

ARX

The Perfect Move



ARX slide
HKS
Espagnolette

Hardware for PVC window - ARXSlide & HKS
Catalogue of products 2018
Kovinoplastika Lož d.o.o,

All the information in the following brochure has been carefully selected and verified. In the time of ever-growing technical progress and improvements, necessary changes constantly take place. We therefore thank you for your understanding, as we can not be held responsible for the correctness and completeness of the brochure content due to the reasons mentioned above. We reserve all the rights, especially the right to reproduce and transmit all parts of this publication.

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Manufacturer



Kovinoplastika Lož d.o.o. is an international company with a longstanding tradition; its aim is to meet the customers' demand for functional quality products. We are organized as a single entity joint-stock company with three divisions and many affiliated companies in Slovenia and abroad.

The operations which are performed in accordance with the international certificates obtained, our knowledge and modern technologies, result in a successful performance in all our core product lines.

We are developing business excellence and making investments in the development in all the strategic areas. Our products and services are marketed under trademarks which are managed by ourselves and with the help of our partners.

Besides its distinctive quality, the building hardware of Kovinoplastika Lož has an excellent quality-to-price ratio, providing Kovinoplastika Lož with a fast and effective strategy of winning market positions both in the European Union and other European countries.

The ARX building hardware made by Kovinoplastika Lož-turn& tilt hardware for doors and shutters are the most distinguished. Is available on selected international markets, where Kovinoplastika Lož markets its products and effectively manages them with its own subsidiaries, whereas the others are managed by maintaining long-lasting and successful partnerships with local companies.

It must be pointed out that Kovinoplastika Lož was the first company in the world, which developed and patented the system of multi-point door locks, operating on the lever principle.

Besides managing production development and marketing all the programmes of building hardware, Kovinoplastika Lož ranks successfully among the top kitchen sink suppliers and gastronom dishes for professional kitchens under our own trademark **ALVEUS**.

Compatibility of components to ensure reliability of operation



The ARX building hardware is new hardware for windows, balcony doors and door locks, being a product of our own development. We are an European hardware manufacturer from Slovenia, with extensive experience in the field of development, production and marketing of the most complex hardware for windows and doors.

The ARX building hardware is fully reliable and adjusted to hard climate; it combines the following features:

Innovation of functional solutions

- High-quality material
- High quality production and installation of individual hardware sets by using highly automated production
- Hardware is easy to maintain, providing a simple and environmentally friendly degradation
- A wide range of use
- Long-term operation and simple installation
- Offers the possibility of high level of automation assembly hardware on the window sash and frame
- Proper surface protection ARXCoat, providing good anti-corrosion durability and a trendy silver appearance, all due to the hot-dip galvanizing process

With a thoroughly made - out design, the **ARX** building hardware will add a new value to your windows and balcony doors.

Manufacturer's standards and certificates

In January 1994, Kovinoplastika Lož acquired the ISO 9001 compliance certification. After that in 2002, the company was successfully recertified and acquired the ISO 9001:2000.

In 2009, Kovinoplastika Lož acquired an important certificate - ISO/TS 16949, proving appropriate compliance certification for implementing appropriate environmental policy.

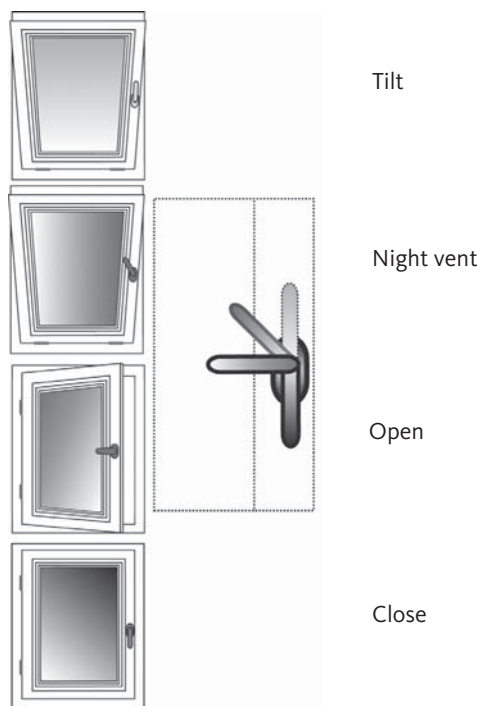
Kovinoplastika Lož was the first big industrial company in Slovenia to gain the ISO 14001 compliance certification for implementing appropriate environmental policy.

Based on successfully finished tests has Kovinoplastika Lož d.o.o. in November 2014 received also certificate about accordance of building fittings ARXspin with regulations in EU.



Product warranty and liability - turn only, turn & tilt hardware

Position of sash and lever



According to the instructions of the Quality Association for Locks and Hardware (Gütegemeinschaft Schlösser und Beschläge), the VHBH Directive, issued on 11.12.2009 and the manufacturer's responsibility for its products, defined in the Consumer Protection Act (Consumer Protection Act of the Republic of Slovenia, paragraph 2, §4-11a), the following information about the turn-only and tilt&turn hardware for sashes must be observed. Failure to comply with the following information exempts the manufacturer from liability.

1. Product information and stipulated application

1.1 Quality Assurance Association for Locks and Hardware (Gütegemeinschaft Schlösser und Beschläge) published in the VHBH Directive states that turn-only and tilt-and-turn hardware is hardware for turnable and tiltable sashes for windows in building construction.

- This hardware is used for:
- bringing windows and sashes of windows, by activation of a handle, into a turning position,
- bringing windows and sashes of windows into a tilting position restricted by means of a scissor stay version.

Turn-only and turn&tilt hardware is used for installation in windows and balcony doors which are to be vertically installed, made from timber, PVC, aluminium or steel, and their corresponding combination.

According to the definition above, the regular function of the turn-only and turn & tilt hardware is closing the windows and sashes and opening them in different airing positions. When the sash is closed, the resistance of a gasket normally needs to be overcome.

1.2 Misuse – exclusion of liability

Misuse is not compliant with the basic purpose of hardware. Anti-theft windows and balcony doors for wet spaces and installation in aggressive and corrosive climate require special hardware with particularly defined characteristics, adjusted to individual building case.

1.3 Restrictions on the use

Open windows, sashes and balcony doors only have protective function and do not provide window fissure sealing, safety in heavy rain or snow, sound and thermal insulation and anti-theft protection. In windy weather and in case of draught, windows and sashes must be closed and bolted. Windy weather and draught logically mean that a window, a sash or balcony doors open and close automatically and uncontrollably in one of the open positions due to air pressure or whirlwind. The only way to make a window, sash or balcony doors fixedly open, is to install additional hardware elements.

1.4 Use in case of special requirements

Wind resistance of the closed and bolted window depends on the actual structure of window and balcony doors. In case a window (or a sash or balcony door) has to endure wind load, according to the DIN EN 12210 standards (in particular pressure test p₃), suitable hardware compilations are to be matched in relation to the respective window design and frame material, and each case individually agreed upon.

Anti-theft windows and balcony doors for wet spaces and installation in aggressive and corrosive climate require special hardware with particularly defined characteristics, adjusted to individual building case.

In general, the turn-only, turn&tilt and tilt&slide hardware meet the requirements according to the DIN 18025 standards, applicable to open-type buildings. To this end, particular agreements and adjustments regarding the appropriate hardware structure and its installation on windows and balcony doors are required.

Product warranty and liability - turn only, turn & tilt hardware

2. Misuse of the product

Misuse of the turn&tilt and slide hardware for window and balcony doors (i.e. the use, non-compliant with intended use of the product) includes the following:

- inserting obstacles in the opening vicinity between the frame and sash and thus preventing the proper specified use,
- if, contrary to the instructions of use, the window or the sash is uncontrollably pushed toward the window reveals (e.g. because of the wind), causing damage or destruction of hardware, sash material or other parts of the window and the sash,
- additional load on the windows or balcony door sashes (if, for example, children swing on the windows or balcony door sashes),
- inserting a hand or an object into the rebate between the window and the sash when closing the window or balcony doors (risk of injury).

3. Product warranty

Kovinoplastika Lož is one of the leading manufacturers of building hardware in the European Union; the quality of the company's product is based on a 60-year tradition in development, production and ensuring quality according to the acquired ISO 9001: 2000 certificate.

We also declare that for the period of 10 years, all the spare parts of the ARX building hardware can be repaired or replaced by the experts, provided that the sash and the window frame or balcony doors have not been damaged. A 10-year period of providing spare parts or equivalent replacement parts starts with the beginning of eventual termination of the ARX building hardware production. Hardware servicing, replacement and repair services, repair time and travel expenses, arising from ensuring the above mentioned services are payable according to the price list of services, provided by Kovinoplastika Lož d.o.o. The hardware structure may only consist of the hardware elements from the ARX building hardware programme. In case of inappropriately performed hardware installation and/or inappropriate use of non-original additional parts, which have not been confirmed by the manufacturer, the latter assumes no responsibility. In order to fixate the hardware professionally, »Implementation regulations for the fixing of supporting hinge-sided hardware components« must be followed.

3.1 Product warranty – exclusion of liability

For functional problems or hardware damage and therefore corresponding trouble of the windows or balcony doors equipped with such hardware, being the subject of insufficient tender or failing to follow the installation rules or application diagram, the hardware manufacturer is not to be held responsible.

Warranty is applicable only to original parts of the ARX building hardware.

4. Product characteristics – manufacturer's instructions for use

4.1 Maximum sash weights

The maximum sash weight for individual hardware installation must not be exceeded. The construction element with the smallest possible permissible load defines the maximum weight of the sash. Application diagrams and component classification must be considered.

4.2 Sash sizes

Application diagrams show the relationship between the permissible sash rebate heights, depending on various glass weights i.e. total glass weight. The calculated sash dimensions in the rebate or the sash formats (portrait and/or landscape format), as well as the maximum sash weight must not be exceeded under any circumstances.

4.3 Hardware combination

The manufacturer's regulations, regarding the combination of hardware (i.e. the application of additional stay arms, the hardware design for anti-theft windows and balcony door sashes), must be followed.

4.4 Hardware functionality

Permanent hardware functionality can be ensured by consistently following the rules below:

- Professional installation of hardware components must be performed according to the attached instructions for installation,
- hardware assembly in the process of window installation is to be done professionally,
- the window manufacturer must deliver the instructions for use and maintenance to the user, along with the guidelines regarding product warranty,
- hardware as a whole can only consist of the original ARX building hardware; any product warranty is excluded for simultaneously using hardware parts, not originally belonging to the ARX building hardware.

5. Product maintenance

Hardware components, important for safety, must be checked at least once a year for fitting tightness and tight fitting. If necessary, the fixing screws can be additionally fastened and the component parts replaced. The following maintenance work must be performed at least once a year:

- Greasing and functional control of all the movable parts and all the locking points of the turn-only and tilt&turn hardware.
- only the cleaning and maintenance agents, which do not reduce the anti-corrosion hardware protection, may be used.

Hardware a – particularly in the vicinity of the pivot rest and the scissor-stay, as well as replacement parts and the unhinging & hinging of the active sash – must be provided by highly-qualified experts. In case of surface treatment for windows and balcony doors (e.g. varnishing), all the hardware components must be excluded from treatment; they must also be protected against potential contamination, caused by surface treatment.

5.1 Maintaining the quality of surface treatment

In normal climate, the hot-dip galvanized coating is not damaged by corrosion, as long as condensed water is not produced in hardware parts or if the condensed water quickly dries up.

In order to maintain long-lasting quality of surface treatment and prevent adverse corrosion effects, the instructions below must be followed:

- Hardware and window rebates must be thoroughly aired (particularly during the construction phase) by making sure that the elements mentioned are not exposed to moisture and condensed water,
- hardware must be protected against any covers or contamination with building materials (e.g. roughcast, dust, cement and the like),
- aggressive vapours in the window rebate (e.g. formic acid and acetic acid, ammonia, amino- and ammonium compounds, aldehyde, phenol, tannic acid etc.) may quickly lead to corrosion of hardware components in combination with a small amount of condensed water; in case of aggressive vapours, thorough airing of rebates on the windows and balcony doors must be provided; this is particularly important for windows and balcony doors made of oak and other types of wood, containing a large amount of tannic acid,
- gaskets with acetic acid or acidic net structure or gaskets, containing the above mentioned ingredients must not be used, as the direct contact with the gasket and its vapours may corrode the hardware surface,
- hardware can only be cleaned with soft, ph-neutral cleaning agent in diluted form; aggressive, acidiferous cleaners or abrasive cleaning agents, containing the above mentioned ingredients, must not be used at any time.

6. Information and instructions

In order to carry out duties of informing and giving instructions and performing maintenance according to »Consumer Protection Act«, the following publications are available:

- Catalogues« for designers and authorized dealers
- Installation instructions« and »factory drawings« for manufacturers of windows and balcony doors,
- instructions for maintenance and cleaning« and »Instructions for use« for investors and users.

In order to ensure the functionality of the turn-only, turn&tilt and slide hardware for windows and balcony doors, the following rules must be observed:

- The designers are required to obtain information from the manufacturer or the authorized dealer, regarding the products, and act accordingly,
- the authorized dealers must pay attention to product information and the information mentioned herein, along with installation instructions, factory drawings and instructions for maintenance and cleaning; they must obtain instructions for use from the manufacturer and pass them on to manufacturers of windows and balcony doors,
- the manufacturers of windows and balcony doors must consider all the relevant product information and ask the manufacturer or authorized dealer for maintenance and
- cleaning instructions in particular, along with instructions for use and pass them on to investors and users.

All information regarding turn&tilt, turn or tilt only hardware systems for windows and balcony doors made of PVC should be observed. In case of non-compliance the manufacturer is exempt from liability.

High-quality, durable and simple

ARX spin is a system of turn&tilt hardware fittings. Its technology enables effortless turning and tilting of window sashes with a single handle operation. ARX spin hardware can be operated very conveniently and is also available in a high-security version. The system can be fitted to a wide range of window sizes and allows for simple integration of components during fabrication process.

ARX spin in combination with Atrium HKS our provide Tilt & Slide sistem for windows and doors.

