	103631	
		78	10	anodised	1	103637	
		max. 86	10	anodised	1	104246	
		max. 110	10	anodised	1	103813	
bronze	72	68	10	anodised	1	103629	
		78	10	anodised	1	103635	
		max. 86	10	anodised	1	104244	
		max. 110	10	anodised	1	103811	
champagne	72	68	10	anodised	1	103630	
		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

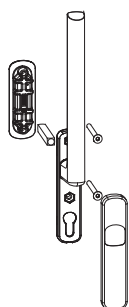
2.8.3.2.2 HS handle 12 with cover plate PC and short finger pull								
black brown RAL 8022	72	68	10	anodised	1	103649		
		78	10	anodised	1	103643		
		max. 86	10	painted	1	104252		
		max. 110	10	painted	1	103819		
bronze	72	68	10	anodised	1	103647		
		78	10	anodised	1	103641		
		max. 86	10	anodised	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		





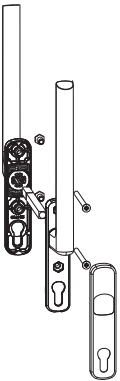
103662

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

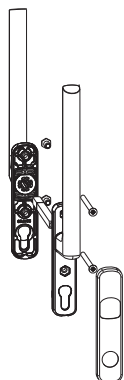
2.8.3.2.4 HS-Handle 12 with cover plate and finger pull short and Rosette RZ					No	No Tricoat
silver	72	10	anodised	1	105260	



103668

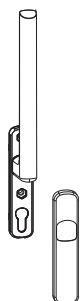


2.8.3.2.5 HS handle 12 with interior and exterior cover plate PC							No	No Tricoat
black brown RAL 8022	72	68	10	anodised	1		103667	
		78	10	anodised	1		103673	
		max. 110	10	anodised	1		103825	
bronze	72	68	10	anodised	1		103665	
		78	10	anodised	1		103671	
		max. 110	10	anodised	1		103823	
champagne	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	



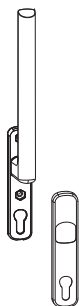
103680

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

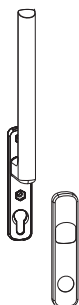
2.8.3.2.8 HS handle 12 with cover plate PC



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

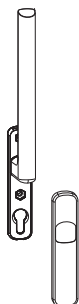
2.8.3.2.9 HS handle 12 with cover plate RC



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

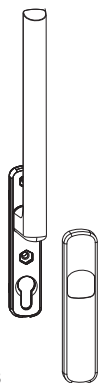
2.8.3.2.10 HS handle with cover plate and rosette RZ



No

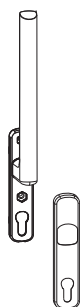
No
Tricoat

silver	72	10	anodised	1	227878	
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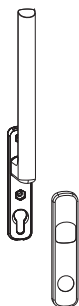
219498

2.8.3.2.11 HS handle 12 without cylinder hole					No	No Tricoat
cream white RAL 9001	72	10	powder coated	1	219498	



218416

2.8.3.2.12 HS handle 12 set exterior PC without lugs					No	No Tricoat
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

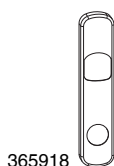


No

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

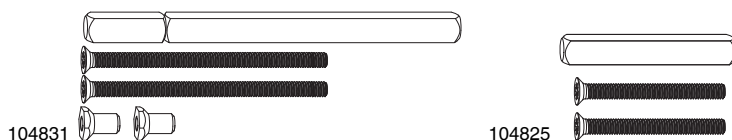


No

No
Tricoat

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



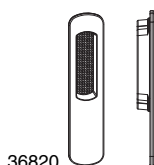
L



No

No
Tricoat

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



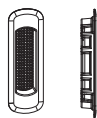
No

No
Tricoat

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	



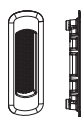
358342



2.8.3.3.3 Short finger pulls

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

369773



2.8.3.3.4 Short finger pulls 9 mm routing depth

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

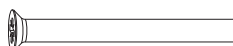
30000



2.8.3.3.5 Spindles

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



37884



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	

455274



101652



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

360060



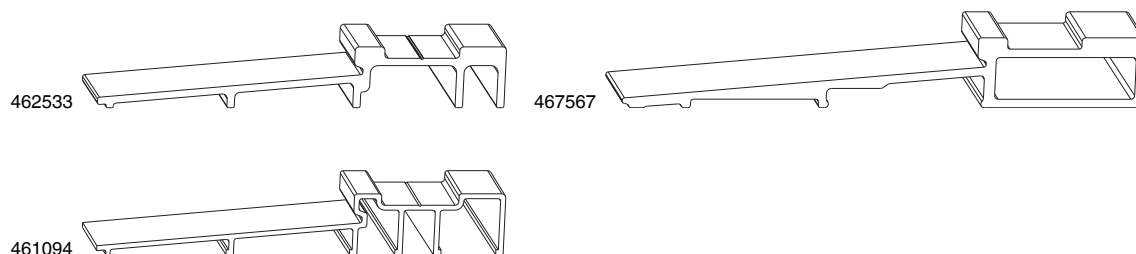
360061



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

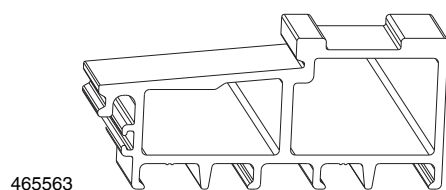


2.9.1.1 Frame cover ALU and GRP

			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	

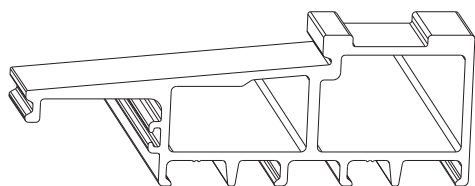
¹ The part number 356613 is absolutely necessary in conjunction with this part.

2.9.1.2 GRP basic profiles



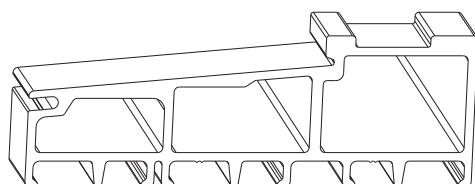
2.9.1.2.1 GRP basic profile 140

		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	



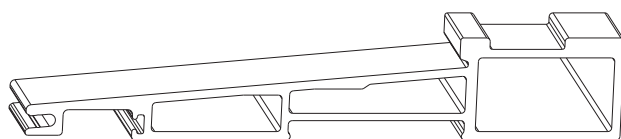
465554

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	



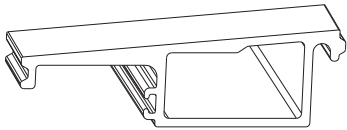
466034

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	465531	

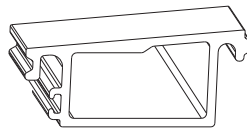


466909

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	466914	



466675



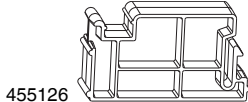
466674

2.9.1.2.5 Extensions

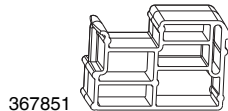
			L		No	No Tricoat
long 128 mm wide	silver		2.500	1	458395	
			3.000	1	458118	
			3.500	1	458408	
			4.000	1	458119	
			6.500	1	466675	
short 88 mm wide	silver		2.500	1	458398	
			3.000	1	458116	
			3.500	1	458117	
			4.500	1	458217	
			6.500	1	466674	



455125



455126

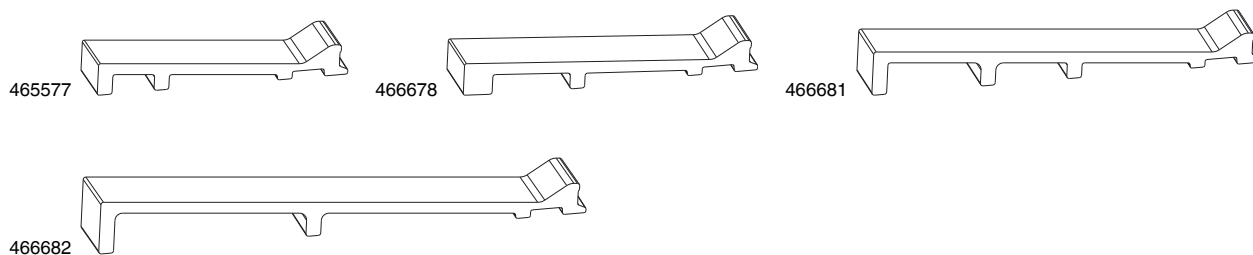


367851

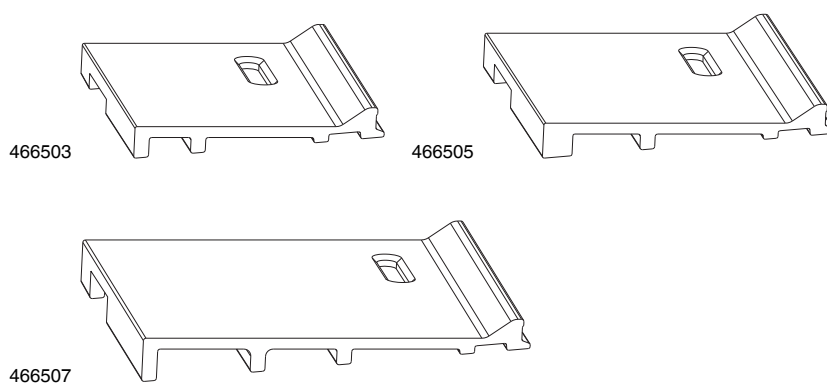
2.9.1.2.6 Extension connectors

				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

365491

**2.9.1.3.3 Seal for intermediate profiles with drainage slots****Nº****Nº**
Tricoatgasket for intermediate profile
with drainage holes

thickness 3 mm

black

99/115/155

1

365491**2.9.1.4 Surface-mounted tracks**

454792

**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

454796

**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

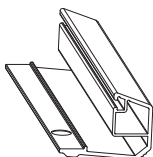
454798

6.500

1

466686

473104

**2.9.1.5 Tracks for frameless fixed glazing Timber****L****Nº****Nº**
Tricoat

silver

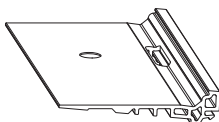
Glass gripping bar

3.500

1

473104

467768



467770

**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



370598



2.9.1.7 Glass gripping for threshold for frameless fixed glazing



No

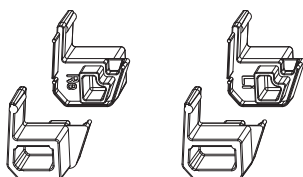
No
Tricoat

packer for glazing for fixed glazing frameless timber silver

10

370598

370597



2.9.1.8 Inch for glass reception board Timber



No

No
Tricoat

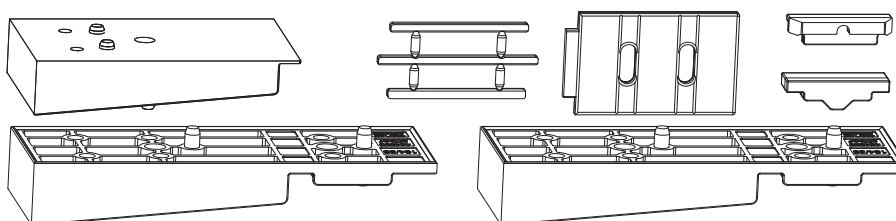
clip-on end cap Glass gripping bar for fixed glazing frameless timber silver

10

370597

2.9.1.9 Basic packs of gasket plates

101317



2.9.1.9.1 Gasket plates for flat roller tracks



No

No
Tricoat

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

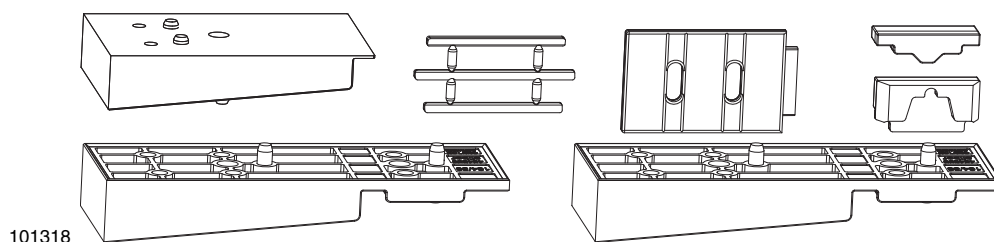
1

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

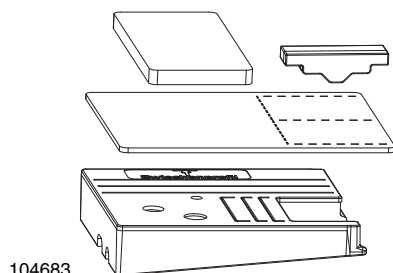
64/28	silver	1	101785¹
68/28mm	silver	1	101318²
78/28	silver	1	102741³
for 98/28mm	silver	1	102730⁴
68/28mm	black	1	101829²

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



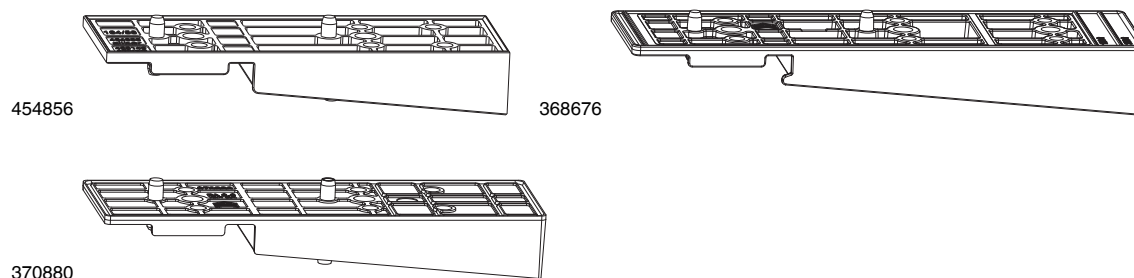
No

No
Tricoat

Package sealing plate for intermediate profile 115 mm	with drainage	silver	left	1	104685¹
			right	1	104686¹
Package sealing plate for intermediate profile 155 mm	with drainage	silver	left	1	104687¹
			right	1	104689¹
Package sealing plate for intermediate profile 99 mm with drainage		silver	left	1	104683¹
			right	1	104684¹

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.



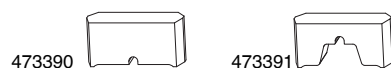
2.9.1.10.2 Seals for roller tracks



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	

455115



362791



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

455116



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

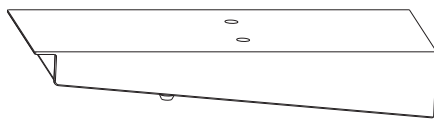
455116

black

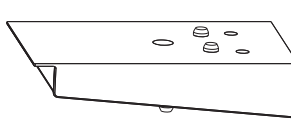
10

370334

455396



454860



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

454882



2.9.1.10.7 Seals for inactive sash



No

No
Tricoat

silver

for fixed sash

10

454882

black

for fixed sash

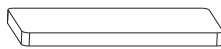
10

455154

454861



370421



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

370879



2.9.1.10.9 Filler for GRP body



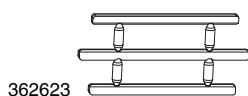
No

No
Tricoat

filler for receiving GRP body 180/240 silver

50

370879



2.9.1.10.10 Insert part for connection plates and gasket plates



No

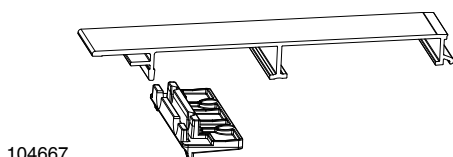
No
Tricoat

filler for gasket plate and centre seal silver

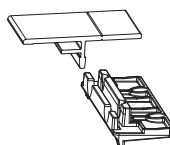
500

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

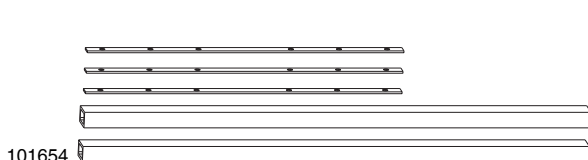
104681¹

5.000

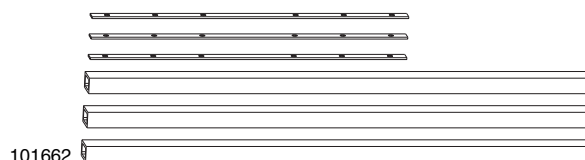
1

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

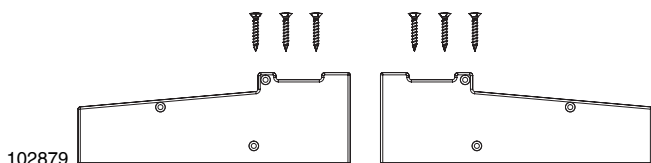
with extension

silver

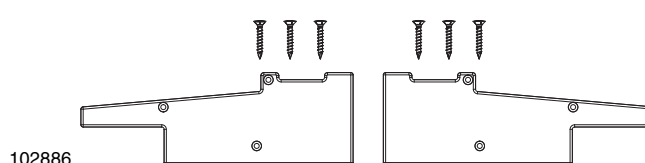
for Fibertherm

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

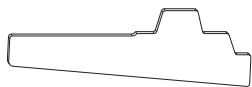
180 mm

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

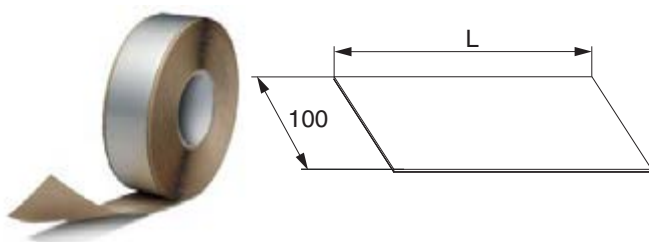
20

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

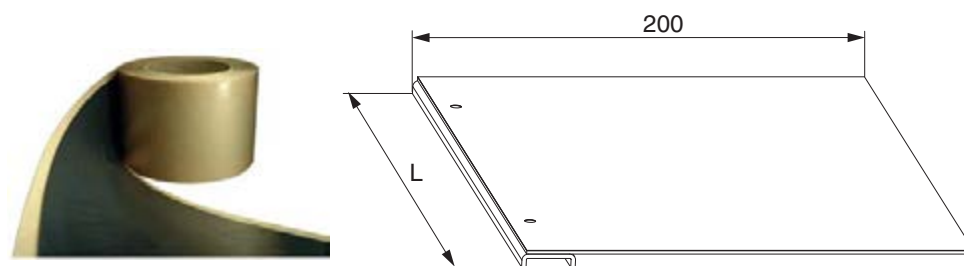
370855

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



No

No
Tricoat

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



No

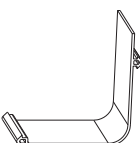
No
Tricoat

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



No

No
Tricoat

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



No

No
Tricoat

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

16

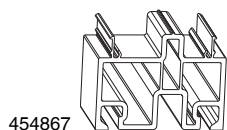
370866

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

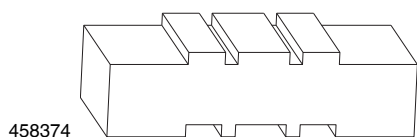
MACO Fibre-Therm add-on profile, height 30mm

white

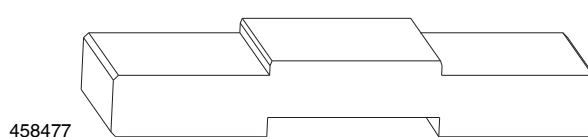
6.000

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

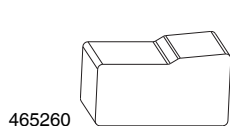
1

458478

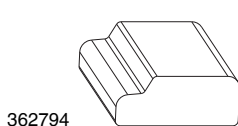
MACO thermal insulation profile for basic profile 240 94 mm L=2.350mm

1

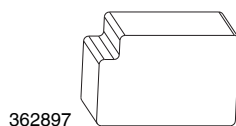
458479



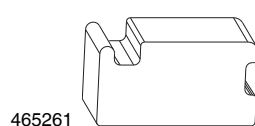
465260



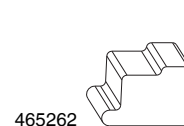
362794



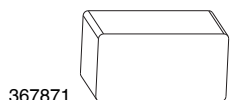
362897



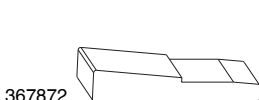
465261



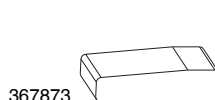
465262



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

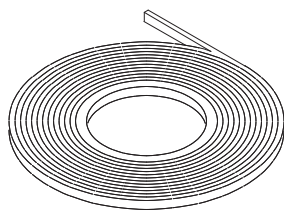
insert profile for basic profile 240 mm for outside cavity

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

367615¹

precompressed Illbruck sealing tape eco anthracite 10/4 L=8M

1

455092¹

precompressed Illbruck sealing tape eco anthracite 10/6 L=5,6M

3

455093¹

precompressed Illbruck sealing tape eco anthracite 15/10 L=3,3M

3

455094¹

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

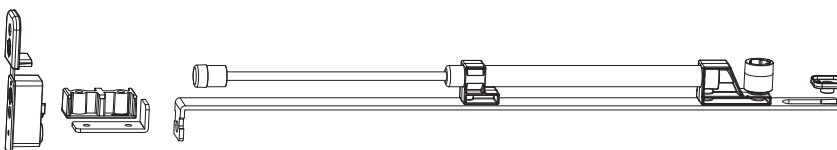


467769

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

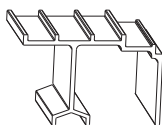


104784

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	
		silver	5	104784¹	

¹ Can be installed for sash weights above 200 kg

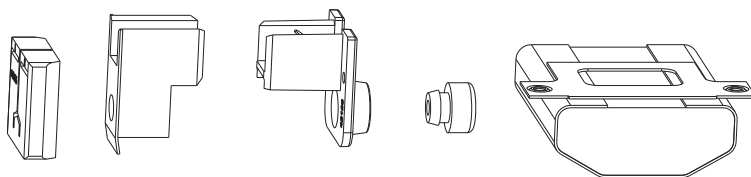
2.9.4.2 Guide tracks with cover



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

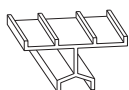
101307

2.9.4.2.2 Accessories for guide tracks with cover

2.9.4.2.2 Accessories for guide tracks with cover							 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		

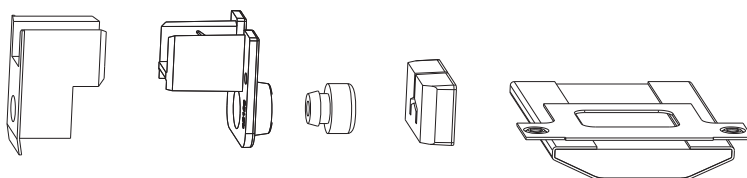
¹ Contents: 1 x top guide drive gear side, 1 x top guide hinge side, 1 x rubber buffer, 1 x gasket piece, 1 x gasket bridge L=72 mm 454866² Contents: 1 x rear top guide 42128, 1 x front drive-gear sided guide 42129, 1 x rubber buffer 42146, 1 x gasket bridge 454868, 1 x gasket piece N21051³ Contents: 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 42496⁴ 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							 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		

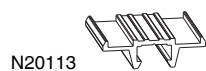
¹ Contents: 1 x rear top guide 42128, 1 x front drive-gear sided guide 42129, 1 x rubber buffer 42146, 1 x gasket bridge 454865, 1 x gasket piece N21051

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

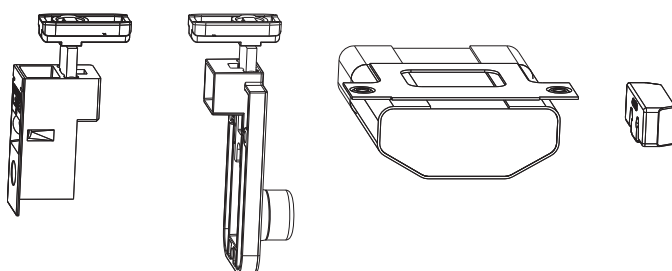
2.9.4.4 Guide tracks C



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

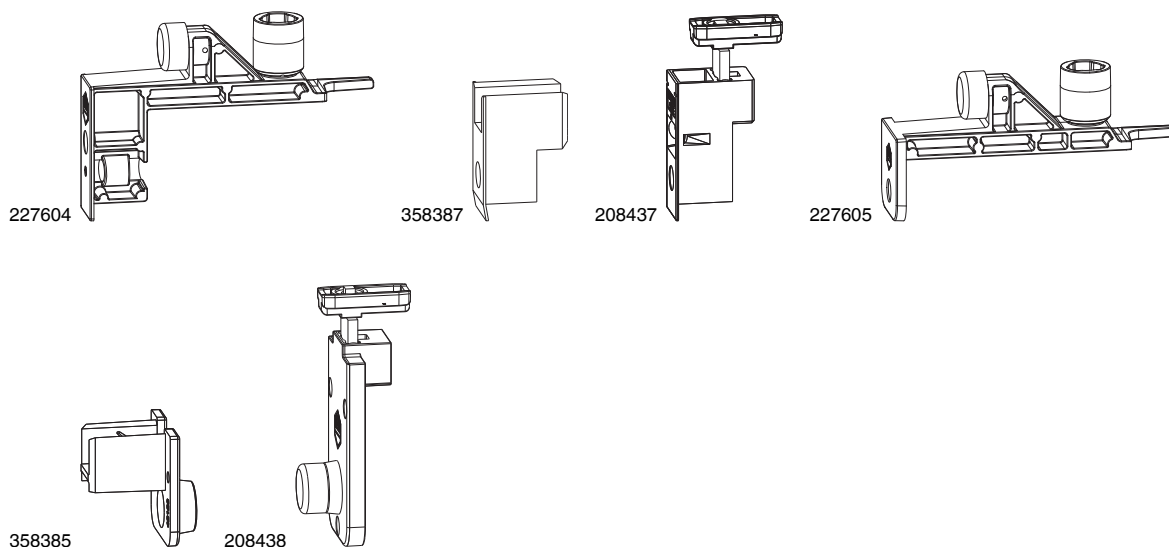


101757

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

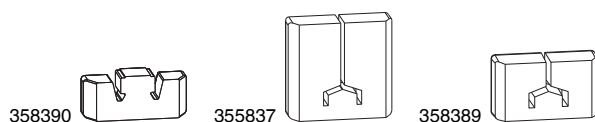
¹ Contents: 1 x top guide drive gear side, 1 x top guide hinge side, 1 x rubber buffer, 1 x gasket piece, 1 x gasket bridge L=65 mm 454898

2.9.4.5 Accessories and individual components for guide tracks



2.9.4.5.1 Top guides

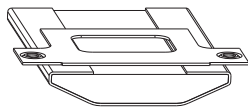
				Nº	Nº Tricoat
top guide - drive gear side, for flush guide track	with buffer	silver	20	227604	
		black	20	227606	
	for guide track with cover and low universal	silver	10	358387	
		black	10	42129	
	for guide track "C"	silver	20	208437	
		black	20	28774	
top guide - hinge-side,	for flush guide track with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



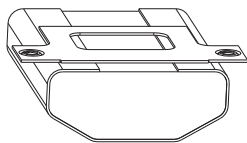
2.9.4.5.2 Sealing components

		Nº	Nº Tricoat
<u>gasket piece for top guide mod.C black</u>	100	41483	
<u>gasket piece for top guide mod.C silver</u>	100	358390	
<u>gasket piece for top guide with cover silver</u>	100	355837	
<u>gasket piece HS for guide with top cover black</u>	100	42496	
<u>gasket piece HS for low universal guide on the top black</u>	100	358656	
<u>gasket piece HS for low universal guide on the top silver</u>	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