The ARX spin turn and tilt building hardware is fully reliable and adjusted to hard climate; it combines the following features:

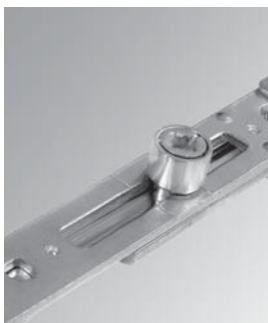


ARXCoat – High quality surface protection

ARXCoat surface protection gives excellent appearance to building hardware and simultaneously ensures long-term and durable surface.

It maintains very high corrosion resistance in severe conditions and extreme climate, exceeding Grade 5 of BS EN1670 (480 hours exposure to salt spray), thereby guaranteeing long-term and simple use without any maintenance trouble.

How have we accomplished this? Through a special technological process that consists of electroplated zinc coating and low-temperature thick-layer passivation, followed by application of organic sealant to increase the anti-corrosion properties.



R – Cam

R-Cams incorporate a regulatory function which allows installer or user to optimize the window compression by $\pm 1,2\text{mm}$, thereby improving the sealing properties of windows and balcony doors. Moreover, the R-Cams provide smoother operation to window users who only need to apply a minimum force in order to operate the handle.



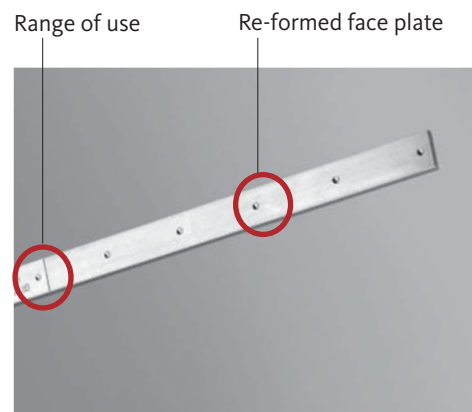
RS – Cam

RS Cams provide superior level of security at closing points (due to their mushroom shape). Their height adjusts automatically to fit the air-gap between sash and frame. The compression can be regulated by $\pm 0.8\text{mm}$ – with allen key (size 2.5) or with spanner (size 10). The rolling cam enables smoother and easier closing operation. RS-Cams are optional on all ARX Spin sash components. They can be used in combination with both security strikers or standard strikers (if used with standard strikers, they don't provide higher security).

High-quality, durable and simple

A wide range of products

ARX spin hardware is available in extensive variety of components, which can be combined into a number of turn&tilt solutions. ARX spin therefore easily meets desires and requirements of different customers. For instance, a wide range of corner drives and shoot-bolts provides an excellent product choice to both very demanding and less stringent security requirements.

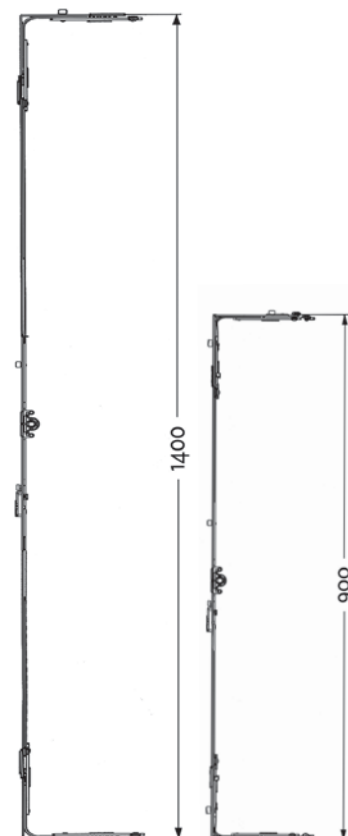


Reduced friction between driving rod and faceplate

The espagnolettes have been redesigned to reduce the contact between the gearplate and faceplate, thereby reducing potential damage to surface protection.

Uniform length of redesigned espagnolettes

A special feature of ARX spin hardware is also uniform length of its espagnolettes. A one-size espagnolette can fit a range of sash dimension, covering up to 50% of total requirement. Each espagnolette can be cropped within the marked cut-off area.



SRH (900 - 1400 mm)
(48% Volumen)

Important information

1. Intended use

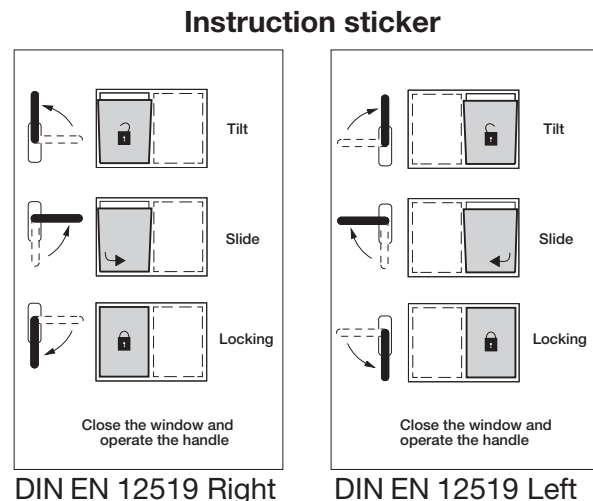
Tilt-and-slide-fittings ATRIUM HKS® 160 S and ATRIUM HKS® 100 S are intended for use only in stationary buildings. They are used for the horizontal opening and closing of windows and window doors. The Tilt-and-slide elements must be installed perpendicularly, and under no circumstances may they be in a skewed position.

2. Product warranty

- These installation instructions and the installation of the fittings demand specialist knowledge corresponding to successfully completed training in at least one of the following trades: construction carpenter, construction metal worker, window and glass facade installer.
- Applications mentioned on page 12 of these mounting instructions apply to the HAUTAU fitting system ATRIUM HKS® 160 S and ATRIUM HKS® 100 S. Quoted tightening speeds and torques are binding.
- When **installing the fittings**, use screws which are **long enough** and which reach right **up to the steel reinforcement** in case of PVC profiles.
- **Under all circumstances comply with the handling guidelines of the profile manufacturer.**
- Fittings must not be used for timbers with aggressive contents and/or surface treatments.
- Tilt-and-slide elements may be surface-treated only **before** the installation of the fitting parts. **Subsequent surface treatment** may have a negative effect on the operability of the fitting parts. In this case, all guarantee claims against the fitting manufacturer are nullified.
- The steel component parts described in these installation instructions have been passivated and sealed as per DIN EN 12329 using a colourless process. They must not be used in environments with aggressive and corrosive air components.
- Keep the runner rail and all rebates free of deposits and contamination, in order to avoid damage to the fitting and to ensure optimum functioning. In particular, protect the fitting from cement or plaster residues.
- Do not use acid-curing sealants, as these can result in corrosion of the fitting parts.
- Avoid directly exposing the fitting to moisture, and prevent acid-containing cleaning agents from coming into contact with the fitting.
- The fitting manufacturer shall not be liable for any malfunction of or damage to the fittings as well as the windows or French doors fitted, if the malfunctions of the tilt-and-slide hardware can be traced back to the use of bought-in fittings, insufficient invitation to tender, non-observation of the rebating instructions or application diagrams.
- The installing party shall be responsible for the adherence to the functional dimensions given in these mounting instructions and workshop drawing as well as for a perfect installation of the fittings and safe attachment of all components.

3. User information

- Hand out product together with maintenance and operating instructions to end-user.
- Chose a clearly visible position at installed window sash for instruction sticker (sliding direction DIN left and DIN right).



- Please comply with the “Requirements/instructions on the product and on liability (VHBH)”. Please inform the end-user about the content of the “Requirements/instructions for end-users (VHBE)”.
- Keep these installation instructions in a safe place.

FIXING SCREWS FOR FITTINGS

Not included in scope of delivery. Length must be chosen according to profiles used.

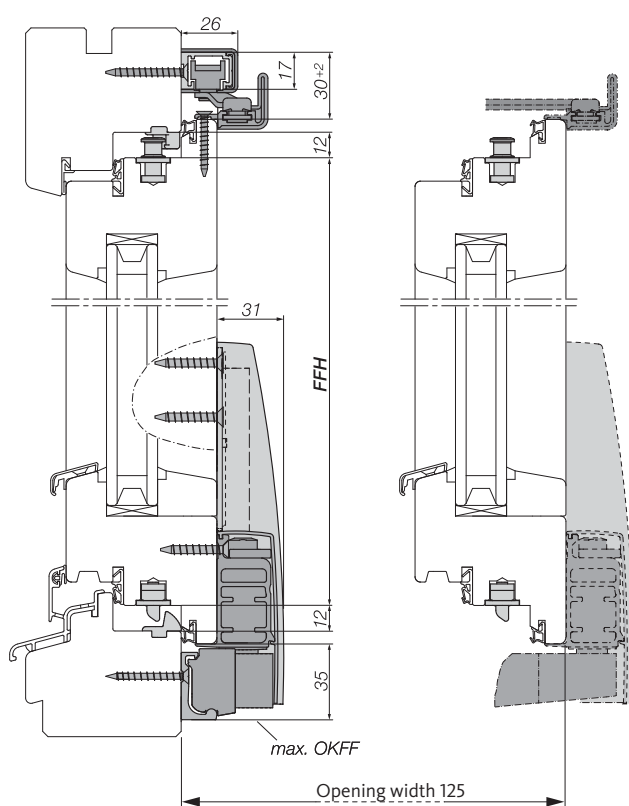
- Countersunk screws mm 3.9 x ...
- Countersunk screws mm 4.8 x ...

All measurements in these instructions are indicated in millimetres (mm).

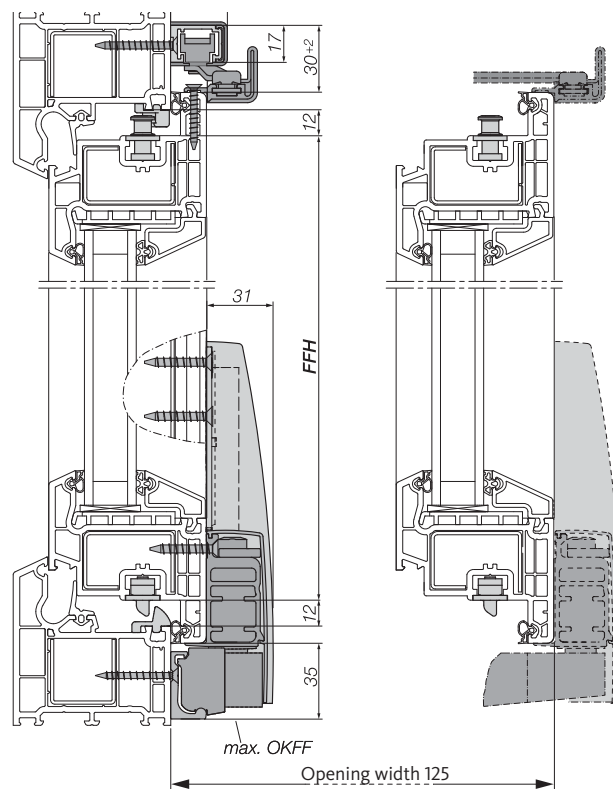
Proprietary note for a limited use of these documents according to DIN ISO 16016. © HAUTAU GmbH

Ranges of application

ATRIUM HKS® 160 S

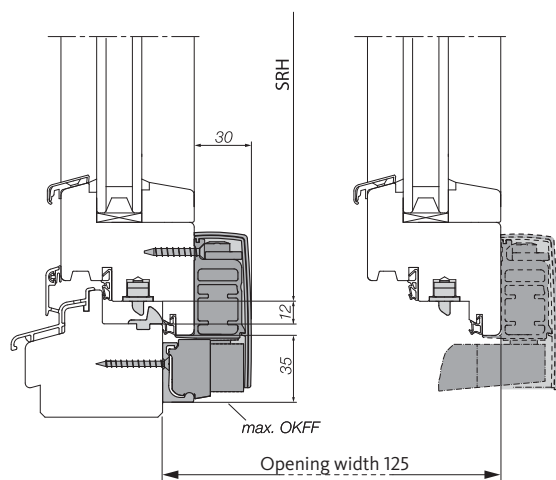


Vertical sections ATRIUM HKS® 160 S timber

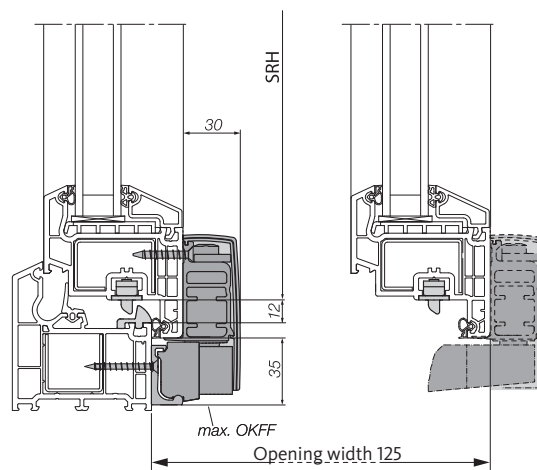


Vertical sections ATRIUM HKS® 160 S PVC

ATRIUM HKS® 100 S



Vertical sections ATRIUM HKS® 100 S timber



Vertical sections ATRIUM HKS® 100 S PVC

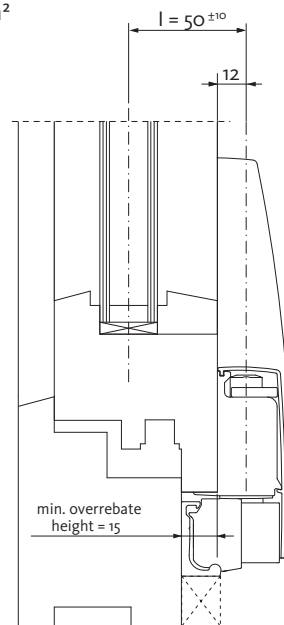
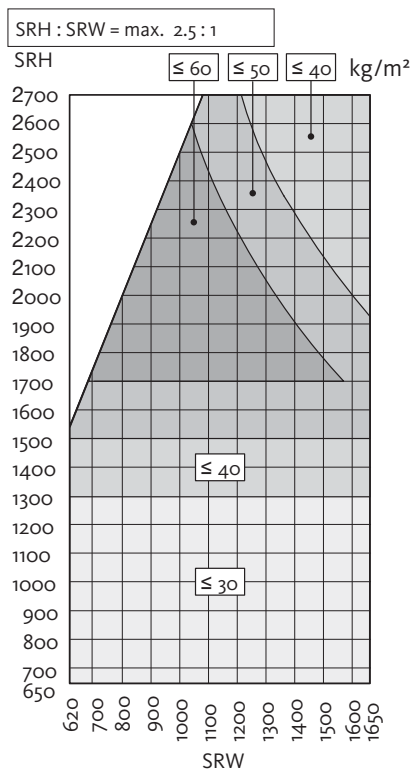
APPLICATIONS

The limits of application quoted in these instructions are binding and must not be exceeded. Please also comply with admissible sizes, manufacturing instructions and processing guidelines given by the profile manufacturer.

ATRIUM HKS® 160 S

Sash rebate width (SRW)	620 - 1650 mm
Sash rebate height (SRH)	650 - 2700 * mm
Sash weight (SW)	max. 160 kg

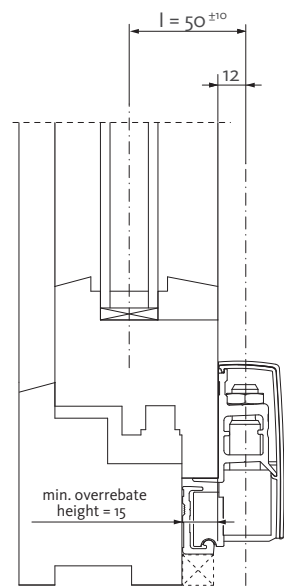
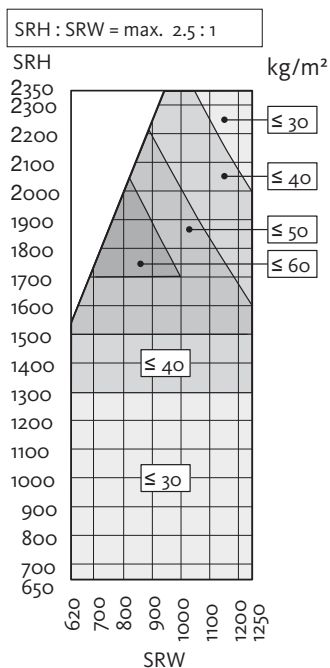
* For SRH > 2350 mm please refer to special information at the end of the document, too.



applicable for an I-value of 50 ± 10

ATRIUM HKS® 100 S

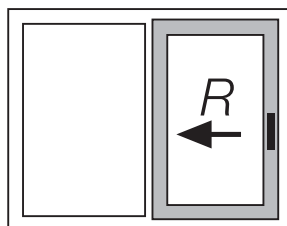
Sash rebate width (SRW)	620 - 1250 mm
Sash rebate height (SRH)	650 - 2350 mm
Sash weight (SW)	max. 100 kg



applicable for an I-value of 50 ± 10

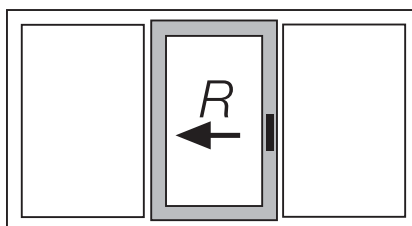
SASH ARRANGEMENTS

Frames with solid glazing or side hung sashes - Schemes A, G , K, and C



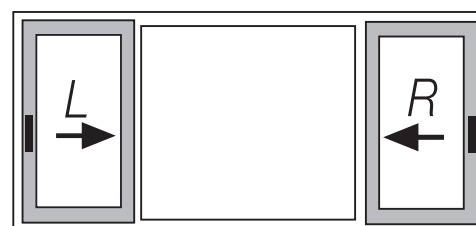
Scheme A

- two-part element:
- 1 Sliding sash (L or R),
- glazed frame.



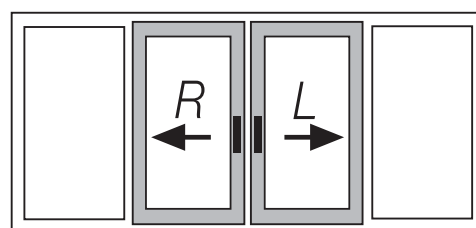
Scheme G

- three-part element:
- 1 Sliding sash (L or R),
- glazed frame



Scheme K

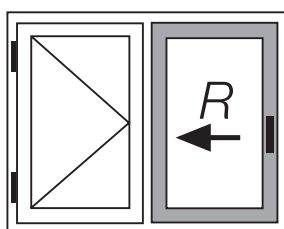
- three-part element:
- 2 Sliding sashes (L and R),
- glazed frames.



Scheme C

- four-part element:
- 2 sliding sashes (L and R),
- glazed frames

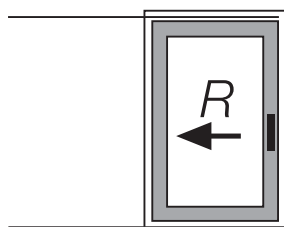
Frame without fixed mounting post between side hung and sliding sash



Scheme A

- two-part element:
- 1 sliding sash (L or R),
- 1 turning sash.

Sliding element in front of the wall

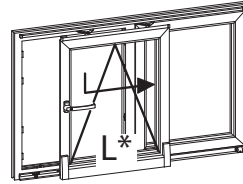
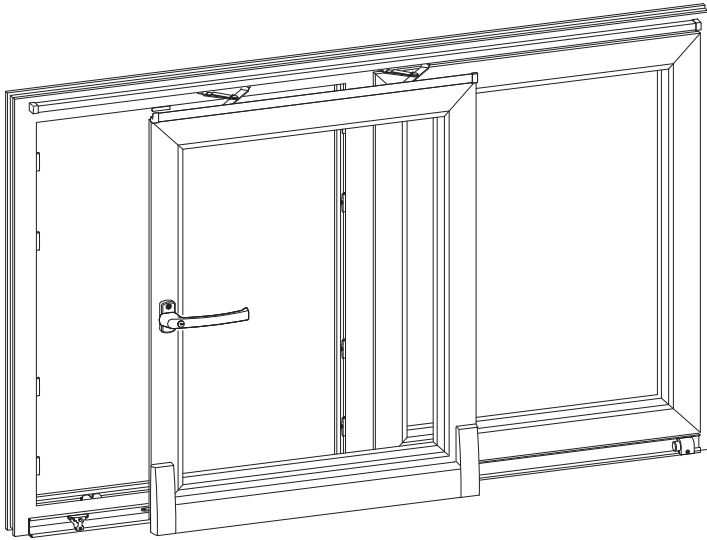


Fitting composition:

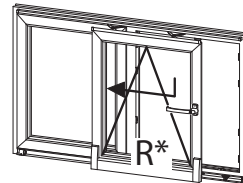
- 1 basic carton
- 1 HAUTAU design handle
- 1 bag of strikers (profile related)
- 1 rail set in standard size
- 1 holding rail (optional)
- 1 horizontal locking
- 1 vertical locking

MOUNTING INSTRUCTIONS

Standard



* HAUTAU version Left
= DIN EN 12519 Right
(right-opening)



* HAUTAU version Right
= DIN EN 12519 Left
(left-opening)

The figures within these mounting instructions refer to **HAUTAU** version Left (DIN EN 12519 Right). For **HAUTAU** versions Right (DIN EN 12519 Left) measures have to be applied correspondingly.

ATRIUM HKS® 160 S

Tilt and slide fitting ATRIUM HKS® 160 S.
With one-hand operation. For window elements made of timber, PVC and ALU profiles and the profiles for sash weights up to 160 kg, assembly-ready screw-on components.
Central locking concealed and installed fixed with adjustable sash closing pressure.
Free choice between locking and not locking when sash is closed.

Upper stay system separated from the central locking, lower corners with spring-loaded catches for automatic sash engagement, anti-slam device in both stay arms.
Bogies with cleaning brushes for clean bottom track.
Sliding sash adjustable thanks to height adjustment, upper guide track with PVC cover profile, flat aluminium bogie cover (31 mm), LM handle.

ATRIUM HKS® 100 S

Tilt and slide fitting ATRIUM HKS® 100 S.
With one-hand operation.
For window elements made of timber or PVC profiles for sash weights up to 100 kg, assembly-ready screw-on components.
Central locking concealed and installed fixed with adjustable sash closing pressure.
Free choice between locking and not locking when sash is closed.

Upper stay system separated from the central locking, lower corners with spring-loaded catches for automatic sash engagement, anti-slam device in both stay arms.
Bogies with cleaning brushes for clean bottom track.
Sliding sash adjustable thanks to height adjustment, upper guide track with PVC cover profile, flat aluminium bogie cover (31 mm), LM handle.

1 BASIC SET HKS 100/160 S

description		Material Nr.
BASIC SET	Right	1083332
	Left	1083331

2 SET OF RAILS

sash rebate width	length	colour	Material Nr.
600 - 900	1930	white	1092851
		silver	1092850
		brown	1092852
		cream white	1092853
		middle bronze	1105246
901 - 1050	2230	white	1092855
		silver	1092854
		brown	1092856
		cream white	1092857
		middle bronze	1105249
1051 - 1250	2630	white	1092859
		silver	1092858
		brown	1092860
		cream white	1092861
		middle bronze	1105267
1251 - 1450*	3030	white	1092863
		silver	1092862
		brown	1092864
		cream white	1092865
		middle bronze	1105268
1451 - 1650*	3430	white	1092867
		silver	1092866
		brown	1092868
		cream white	1092869
		middle bronze	1105269

3 STAY SYSTEM + HOLDING RAIL SET

sash rebate width	length	colour	Material Nr.
600 - 900	1930	white	1092875
		silver	1092874
		brown	1092876
		cream white	1092877
		middle bronze	1105271
901 - 1250	2630	white	1092879
		silver	1092878
		brown	1092880
		cream white	1092881
		middle bronze	1105272
1251 - 1650*	3430	white	1092883
		silver	1092882
		brown	1092884
		cream white	1092885
		middle bronze	1105273

4 COVER CAP 100 Kg

colour	Material Nr.
white	1092897
silver	1092896
brown	1092898
cream white	1092899
middle bronze	1105277

5 ADDITIONAL SET FOR 160KG - COVER CAP + SUPPORT ARM

colour	Material Nr.
white	1092887
silver	1092886
brown	1092888
cream white	1092889
middle bronze	1105274

* Application additional set 160 kg

6 CENTRE LOCK - VERTICAL

sash rebate height	length		Material Nr.
600 - 1000	720	1 R	1095173
1001 - 1400	1120	1 R	1095174
1401 - 1800	1520	1 R	1095175
1801 - 2000	1720	2 R	1095176
2001 - 2400	2120	2 R	1095177
2401 - 2700	2120	2 R	1095177 + 1102897

7 CENTER LOCK - HORIZONTAL

sash rebate width	length		Material Nr.
600 - 1000	720	1 R	1095173
1001 - 1400	1120	1 R	1095174
1401 - 1650	1520	1 R	1095175

8 ESPAGNOLETTE M, BS 14,5 mm

sash rebate height	handle height	length	Material Nr.
600 - 1000	300 - 500	720	1 R 1088473
1001 - 1400	450 - 700	1120	1 R 1098964
1401 - 1800	701 - 900	1520	1 R 1098965
1801 - 2000	801 - 1000	1720	2 R 1098966
2001 - 2400	1001 - 1200	2120	2 R 1098967
2401 - 2700	1001 - 1200	2120	2 R 1098967 + 1102897

ESPAGNOLETTE M, BS 25 mm

sash rebate height	handle height	length	Material Nr.
420 - 620 ¹⁾	210 - 310	340	1104484
600 - 1000	300 - 500	720	1 R 1104485
900 - 1400	450 - 700	1120	2 R 1104486
1401 - 1800	701 - 900	1520	2 R 1104487
1601 - 2000	801 - 1000	1720	3 R 1104488
2001 - 2400	1001 - 1200	2120	4 R 1104489

ESPAGNOLETTE M, BS 30 mm

sash rebate height	handle height	length	Material Nr.
420 - 620 ¹⁾	210 - 310	340	1107647
600 - 1000	300 - 500	720	1 R 1107648
900 - 1400	450 - 700	1120	2 R 1107649
1401 - 1800	701 - 900	1520	2 R 1107650
1601 - 2000	801 - 1000	1720	3 R 1107651
2001 - 2400	1001 - 1200	2120	4 R 1107652

ESPAGNOLETTE M, BS 35 mm

sash rebate height	handle height	length	Material Nr.
420 - 620 ¹⁾	210 - 310	340	1107653
600 - 1000	300 - 500	720	1 R 1107654
900 - 1400	450 - 700	1120	2 R 1107655
1401 - 1800	701 - 900	1520	2 R 1107656
1601 - 2000	801 - 1000	1720	3 R 1107657
2001 - 2400	1001 - 1200	2120	4 R 1107658

ESPAGNOLETTE M, BS 45 mm

sash rebate height	handle height	length	Material Nr.
420 - 620 ¹⁾	210 - 310	340	1104490
600 - 1000	300 - 500	720	1 R 1104491
900 - 1400	450 - 700	1120	2 R 1104492
1401 - 1800	701 - 900	1520	2 R 1104493
1601 - 2000	801 - 1000	1720	3 R 1104494
2001 - 2400	1001 - 1200	2120	4 R 1104495

ESPAGNOLETTE M, BS 25 mm - lockable

sash rebate height	handle height	length	Material Nr.
1600 - 2000	801 - 1000	1720	3 R 1104477
2001 - 2400	1001 - 1200	2120	4 R 1104480

ESPAGNOLETTE M, BS 30 mm - lockable

sash rebate height	handle height	length	Material Nr.
1600 - 2000	801 - 1000	1720	3 R 1107659
2001 - 2400	1001 - 1200	2120	4 R 1107661

ESPAGNOLETTE M, BS 35 mm - lockable

sash rebate height	handle height	length	Material Nr.
1600 - 2000	801 - 1000	1720	3 R 1107662
2001 - 2400	1001 - 1200	2120	4 R 1107663

ESPAGNOLETTE M, BS 45 mm - lockable

sash rebate height	handle height	length	Material Nr.
1600 - 2000	801 - 1000	1720	3 R 1104482
2001 - 2400	1001 - 1200	2120	4 R 1104483