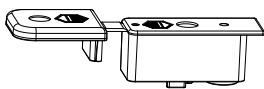
L**No****No**
Tricoat

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	

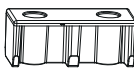
369679



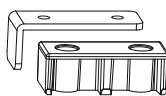
369683



369678

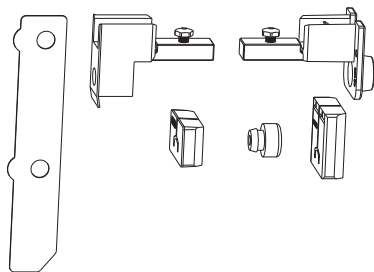


104782

**2.9.4.5.4 Individual parts****No****No**
Tricoat

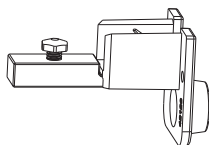
safety catch for top guide for flush guide track silver	50	369679	
set of cover caps for top guide with stop absorber for flush guide track black	10	369683	
set of cover caps for top guide with stop absorber for flush guide track silver	10	369682	
stop for flush guide track black	20	369678	
stop for flush guide track silver	20	369677	
stop for flush guide track with stop absorber black	10	104782	
stop for flush guide track with stop absorber silver	10	104781	

103098

**2.9.4.5.5 Accessories for RC 2****No****No**
Tricoat

RC2 accessories	for HS drive gear	for top universal low guide frame with cover	black DM27,5	1	103568¹	
			DM37,5	1	103567¹	
			silver DM27,5	1	103566¹	
			DM37,5	1	103098¹	

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

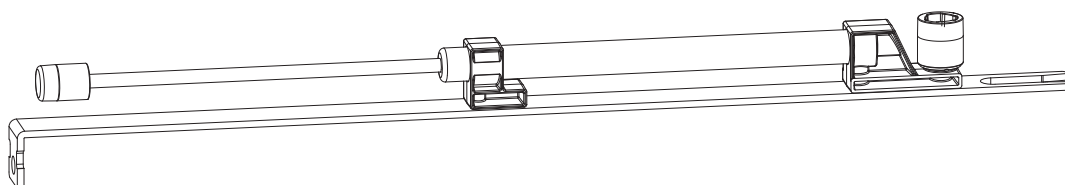
20

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

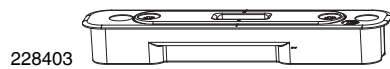
No

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

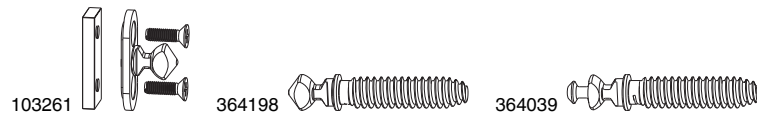
228403¹

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

10

229030¹¹ 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

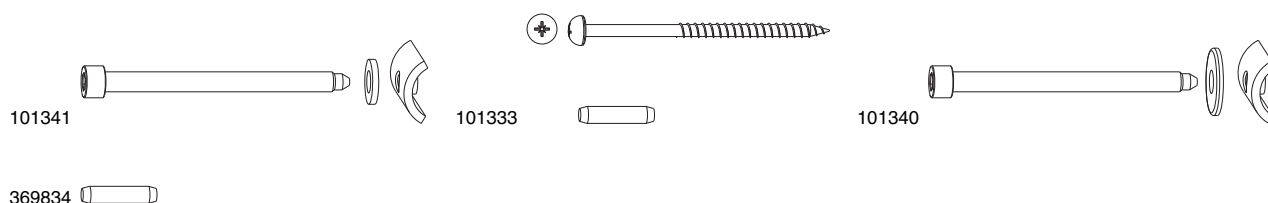
385037

with special thread with night-vent

10

364039

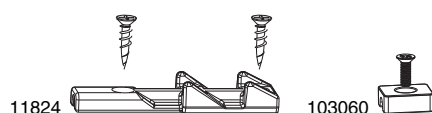
2.9.6 Accessories for frame components



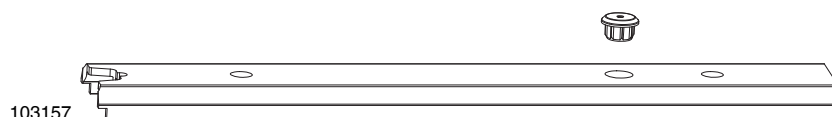
2.9.6.1 Corner connectors			 Tricoat
chipboard screw Torx 6x100 round head silver	100	105362	
corner connector bottom silver	1	101341 ¹	
corner connector components for Fibertherm silver	10	101333 ²	
corner connector top silver	1	101340 ¹	
rawplug D= 6,8 L= 30	50	369834	

¹ Contents: 4 x corner connector

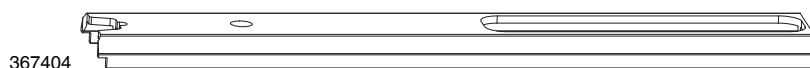
² Contents: 2x connection plate 180/56, 1 x seal for roller track, 1 x gasket plate for intermediate profile 115mm, 1 x attachable seal for gasket plate 42mm timber, 1 x seal for fixed sash, 1 x filler element for connection plate and centre seal



2.9.6.2 Locking blocks			 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			 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			 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	458442	
		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	467022 ¹	
	grey	L = 50m	50	466918 ¹	

¹ All dimensions in metres

466919

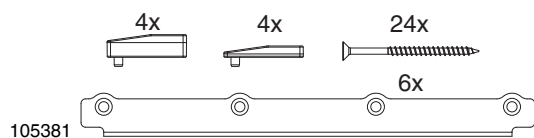
2.10.1.1.4 Bubble gaskets for sealing profiles PVC

				No	No Tricoat
bubble gasket for HS gasket track PVC L = 50m black			50	467023 ¹	
bubble gasket for HS gasket track PVC L = 50m grey			50	466919 ¹	

¹ All dimensions in metres

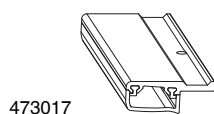


2.10.1.1.5 Individual components for sealing profiles PVC		Nº	Nº Tricoat
fixing screw for HS gasket track PVC silver	100	367613	
set of cover caps for HS gasket track in PVC left/right black	10	369471	
set of cover caps for HS gasket track in PVC left/right silver	10	367284	
set of cover caps for HS 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	

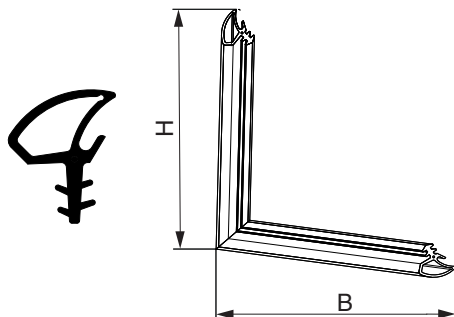
2.10.1.2 Sealing profiles for narrow crossbar



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

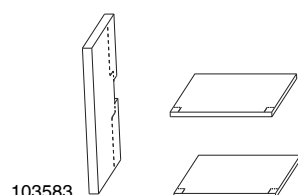
2.10.2.1 Pack of seals



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	

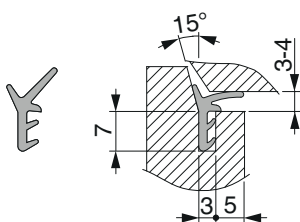


103583

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

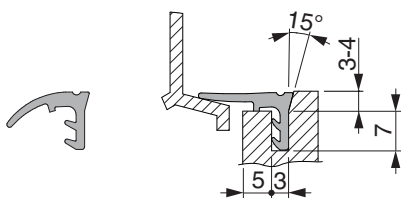
2.10.2.2 Accessories and individual seal components



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	

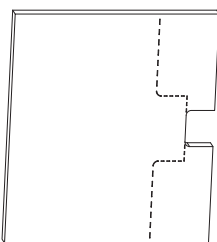
¹ All dimensions in metres



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	

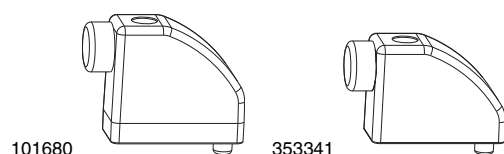
¹ All dimensions in metres



369760

2.10.2.2.3 Foamed rubber seals				No	No Tricoat
overlap sealing plate	black	universal	10	369760	

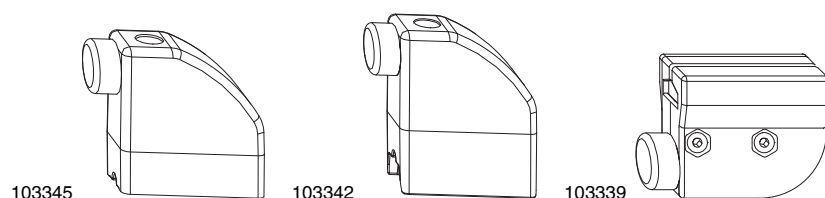
2.10.3 Buffer stops



2.10.3.1 Pack of buffer stops

			No	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	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	

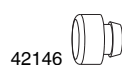
¹ 2 stop buffers (top and bottom) are required for each active sash.



2.10.3.3 Pack of buffer stops for frame installation

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

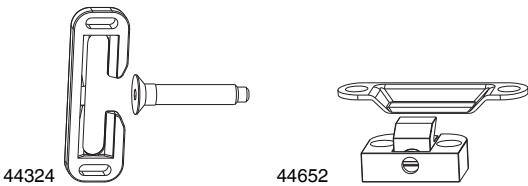
¹ 2 stop buffers (top and bottom) are required for each active sash.



2.10.3.4 Individual rubber buffers

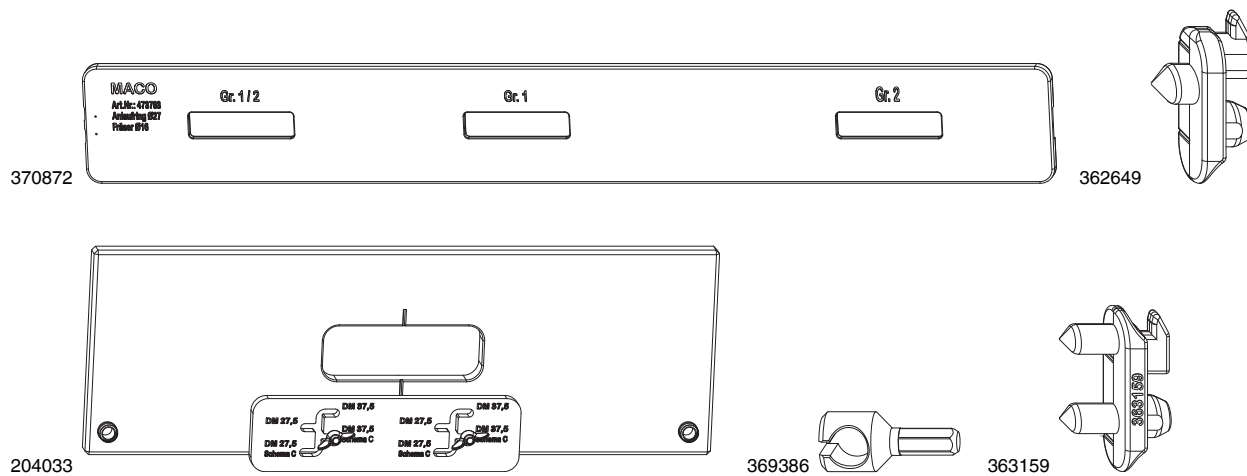
			No	No Tricoat
rubber buffer HS		silver	50	358379
rubber buffer HS Ø = 19 mm		silver	50	369680
rubber buffer HS		black	50	42146
rubber buffer HS Ø = 19 mm		black	50	369681

2.10.4 Accessories for frame/sash components



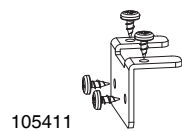
2.10.4.1 Centre lock				 Tricoat
centre lock vertical HS	silver	10	44324	216767
centre lock vertical HS adjustable	silver	1	44652	216768

2.11 Jigs



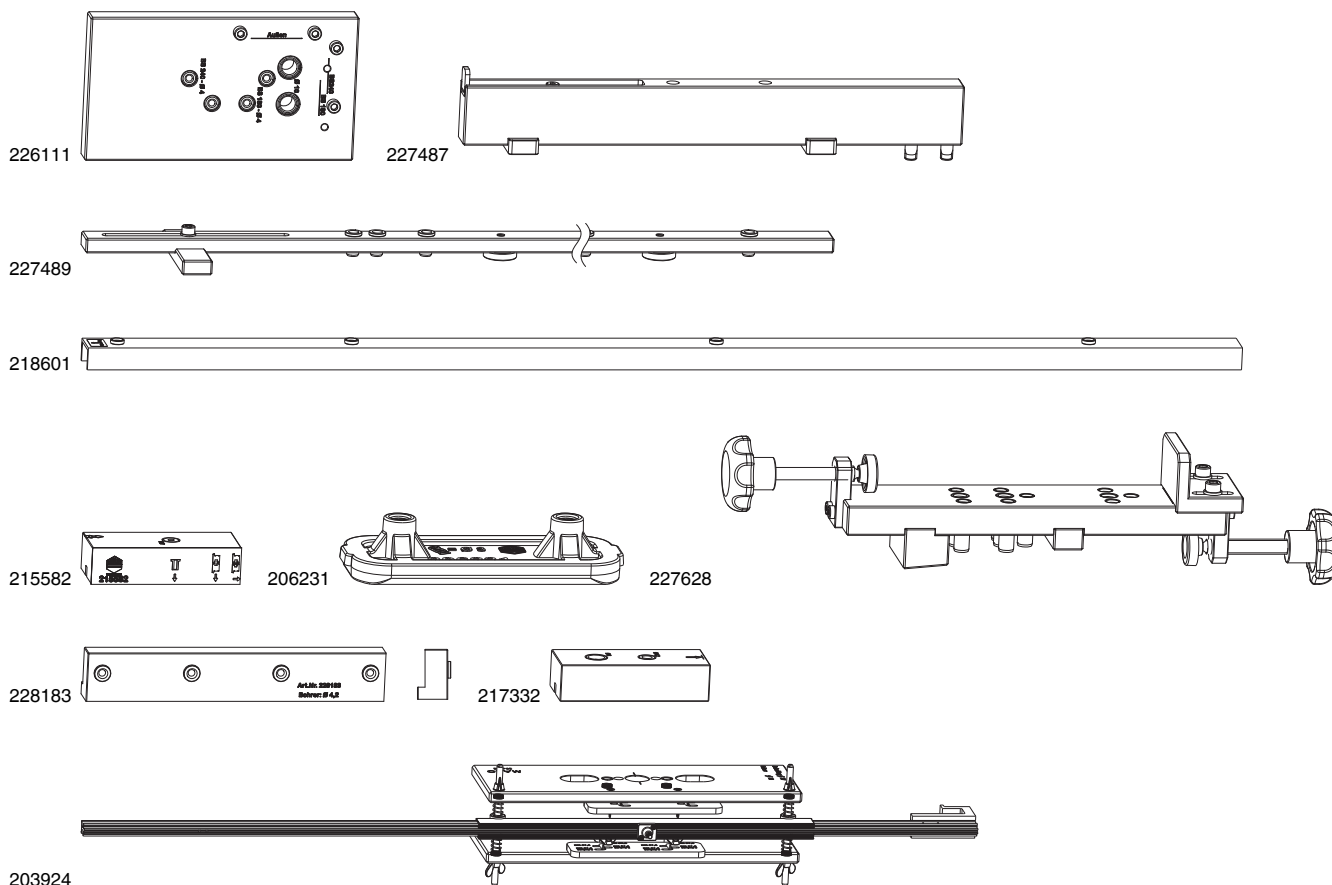
2.11.1 Jigs

		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	



2.11.2 Pack stop routing jig for hook strike

		No	No Tricoat
stop set for milling gauge 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	



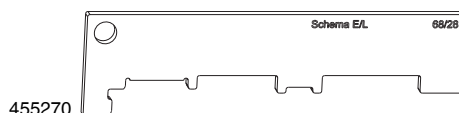
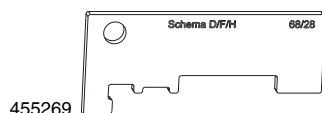
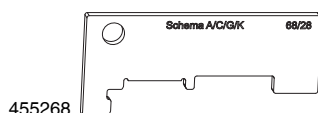
2.11.4 Pack stop for drill jig



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	



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

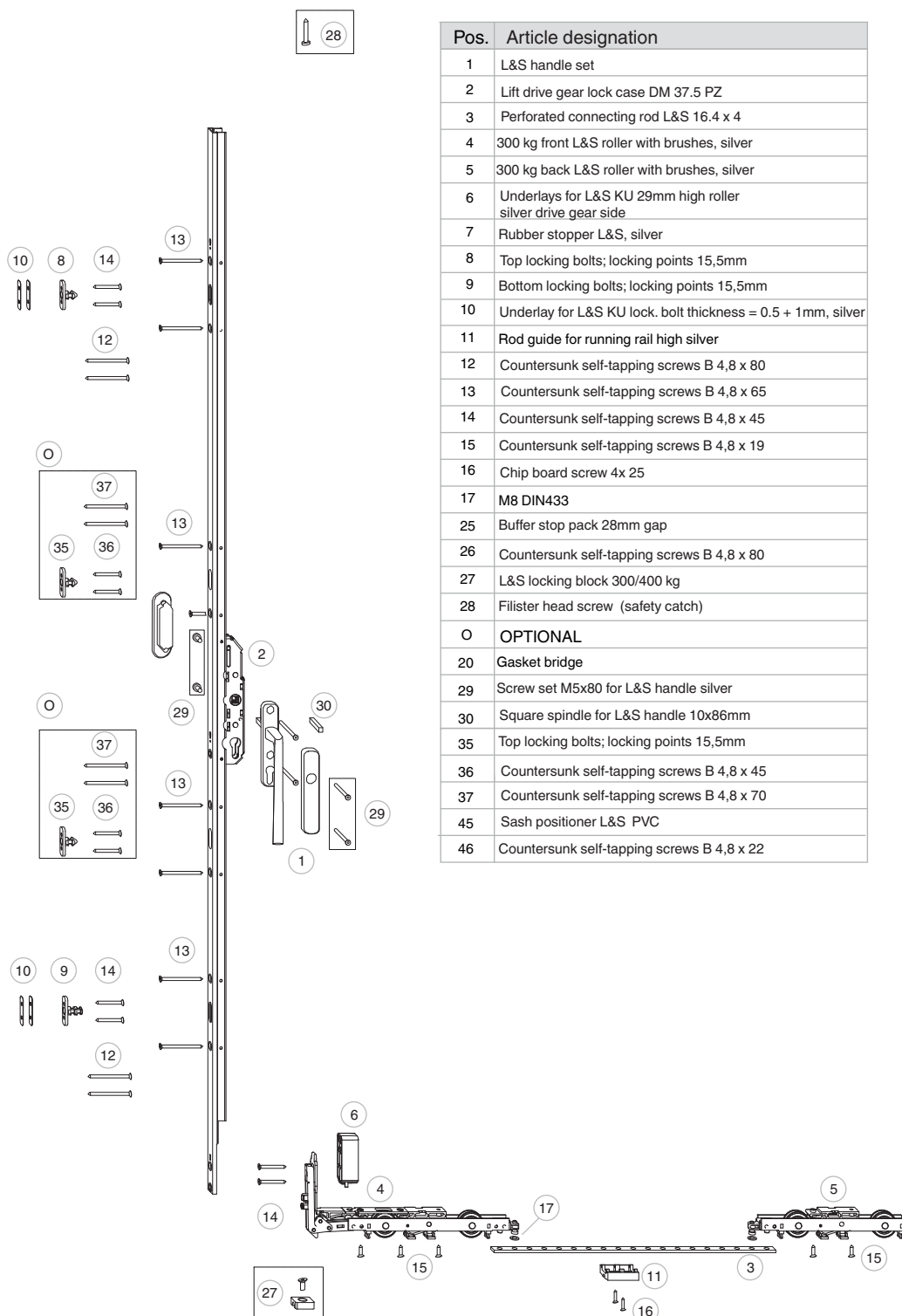
²⁾ Use lift drive gear lockcase DM 37.5 PC in silver

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





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	Size	DH	L	RH				
					FH = RAH - 128	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		
						2	1196	1210 - 1785			359640		
					Diagram C,F FB = (RAB / 4) + 7	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

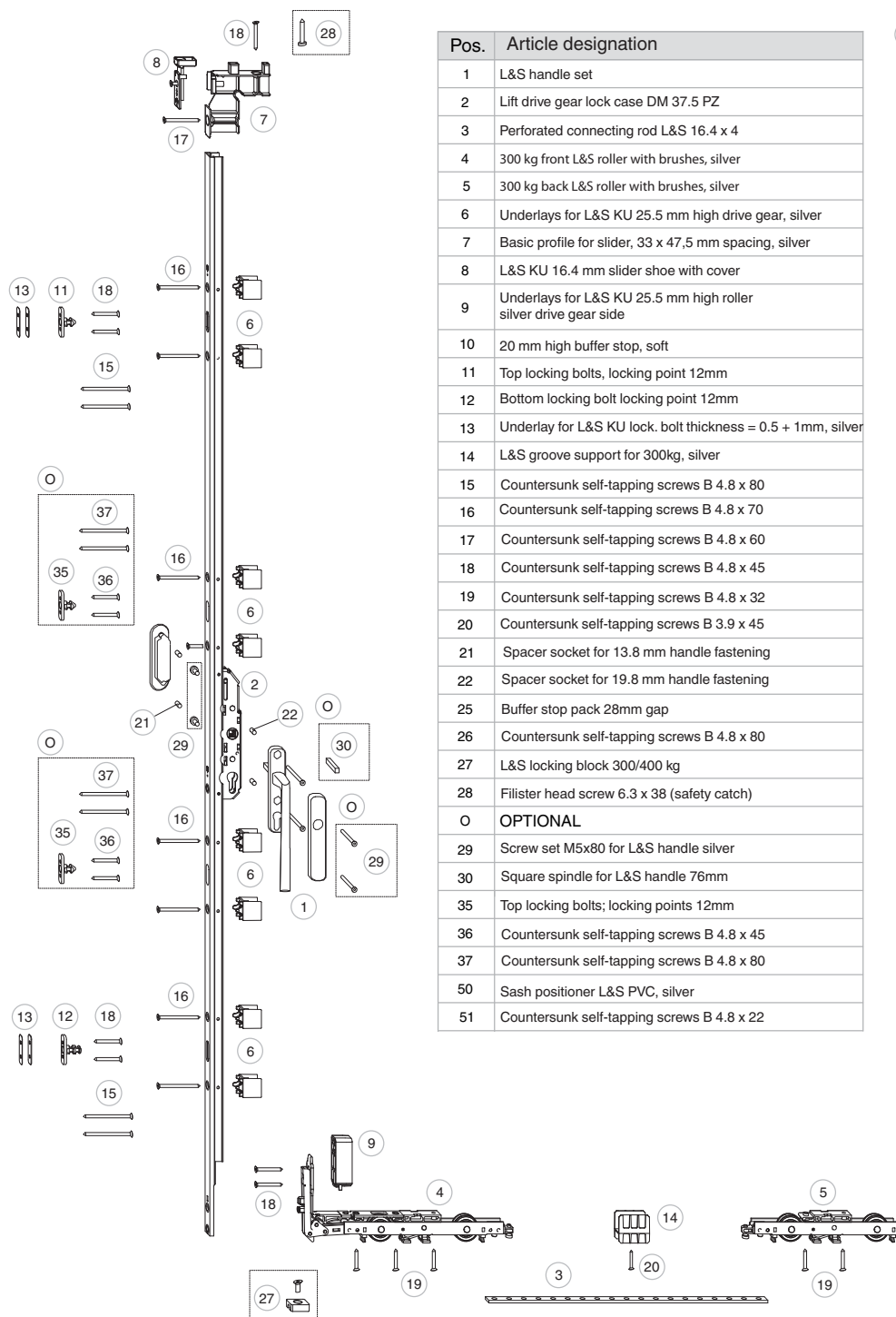
Installing Tools

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





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⁾
						2	402	1700	1320 - 1820 ²⁾
						3	1002	2100	1720 - 2220 ²⁾
						4	1002	2500	2120 - 2620 ²⁾
						5	1002	2800	2520 - 2920 ²⁾
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

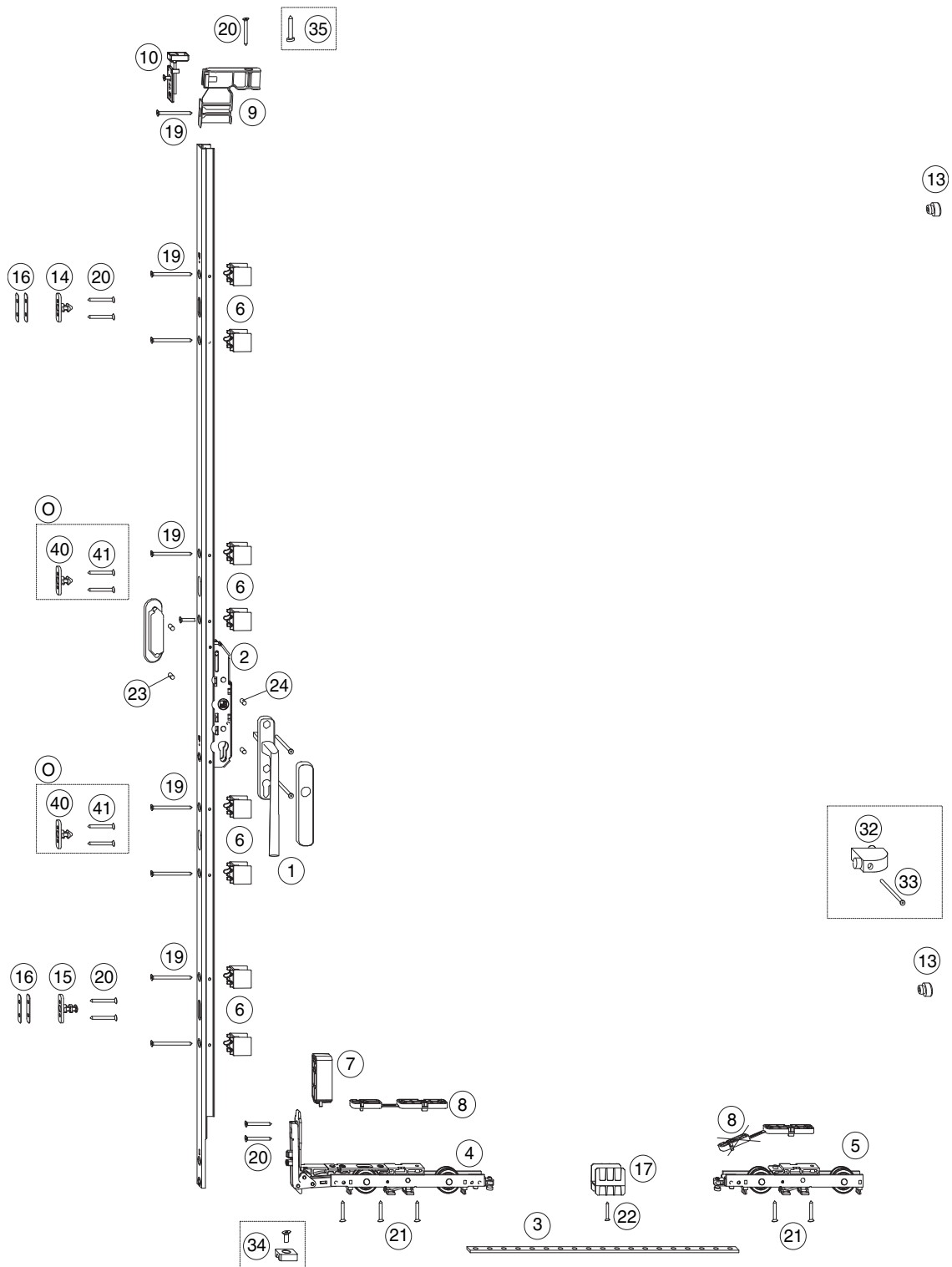
⁹⁾ Use 1 piece for drive-gear size 4, use 2 pieces for drive-gear size 5
Hardware design in Tricoat available on request