9 CORNER DRIVE

description		Material Nr.
CORNER DRIVE	1 R	1103158

10 CORNER DRIVE

description		Material Nr.
CORNER DRIVE	1 RS	1100983

11 STRIKER**SYSTEM 12/20-13**

description	Material Nr.
ALPHACAN 70-80	1083205
ALUPLAST 2000/ 3000/ 4000/ 5000/ 6000	1083204
CONCH	1083202
DECEUNINCK	1083206
EGEPEN	1083206
GEALAN 3000/ 7000/ 8000	1083203
INOUTIC Prestige	1083206
KBE 70AD	1083205
KMG Prestige	1083204
KÖMMERLING Eurofutur Clasic/ Elegance/ 88 Plus	1083205
PESTAN S509	1083205
PIMAPEN S6000/ S7500	1083204
REHAU S730	1083204
ROLOPLAST 300/ 500/ 600/ 800	1083205
ROPLASTO 7001 AD	1083204
SALAMANDER 2D/ 3D/ BlueEvolution/ Streamline 76	1083204
SCHÜCO Corona AD/ CT70 AD/ CT70 MD/ S182 MD	1083204
THYSSEN Prestige	1083206
TROCAL Innova 70.A5 AD/ 70.M5 MD	1083205
VEKA Softline/ Topline	1083202
WEISS WP3000/ WP4000/ WP5000	1083204

SYSTEM 12/20-9

description	Material Nr.
KBE AD 9	1083208
ROLOPLAST 400 9 os	1083208

12 T&T SECURITY STRIKER**SYSTEM 12/20-13**

description	Material Nr.
ALUPLAST 2000/ 3000	1083197
ALUPLAST 4000/ 5000/ 6000	1083194
GEALAN 3000/ 7000/ 8000	1083191
KBE 70AD	1083191
PIMAPEN S6000/ S7500	1083197
REHAU S730	1083196
ROLOPLAST 300/ 500/ 600/ 800	1083191
SCHÜCO Corona AD/ CT70 AD/ CT70 MD/ S182 MD	1083197
TROCAL Innova 70.A5 AD/ 70.M5 MD	1083191
VEKA Softline/ Topline	1083190
WEISS WP3000/ WP4000/ WP5000	1083197

13 HANDLE

description	colour	Material Nr.
ARX	R9010	1066771
ARX	R8707	1066773
ARX	F1	1066774
ARX	F4	1069325
ROTO	R05.4	1014244
ROTO	R01.1	1013077
ROTO	R07.2	1012726
ROTO	R05.3	1012736

HANDLE for Balcony door

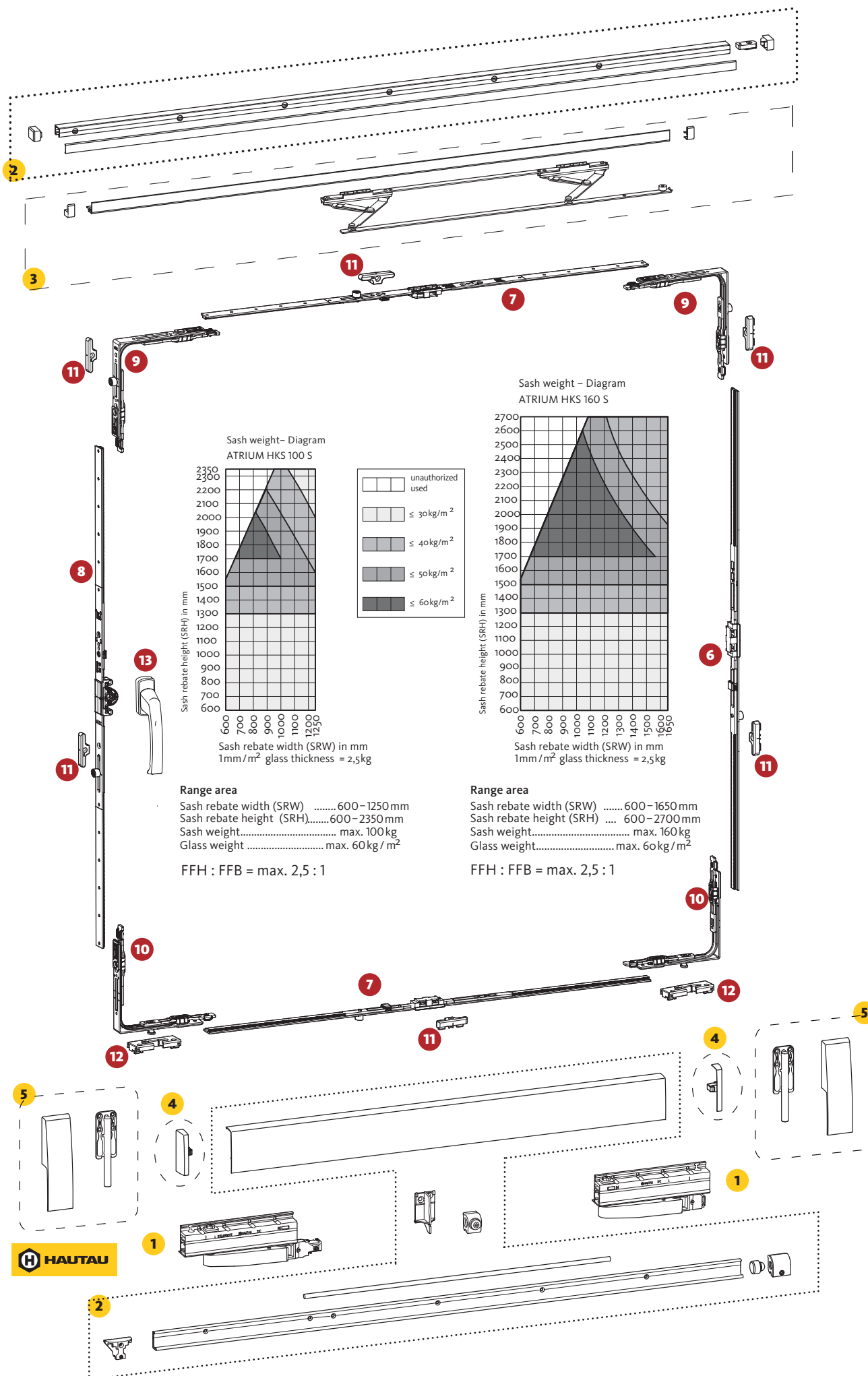
description	colour	Material Nr.
ARX	F1 - silver	1053267
ARX	F4 - brown	1053268
ARX	F9 - grey	1053269
ARX	F9010 - white	1053270

HANDLE for balcony door with roller shutters

description	colour	Material Nr.
ARX	F1 - silver	1053281
ARX	F4 - brown	1053282
ARX	F9 - grey	1053283
ARX	F9010 - white	1053284

¹⁾ Application additional set 160 kg

ATRIUM HKS 100/160 S & ARX spin



1 BASIC SET HKS ALU 100/160 S

Description		Material Nr.
Basic set	R	1103976
	L	1103977

2 SET OF RAILS

Sash width	(SW) Length	Colour	Material Nr.
670 - 930	1930	WHITE	1103991
		SILVER	1103996
		BROWN	1107220
		BLACK	1104001
931 - 1080	2230	WHITE	1103992
		SILVER	1103997
		BROWN	1107193
		BLACK	1104002
1081 - 1280	2630	WHITE	1103993
		SILVER	1103998
		BROWN	1107194
		BLACK	1104003
1281 - 1480*	3030	WHITE	1103994
		SILVER	1103999
		BROWN	1107195
		BLACK	1104004
1481 - 1680*	3430	WHITE	1103995
		SILVER	1104000
		BROWN	1107196
		BLACK	1104005

3 STAY SYSTEM

(SW) Length	Length (RAB)	Material Nr.
650 - 930	1930	1099523
931 - 1280	2630	1099524
1281 - 1680	3430	1107197

4 COVER CAP 100 Kg

Colour	Material Nr.
WHITE	1107414
SILVER	1107415
BROWN	1107198
BLACK	1107416

5 ADDITIONAL SET FOR 160KG - COVER CAP + SUPPORT ARM

Colour	Material Nr.
WHITE	1103978
SILVER	1103979
BROWN	1107199
BLACK	1103980

6 CENTRE LOCK - VERTICAL

Sash rebate height	Length		Material Nr.
894 - 1000	720	1 R	1095173
1001 - 1400	1120	1 R	1095174
1401 - 1800	1520	1 R	1095175
1801 - 2000	1720	2 R	1095176
2001 - 2344	2120	2 R	1095177

7 CENTER LOCK - HORIZONTAL

Sash rebate width	Length		Material Nr.
634 - 1000	720	1 R	1095173
1001 - 1400	1120	1 R	1095174
1401 - 1644	1520	1 R	1095175

8 ESPAGNOLETTE M, BS 14,5 mm

Sash rebate height	Handle height	Length		Material Nr.
894 - 1000	300 - 500	720	1 R	1088473
1001 - 1400	450 - 700	1120	1 R	1098964
1401 - 1800	701 - 900	1520	1 R	1098965
1601 - 2000	801 - 1000	1720	2 R	1098966
2001 - 2344	1001 - 1200	2120	2 R	1098967

ESPAGNOLETTE M, BS 25 mm

sash rebate height	handle height	length		Material Nr.
420 - 620 ¹⁾	210 - 310	340		1104484
600 - 1000	300 - 500	720	1 R	1104485
900 - 1400	450 - 700	1120	2 R	1104486
1401 - 1800	701 - 900	1520	2 R	1104487
1601 - 2000	801 - 1000	1720	3 R	1104488
2001 - 2400	1001 - 1200	2120	4 R	1104489

ESPAGNOLETTE M, BS 30 mm

sash rebate height	handle height	length		Material Nr.
420 - 620 ¹⁾	210 - 310	340		1107647
600 - 1000	300 - 500	720	1 R	1107648
900 - 1400	450 - 700	1120	2 R	1107649
1401 - 1800	701 - 900	1520	2 R	1107650
1601 - 2000	801 - 1000	1720	3 R	1107651
2001 - 2400	1001 - 1200	2120	4 R	1107652

ESPAGNOLETTE M, BS 35 mm

sash rebate height	handle height	length		Material Nr.
420 - 620 ¹⁾	210 - 310	340		1107653
600 - 1000	300 - 500	720	1 R	1107654
900 - 1400	450 - 700	1120	2 R	1107655
1401 - 1800	701 - 900	1520	2 R	1107656
1601 - 2000	801 - 1000	1720	3 R	1107657
2001 - 2400	1001 - 1200	2120	4 R	1107658

ESPAGNOLETTE M, BS 45 mm

sash rebate height	handle height	length		Material Nr.
420 - 620 ¹⁾	210 - 310	340		1104490
600 - 1000	300 - 500	720	1 R	1104491
900 - 1400	450 - 700	1120	2 R	1104492
1401 - 1800	701 - 900	1520	2 R	1104493
1601 - 2000	801 - 1000	1720	3 R	1104494
2001 - 2400	1001 - 1200	2120	4 R	1104495

ESPAGNOLETTE M, BS 25 mm - lockable

sash rebate height	handle height	length		Material Nr.
1600 - 2000	801 - 1000	1720	3 R	1104477
2001 - 2400	1001 - 1200	2120	4 R	1104480

ESPAGNOLETTE M, BS 30 mm - lockable

sash rebate height	handle height	length		Material Nr.
1600 - 2000	801 - 1000	1720	3 R	1107659
2001 - 2400	1001 - 1200	2120	4 R	1107661

ESPAGNOLETTE M, BS 35 mm - lockable

sash rebate height	handle height	length		Material Nr.
1600 - 2000	801 - 1000	1720	3 R	1107662
2001 - 2400	1001 - 1200	2120	4 R	1107663

ESPAGNOLETTE M, BS 45 mm - lockable

sash rebate height	handle height	length		Material Nr.
1600 - 2000	801 - 1000	1720	3 R	1104482
2001 - 2400	1001 - 1200	2120	4 R	1104483

9 CORNER DRIVE

Description		Material Nr.
CORNER DRIVE	1 R	1103158

10 CORNER DRIVE

Description		Material Nr.
CORNER DRIVE	1 RS	1100983

11 STRIKER

SYSTEM 12/18-13

Description		Material Nr.
Dki SECURITY STRIKER ALU AXIS 13		1105497
STRIKER ALU AXIS 13		1105495
SECURITY STRIKER ALU AXIS 13		1105498

12 T&T SECURITY STRIKER

SYSTEM 12/20-13

Description		Material Nr.
DKI SECURITY STRIKER ALU AXIS 9	L	1078264
	R	1078265
STRIKER ALU AXIS 9		1097952
SECURITY STRIKER ALU AXIS 13		1104662

13 HANDLE

Description	colour	Material Nr.
ARX	R9010 - WHITE	1066771
ARX	R8707 - BROWN	1066773
ARX	F1 - SILVER	1066774
ARX	F4 - BRONZE	1069325
ROTO	R05.4 - DARK BRONZE	1014244
ROTO	R01.1 - SILVER	1013077
ROTO	R07.2 - WHITE	1012726
ROTO	R05.3 - MIDDLE BRONZE	1012736

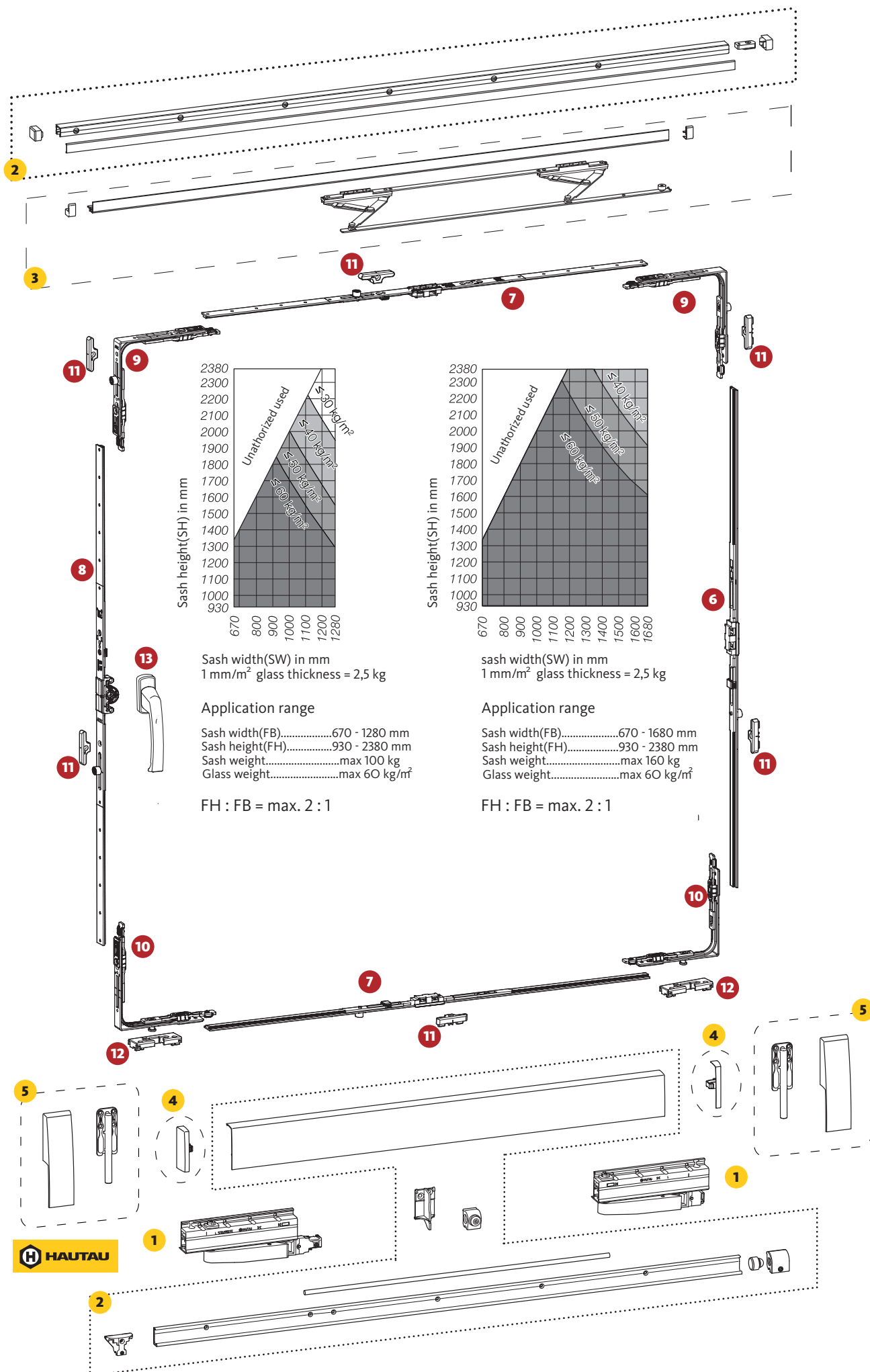
HANDLE for Balcony door

description	colour	Material Nr.
ARX	F1 - silver	1053267
ARX	F4 - brown	1053268
ARX	F9 - grey	1053269
ARX	F9010 - white	1053270


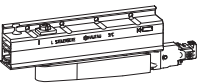
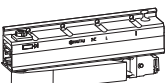


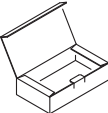








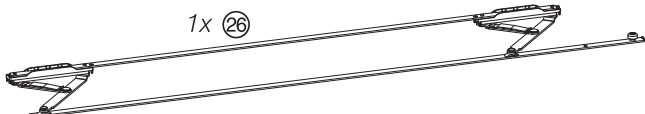
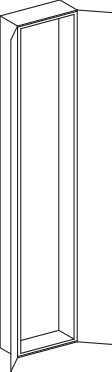

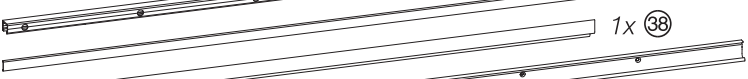
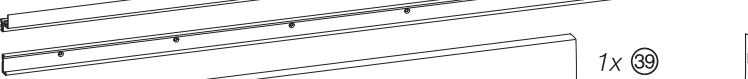
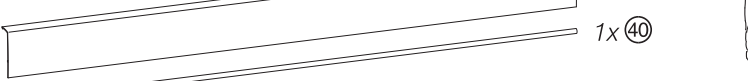
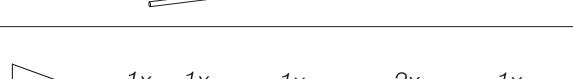










HANDLE for balcony door with roller shutters

description	colour	Material Nr.
ARX	F1 - silver	1053281
ARX	F4 - brown	1053282
ARX	F9 - grey	1053283
ARX	F9010 - white	1053284

* Application additional set 160kg



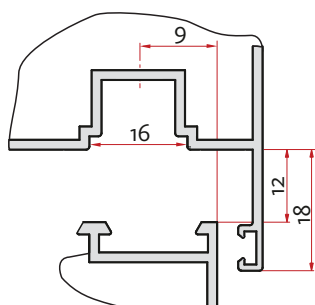
ATRIUM ALU HKS 100/160 S

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	<div> <div> <div>4x ⑦6</div>  </div> <div> <div>2x ③</div>  </div> <div> <div>4x ⑤9d</div> <div>M5 x 25</div>  </div> <div> <div>1x ④4</div>  </div> <div> <div>1x ④5</div>  </div> <div> <div>FG ≥ 100 kg</div> </div> <div> <div>1x ④4</div>  </div> <div> <div>1x ④5</div>  </div> <div> <div>FG < 100 kg</div> </div> </div>
	<div> <div>1x ②6</div>  </div>
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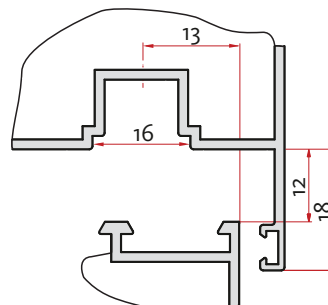
MOUNTING INSTRUCTIONS

Sash - frame ALU profile

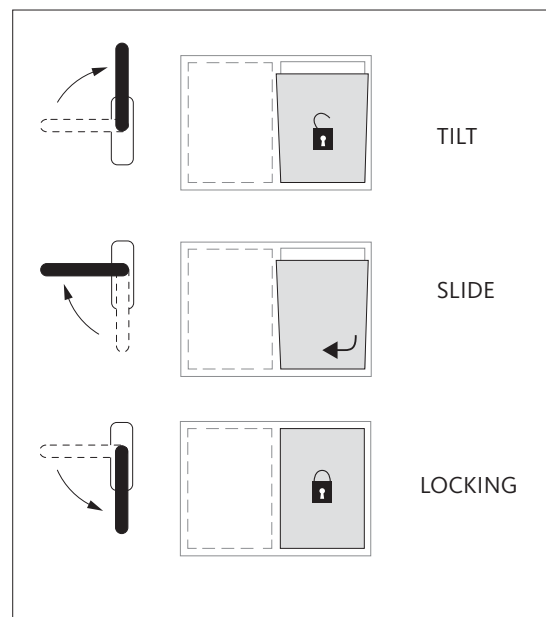
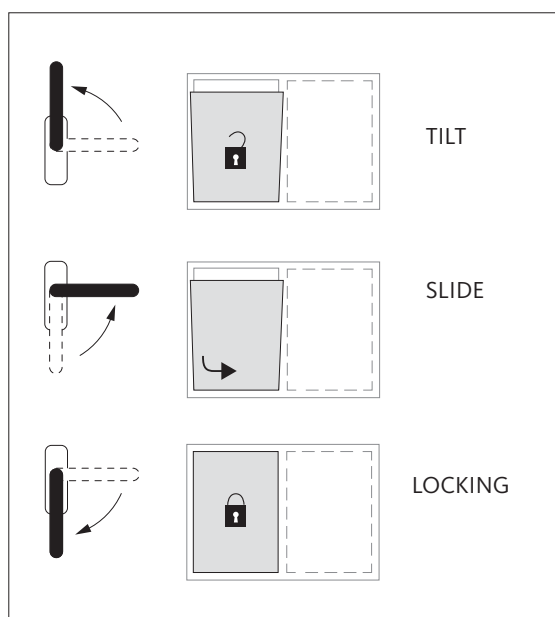
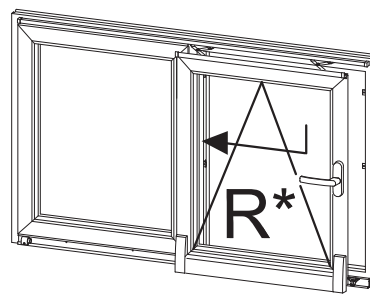
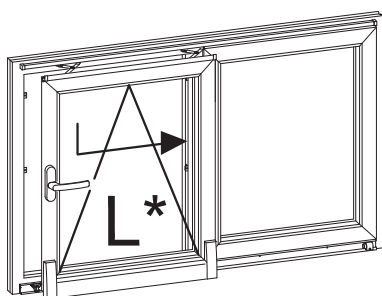
ALU SASH/FRAME CROSS SECTION
DIMENSION FOR HARDWARE, **AXIS 9**