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)	102947	
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

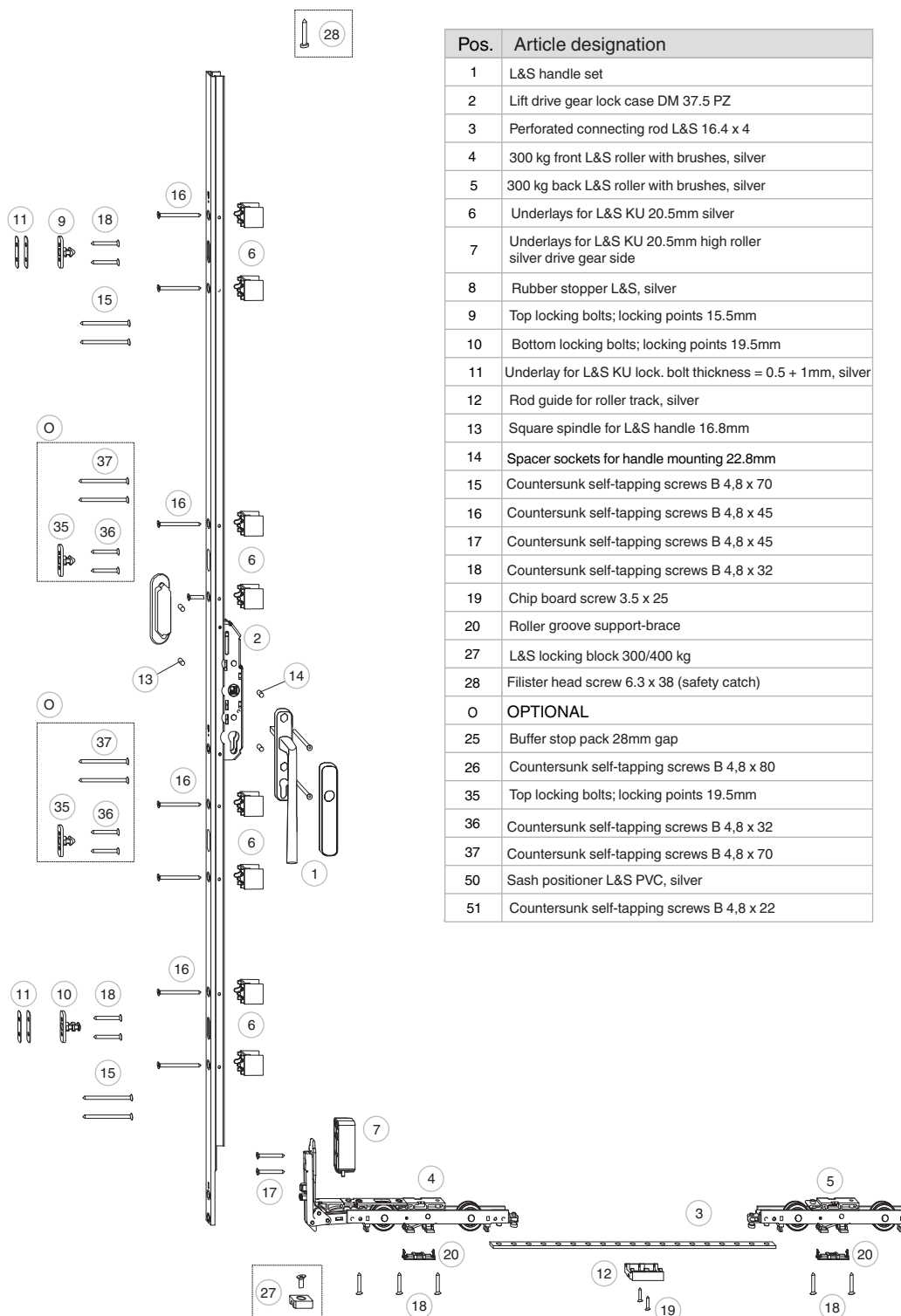
70					L&S drilling and milling jigs for drive gear drilling hole and Schüco finger pull						225025		
71					Marking gouge for L&S locking bolts Base plate hole spacing 22 mm						363159		
84					Jig for locking block						215582		

⁶⁾ Component colour black

⁷⁾ Use component colour black or silver

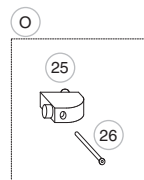


2.12.1.5 Inoutic HST 76 / sash HS 276

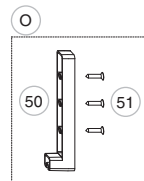


Pos.	Article designation
1	L&S handle set
2	Lift drive gear lock case DM 37.5 PZ
3	Perforated connecting rod L&S 16.4 x 4
4	300 kg front L&S roller with brushes, silver
5	300 kg back L&S roller with brushes, silver
6	Underlays for L&S KU 20.5mm silver
7	Underlays for L&S KU 20.5mm high roller silver 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





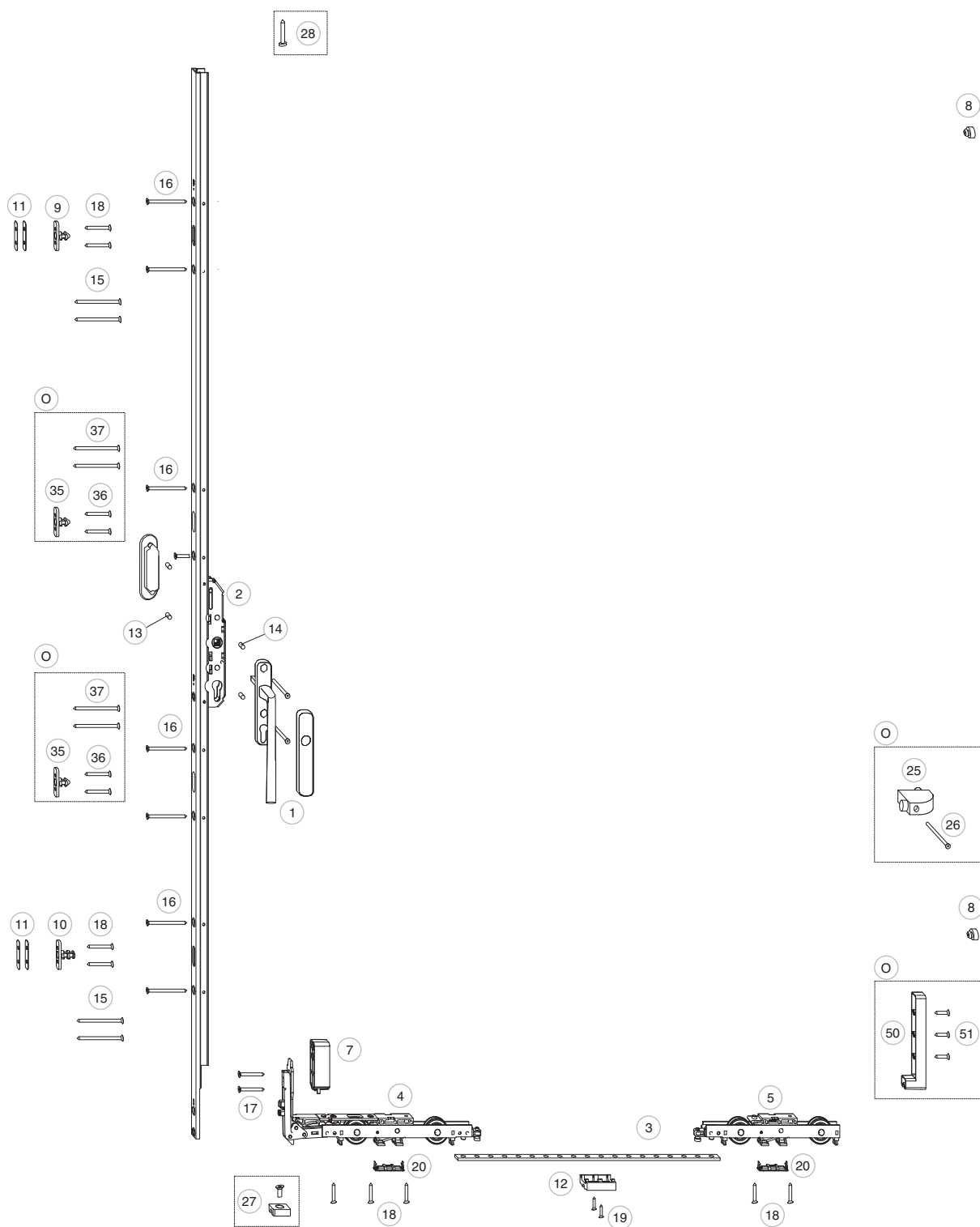
INOUSIC HST76 / sash HS 276

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
				2	406	1700	1240 - 1730
				3	1006	2100	1640 - 2130
				4	1006	2500	2040 - 2530
				5	1006	2800	2440 - 2830
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 silver				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 silver³⁾ Use black colour⁴⁾ 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					





INOUTIC HST 76 / sash HS 476

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

INSTALLING TOOLS

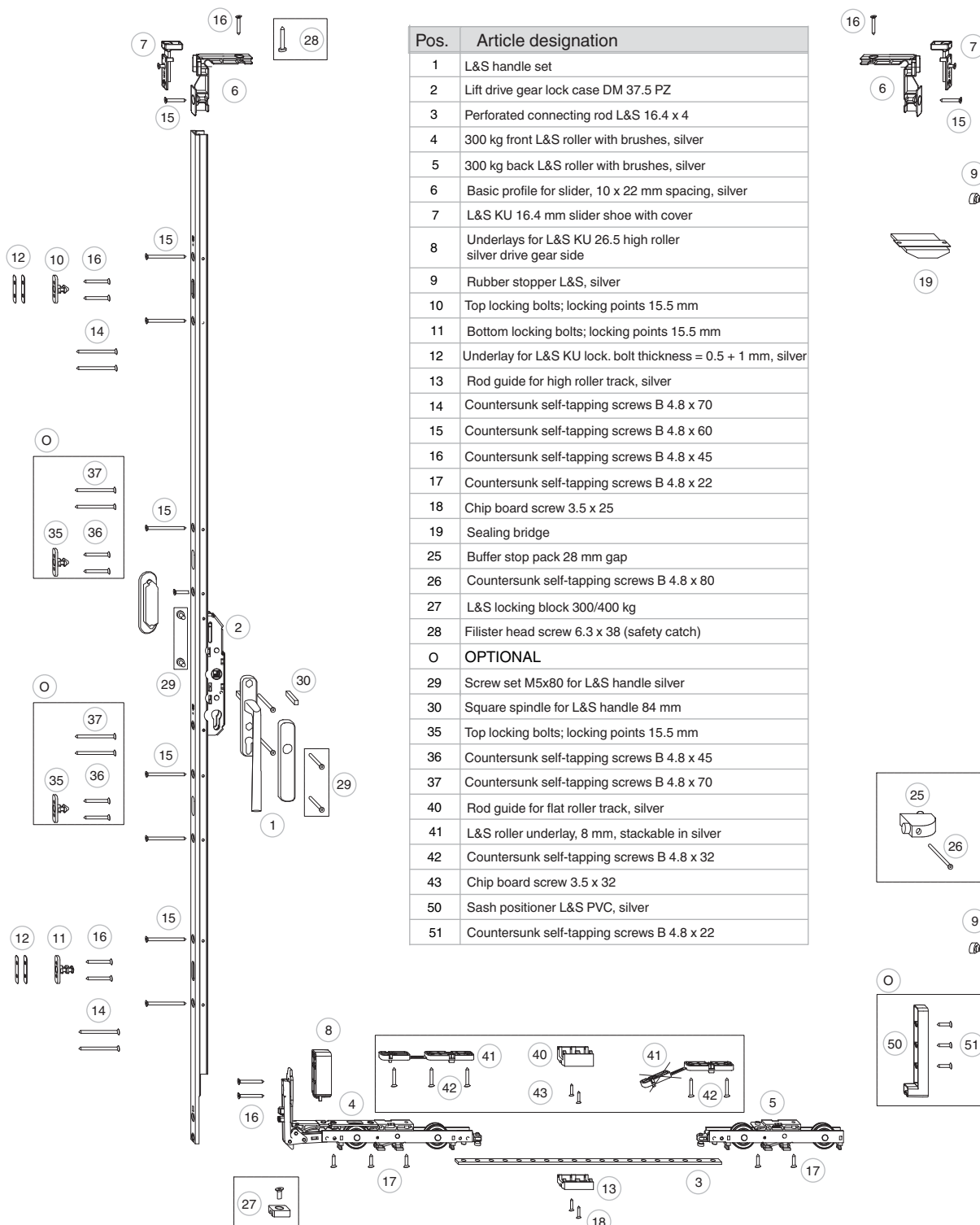
70			HS-drilling and routing jigs for drive gear drilling hole and Thyssen finger pull				214864
83			Drilling jig for roller 300 kg				
	1		Drilling jig for roller 300 kg front				227487
	1		Drilling jig for roller 300 kg rear				227488
	1		Set of side gauges for drilling jig for roller 60 mm				104856
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





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				
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

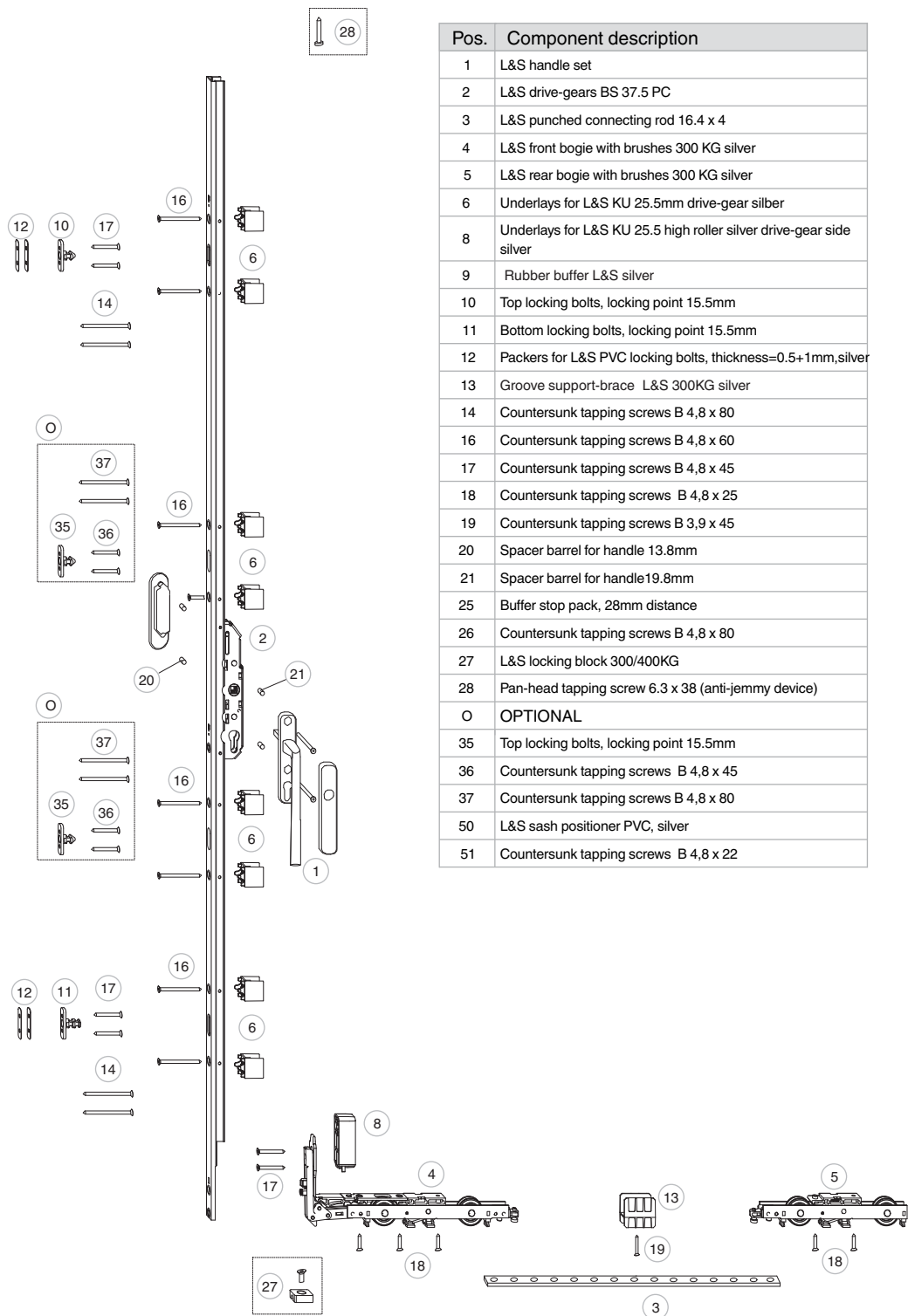
Installing Tools

80		Profil	
	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
82	Drilling jig for locking bolt		Profil
	1	Drilling jig for locking block L&S drive-gear size 3	HS 70
	1 - 2	Drilling jig extension for locking bolt ¹⁰⁾	HS 70
83	Drilling jig for L&S standard drive gear screw holes		227489
84	Drilling jig for roller 300 kg		Profil
	1	Drilling jig for roller 300 kg front	HS 76 / 88
	1	Drilling jig for roller 300 kg rear	HS 76 / 88
	1	Set of side gauges for drilling jig for roller 34 mm	HS 76 / 88
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

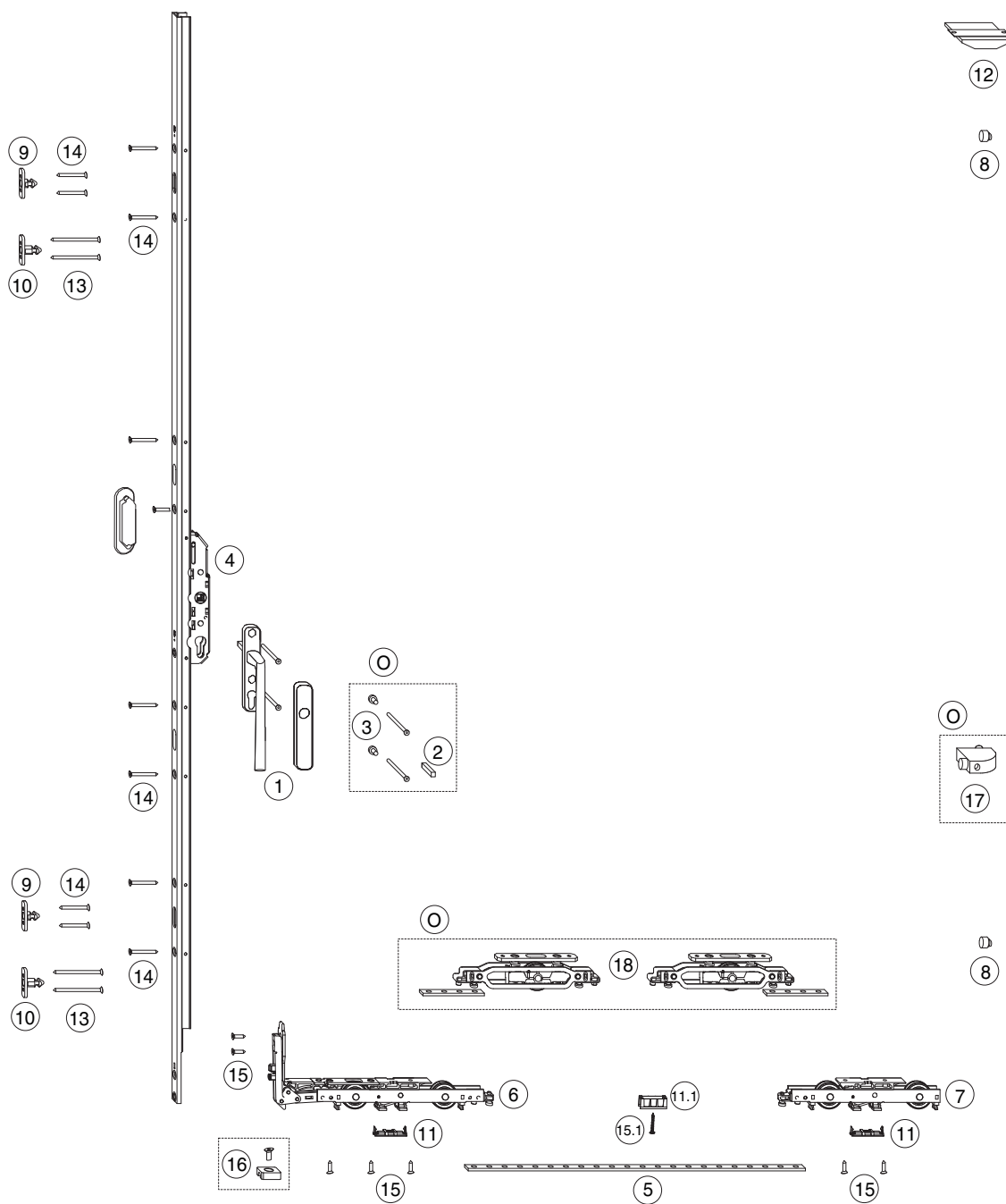
70		L&S drilling and routing jigs for drive gear drilling hole and Veka Slide 70 finger pull	214865
		Marking gauge for L&S locking bolts Base plate hole spacing 82 mm	225023
71		Marking gauge for L&S locking bolts Base plate hole spacing 22 mm	363159
72		Drilling jig for locking block	215582

- 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	406	1700	1250 - 1745
				3	1006	2100	1630 - 2145
				4	1006	2500	2050 - 2545
				5	1006	2800	2450 - 2845
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 (silver) 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

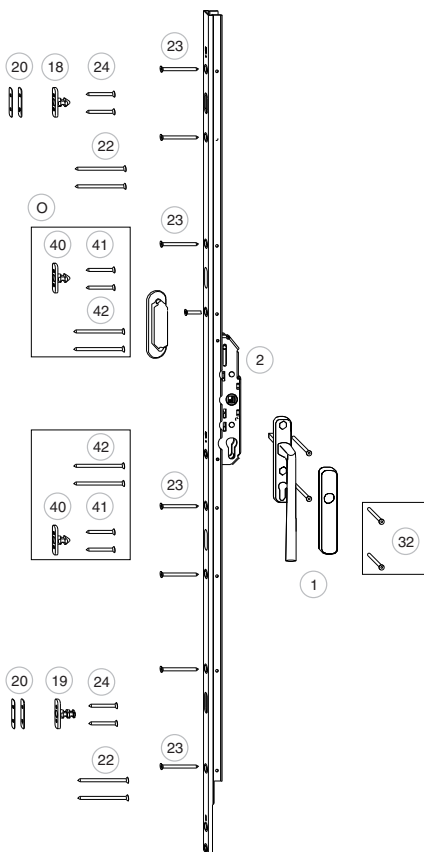
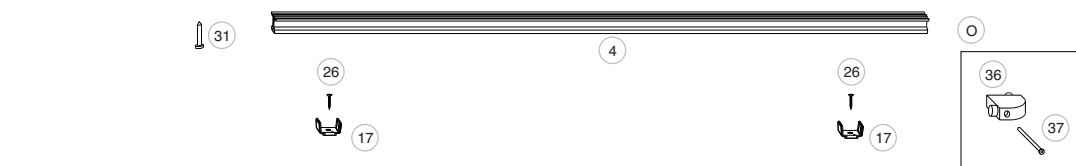
¹⁾ Also order items 2 and 3

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

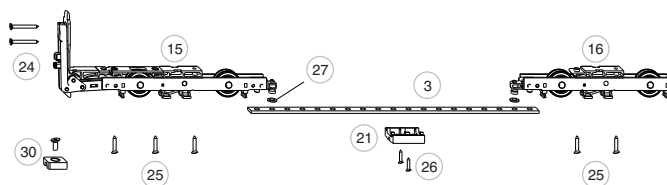
³⁾ Installing SW sliding sash > 1.800mm, 1 piece centred

⁴⁾ Component colour black

2.12.1.10 Rehau Geneo with GRP threshold system

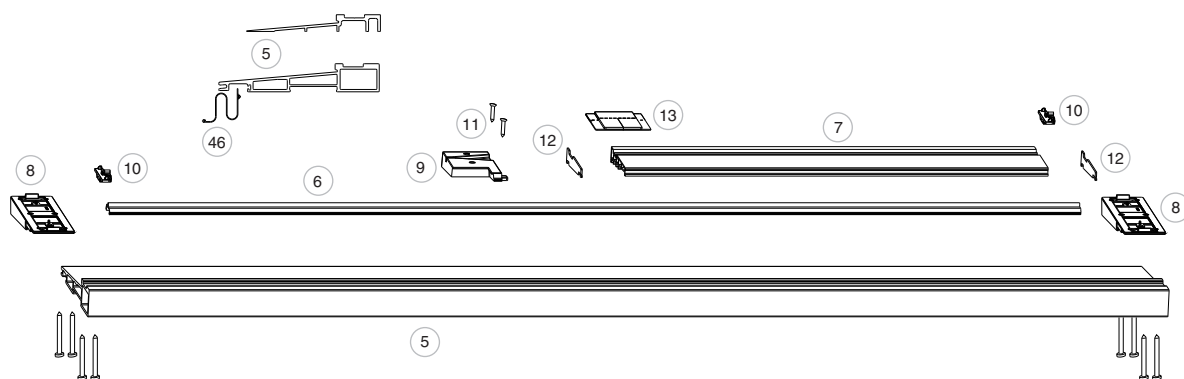


Pos.	Article designation
1	L&S handle set 12
2	Lift drive gear lock case DM 37.5 PZ
3	Perforated connecting rod L&S 16.4 x 4
4	Top guide track Rehau Geneo silver
15	300 kg front L&S roller with brushes, silver
16	300 kg back L&S roller with brushes, silver
17	Basic profile for slider Rehau Geneo, silver
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 Rehau Geneo 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

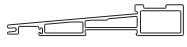




Pos.	Component description
5	MACO with GFK-threshold Silver
6	MACO Fiber Therm roller track 10 mm Silver
7	MACO intermediate profile PVC Rehau Geneo Silver
8	Connector plate for Fibertherm Rehau Geneo Silver
9	Cover cap for PVC intermediate profile 86-88/31mm (L/R)
10	Connection component roller track 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	404	1700	1240 - 1735
				3	1004	2100	1640 - 2135
				4	1004	2500	2040 - 2535
			FH = RAH - 106	5	1004	2800	2440 - 2835
3	1	2	Perforated connecting rod L&S 16.4 x 4	Size	L	FB	
				1	692	895 - 1285	359639
				2	1196	1205 - 1785	359640
			Diagram A FB = RAB / 2 -30,5	3	1700	1710 - 2290	359641
			Diagram C FB = RAB / 4 +4,75	4	2204	2215 - 2795	359642
				5	2708	2720 - 3300	359643
4	1	2	Top guide Rehau Geneo Silver	L			
				2500		466887	
			Diagram A L = RAB - 144	3500		466888	
			Diagram C L = RAB - 130	5000		466889	
				6500		466890	
5	1	2	Top guide Rehau Geneo Silber	L			
				3000		466909	
				3500		466910	
				4000		466911	
				5000		466912	
				6500		466913	
				9000		466914	
				2500		462287	
				3500		462288	
				5000		462289	