ALU SASH/FRAME CROSS SECTION
DIMENSION FOR HARDWARE, **AXIS 13**

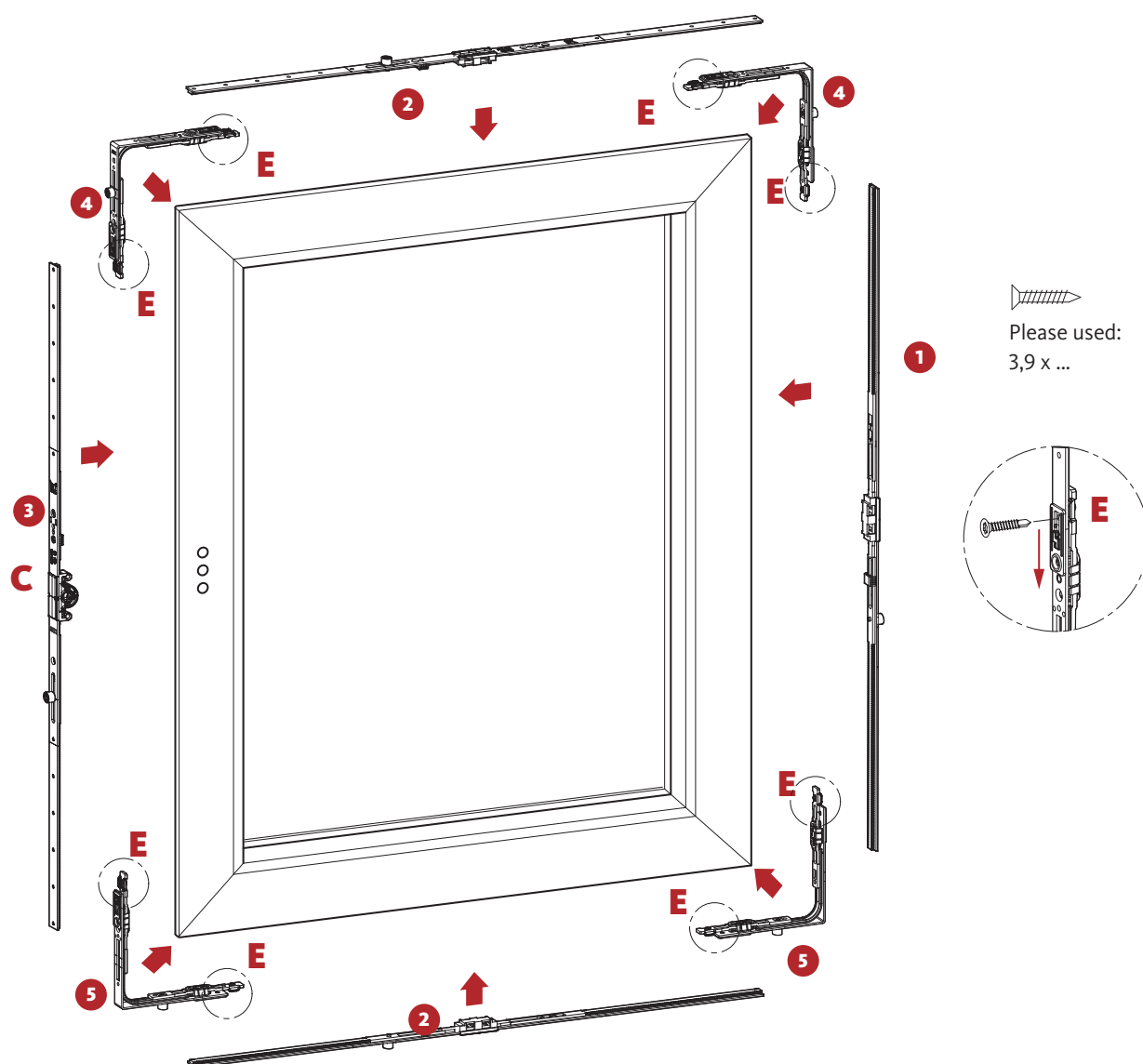


Operating and system instructions

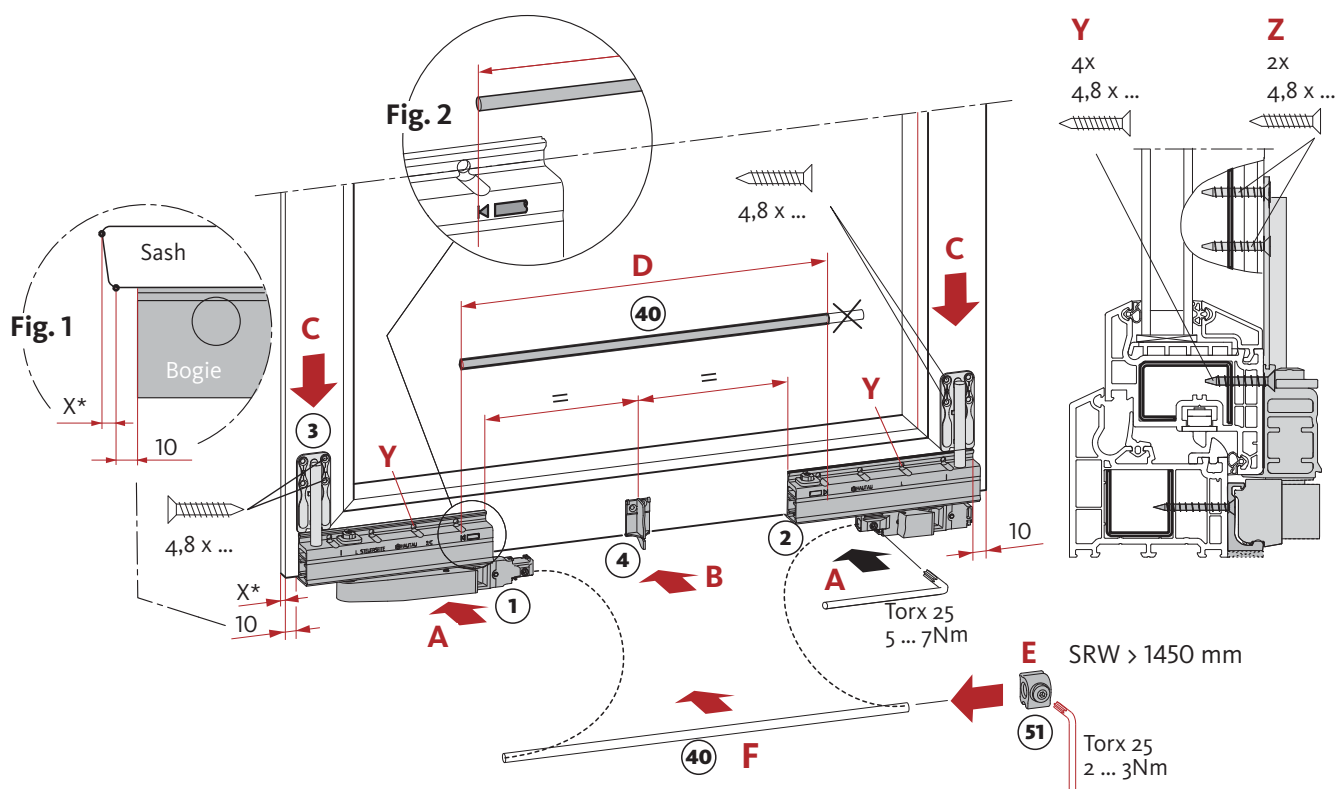


Installation of central locking

- A** Fix corner top **4** as well as corners bottom **5** by means of screws.
- B** Fix connecting track top **2** (in case of corners top) and connecting track bottom **2** by means of screws.
- D** SRH \leq 2400 mm: screw connecting track lateral **1** as well as espag EG **3**.
For SRH > 2400 mm please refer to pages **24**.
- E** Move and fix adjustment system for connecting tracks at corners.

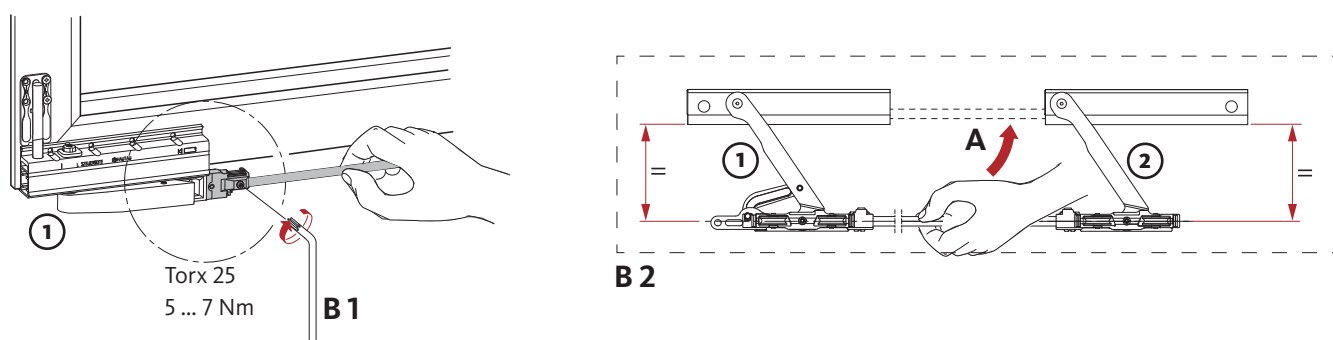


Mounting of bogies



- A** Tighten bogies (1) / (2) with four screws 4.8 x ... each at sash. Keep a lateral distance of 10 mm to outer sash edges and ensure flush positioning with bottom edge (see reference edge for profiles with edge radius in figure 1). Screw length has to be chosen such as to ensure proper fastening in steel reinforcement (Y).
- B** Fix cover fillet support (4) with two screws 4.8 x ... in centre position between bogies. For SRW > 1450, arrange both cover fillet supports equally between bogies.
- C** For HKS® 160 S: insert and click support arms (3) into the profiles of the bogies and fasten with two screws 4.8 x ... each (see figure for screw bores). Screw length has to be chosen such as to ensure proper fastening in steel reinforcement (Z).
- D** Cut connecting track (40) to size according to marks on bogies (see figure 2).
- E** For SRW > 1450: move support block (51) in centre position of connecting rod. Fasten (Torx 25, 2 ... 3 Nm).
- F** Insert connecting rod in couplings of bogies (1) and (2). Tighten bogie (2) on non-handle side with Torx 25 (5 ... 7 Nm).

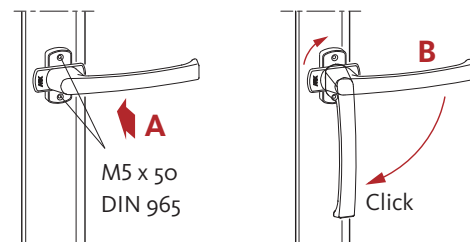
Parallel alignment of bogies (to ensure uniform entry of sash into frame)



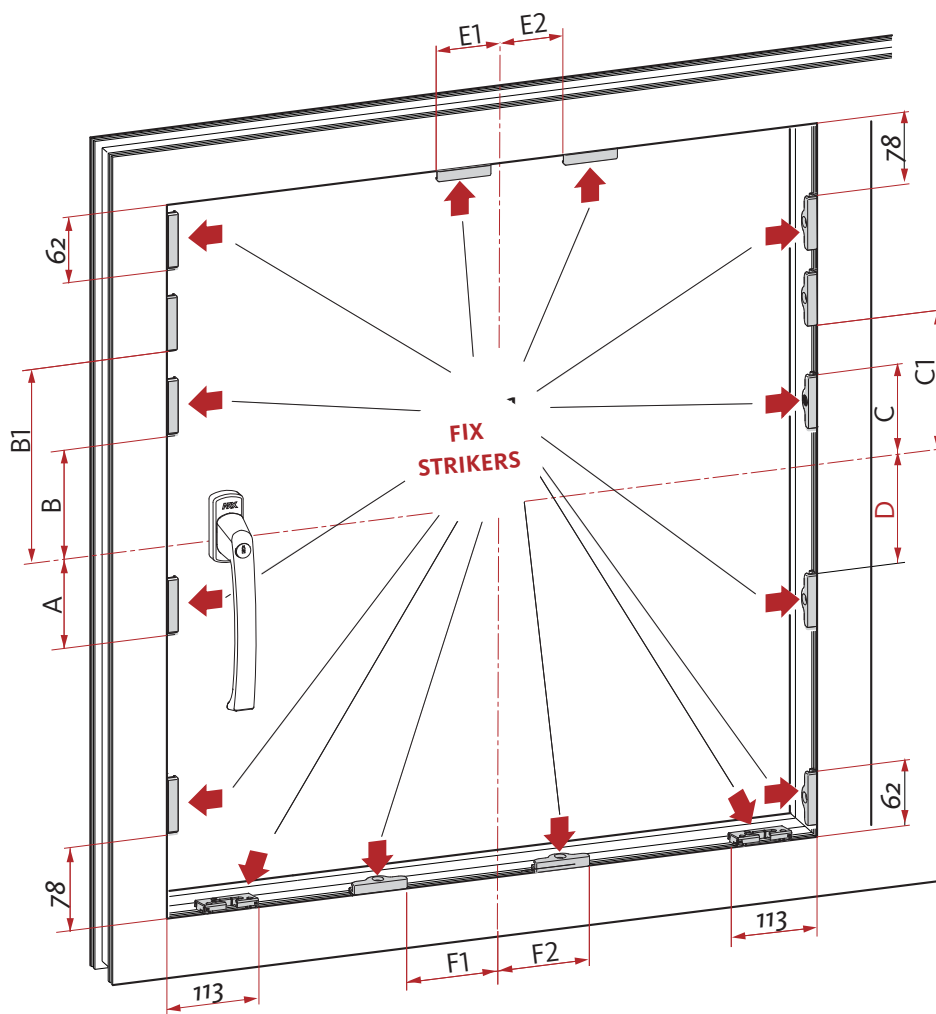
- A** Grab connecting rod centered and bring it into position "close".
- B**
 - B.1:** In this position, tighten connecting rod firmly at bogie (1) on handle side (Torx 25, 5 ... 7 Nm).
 - B.2:** Now, both bogies (1) + (2) have to be parallel in position "open", too.

Mounting of handle

- A** Mount handle on sash at a position of 90°. Turn rosette and tighten handle with two screws M5 x 50 mm.
- B** Make sure that handle can be easily moved. Move back rosette into home position.



Mounting of strikers and tilt lock bearings at frame



Vertikal (variabile) SRH

Lenght (mm)	A	B	C	D	B1	C1
630 - 1000	102,5	-	102,5	122	-	-
900 - 1400	102,5	-	102,5	177	-	-
1401 - 1800	102,5	-	102,5	277	-	-
1650 - 2000	302,5	317,5	302,5	317,5	-	-
2001 - 2400	302,5	317,5	302,5	317,5	-	-
2401 - 2600*	302,5	317,5	302,5	317,5	934	939
2601 - 2700**	302,5	317,5	302,5	317,5	1139	1139

Horizontal (Konstant) SRW

Lenght (mm)	E1	E2	F2	F1
620 - 1000	102,5	-	102,5	-
900 - 1400	102,5	-	102,5	-
1401 - 1650	102,5	-	102,5	-

* Extension (Material nr. 1102897), Espagnolette cut 200 mm.

** Extension (Material nr. 1102897), Espagnolette not to be cuted.

Mounting

Mounting guide track to frame

A Total length of guide track 35 : distance between outer edges of sliding sash and fixed sash minus 8 mm.

B Tighten guide track with screws 3,9 x ... as shown.

C Shorten cover profile 36 according to size of guide track and clip on guide track.

Mounting bottom track to frame

D Shorten bottom track 37 until it is flush with outer corners of sliding sash and fixed sash.

E Fix bottom track at frame at a distance of 35 mm from bottom edge of bottom track to bottom edges of sashes.

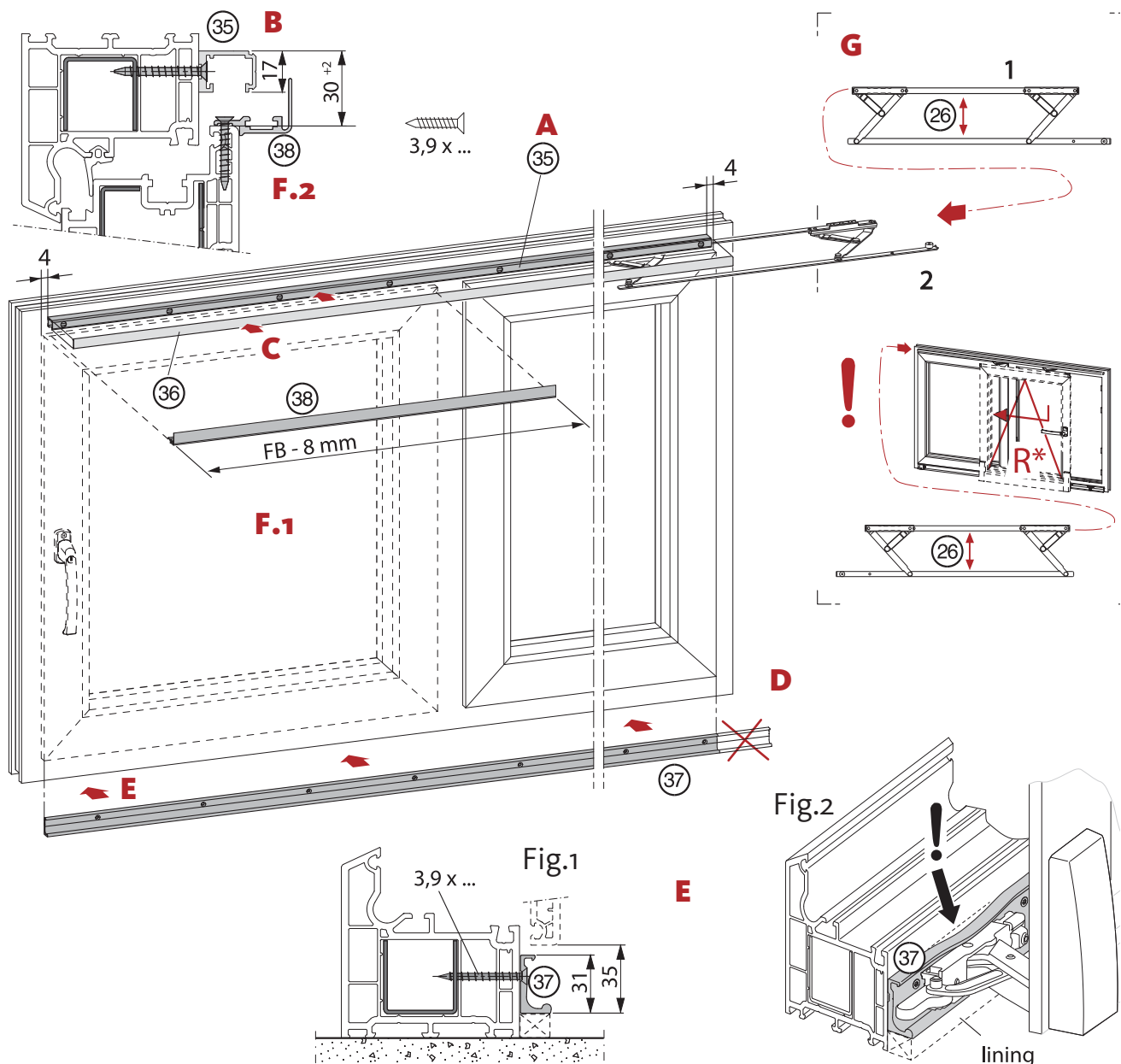
Use screws 3,9 x ... (fig. 1). In case of visible deformation or unusual (well audible) noise in the area of bottom track, provide continuous lining (on site) at bottom track for load transfer (fig. 2).

Mounting stay connecting profile to sash

F Cut stay connecting profile 38 to size – sash width minus 8 mm – (F.1) and screw centered to sash (F.2).

Mounting of stay system in guide track

G Open stay system 26 (1) and push it into guide track as illustrated (2). Take care to choose the right side!



Mounting

Installing sash into guide track

A Bring handle in slide position. Lift sash slightly in oblique position and place it together with bogie rollers on front edge of bottom track (37). Check position of rolls by sliding the sash and adjust, if necessary.

Connecting sash with guide track

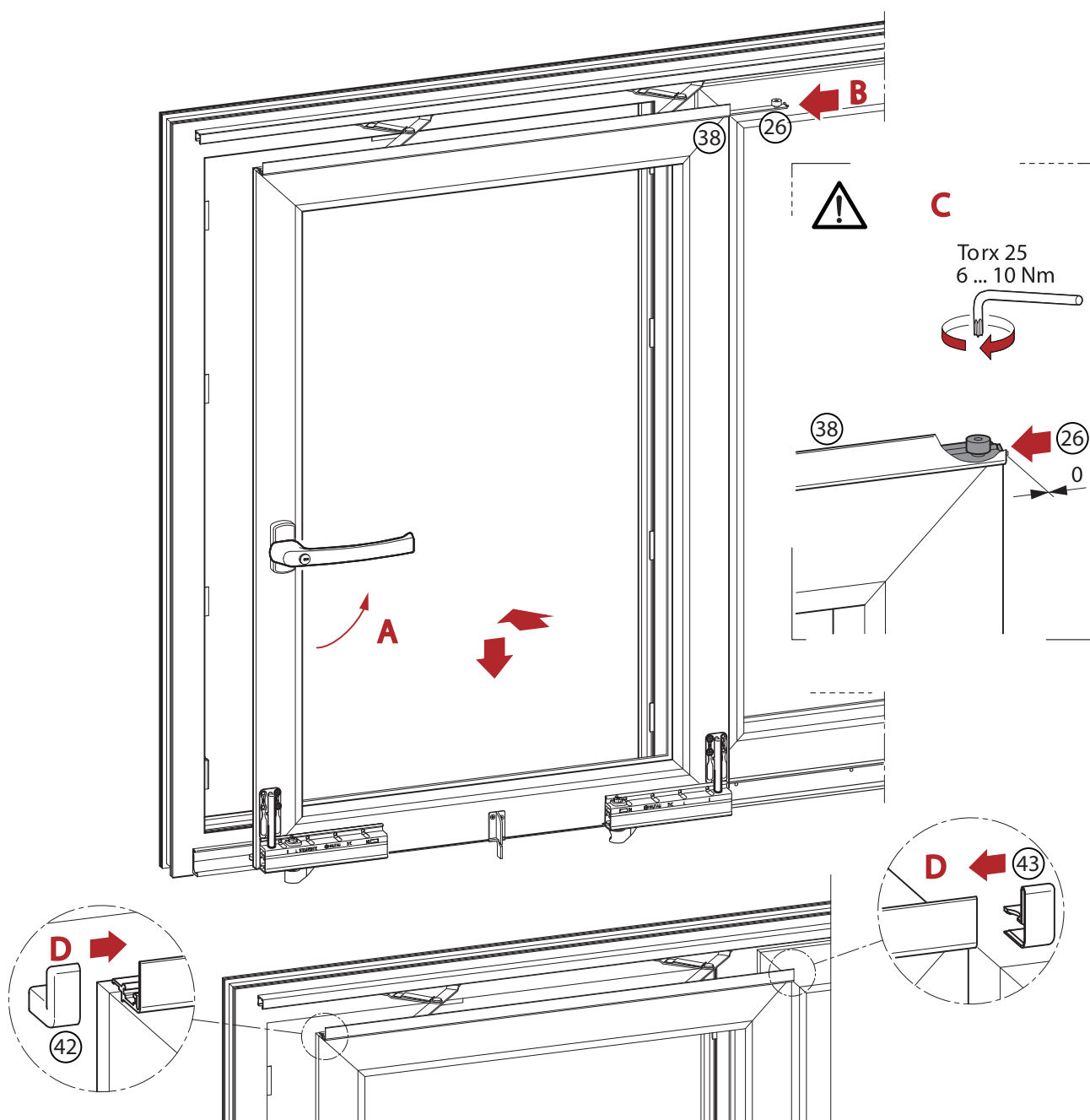
B Push stay system (26) into stay connecting profile (38).

C Put sliding track in flush position with sash and tighten safety screw (Torx 25, 6 ... 10 Nm).



Warning: If the safety screw has not connected tightly with the stay connecting profile (38), the sash is not sufficiently secured. Severe injuries could be the consequence.

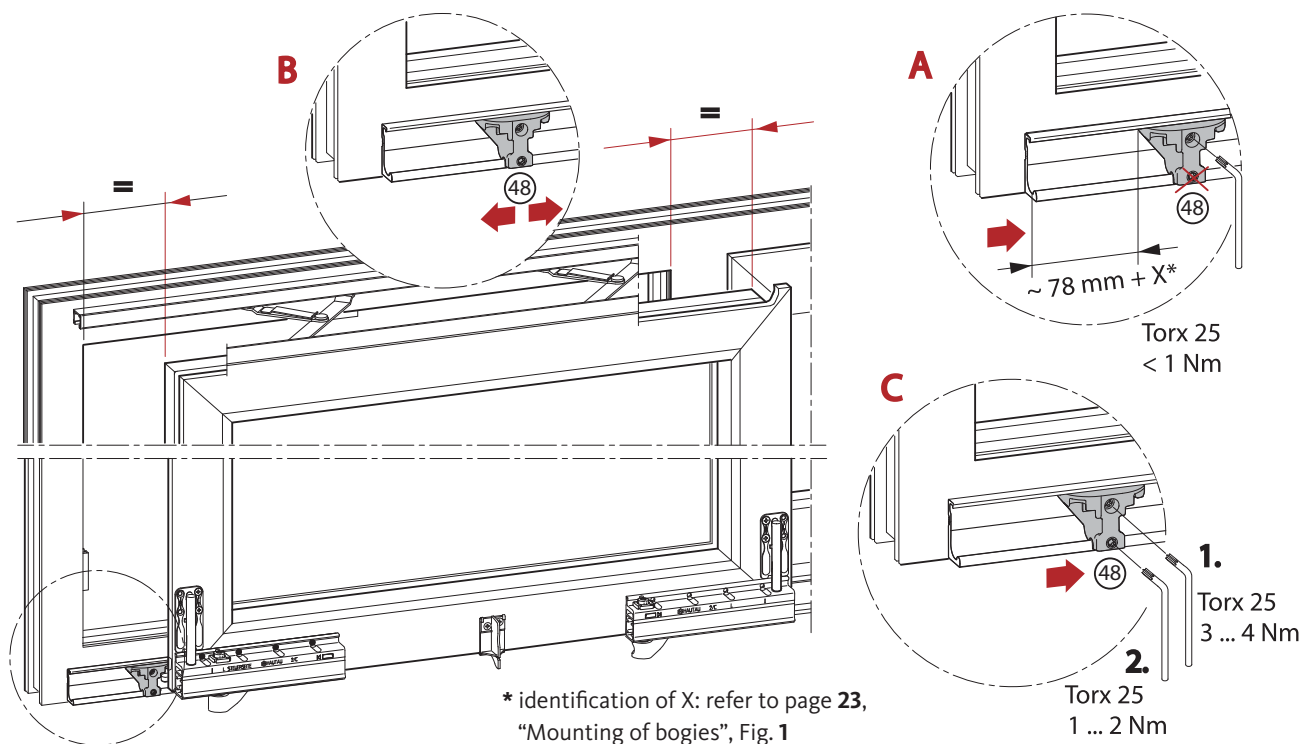
D Attach cover caps left (42) and right (43) on ends of stay connecting profile.



Installation

Installation of guide block

- A** Set guide block (48) on handle side at a distance of approx. 78 mm + X* from outer edge of bottom track
- B** Put sash in tilt position and check fittings cavity on both sides (12 mm). Reset guide block, if necessary.
- C**
 1. Tighten upper screw firmly at guide block (Torx 25, 3 ... 4 Nm).
 2. Then tighten bottom screw (Torx 25, 1 ... 2 Nm).

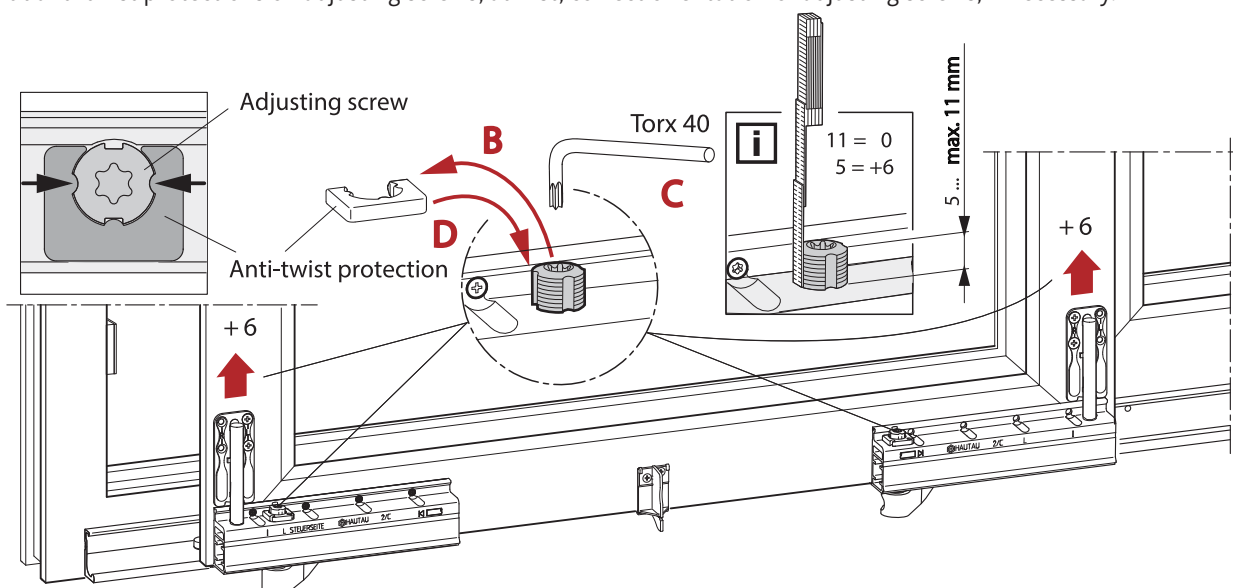


Horizontal sash alignment

- A** Check fittings cavity top and bottom on both sides (not shown).
- B** Remove anti-twist protections.
- C** Lift bogies (Torx 40) by means of adjusting screws in order to align sash. The adjusting screws are allowed to be turned out **max. 11 mm**.

Attention: If the adjusting screws are turned out more than 11 mm, the bogies will be destroyed.

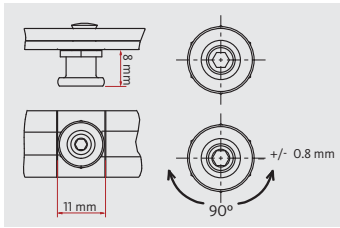
- D** Put anti-twist protections on adjusting screws; at first, correct orientation of adjusting screws, if necessary.



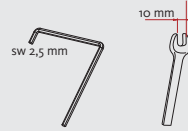
Installation

Setting of sash closing pressure (overbate height)