REHAU Geneo with GRP-threshold

Pos.	Quantity for system		Article designation		Order number			
	A	C			white	silver	bronze	brown
6	1	1	MACO Fiber Therm Roller track 10mm Silver	L				
				2500		466895		
			Diagram A L = RAB - 144	3500		466896		
			Diagram C L = RAB - 130	5000		466897		
				6500		466898		
7	1	2	Maco intermediate profile PVC Rehau Geneo Silber	L				
				1500		466891		
			Diagram A L = RAB / 2 - 87	2000		466892		
			Diagram C L = RAB / 4 + 52	2500		466893		
				3500		466894		
8 - 11	1	1	Maco Fibertherm PVC accessories pack for Rehau Geneo Silver			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				
				2500		358713		
				3500		358714		
			L = RAB	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		

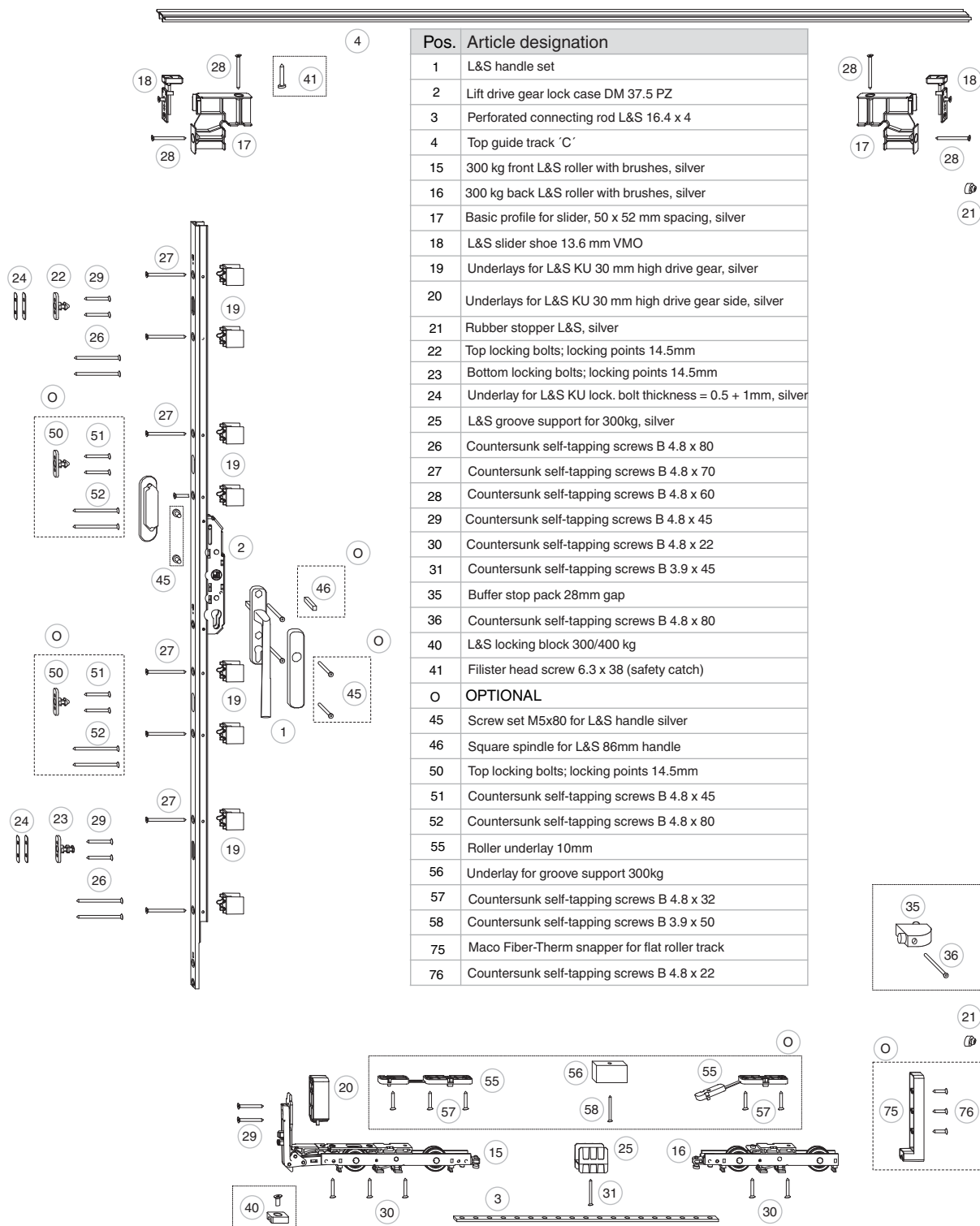
¹⁾ Also order items 32 and 33

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

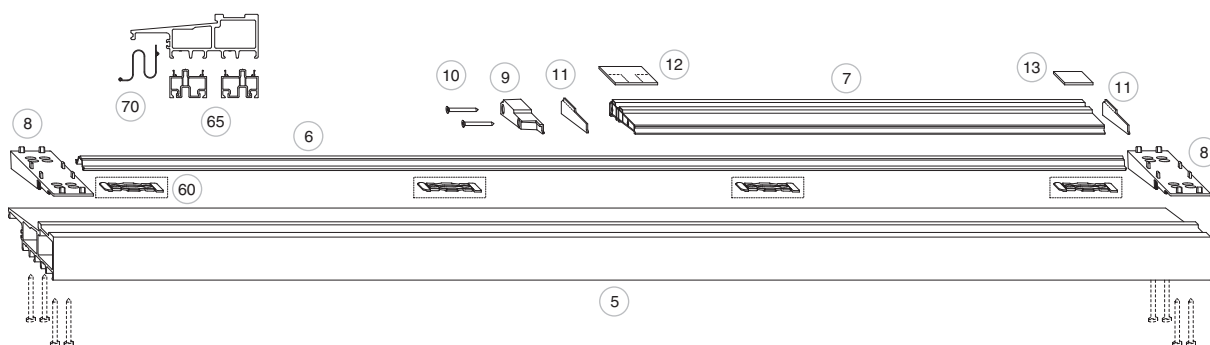
2.12.1.11 Salamander ID with GRP threshold system



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

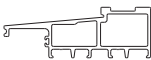


Pos.	Article designation
5	MACO Fiber Therm basic profile 180
6	MACO Fiber Therm roller track
7	MACO intermediate profile 68/28mm, silver
8	Connection plate
9	Cover for L&S intermediate profile, silver
10	4.2x50 A2 countersunk self-tapping screw
11	Side gasket for 2 mm intermediate profile
12	L&S centre 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



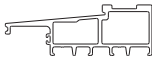


Salamander ID with GRP threshold

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					
						1	692	720 - 1300		359639			
					Diagram A FB = (RAB / 2) - 18	2	1196	1225 - 1800		359640			
					Diagram G FB = (RAB / 3) + 24	3	1700	1730 - 2305		359641			
					Diagram C, K FB = (RAB / 4) + 14	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	Order number					
	A	G	C	K		white	silver	bronze			
5	1	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⁾	
						6000	²⁾	462281	²⁾	²⁾	
						6500	²⁾	462282	²⁾	²⁾	
6	1	1	1	1	MACO Fiber Therm roller track		L				
					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		L			
					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 ⁶⁾
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	
					L = RAB	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

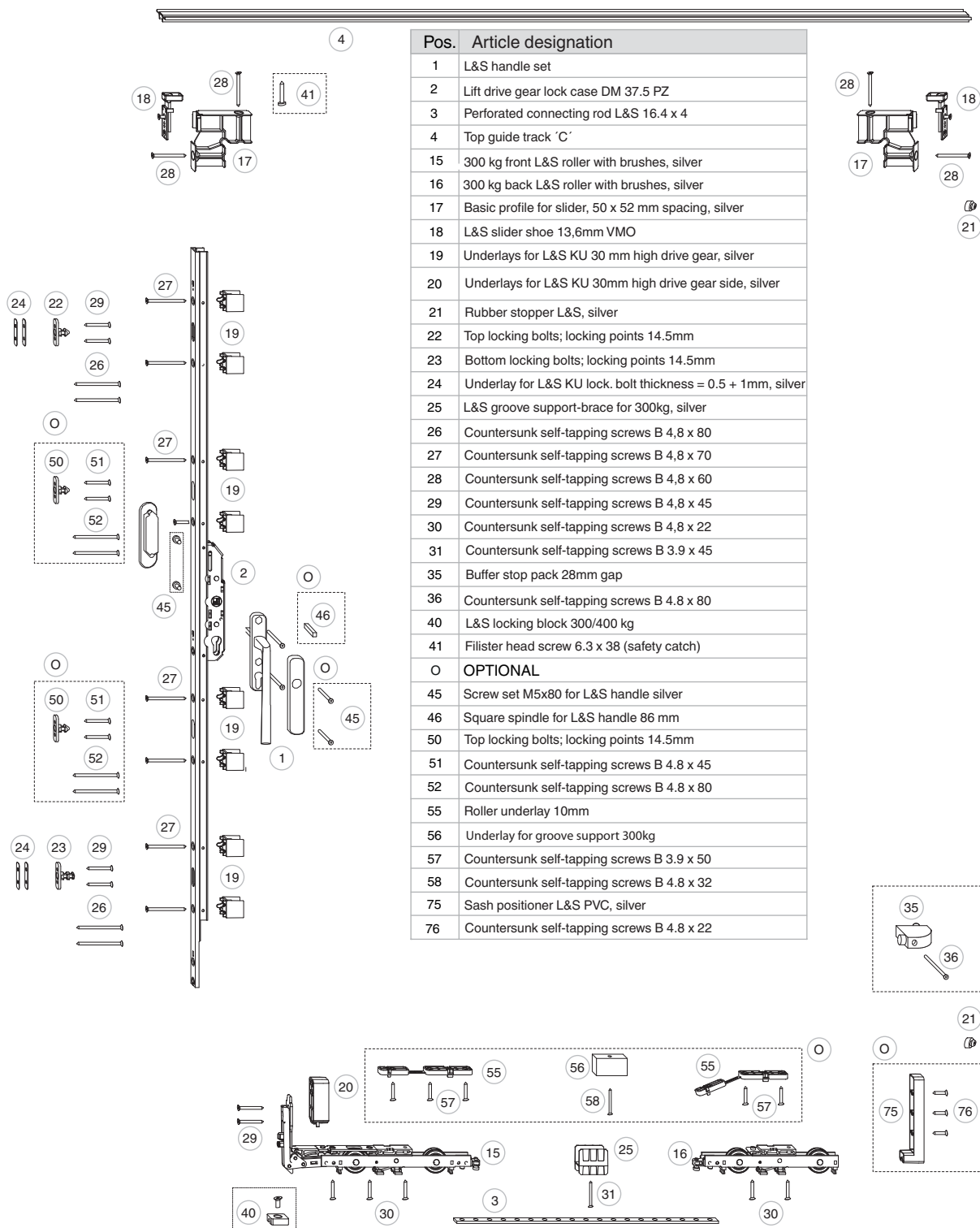
⁶⁾ Component colour black

⁷⁾ Use component colour black or silver

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

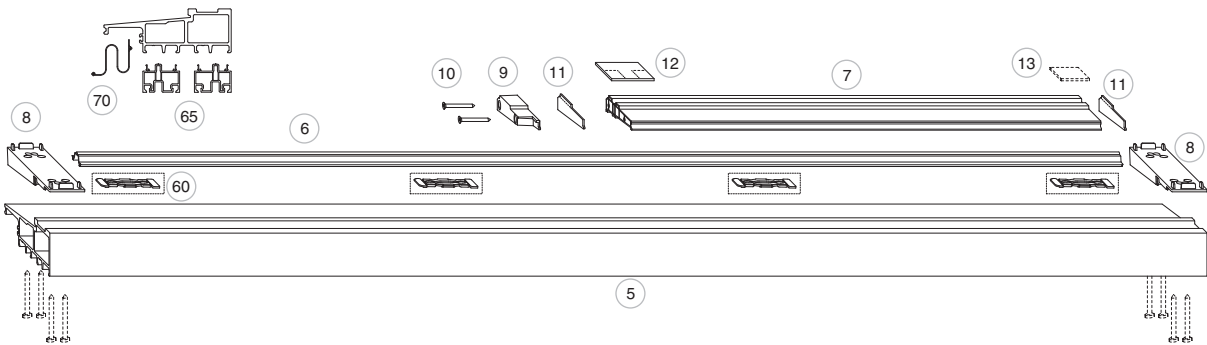
{...} Application areas for flat roller track design
Hardware design in Tricoat available on request

2.12.1.12 Gealan 8000 with GRP-threshold

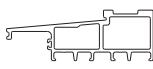




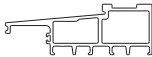
Pos.	Article designation
5	MACO Fiber Therm basic profile 180
6	MACO Fiber Therm roller track
7	MACO intermediate profile 68/28mm, silver
8	Connection plate
9	Cover for L&S intermediate profile, silver
10	4.2x50 A2 countersunk self-tapping screw
11	Side gasket for 2mm intermediate profile
12	L&S centre gasket plate for 3mm PVC intermediate profile
13	Gasket plate
O	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  FH = RAH - 90	1	411 {401}	1300	810 - 1420 {800 - 1410}	²⁾	214415	214602	214612
					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 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	Top guide track ‘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 with GRP-threshold

Pos.	Quantity for system			Article designation		L	Order number			
	A	C	K				white	silver	bronze	brown
5	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⁾
				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						
				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						
				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

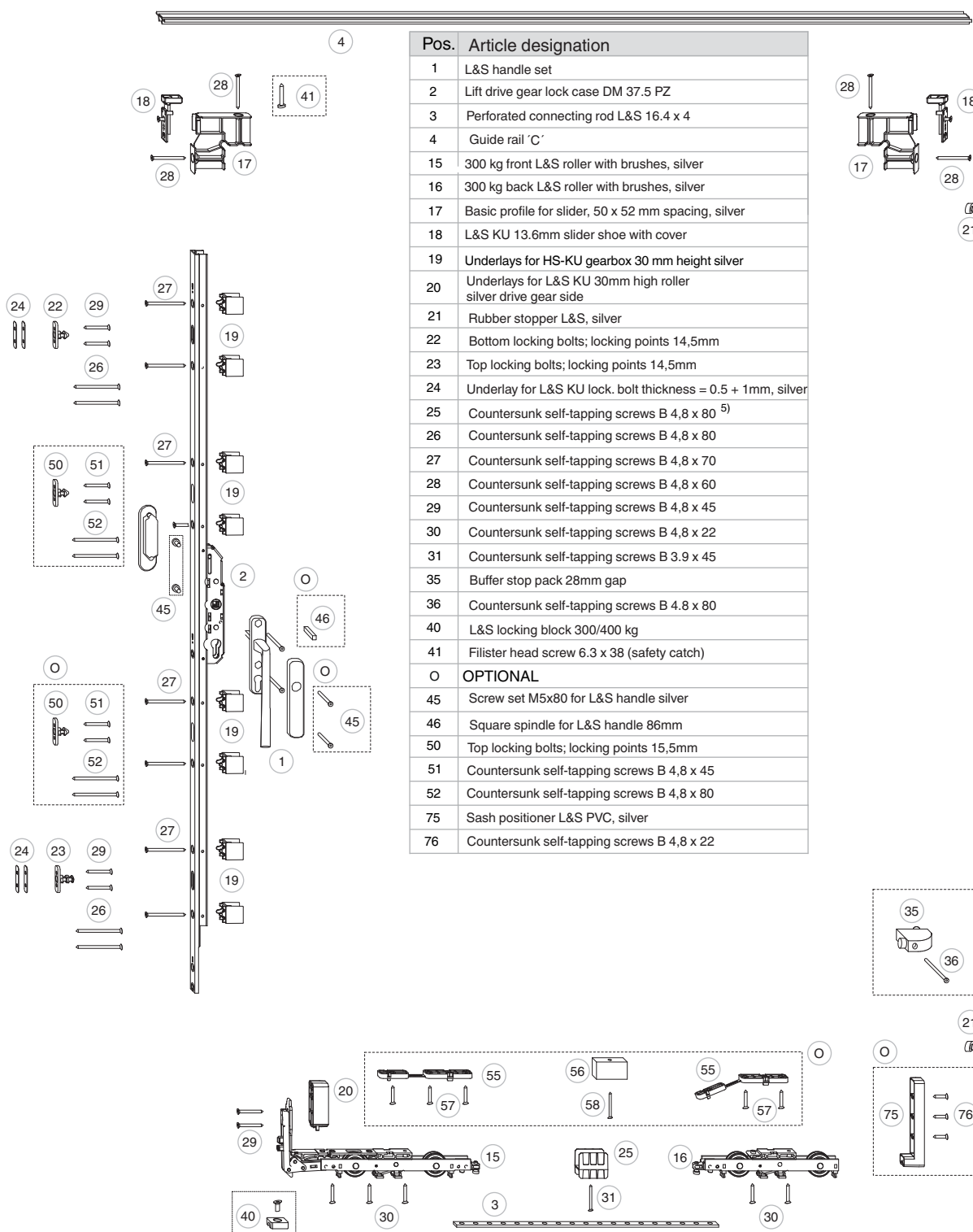
⁶⁾ Component colour black

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





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			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 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 silber	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			

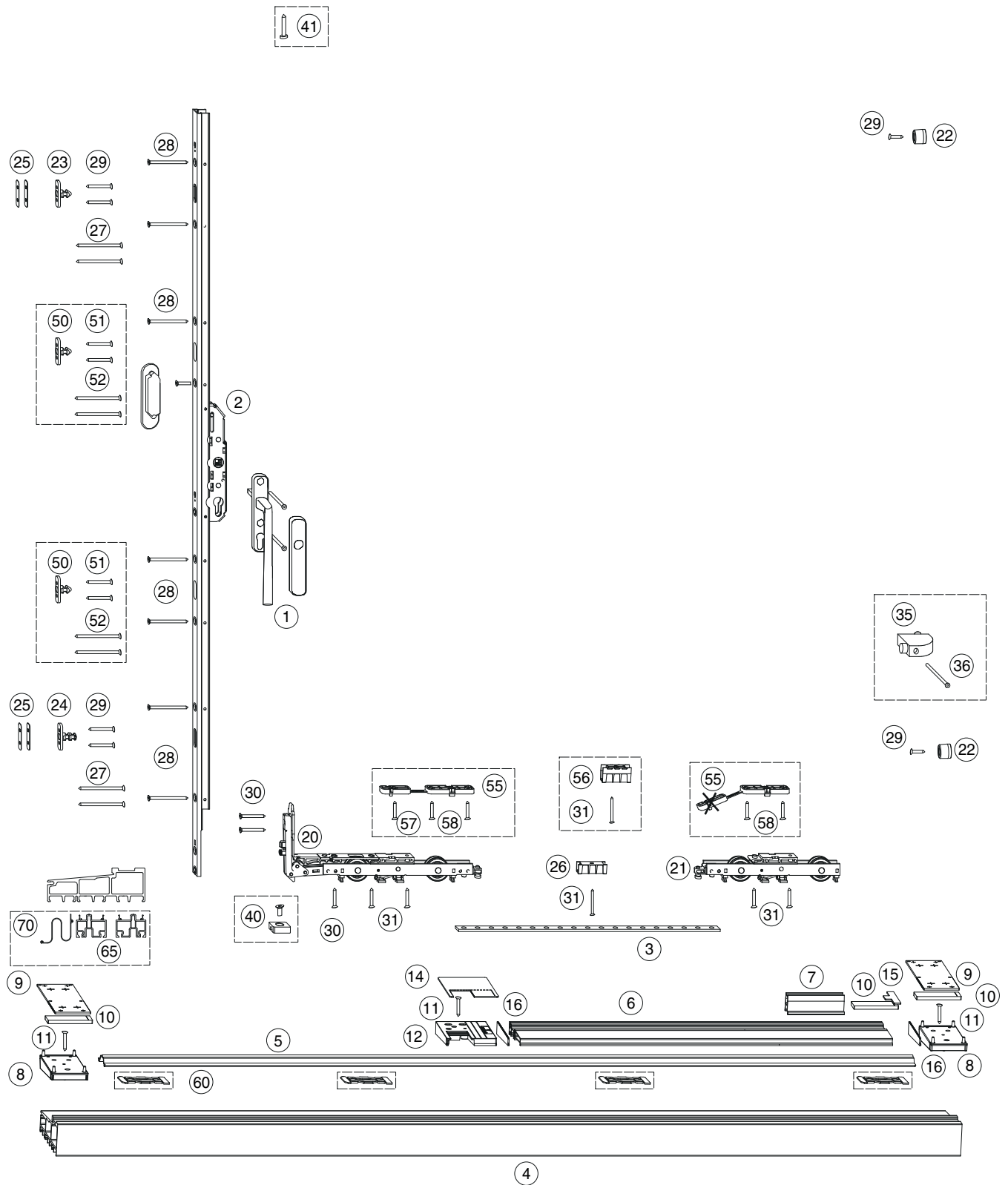
INSTALLING TOOLS

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
					2	410 {400}	1700	1270 - 1760 {1260 - 1750}	2)	214416	214603	214613	
					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				
						2	1196	1235 - 1810	359640				
						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		180 CH	240	184	
					180 CH	L = RAB	2500	-	466034	-	462279		
							3000	-	466035	466909	-		
							3500	-	466036	466910	462280		
							4000	-	466037	466911	-		
							4500	-	466038	-	-		
							5000	-	466039	466912	462281		
							5500	-	466040	-	-		
							6000	-	466041	-	-		
					240		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		1		right	104844				
	1	1	1	1	Design profile	left	104845				
		1		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

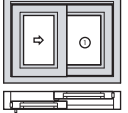
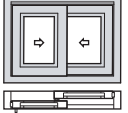
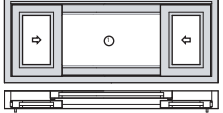
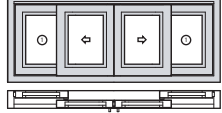
INSTALLING TOOLS

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

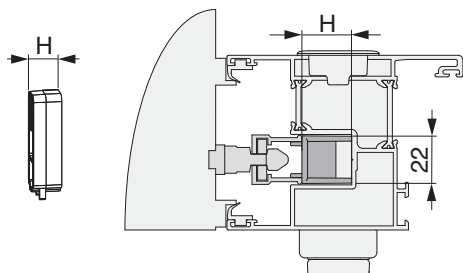
	A	D	K	C	Jig
					
Alphacan HST Vision	228422				-
Aluplast HST 70	228409				-
Aluplast HST 85	228408			228409	370874
Gealan S8000	228412				370875
Gealan S9000	228412				370875
Inoutic HST76 - Sash HS276	228416				-
Ital Plastick DA 82	228422				370874
Profine PremiDoor 70	228407			228409	370874
Profine 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

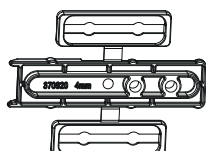


No

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



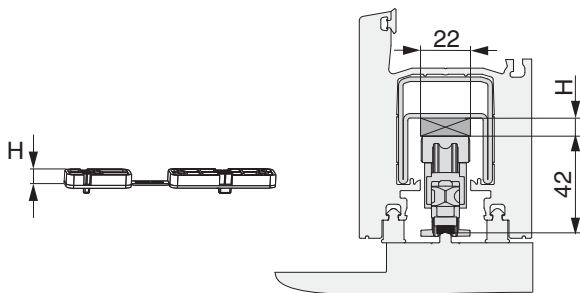
No

No
Tricoat

packer Feal for HS carriage and locking bolt silver

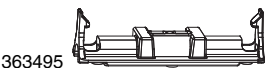
10

370820



363821

2.13.1.1.3 Horizontal packers for 300 kg roller					No	No Tricoat
silver	H	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	



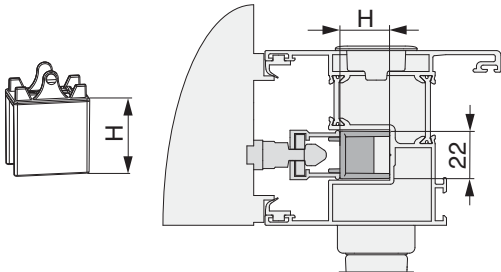
363495

2.13.1.1.4 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



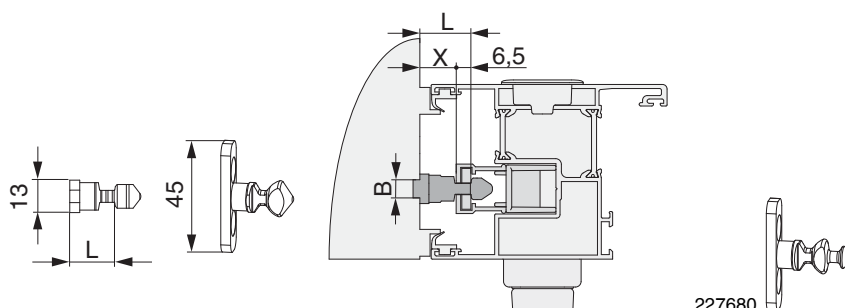
369363



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

2.13.2 Frame components

2.13.2.1 Locks



227679

227680

2.13.2.1.1 Locking bolts

silver

PVC with night vent

M12 for HS doors standard
M12 for HS doors standard L=55mm
M12 for HS doors with night-vent L=61,5mm
M8 standard

L	W		No	No Tricoat
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	
26,5	13	20	217078	
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	
		10	364581	365971
		10	365370	
		10	365371	
		100	364580	



364727



2.13.2.1.2 Packers for locking bolts

packer for HS locking bolt silver



No
Tricoat

20

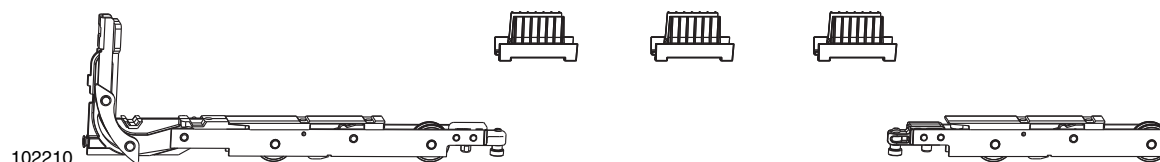
364727

2.14 Special parts for Netherlands

2.14.1 Sash components:

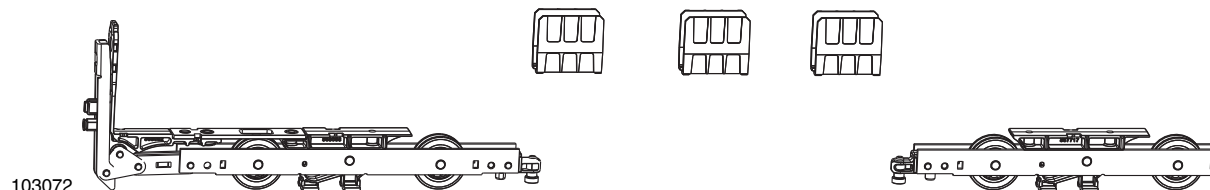
2.14.1.1 Rollers

2.14.1.1.1 Roller sets and connecting rods



2.14.1.1.1.1 Roller set 200 kg

						 Tricoat
roller pack	without guide track NL	silver	200	1	102210	102328



2.14.1.1.1.2 Roller set 300 kg

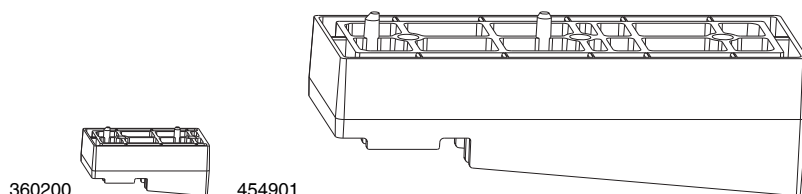
						 Tricoat
roller pack	without guide track and with brushes NL	silver	300	1	103072	103390

2.14.1.1.2 Accessories and individual components for roller



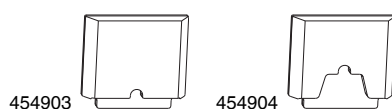
2.14.1.1.2.1 Rod guides and groove supports

						 Tricoat
groove support-brace for 200 kg	for 18x20 mm routing			10	362651	

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

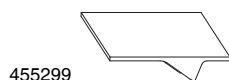
**2.14.2.1.1.2 Seals for roller tracks****Nº****Nº**
Tricoat

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

**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

**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

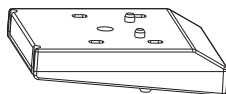
68/11 & 56/11	silver	10	357697
	black	10	362979

attachment gasket for sealing plate for Netherlands

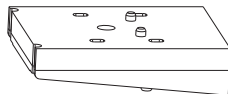
56/11, 3-sashed	silver	10	357695
68/11, 3-sashed	silver	10	357696
56/11, 3-sashed	black	10	363012
68/11, 3-sashed	black	10	363013



362977



362978

**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

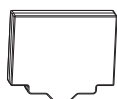
68/11, 2-sashed

black

100

362978

454883

**2.14.2.1.1.6 Seals for inactive sash****No****No**
Tricoat

for Netherlands for fixed sash

black

10

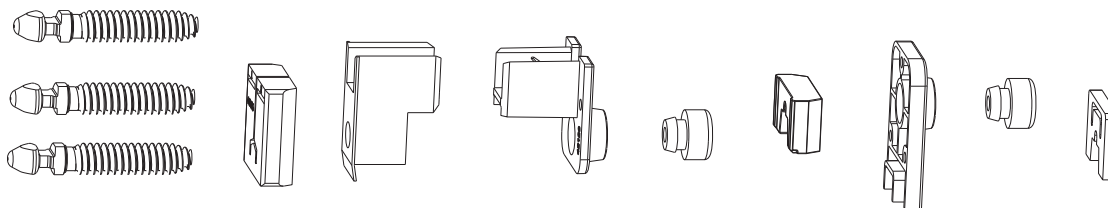
465550

grey

10

454883**2.14.2.2 Guide tracks****2.14.2.2.1 Guide tracks with cover**

103628

**2.14.2.2.1.1 Accessories for guide tracks with cover****No****No**
Tricoat

accessories for top guide track with locking bolt NL

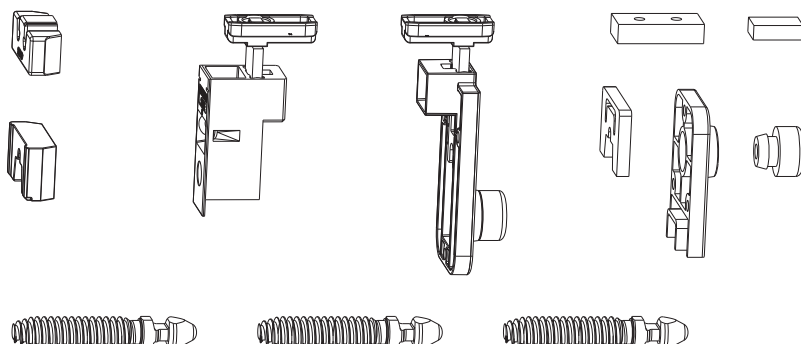
with cover and low universal

black

1

103628**2.14.2.2.2 Guide tracks C**

102208

**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

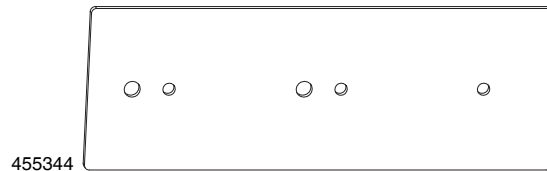
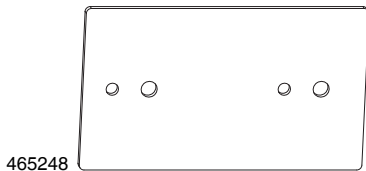
103060

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

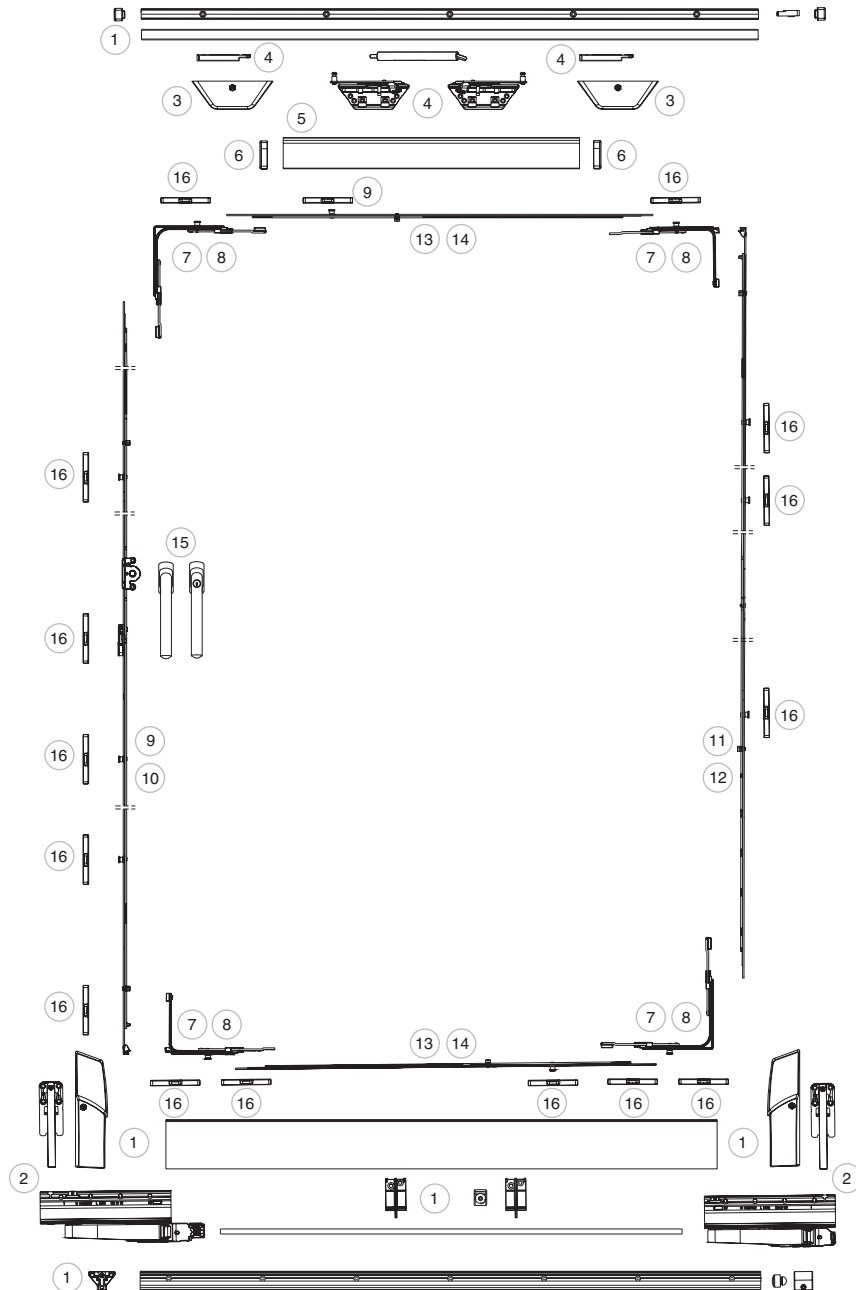


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3 SKB-S

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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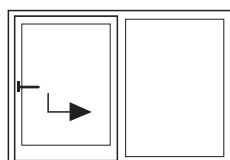


3.2 Diagrams SKB-S - Hardware itemisation

2-sashed unit:

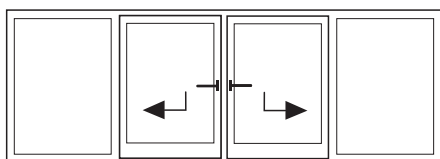
1 sliding sash, 1 fixed glazing; DIN left-handed

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

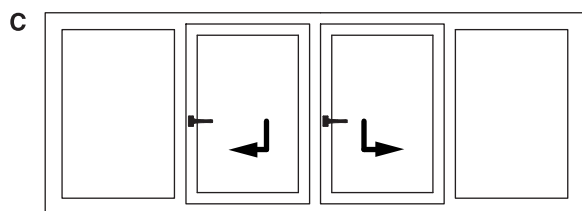
1	Left-handed roller pack
1	Profile set for sash and frame
1	Scissors-slider pack
1	Corner element set or SKB-S
1	T&T drive-gear FHH
1	Height connector
2	Width connector
1	Tilt striker plate
-	Striker plates (for 4 mm air gap: 1 striker plate for pull-in wedge)
1	Sash lifter
-	Striker plate sEH
1	Handles

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

Window adjustments

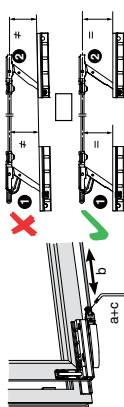
Settings and adjustments for the fittings (including inserting and removing the sashes) must only be carried out by specialists.



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

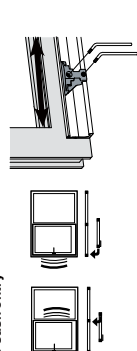
- Loosen the connecting rod on the roller at the handle side
- Push the connecting rod to the left or right to position the rear roller parallel to the roller unit on the handle side
- Fix the connecting rod



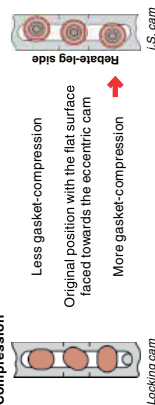
Regulating the height of the roller

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

Correct the sash entry



Compression



Safety and maintenance instructions

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



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

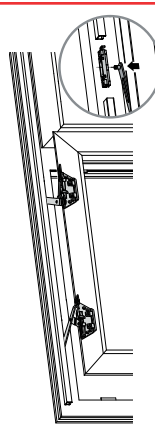
A good window can do more than just let in light:

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!

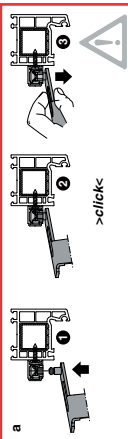
Do not paint over the fittings!

Inserting and removing the sash

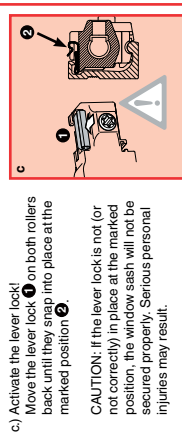
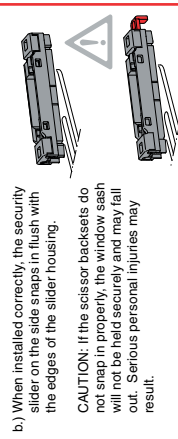
Specialists must pay particular attention to the following points, since the installation no longer lies within the sphere of influence of the fittings manufacturer!



Inserting the sash



- 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. Pull down the scissor arms to check that the connections are secure.



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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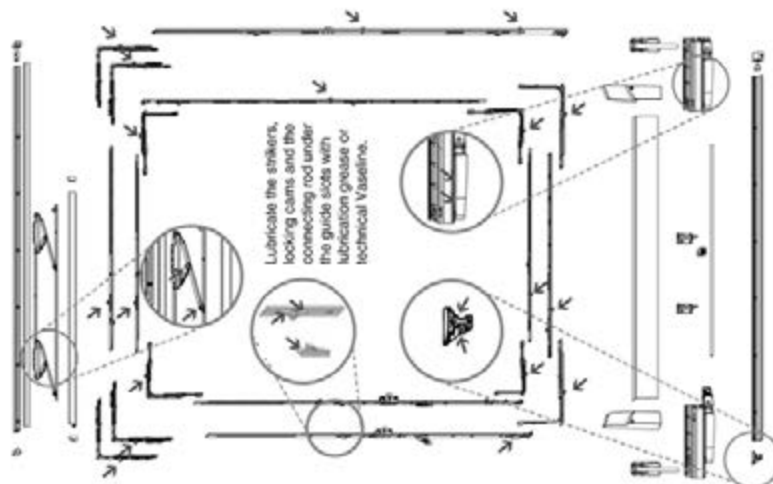


TECHNOLOGY IN MOTION

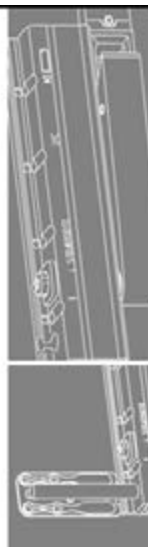
Maintenance

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.



MACO
RAIL-SYSTEMS
SLIDING FITTINGS



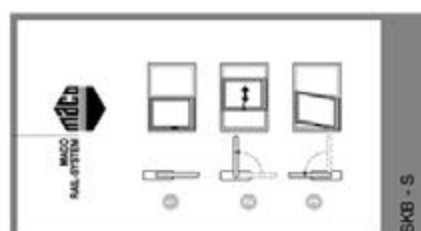
Operation and maintenance
instructions
Tilt&Slide fittings

T&S
Standard version

Product liability advice

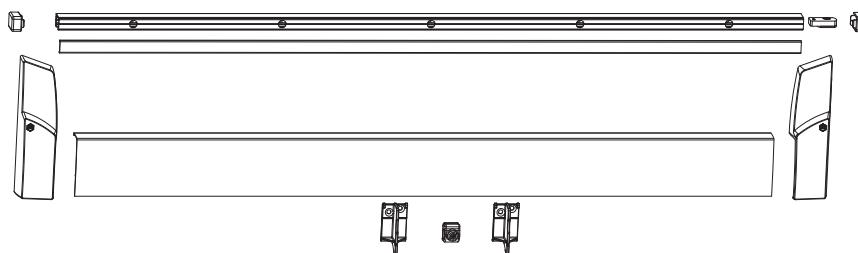
- Your windows / balcony-doors have been equipped with high-quality Tilt&Slide fittings. The operation is straightforward and trouble-free; nevertheless you should read through these instructions carefully and adhere to the operation advice.
- In your own interest, please do not forget to read the safety 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

3.4 Sash/frame components



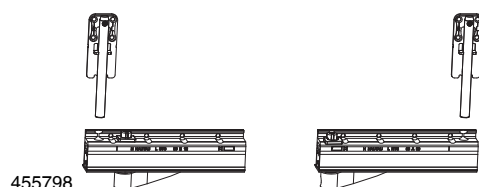
466052   

3.4.1 Profile Packs				L		N ^o	N ^o 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



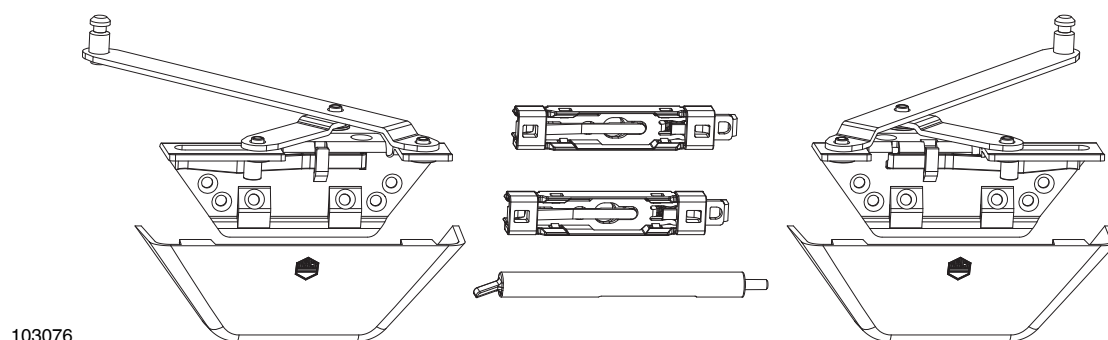
3.5.1.1 Roller Packs

roller pack		kg		No	No Tricoat
	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

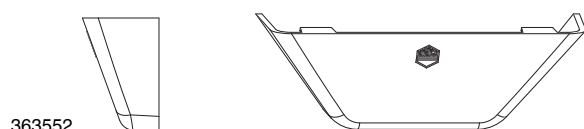


3.5.2.1.1 Scissor slider pack for SKB-S/SE

scissor-slider SKB-S/SE adjustable	left/right				No	No Tricoat
		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

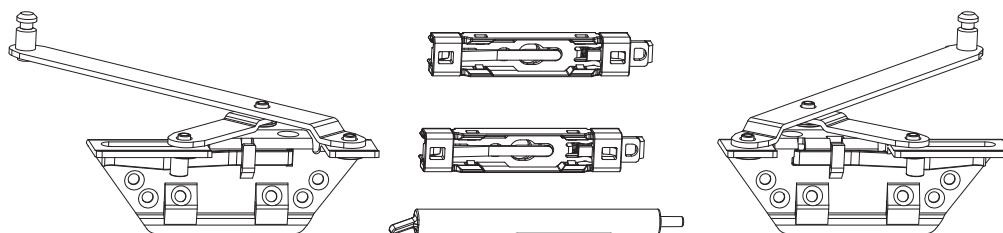
¹ Contents: 1x scissor slider right, 1x scissor slider left, 2x cover cap for scissor slider

3.5.2.2 Accessories and individual components for scissor stays



3.5.2.2.1 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

3.5.2.2.2 Scissor slider for SKB-S/SE



No

No
Tricoat

scissor-slider SKB-S/SE adjustable

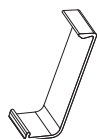
left/right silver

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

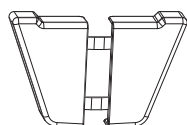
366591

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

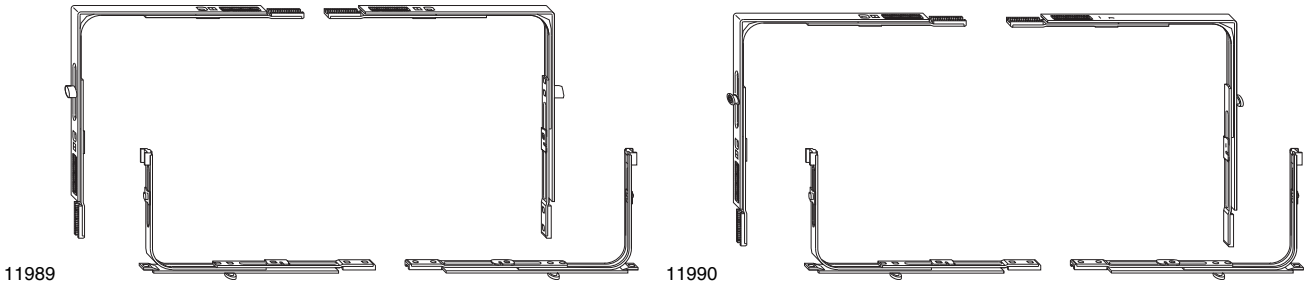
bronze SKB

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

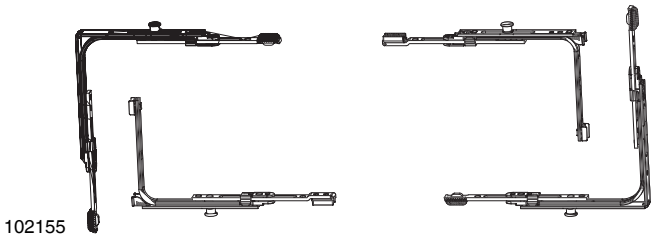
				No	No Tricoat
corner element set MULTI TREND					
	EH	silver	1	11989 ¹	
		silver	1	11990 ²	

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



3.5.4.1.1 T&T drive gears BS 15 FHH VZ										
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	



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



3.5.4.1.3 T&T drive gears lockable special-BS for PC FHH i.S.										
silver	size 6	25	2	1.050	1.851 - 2.100	1	10		58443¹	
	size 7	25	2	1.050	2.101 - 2.350	1	10		52825¹	
	size 6	40	2	1.050	1.851 - 2.100	1	5		52830¹	
	size 7	40	2	1.050	2.101 - 2.350	1	5		52831¹	

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



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

201734

3.5.4.2.1 T&T drive gears BS 15 FHH i.S.									 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*

205602

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

205547

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

3.5.4.2.4 Turn-only drive gears diagram C with welded-on striker plate									 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	

3.5.5 Height connectors

57418



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	

210335



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

210529



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	

210381



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

10585



10587



3.5.7.1 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.

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*

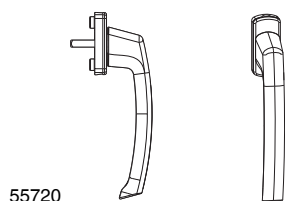


* Availability and delivery time on request.

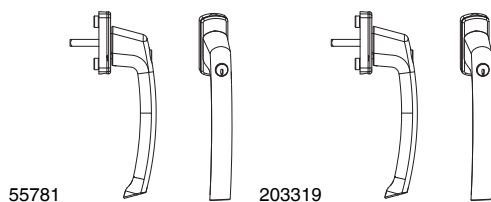
3.5.8 Handles

3.5.8.1 Handles SKB-S/SE and PAS

3.5.8.1.1 HARMONY design



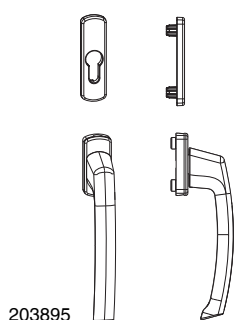
3.5.8.1.1 Lugs 10/12								No	No Tricoat
black brown RAL 8022	58				anodised	10		24658	
		pin 32	28	7	anodised	10		21269	
		pin 35	28	7	anodised	10		203310	
bronze	58	pin 32	28	7	anodised	10		21470	
		pin 35	28	7	anodised	10		203305	
		without pin	28		anodised	10		24432	
bronze SKB	58		28	7	anodised	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	



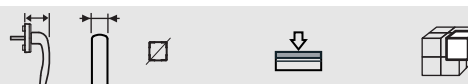
3.5.8.1.1.2 Lugs 10/12 with locking cylinder



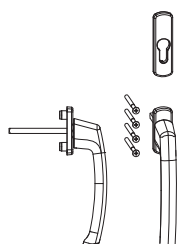
black brown RAL 8022	58		28	7	anodised	10	220634	
		pin 32	28	7	anodised	10	21270	
		pin 35	28	7	anodised	10	203322	
bronze	58		28	7	anodised	10	59049	
		pin 32	28	7	anodised	10	21476	
		pin 35	28	7	anodised	10	203317	
bronze SKB	58		28	7	anodised	10	203893	
		pin 32	28	7	anodised	10	203891	
		pin 35	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								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

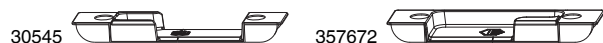


3.5.8.1.2 Spindles	L				No	No Tricoat
spindle	52	26	7	20	39013	
	56	30	7	100	39029	
	61	35	7	20	30717	
	64	38	7	20	94228	
	69	43	7	200	39014	
	76	50	7	20	30765	

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	



357673



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		357673 ¹	359253 ¹
			left	100		357674 ¹	359254 ¹
	striker plate i.S. for 4 mm air gap without reinforcement rings	angled screw-fixing	right	100		357958 ¹	
			left	100		357959 ¹	
	striker plate i.S. for 4 mm air gap, 13 mm offset	angled screw-fixing - 1 mm gasket-compression	right	100		360102 ¹	
			left	100		360103 ¹	
	striker plate i.S. for 4 mm air gap	angled screw-fixing - 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

358993



3.6.1.1.5 Tilt striker plates 4 mm air gap							 Tricoat
silver	tilt striker for 4 mm air gap		right and left	100	30274 ¹	355134 ¹	
	horizontal i.S. tilt striker for 4 mm air gap, 13 mm offset	angled screw-fixing	right	100	357678 ¹	365089 ¹	
			left	100	357679 ¹	365090 ¹	
	tilt striker for 4 mm air gap, 13 mm offset		right	100	358993 ¹	365091 ¹	
	horizontal i.S. tilt striker for 4 mm air gap	angled screw-fixing	left	100	358994 ¹	365092 ¹	
			right	100	96200 ¹	204964 ¹	
			left	100	96201 ¹	204965 ¹	

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

38593



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

34610



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

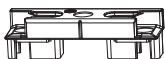
355923



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	



96558

**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**

34921

**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**

363175

**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

95114

**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

96563

**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**

33932

**3.6.1.3.5 Tilt striker plates 12 mm air gap for hardware groove 6/8/4****No****No**
Tricoat

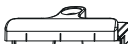
silver tilt striker for hardware groove 6/8/4

right and
left

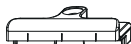
100

33932**355558*****3.6.1.4 Striker plates 12 air gap hardware groove 7/8/4**

34522



34902



34969

**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**

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*

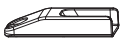
96564 

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	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	angled screw-fixing			100	355606	358991*
	without reinforcement rings						
	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	angled screw-fixing			200	34986	
	without reinforcement rings						
	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						 Tricoat	 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
					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*
			- 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	



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

359003 

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-rebate361100 

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	

360445 

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

95326 

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	

360444 

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

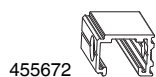
368346 

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	



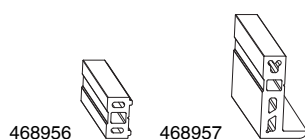
455673

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

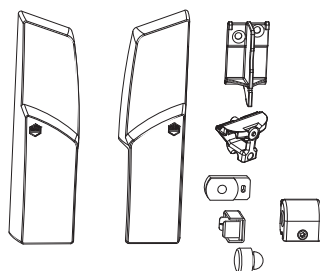
3.7.1.5 Roller cover strip	L		No	No Tricoat
silver	5.170	10	455667	
	2.036	10	465181	
brown	5.170	10	455669	
	2.036	10	465183	
white	5.170	10	455668	
	2.036	10	465182	
cream white RAL 9001	5.170	10	455671	
	2.036	10	465185	
bronze SKB	5.170	10	455670	
	2.036	10	465184	



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

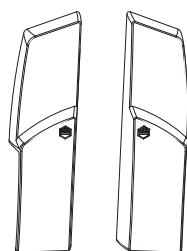


Nº

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



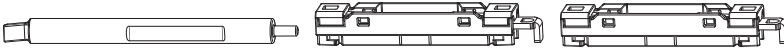
Nº

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	



465276

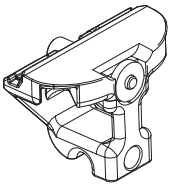
**3.7.2.5 Bag of accessories for guide tracks****No****No**
Tricoat

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

455655¹¹ Only for diagram D

465766



465508



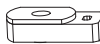
363388



465277



463068

**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

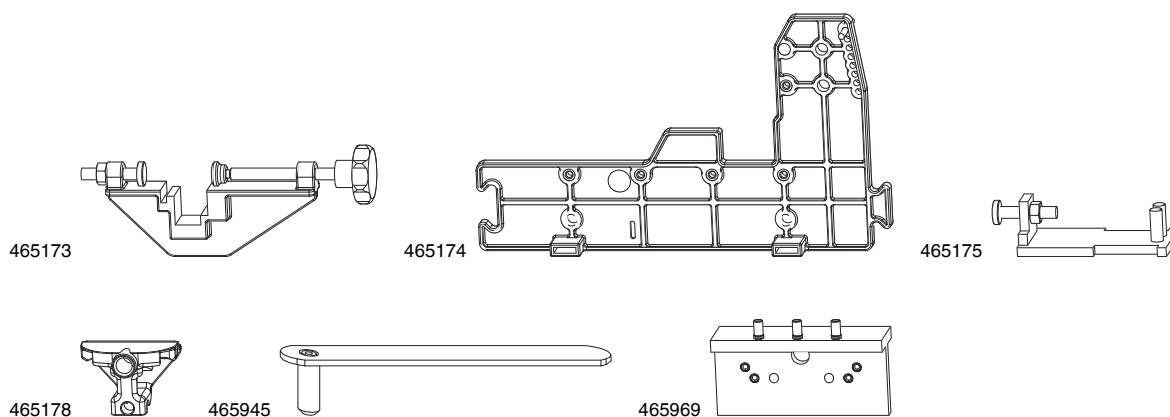
465277

top buffer stop for guide track SKB

50

463068

3.8 Jigs

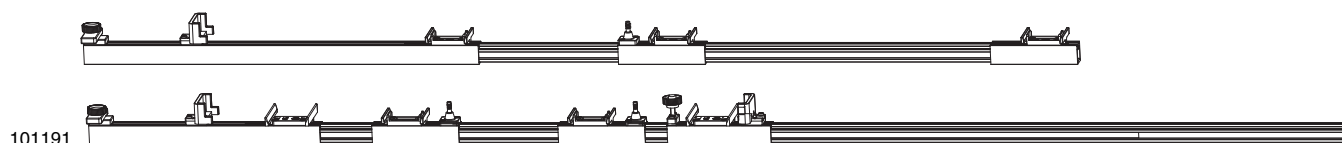


3.8.1 Jigs

		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	465178¹	
jig for aligning screw holes centrally on SKB guide track	1	465945	
drill jig for scissor-slider SKB-S/SE	1	465969	

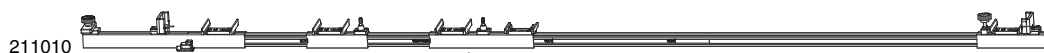
¹ Only for diagram D

3.8.2 Positioning jigs



3.8.2.1 Positioning jigs for width connectors/height connectors MULTI TREND

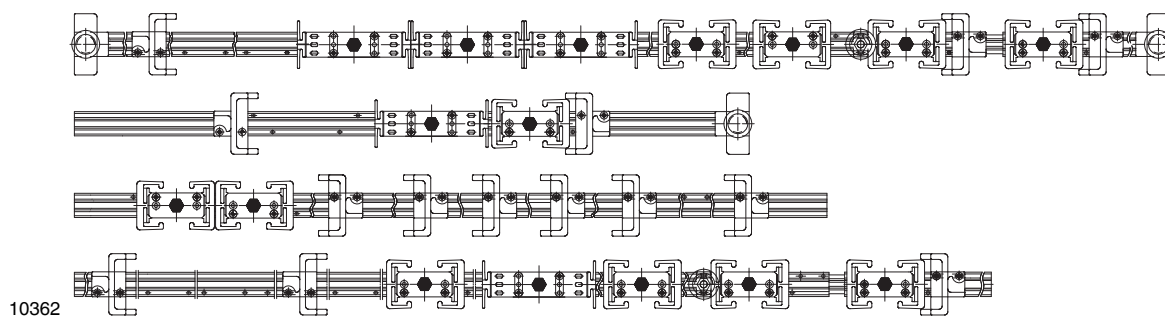
		Nº	Nº Tricoat
striker positioning jig set for width connector SKB-S for 48 mm retainer bottom and top	1	101191	
striker positioning jig set for width connector SKB-S for 50 mm retainer bottom and top	1	101192	
jig for height connector SKB-S/SE with retainer for 34943	1	14583	



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	211010¹	
striker positioning jig for width connector SKB-S bottom with 50 mm retainer	620 - 1.650	1	211267¹	

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

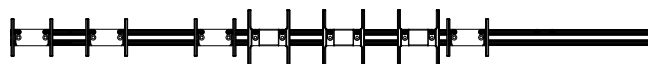
1

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



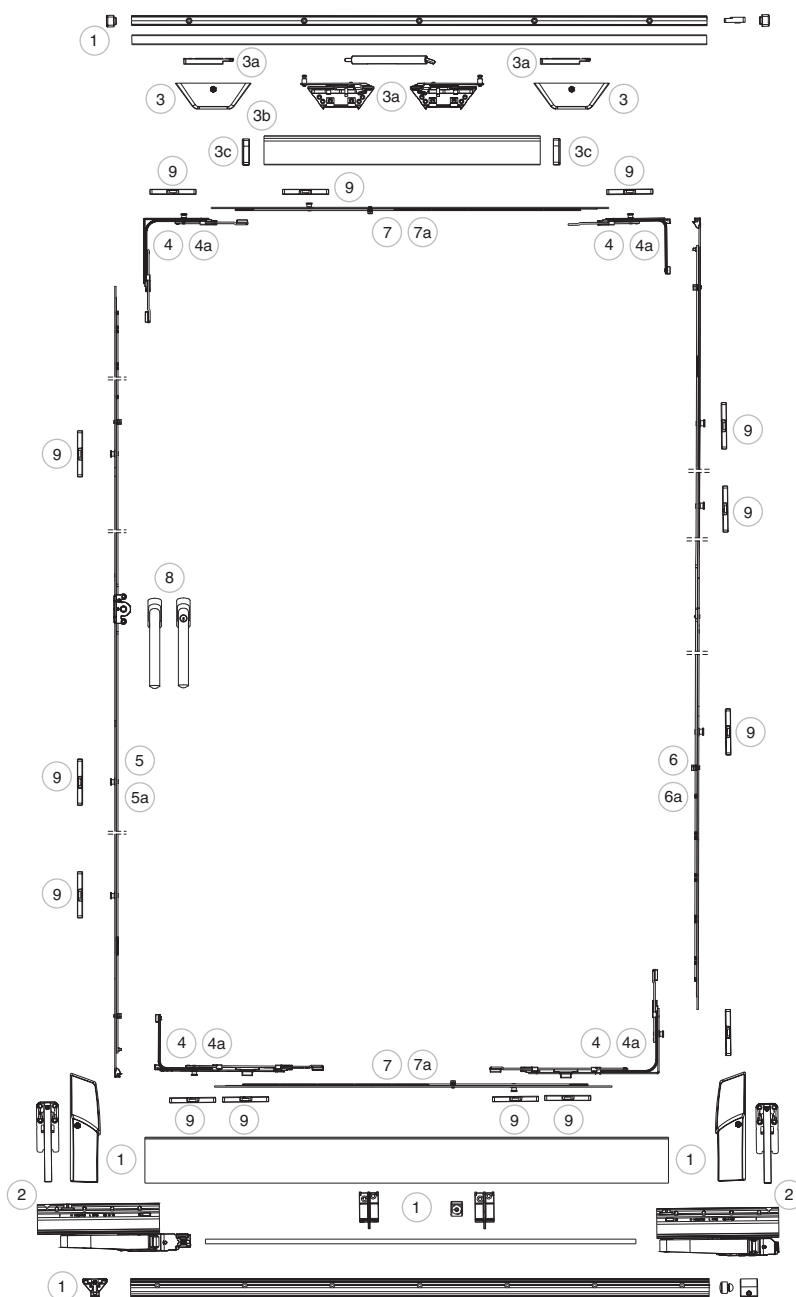


4 SKB-SE

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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.



Selection guide		Page
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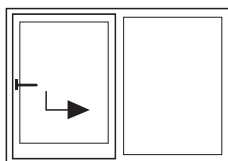


4.2 Diagrams SKB-SE - Hardware itemisation

2-sashed unit:

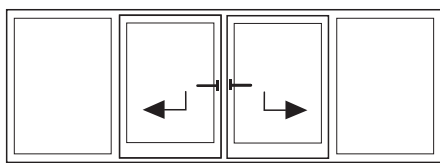
1 sliding sash, 1 fixed glazing; DIN left-handed

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

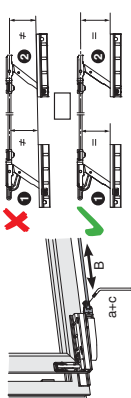
4.3 Operating and maintenance instructions SKB-SE

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

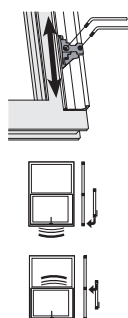
- Loosen the connecting rod on the roller at the handle side
- Push the connecting rod to the left or right to position the rear roller parallel to the roller 1 unit
- Fix the connecting rod



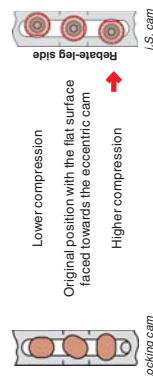
Regulating the height of the roller

- Lift off the adjusting device
- 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.

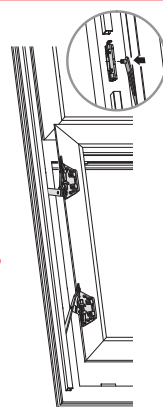
Be sure to prevent any obstructions in the opening gap between the sash and the frame.

General advice for your windows

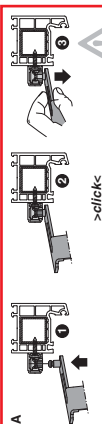
A good window can do more than just let in light: It is a design element, and at the same time a component that must satisfy demanding technical requirements. Apart from the essential care of the fittings components, you should also constantly check the surface finish, the glazing, and the seals and 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!) ② Correctly fastened position of the fixing pin in the sliders ③ Pull/push down the scissor arms to check that the connections are secure ④

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 ① lever lock on both rollers back until they snap into place at the marked ② 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).

Order No. 750496_DE
Date created: October 2008
Change date: January 2011
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MACO DOOR & WINDOW HARDWARE (UK) LTD
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CENTRE CASTLE ROAD
SITTINGBOURNE KENT ME10 3LY
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enquiries@macouk.net
www.maco.uk.net



TECHNOLOGY IN MOTION

Maintenance

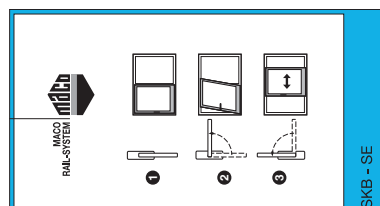
To maintain the functionality of slide & tilt fittings (SKB) for windows and French door sashes, the following maintenance work must be performed annually:

- 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!

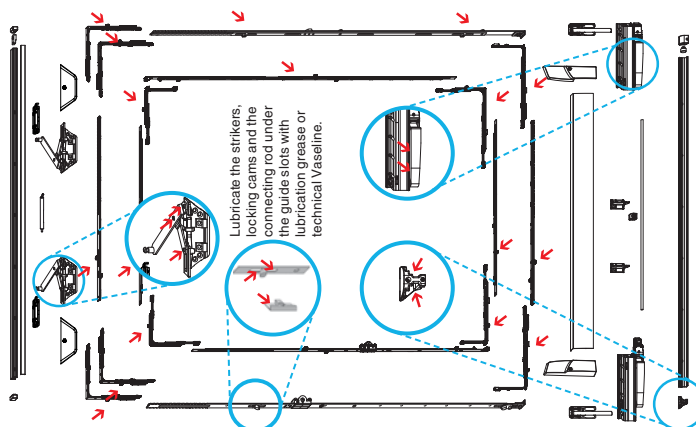
Product liability advice

- 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!

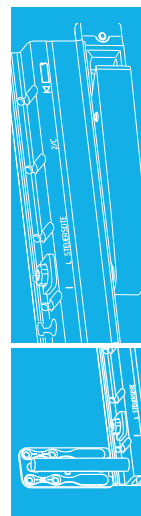
Operation



- 1 close
- 2 tilt
- 3 open/close



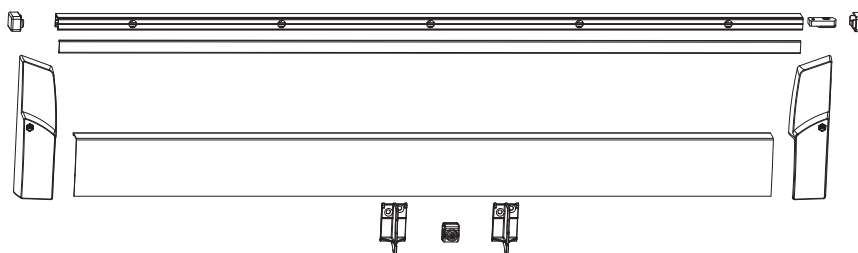
MACO RAIL SYSTEMS SLIDING FITTINGS



Operation and maintenance
instructions slide & tilt fittings

SKB
Self-engaging

4.4 Sash/frame components



466052



4.4.1 Profile Packs



L



No

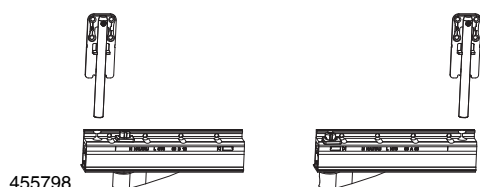
No
Tricoat

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	
	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)

4.5 Sash components

4.5.1 Roller Packs



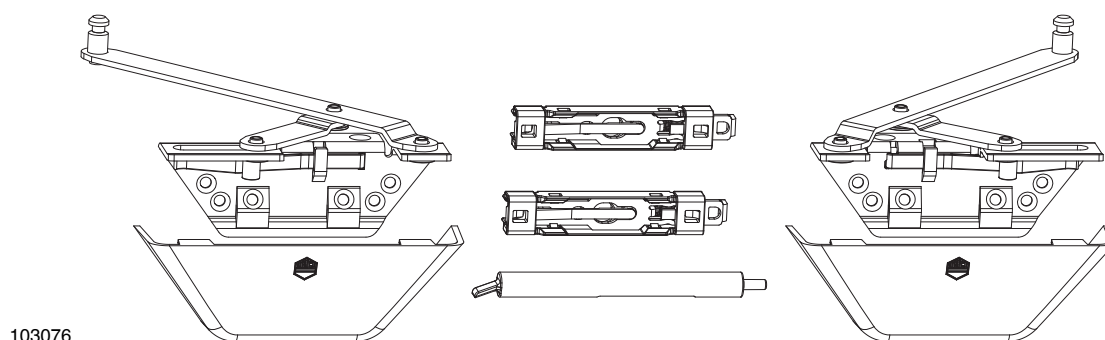
4.5.1.1 Roller Packs

				No	No Tricoat
roller pack	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

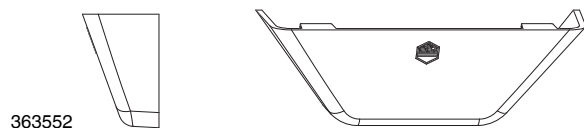


4.5.2.1.1 Scissor slider pack for SKB-S/SE

					No	No 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

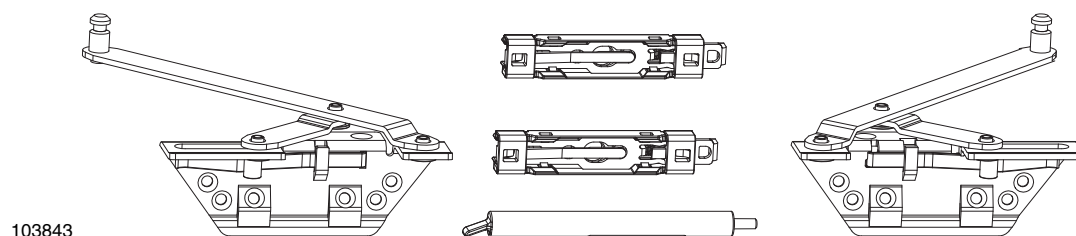
4.5.2.2.1 Cover caps for SKB-S/SE scissors-slider



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

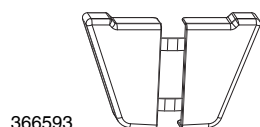
L



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)



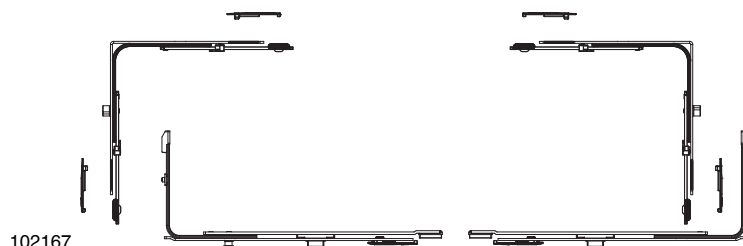
No

No
Tricoat

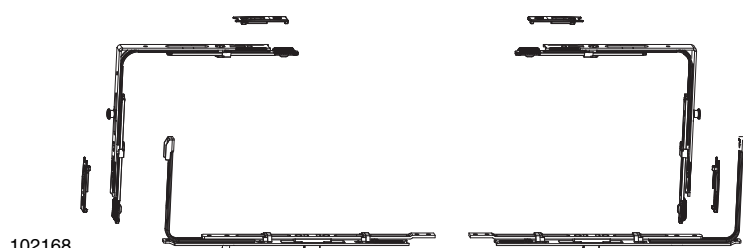
silver	10	366593	
brown	10	366595	
white	10	366594	
cream white RAL 9001	10	366597	
bronze SKB	10	366596	

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

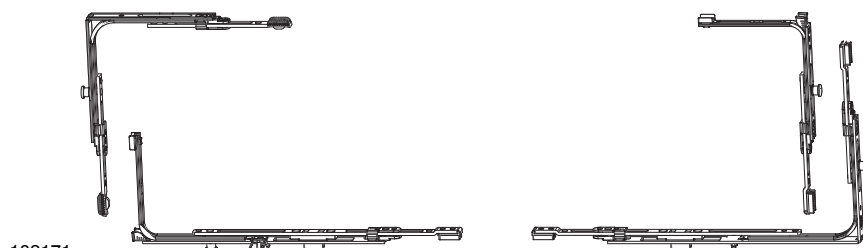
No
Tricoat

corner element set MULTI TREND	right		silver	1	102169¹	
		EH	silver	1	102170²	
	left		silver	1	102167¹	
		EH	silver	1	102168²	

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	right	silver	1	102172¹	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

57418 

4.5.5.1 Height connectors SKB-S/SE MULTI TREND i.S. with pull-in wedge								 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	

210335 

4.5.5.2 Height connectors SKB-S/SE and PAS MULTI MATIC i.S.								 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

210529 

4.5.6.1 Width connector SKB-S/SE MULTI TREND i.S.								 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	

210381 

4.5.6.2 Width connector SKB-S/SE and PAS MULTI MATIC i.S. with pull-in wedge								 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

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.



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

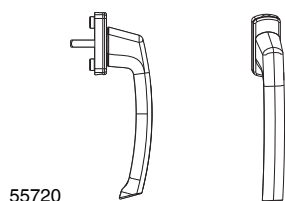
201750

207444*

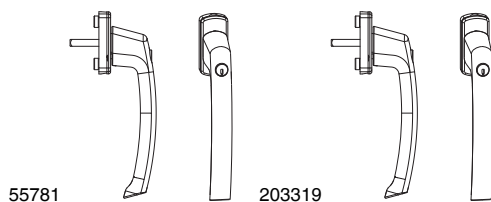
4.5.8 Handles

4.5.8.1 Handles SKB-S/SE and PAS

4.5.8.1.1 HARMONY design



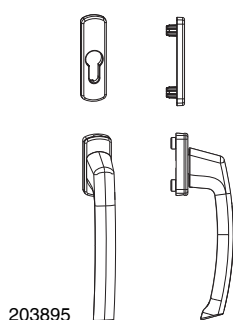
4.5.8.1.1 Lugs 10/12								No	No Tricoat
black brown RAL 8022	58					anodised	10	24658	
			pin 32	28	7	anodised	10	21269	
			pin 35	28	7	anodised	10	203310	
bronze	58		pin 32	28	7	anodised	10	21470	
			pin 35	28	7	anodised	10	203305	
			without pin	28		anodised	10	24432	
bronze SKB	58			28	7	anodised	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	



4.5.8.1.1.2 Lugs 10/12 with locking cylinder



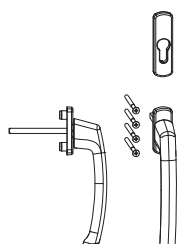
black brown RAL 8022	58		28	7	anodised	10	220634
		pin 32	28	7	anodised	10	21270
		pin 35	28	7	anodised	10	203322
bronze	58		28	7	anodised	10	59049
		pin 32	28	7	anodised	10	21476
		pin 35	28	7	anodised	10	203317
bronze SKB	58		28	7	anodised	10	203893
		pin 32	28	7	anodised	10	203891
		pin 35	28	7	anodised	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									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



4.5.8.1.2 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	

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		right	100	357673 ¹	359253 ¹
	13 mm offset		left	100	357674 ¹	359254 ¹
	striker plate i.S. for 4 mm air gap angled screw-fixing		right	100	357958 ¹	
	without reinforcement rings		left	100	357959 ¹	
	striker plate i.S. for 4 mm air gap, angled screw-fixing	- 1 mm gasket-compression	right	100	360102 ¹	
	13 mm offset		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



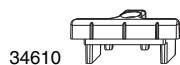
4.6.1.1.3 Pull-in wedge					No	No Tricoat
silver	pull-in wedge for 4 mm air gap	for SKB		50	38593	355870



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	

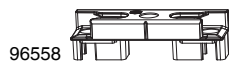


4.6.1.2 Striker plates for opposite Eurogroove



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.

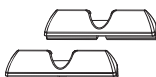


96564



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	

455716



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

34943



34980



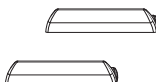
4.6.1.5.1 Striker plates 12 mm air gap 18 mm Euro-rebate					No	No Tricoat
silver	striker plate Euro-rebate 18 mm	double screw fixing	200		34943	201476*
		angled screw-fixing	200		34980	355135
		- 1 mm gasket-compression	200		357844	
		+ 1 mm gasket-compression	200		359769	

96860



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*
	striker plate i.S. Euro-rebate 18 mm	+ 1 mm gasket-compression	100		359770	
		- 0.7 mm gasket-compression	100		96660	362849
			100		96860	97544*

455711



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

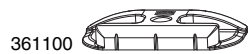
465939

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.



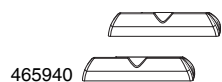
4.6.1.8 Striker plates 12 mm air gap 30 mm Euro-rebate



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	



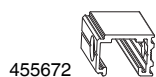
4.6.1.8.2 Striker plates i.S. 12 mm air gap 30 mm Euro-rebate					No	No Tricoat
silver	striker plate i.S. 30mm rebate depth, 13mm offset	angled screw-fixing	100		360444	362305



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



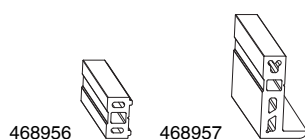
4.7.1.1 Guide tracks	L		Nº	Nº Tricoat
silver	6.070	10	455672	
brown	6.070	10	467089	
bronze SKB	6.070	10	467088	



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	

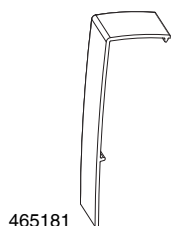


4.7.1.3 Roller tracks	L		Nº	Nº Tricoat
silver	6.070	10	455664	
brown	6.070	10	455665	
bronze SKB	6.070	10	455666	



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	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

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	

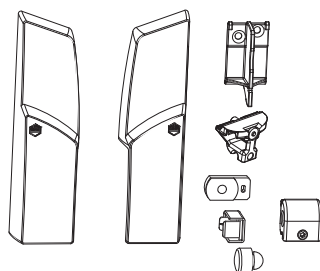


455683

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

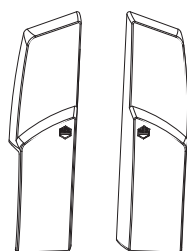


No

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	

465276

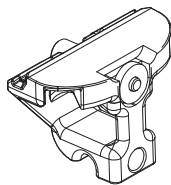
**4.7.2.5 Bag of accessories for guide tracks****No****No**
Tricoat

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

455655¹¹ 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

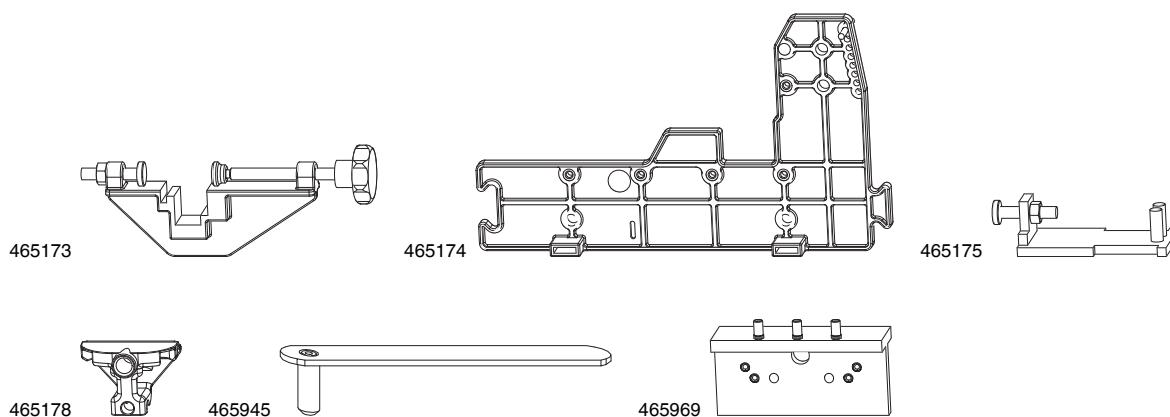
465277

top buffer stop for guide track SKB

50

463068

4.8 Jigs

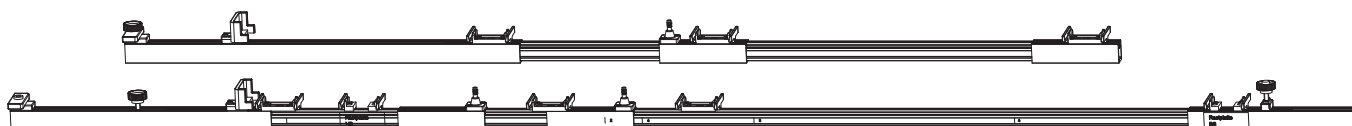


4.8.1 Jigs		Nº	Nº Tricoat
clamping jig for positioning the SKB guide track and roller track	1	465173	
jig for aligning screw holes centrally on SKB rollers	1	465174	
installation jig for SKB control module	1	465175	
drill jig for movable SKB control module diagram D	1	465178 ¹	
routing template for SKB-SE 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	

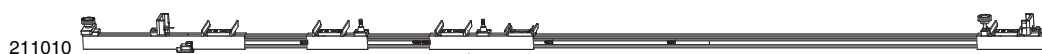
¹ Only for diagram D

4.8.2 Positioning jigs

102303

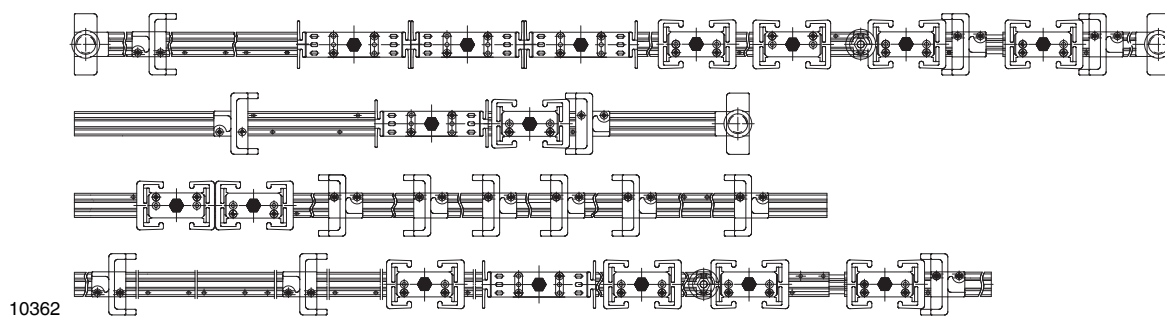


4.8.2.1 Positioning jigs for width connectors/height connectors MULTI TREND		Nº	Nº Tricoat
striker positioning jig set for width connector SKB-SE for 48 mm retainer bottom and top	1 ¹	102303	
striker positioning jig set for width connector SKB-SE for 50 mm retainer bottom and top	1 ¹	102304	
jig for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

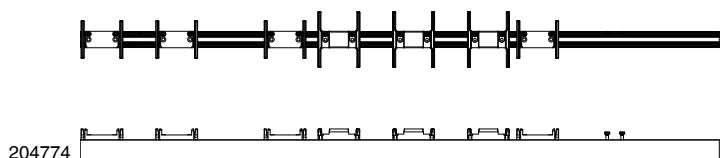
1

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

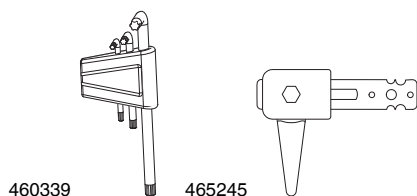
striker positioning jig MM for drive gear FHH for doors with 48 mm retainer

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

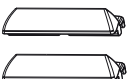
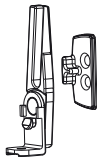
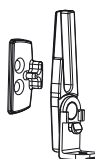
clamp for routing jig for SKB

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
Brüggmann 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

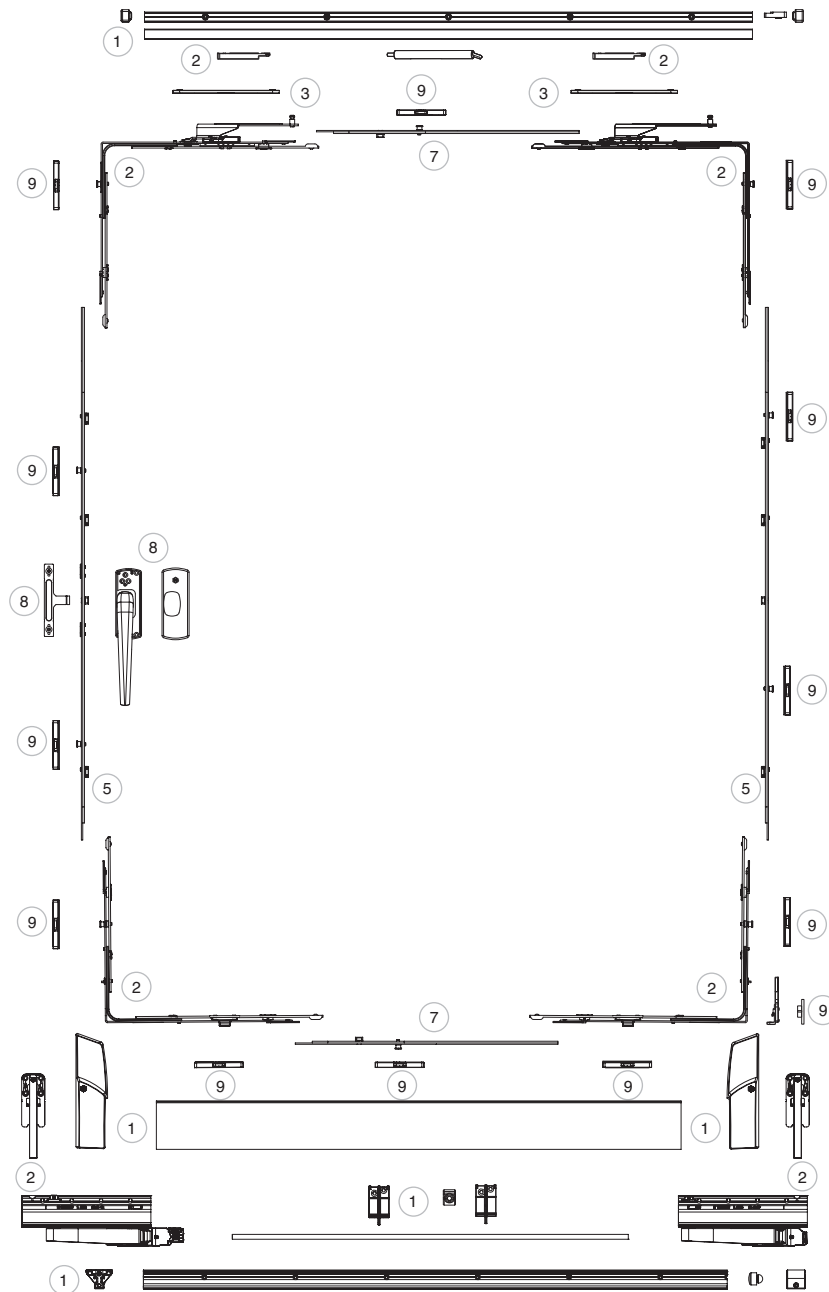


5 SKB-Z

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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
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5.2 Diagrams SKB-Z - Hardware itemisation

2-sashed unit:

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

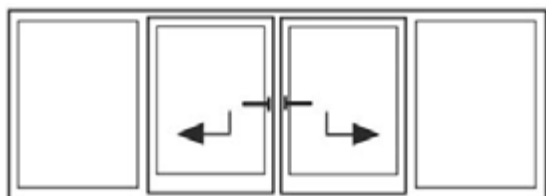


Order text

- | | |
|---|--|
| 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) |

4-sashed unit:

2 sliding sashes (with handles), 2 fixed glazings



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 1 lock
- 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 2 the rear roller parallel to the roller unit on the handle side 1
- Fix the connecting rod

Correct the sash entry

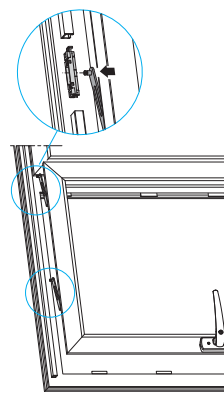
Compression

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

Locking cam
Rebate-leg 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"! 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
- 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 1 on both rollers back until they snap into place at the marked position 2.
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: maco@maco.at
www.maco.at

MACO DOOR & WINDOW HARDWARE (U.K.) LTD
CASTLE ROAD, EUROLINK BUSINESS CENTRE
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FAX: +44 (0)1795 433902
E-Mail: enquiry@macouk.net
www.macouk.com

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

Maintenance

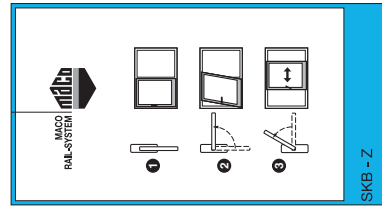
To maintain the functionality of slide & tilt fittings (SKB) for windows and French door sashes, the following maintenance work must be performed annually:

- 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!

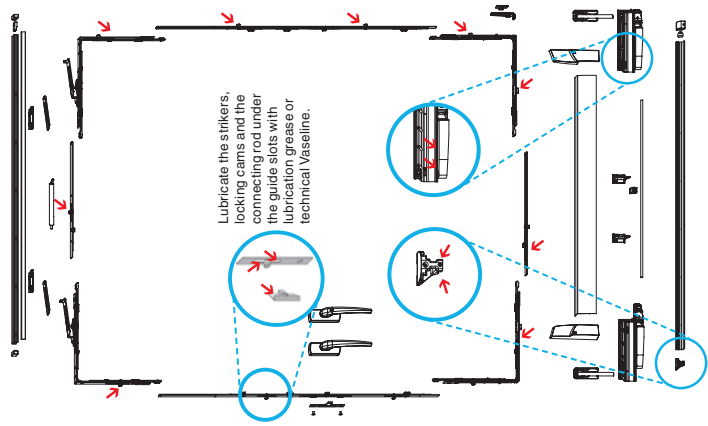
Product liability advice

- 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!

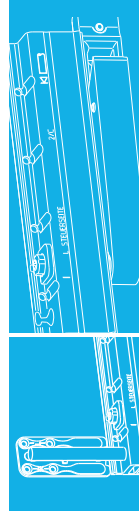
Operation



- 1 Closed
- 2 Tilt
- 3 Open/slide



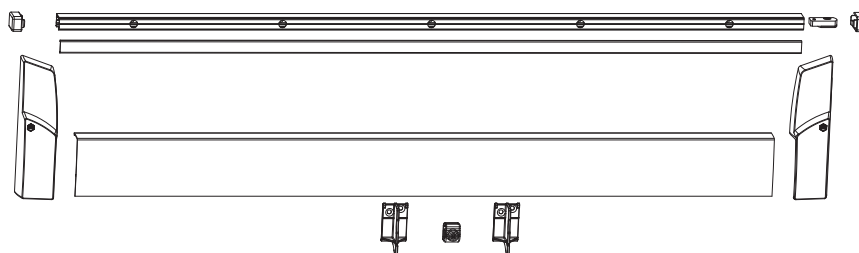
MACO RAIL-SYSTEMS SLIDING FITTINGS



Operation and maintenance
instructions
Slide & tilt fittings

SKB
Positive control

5.4 Sash/frame components



466052



5.4.1 Profile Packs



L



No

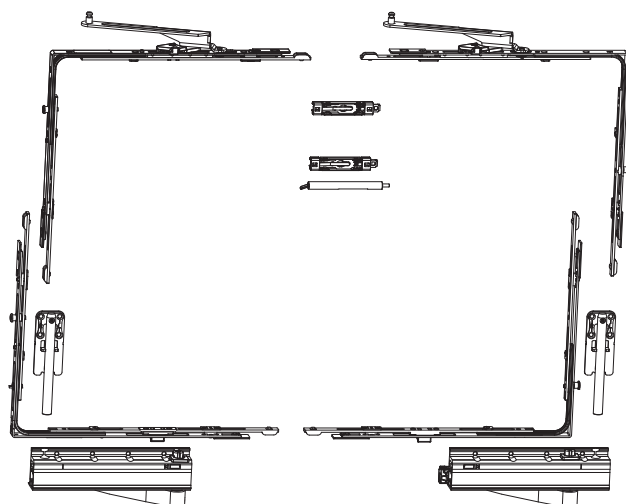
No
Tricoat

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

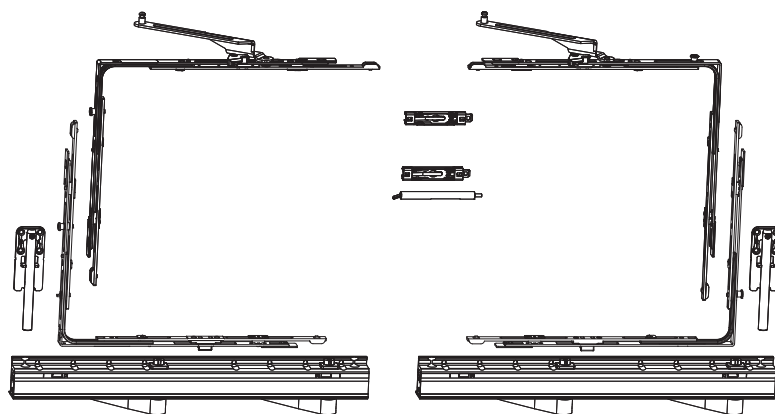


455506

5.5.1.1 Basic pack SKB-Z 160 kg

				kg		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

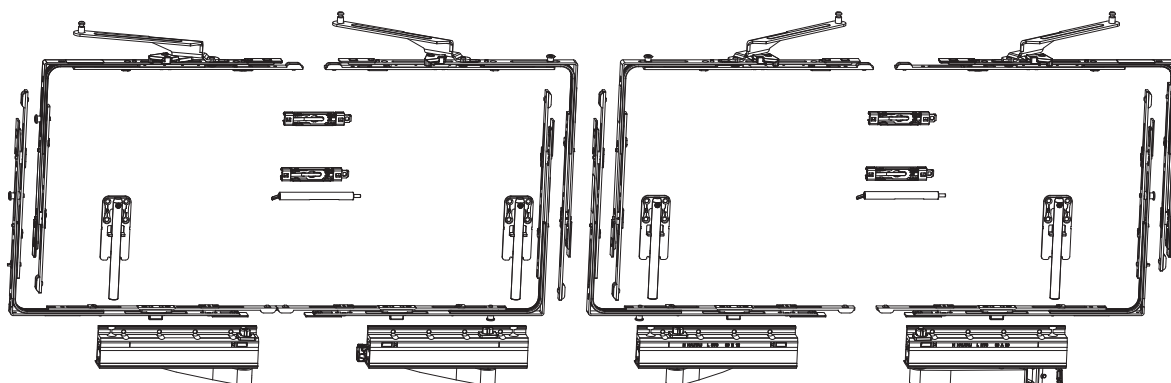


455510

5.5.1.2 Basic pack SKB-Z 200 kg

				kg		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

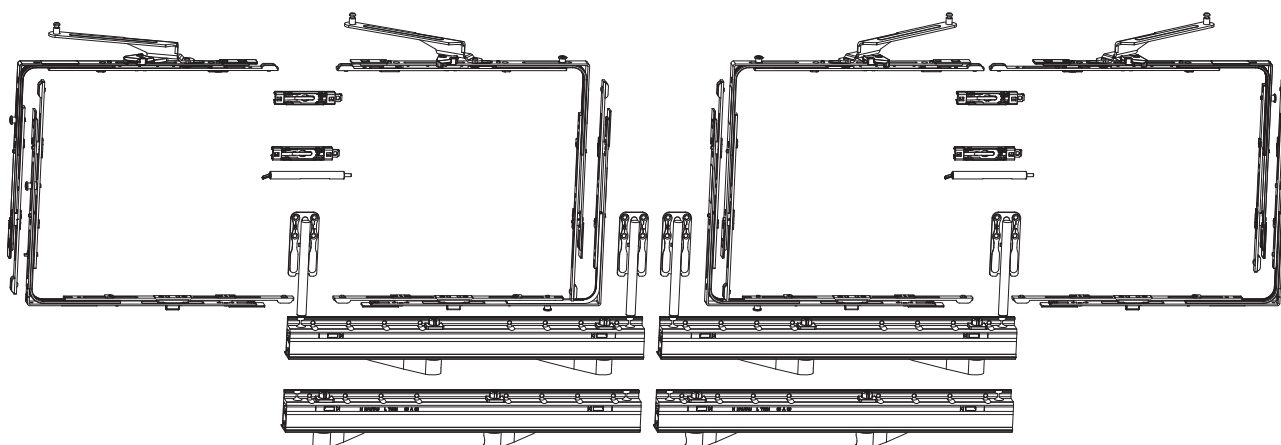
silver

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

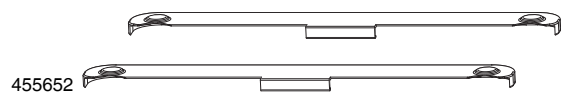
465373¹

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



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

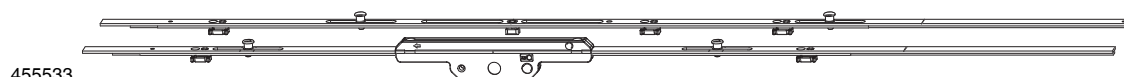
5.5.3 Drive gears

5.5.3.1 Drive gears SKB-Z



5.5.3.1.1 Drive gear set SKB-Z BS 0								No	No Tricoat
silver	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	

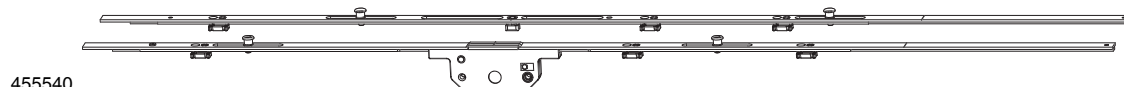
¹ Contents: 1 x drive-gear, 1 x height connector



5.5.3.1.2 Drive gear set SKB-Z BS 17.5								No	No Tricoat
silver	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



5.5.3.1.3.1 Drive gear set SKB-Z BS 30								No	No Tricoat
silver	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



silver	size	BS	450	1.101 - 1.300	5	455565 ¹	
	size 2	BS 35	450	1.101 - 1.300	5	455565 ¹	
	size 3	BS 35	650	1.301 - 1.500	5	455565 ¹	
	size 4	BS 35	650	1.501 - 1.700	5	455565 ¹	
	size 5	BS 35	950	1.701 - 1.900	5	455565 ¹	
	size 6	BS 35	950	1.901 - 2.100	5	455565 ¹	
	size 7	BS 35	950	2.101 - 2.300	5	455565 ¹	
	size 8	BS 35	950	2.301 - 2.400	5	455565 ¹	

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

5.5.3.1.5 Drive gear set SKB-Z BS 40

455571



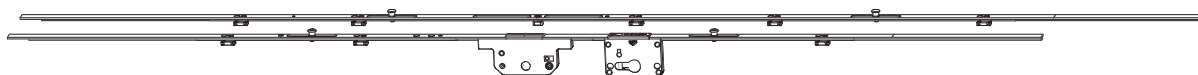
5.5.3.1.5.1 Drive gear set SKB-Z BS 40



silver	size	BS	0	450	900 - 1.100	0	5	455569 ¹	
	size 1	BS 40	0	450	900 - 1.100	0	5	455569 ¹	
	size 2	BS 40	2	450	1.101 - 1.300	1	5	455570 ¹	
	size 3	BS 40	4	650	1.301 - 1.500	2	5	455571 ¹	
	size 4	BS 40	4	650	1.501 - 1.700	2	5	455572 ¹	
	size 5	BS 40	4	950	1.701 - 1.900	2	5	455573 ¹	
	size 6	BS 40	4	950	1.901 - 2.100	2	5	455574 ¹	
	size 7	BS 40	4	950	2.101 - 2.300	2	5	455575 ¹	
	size 8	BS 40	4	950	2.301 - 2.400	2	5	455576 ¹	

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

455577



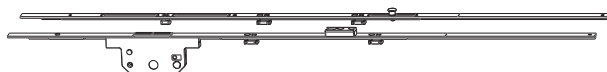
5.5.3.1.5.2 Drive gear set SKB-Z BS 40 lockable PC



silver	size	BS	4	950	1.701 - 1.900	2	5	455577 ¹	
	size 5	BS 40	4	950	1.701 - 1.900	2	5	455577 ¹	
	size 6	BS 40	4	950	1.901 - 2.100	2	5	455578 ¹	
	size 7	BS 40	4	950	2.101 - 2.300	2	5	455579 ¹	
	size 8	BS 40	4	950	2.301 - 2.400	2	5	455580 ¹	

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



silver	size	BS	450	1.101 - 1.300	5	455581 ¹	
	size 2	BS 40	450	1.101 - 1.300	5	455581 ¹	
	size 3	BS 40	650	1.301 - 1.500	5	455582 ¹	
	size 4	BS 40	650	1.501 - 1.700	5	455583 ¹	
	size 5	BS 40	950	1.701 - 1.900	5	455584 ¹	
	size 6	BS 40	950	1.901 - 2.100	5	455585 ¹	
	size 7	BS 40	950	2.101 - 2.300	5	455586 ¹	
	size 8	BS 40	950	2.301 - 2.400	5	455587 ¹	

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

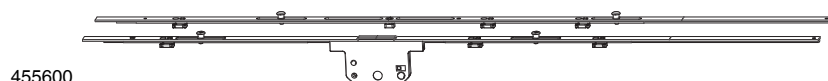


455596

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

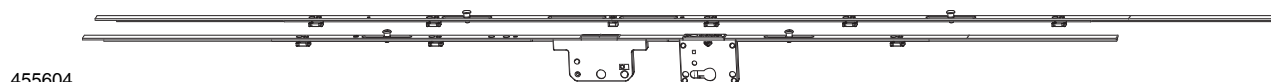
5.5.3.1.7 Drive gear set SKB-Z BS 50



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							 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	455794 ¹	
	size 6	BS 40	4	950	1.901 - 2.100	2	5	455795 ¹	
	size 7	BS 40	4	950	2.101 - 2.300	2	5	455796 ¹	
	size 8	BS 40	4	950	2.301 - 2.400	2	5	455797 ¹	

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	466597 ¹	
	size 6	BS 45	4	950	1.901 - 2.100	2	5	466598 ¹	
	size 7	BS 45	4	950	2.101 - 2.300	2	5	466599 ¹	
	size 8	BS 45	4	950	2.301 - 2.400	2	5	466600 ¹	

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	465739 ²	
		size 3	1.251 - 1.450	5	455520 ²	
with 2 i.S.	silver	size 4	1.451 - 1.650	5	465740 ²	
		size 5	1.651 - 1.850	5	465741 ²	
		size 6	1.851 - 2.000	5	465742 ²	

¹ Bei 200 kg FB = 960 - 1050mm

² Contents: 2 x width connectors

5.5.5 Extension piece

455612

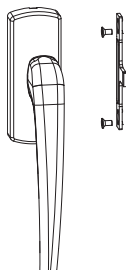
465256

5.5.5.1 Extension piece SKB-Z	L				 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

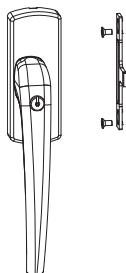
5.5.6.1 Handle sets SKB-Z

5.5.6.1.1 Standard design



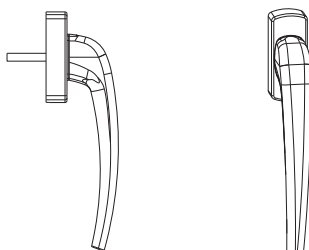
455685

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	



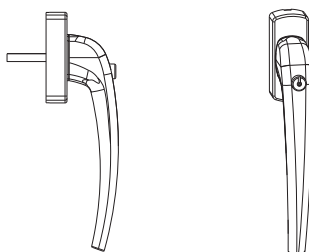
455762

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	



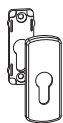
455772

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	

363640

5.5.6.1.2 Spindle		L			No	No Tricoat
spindle		162	8	50	363640	

465747

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



465254

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	



455717

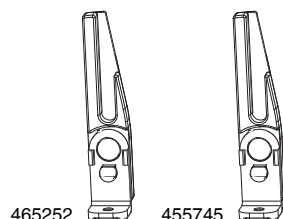
5.6.1.1.2 Latching plate set SKB-SE/Z for 4 mm air gap



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	



465252

455745

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



34610

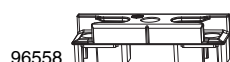
5.6.1.2.1 Striker plates for opposite Eurogroove



No

No
Tricoat

silver	striker plate opposite Eurogroove	- 1 mm gasket-compression	200	34606	
			200	34610	354028



96558

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



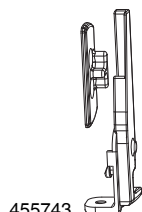
96564

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.

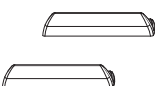
5.6.1.5 Striker plates 12 mm air gap 18 mm Euro-rebate

34943  34980 

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	

96860 

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*
	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*

455711 

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

455739  455738 

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

34981 

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*
	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



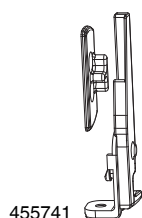
96561

5.6.1.6.2 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	
	striker plate i.S. Euro-rebate 20 mm	angled screw-fixing	- 0.7 mm gasket-compression	100	96779	359370
	striker plate i.S. Euro-rebate 20 mm	angled screw-fixing	- 0.7 mm gasket-compression	100	96861	360293*



455714

5.6.1.6.3 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



455741

5.6.1.6.4 Mishandling device set SKB-Z for 20 mm Euro-rebate					Nº	Nº 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					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

5.6.1.7.2 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 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

465942 **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-rebate361100 **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

360444 **5.6.1.8.2 Striker plates i.S. 12 mm air gap 30 mm Euro-rebate**

No

No
Tricoat

silver

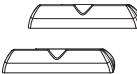
striker plate i.S. 30mm rebate depth, 13mm offset

angled screw-fixing

100

360444

362305

465940 **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

465944 **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

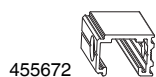
silver

10

465943

5.7 SKB accessories

5.7.1 Profiles in stock lengths for SKB and PAS



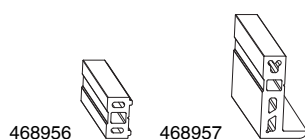
5.7.1.1 Guide tracks	L		Nº	Nº Tricoat
silver	6.070	10	455672	
brown	6.070	10	467089	
bronze SKB	6.070	10	467088	



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	

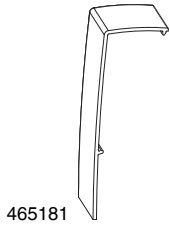


5.7.1.3 Roller tracks	L		Nº	Nº Tricoat
silver	6.070	10	455664	
brown	6.070	10	455665	
bronze SKB	6.070	10	455666	



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	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

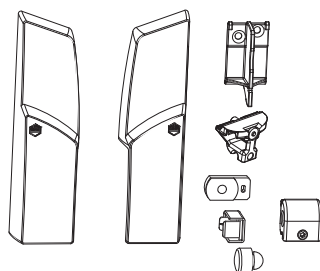
5.7.1.5 Roller cover strip	L		No	No Tricoat
silver	5.170	10	455667	
	2.036	10	465181	
brown	5.170	10	455669	
	2.036	10	465183	
white	5.170	10	455668	
	2.036	10	465182	
cream white RAL 9001	5.170	10	455671	
	2.036	10	465185	
bronze SKB	5.170	10	455670	
	2.036	10	465184	



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

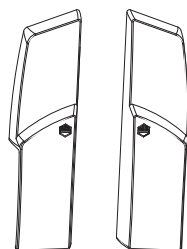


No

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

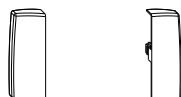
5.7.2.2 Set of cover caps for rollers with reinforcement



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	

465276

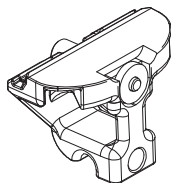
**5.7.2.5 Bag of accessories for guide tracks****No****No**
Tricoat

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

455655¹¹ Only for diagram D

465766



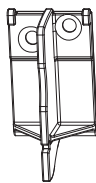
465508



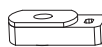
363388



465277



463068

**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

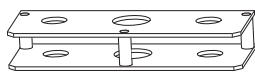
455698¹

for 9mm offset

50

455697²¹ Rebate thicknesses from 15-25 mm² 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

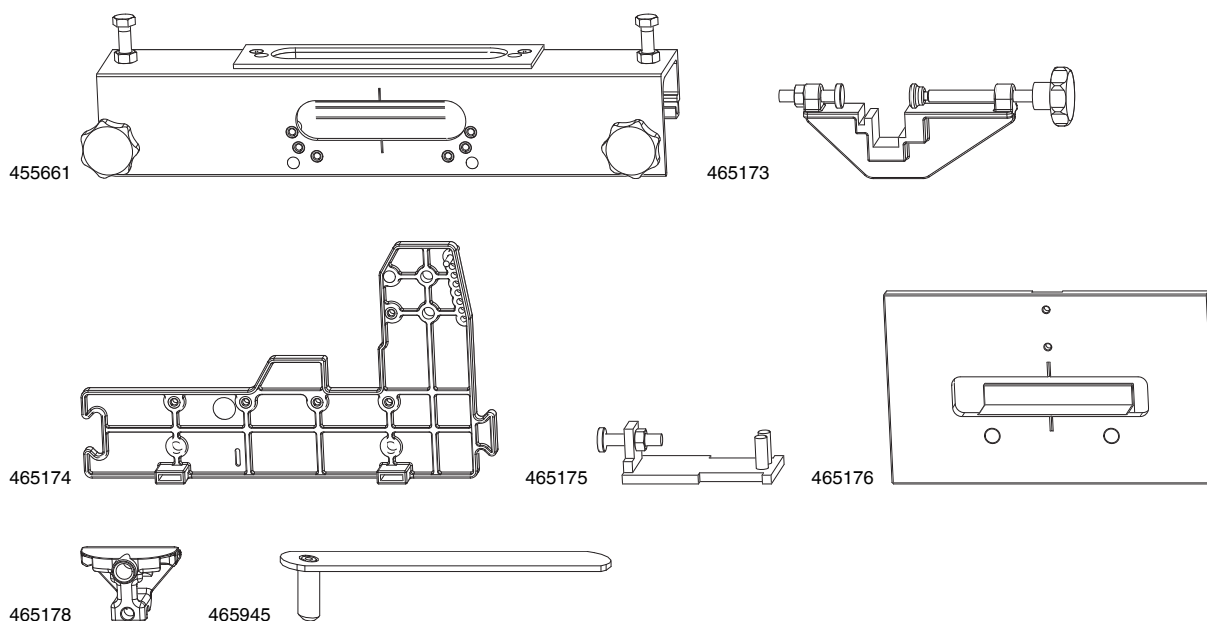
465381

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	465178 ¹	
jig for aligning screw holes centrally on SKB guide track	1	465945	

¹ Only for diagram D

5.8.2 Positioning jigs

211611



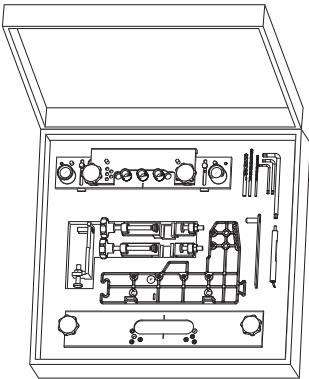
5.8.2.1 Positioning jigs SKB-Z



No

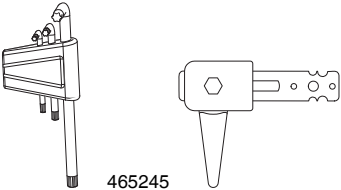
No
Tricoat

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			
jig case for SKB	1	455659¹	Tricoat

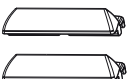
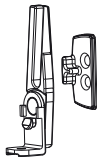
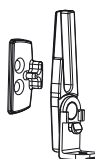
¹ Contents: Routing jig for scissor stays and SKB-Z handles, jig for SKB lockable drive-gear for BS 17.5 - 50, clamping jig to position the SKB guide tracks and roller tracks, jig to centre the screw holes for SKB rollers, installation jig for SKB control module, drill bit centring device, slider release, drill 3.2 mm, drill 4 mm, routing cutter 6 mm, Torx wrench T25, Torx wrench T40



460339	465245		
5.8.4 Jig accessories			
set of Torx screwdrivers TX15 + TX25 + TX40	1	460339	
clamp for routing jig for SKB	1	465245	



5.9 Profile data sheet accessoriess 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
Brüggmann 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

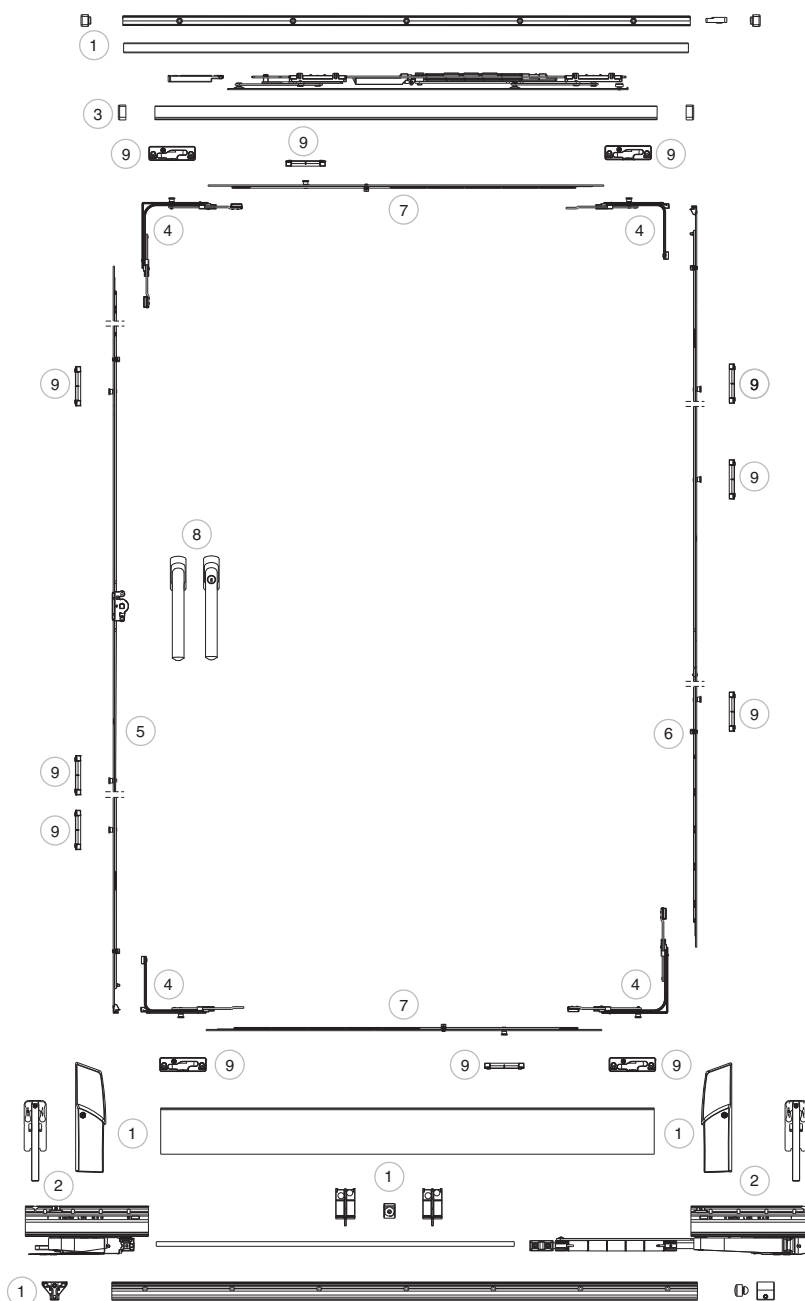


6 PAS

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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.

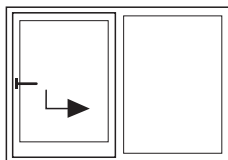


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6.2 Diagrams PAS - Hardware itemisation

2-sashed unit:

1 sliding sash, 1 fixed glazing

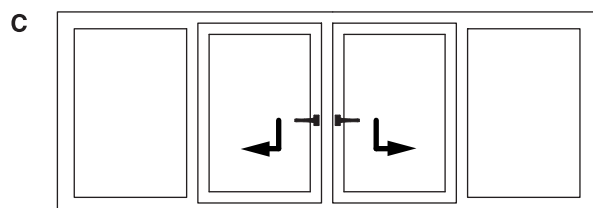


Order text

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

4-sashed unit:

2 central sliding sashes, 2 outer fixed glazings



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

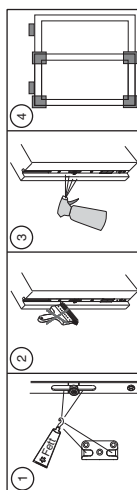
6.3 Operating and maintenance instructions PAS



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.

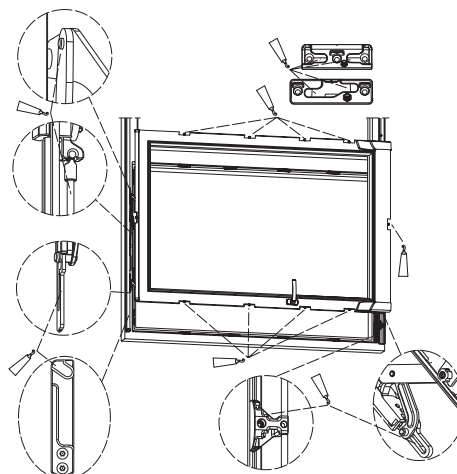


1. Grease all moving parts and contact surfaces.
Do not use: lubricating oils, rust dissolver silicone sprays etc.! Grease only with lubricating grease or technical Vaseline!

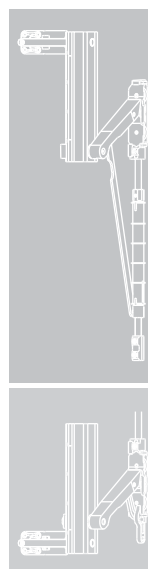


2. Do not paint fittings!
3. Only use cleaning and care products which don't affect the anti-corrosive protection of the fittings!
4. Check security-relevant fittings for wear at regular intervals! ■

Lubrication points



MACO
RAIL-SYSTEMS
SLIDING HARDWARE



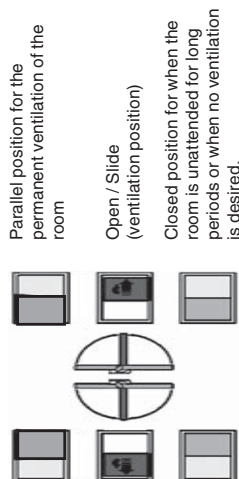
Parallel Sliding Door System

TIMBER / PVC

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.

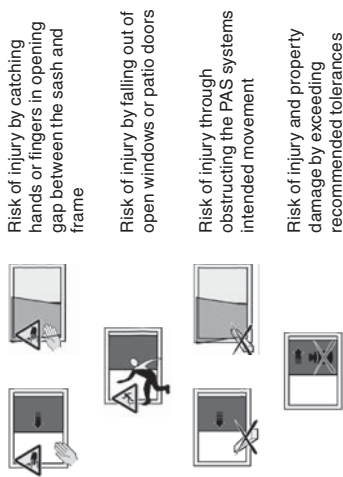
Operation



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.

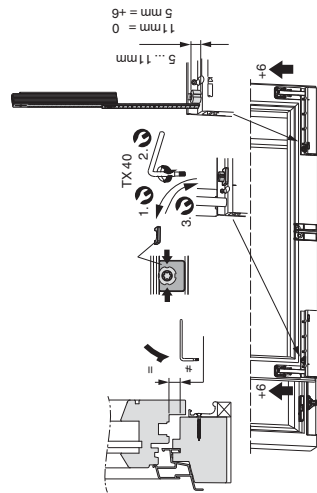
Details of risks and failure



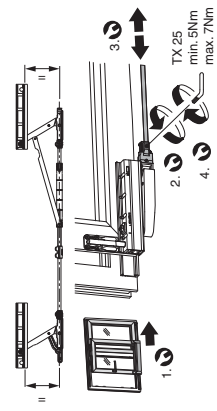
Adjustment work on the sash

Adjustment work as well as the clipping in and out of the sash has to be carried out by authorized experts only.

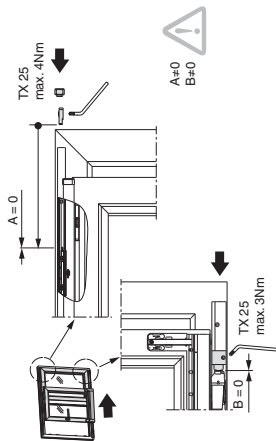
Horizontal adjustment of sash



Parallel Adjustment of running gear

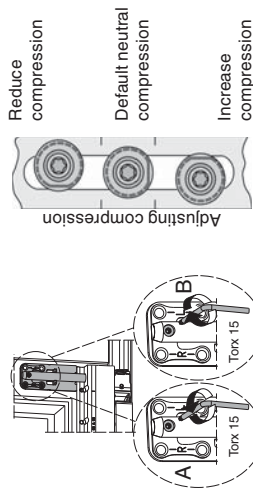


Adjustment of fittings



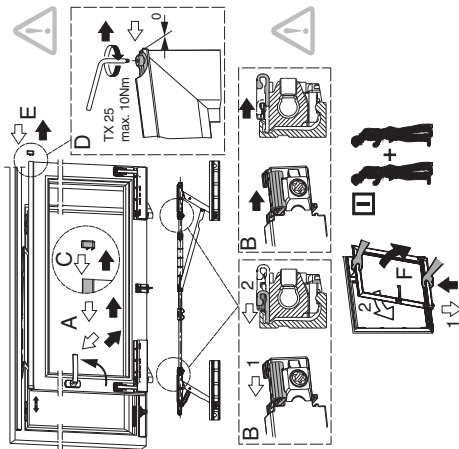
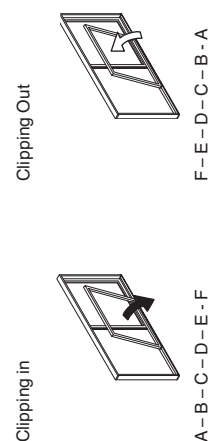
Adjustment of reinforcement parts

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 lever 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.

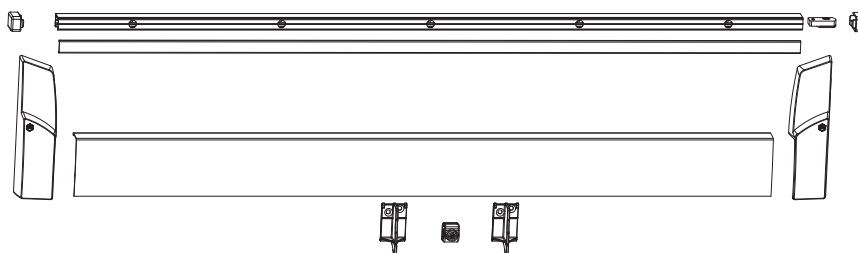
The same care and maintenance notes also apply to all window types which are not mentioned in this instruction (e.g. tilt and slide window, scheme C)

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enquiry@macouk.net
www.macouk.net

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6.4 Sash/frame components



466052



6.4.1 Profile Packs



L



No

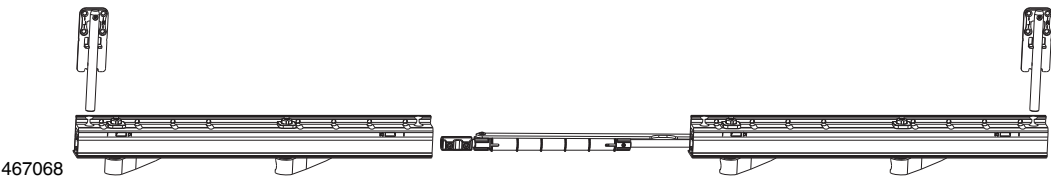
No
Tricoat

profile set: frame and sash SKB	silver	size 1	620 - 900	1.930	1	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)

6.5 Sash components

6.5.1 Roller Packs

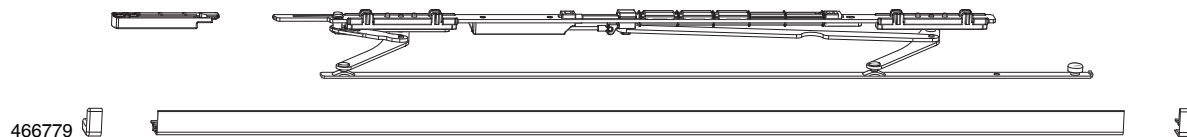


6.5.1.1 Roller Packs		 			 Tricoat
roller pack	right	160	1	466778 ¹	
		200	1	467069	
	left	160	1	466777 ¹	
		200	1	467068	

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



6.5.2.1.1 Scissor slider pack for PAS

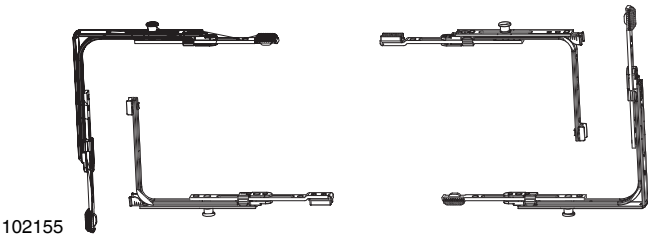
PAS scissor slider and track cover pack	right	silver	750 - 900	5	466782 ¹	
			901 - 1.250	5	466783 ¹	
			1.251 - 1.650	5	466784 ¹	
			1.651 - 2.000	5	467071 ¹	
		brown	750 - 900	5	466794 ¹	
			901 - 1.250	5	466795 ¹	
			1.251 - 1.650	5	466796 ¹	
			1.651 - 2.000	5	467075 ¹	
		white	750 - 900	5	466788 ¹	
			901 - 1.250	5	466789 ¹	
			1.251 - 1.650	5	466790 ¹	
			1.651 - 2.000	5	467073 ¹	
		cream white RAL 9001	750 - 900	5	466806 ¹	
			901 - 1.250	5	466807 ¹	
			1.251 - 1.650	5	466808 ¹	
			1.651 - 2.000	5	467079 ¹	
		bronze SKB	750 - 900	5	466800 ¹	
			901 - 1.250	5	466801 ¹	
			1.251 - 1.650	5	466802 ¹	
			1.651 - 2.000	5	467077 ¹	
	left	silver	750 - 900	5	466779 ¹	
			901 - 1.250	5	466780 ¹	
			1.251 - 1.650	5	466781 ¹	
			1.651 - 2.000	5	467070 ¹	
		brown	750 - 900	5	466791 ¹	
			901 - 1.250	5	466792 ¹	
			1.251 - 1.650	5	466793 ¹	
			1.651 - 2.000	5	467074 ¹	
		white	750 - 900	5	466785 ¹	
			901 - 1.250	5	466786 ¹	
			1.251 - 1.650	5	466787 ¹	
			1.651 - 2.000	5	467072 ¹	
		cream white RAL 9001	750 - 900	5	466803 ¹	
			901 - 1.250	5	466804 ¹	
			1.251 - 1.650	5	466805 ¹	
			1.651 - 2.000	5	467078 ¹	
		bronze SKB	750 - 900	5	466797 ¹	
			901 - 1.250	5	466798 ¹	
			1.251 - 1.650	5	466799 ¹	
			1.651 - 2.000	5	467076 ¹	

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



6.5.3.1.1 Pack of corner elements SKB-S/SE and PAS MULTI MATIC				No	No
corner element set MULTI MATIC			silver	1	Tricoat
				102155 ¹	102298

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

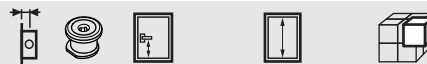
6.5.4 Drive gears

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

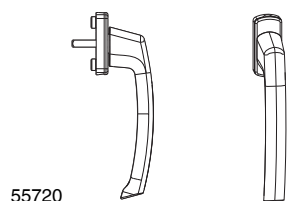
206197 

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*

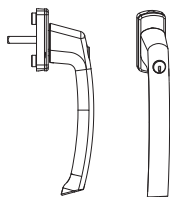
6.5.8 Handles

6.5.8.1 Handles SKB-S/SE and PAS

6.5.8.1.1 HARMONY design

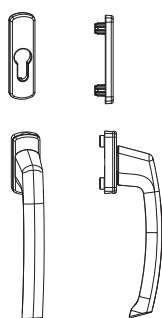


6.5.8.1.1.1 Lugs 10/12								No	No Tricoat
black brown RAL 8022	58			28	7	anodised	10	24658	
			pin 32	28	7	anodised	10	21269	
			pin 35	28	7	anodised	10	203310	
bronze	58		pin 32	28	7	anodised	10	21470	
			pin 35	28	7	anodised	10	203305	
			without pin	28		anodised	10	24432	
bronze SKB	58			28	7	anodised	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	



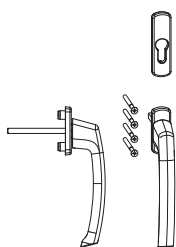
55781

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



357672

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		357671¹	359251¹
			left	200		357672¹	359252¹
			right	200		363020¹	
			left	200		363021¹	

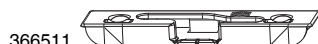
¹ Use the left striker for the right RS element and vice-versa



357673

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		357673¹	359253¹
			left	100		357674¹	359254¹
			right	100		360102¹	
			left	100		360103¹	

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



366511

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



34943

34980

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	



96860

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	+ 1 mm gasket-compression		100		359770	
		- 0.7 mm gasket-compression		100		96660	362849
				100		96860	97544*

* Availability and delivery time on request.

366507 **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-rebate34934 **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	

364952 **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 without reinforcement rings	angled screw-fixing		100	364952	366635
			- 1 mm gasket-compression	100	364953	366636

366505 **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-rebate361100 **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	

360444 **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
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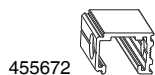
366509



6.6.1.4.3 Striker plates PAS 12 mm air gap 30 mm Euro-rebate						
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



455672

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	



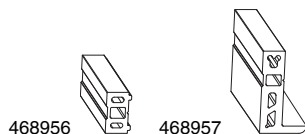
455673

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	



455664

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	



468956

468957

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	



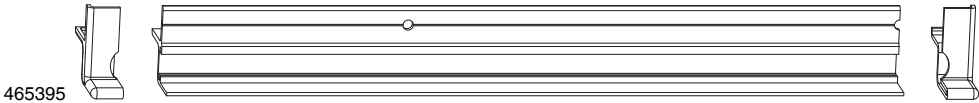
466726

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

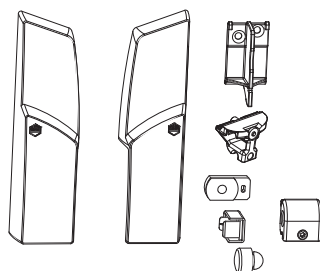
6.7.1.8 Track cover 20 mm	L		Nº	Nº Tricoat
silver	5.170	10	465390	
brown	5.170	10	465392	
white	5.170	10	465391	
cream white RAL 9001	5.170	10	465394	
bronze SKB	5.170	10	465393	



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

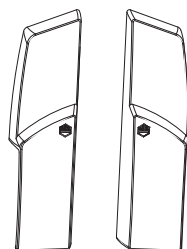


No

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

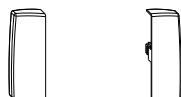
6.7.2.2 Set of cover caps for rollers with reinforcement



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

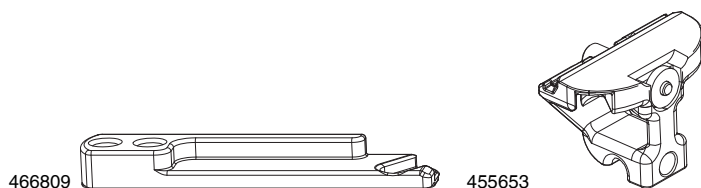
6.7.2.4 Cover caps for guide tracks



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**

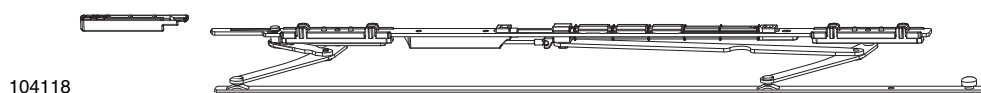
					No	No Tricoat
control element scissor-slider PAS	left	silver	10		466809	
	right	silver	10		466810	
control module SKB adjustable	for diagram D		silver	10	455653¹	
			brown	10	455657¹	
			bronze SKB	10	455655¹	

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	

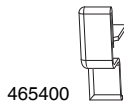
**6.7.2.8 Package scissor slider TRICOAT**

						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

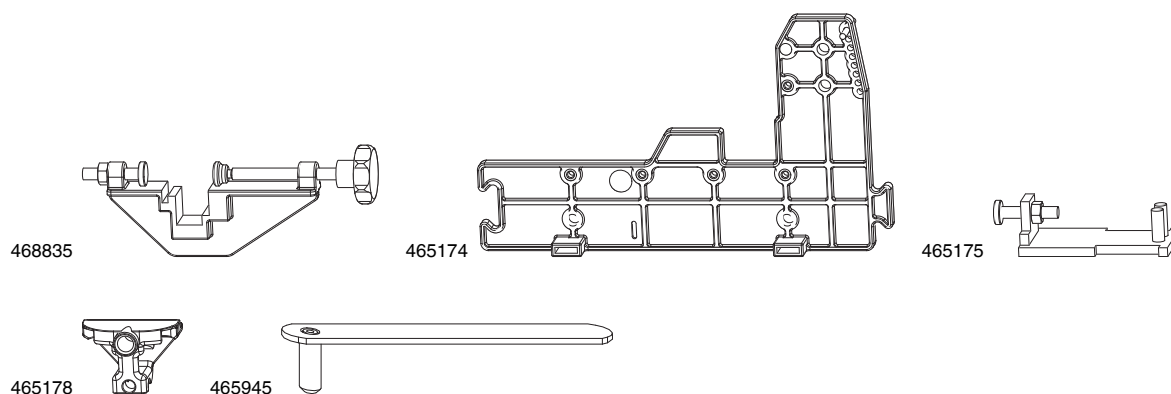


6.7.2.9 Cover caps for track cover 13 mm				No	No Tricoat
silver	right	50		466732	
	left	50		466731	
brown	right	50		466736	
	left	50		466735	
white	right	50		466734	
	left	50		466733	
cream white RAL 9001	right	50		466740	
	left	50		466739	
bronze SKB	right	50		466738	
	left	50		466737	



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	

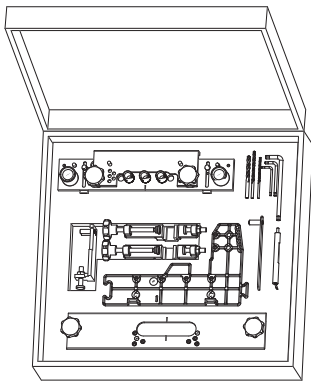
¹ Jigs suitable for drive-gears and height connectors.



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



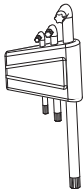
No

No
Tricoat

jig case for PAS

1

466817



460339

6.8.4 Jig accessories



No

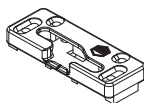
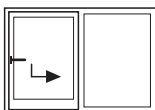
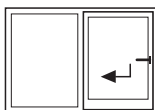
No
Tricoat

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	

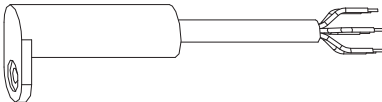
201755 

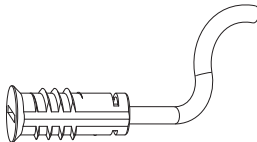
7.3 Faceplate extension for Multi Matic				No	No Tricoat
silver	faceplate extension MM, extendable		20	201755	209921*

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 mm ²)	10	363181		
	reed contact RHS for central heating control 6 m cable (0.14 mm ²)	10	363180		
	reed contact RVS for locking and tilt monitoring 10 m cable (0.14 mm ²)	10	363178		
	reed contact RVS for locking and tilt monitoring 15 m cable (0.14 mm ²)	10	363179 ¹		
	reed contact RVS for locking and tilt monitoring 6 m cable (0.14 mm ²)	10	363177		

¹ Reed contact for lock monitoring RVS cable 15 m is not approved by VdS

455427 

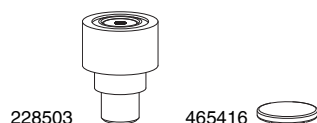
455426 

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 mm ²)	10	455427		
	screw-in magnetic contact VS for locking and tilt monitoring 6 m cable (0.14 mm ²)	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	10	363187		

¹ To select the correct injection-moulded part please refer to the latest profile data sheet.



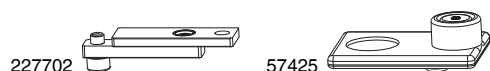
7.7 Spigot for closure monitoring



No

No
Tricoat

	contact sensor cam short 10x13.4	100	228503	
blank	magnetic disc Ø 8x1 mm	200	465416	



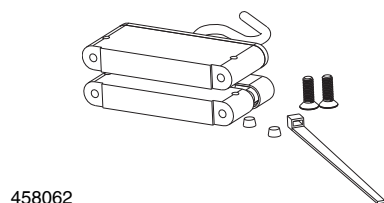
7.8 Adapter with contactor



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	
--	--	---	---------------	--



7.10 Cable Junction Accessories for Sliding Elements



No

No
Tricoat

white	construction case set for electronic cable junction without contacts	1	455431	
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