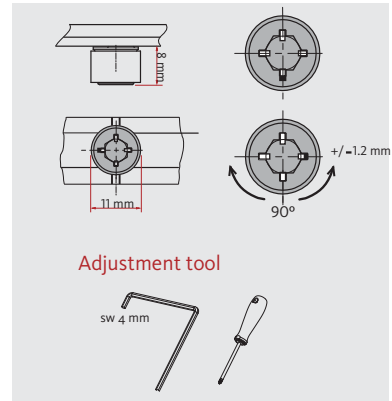
Locking pin RS



Adjustment tool



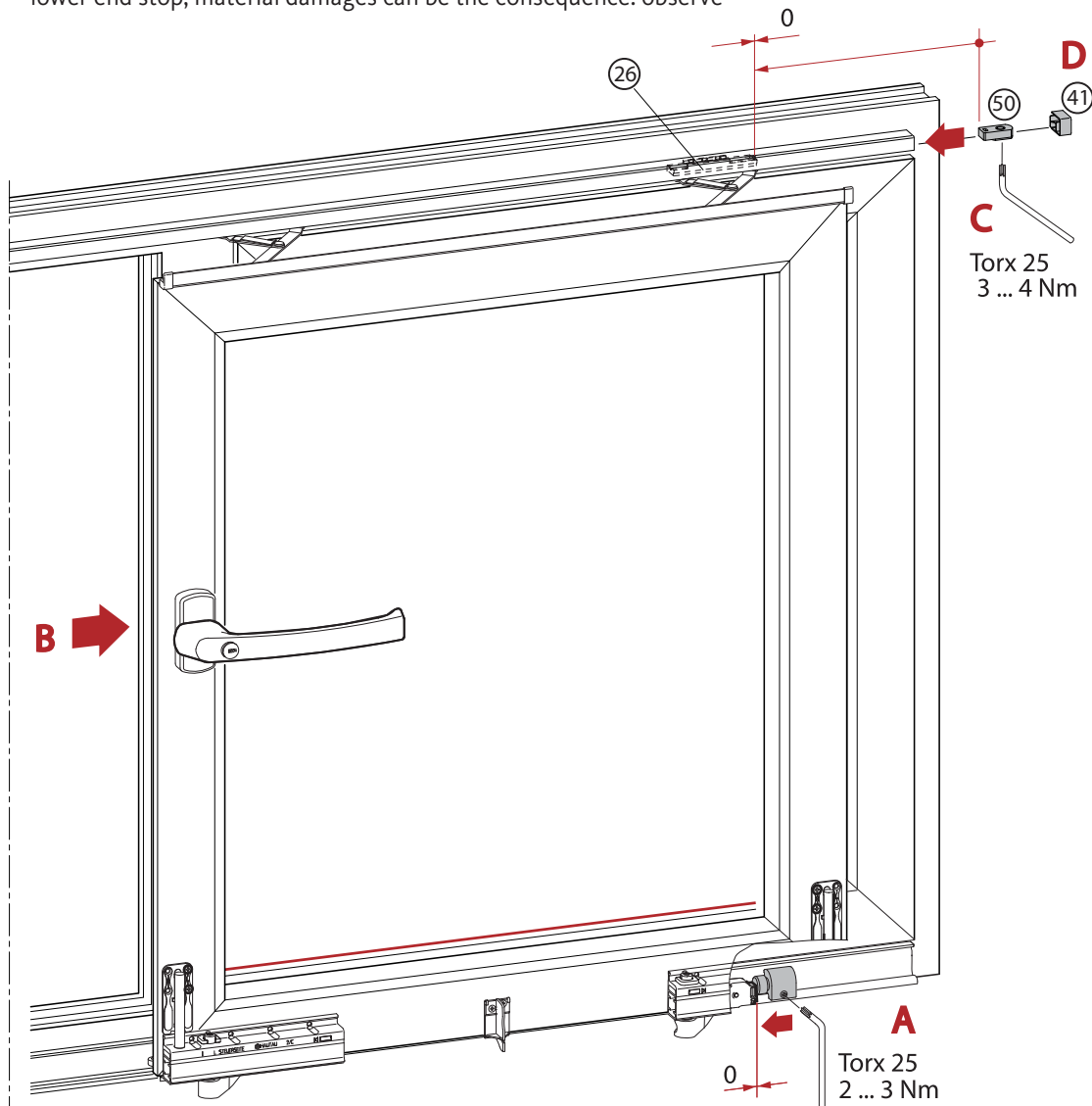
Locking pin R



Installation of buffers

- A** Screw bottom buffer (46) in required position at bottom track (Torx 25, 2 ... 3 Nm).
- B** Move sash right to buffer. C
- C** Insert top buffer (50) into guide track (until stay system) and tighten it firmly (Torx 25, 3 ... 4 Nm).
- D** Attach cover caps (41) on ends of guide track.

i Attention: If the window sash does not run simultaneously to upper and lower end stop, material damages can be the consequence. observe



Installation

Activate bogie safety device, assemble cover(s) for bogies

A Move bogie safety device (1) of both bogies backwards until they engage in position as shown (2).



Warning: Warning: If the bogie safety device has not locked correctly or not locked at all in position as shown, the sash is not sufficiently secured (3). Severe injuries could be the consequence.

B Cut cover profile (39) to size:

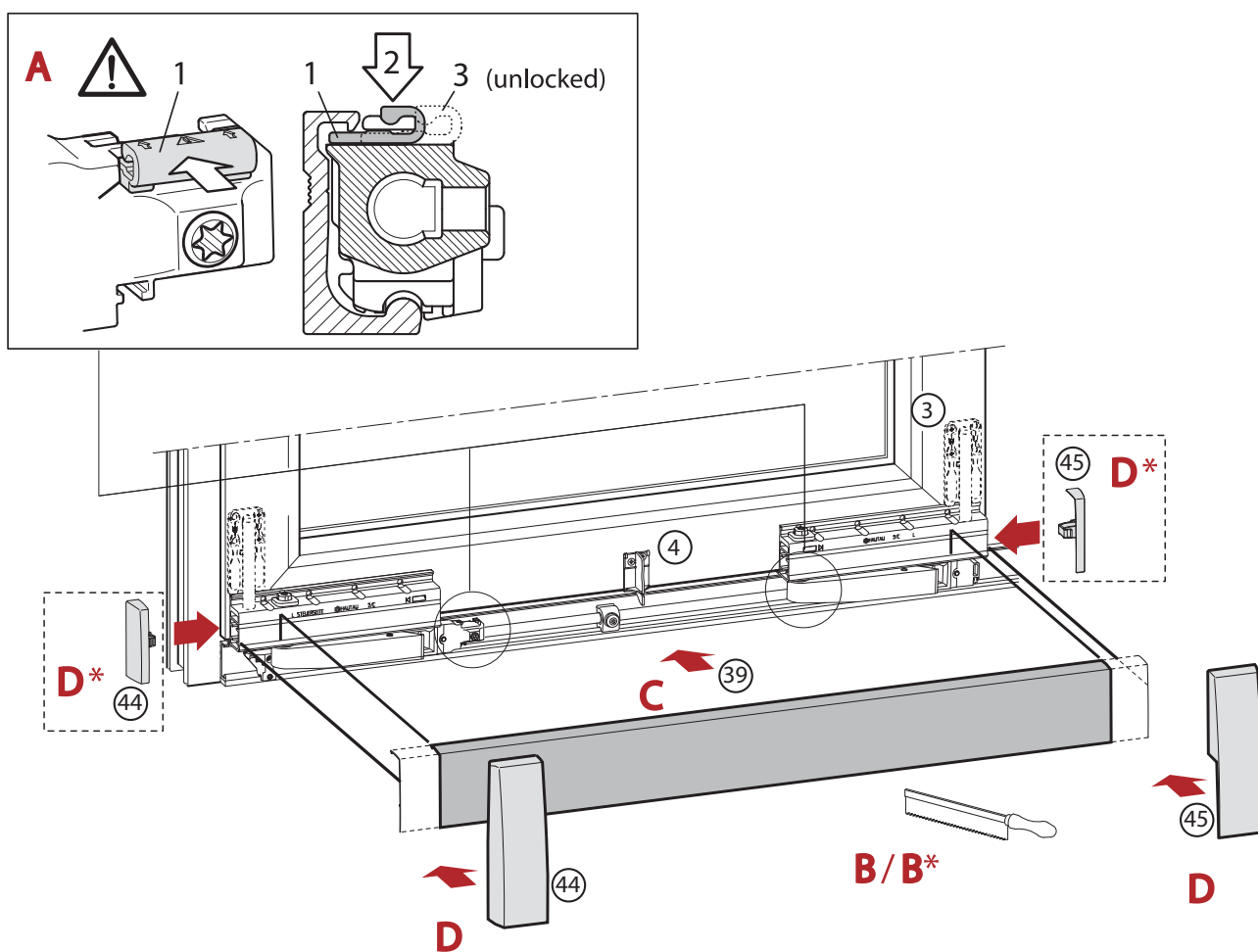
Sash with support arms (3): acc. to bogie marks,

* Sash w/o support arms: acc. to outer edges of bogies.

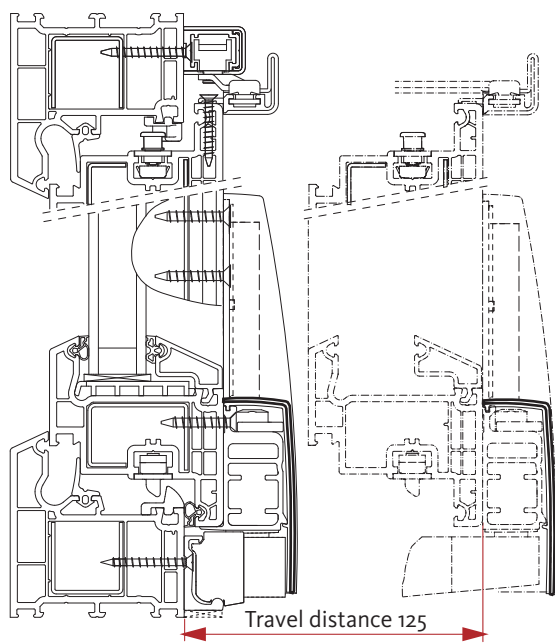
C Align cover profile according to bogie marks (or outer edges of bogies) and clip on the bogie profiles as well as on the cover fillet support(s) (4).

D Sash with support arms (3): Clip cover cap down left (44) and cover cap down right (45) to support arms 3.

* Sash w/o support arms: Clip cover cap down left (44) and cover cap down right (45) from the side to cover profile. Clip them into bogie afterwards.

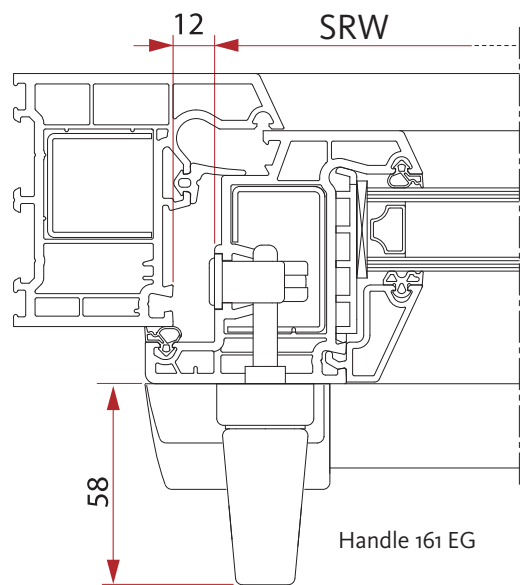


Installation

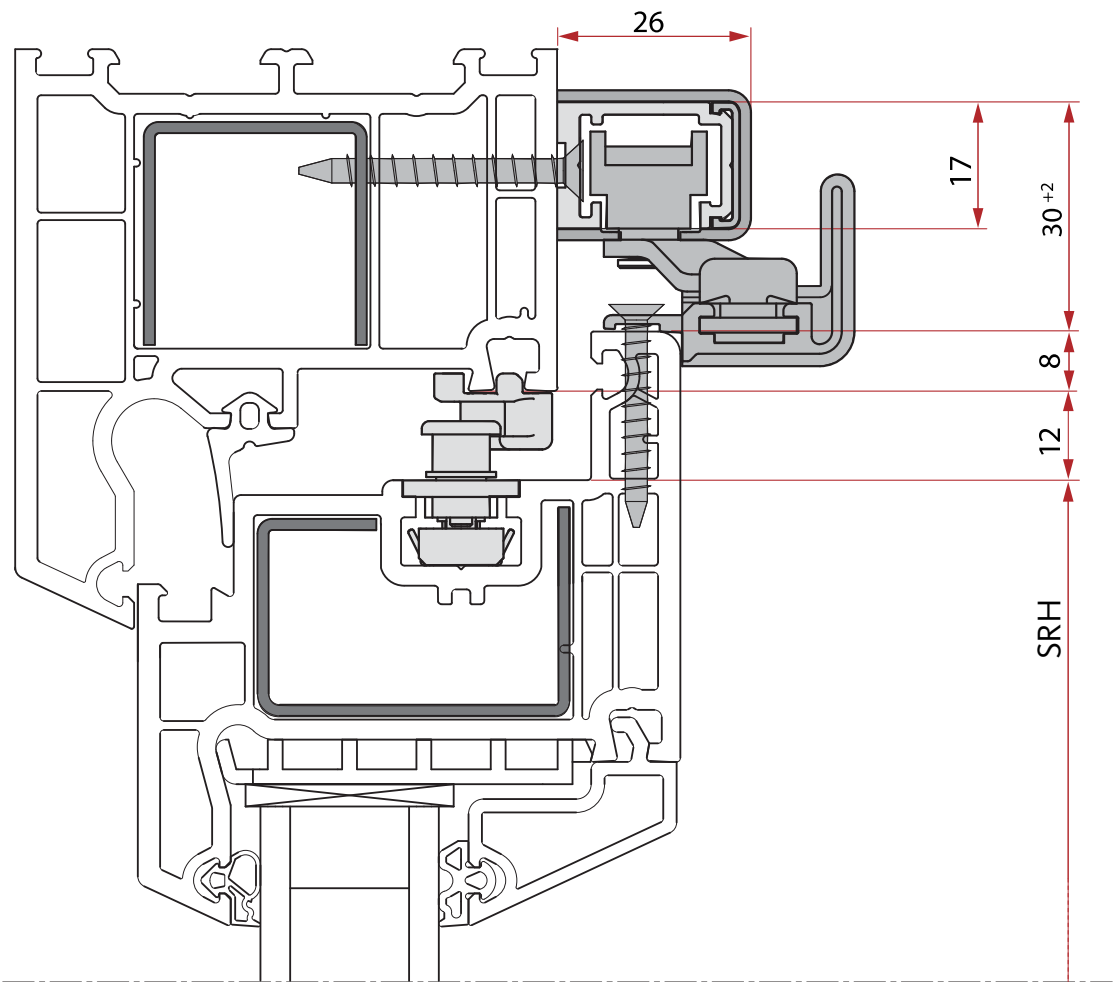


no scale

Horizontal section handle EG



Vertical section top Scale 1:1



The ARX logo consists of the letters 'ARX' in a bold, white, sans-serif font, set against a solid red square background.

The Perfect Move



ARX slide
Espagnolette

General advice concerning the catalogue

- All dimensions in mm.
- The depicted illustrations and /or technical drawings are not to scale.
- The width-height ratio of a sliding sash should be 1 : 2,5 maximum.
- Application range: The maximum length of the espagnolette is shown in the illustration.



ARXCoat – High quality surface protection

ARXCoat surface protection gives excellent appearance to building hardware and simultaneously ensures long-term and durable surface.

It maintains very high corrosion resistance in severe conditions and extreme climate, exceeding Grade 5 of BS EN1670 (480 hours exposure to salt spray), thereby guaranteeing long-term and simple use without any maintenance trouble.

How have we accomplished this? Through a special technological process that consists of electroplated zinc coating and low-temperature thick-layer passivation, followed by application of organic sealant to increase the anti-corrosion properties.

Single action espagnolettes

Advantages of the system

- designed for use on timber, PVC and aluminium systems
- faceplate width 16 mm
- easy installation due to one-piece assembly
- anti-lift pin integrated as standard
- precise design of internal components ensures a smooth, reliable operation
- all surfaces are coated in ARX Coat (silver finish)

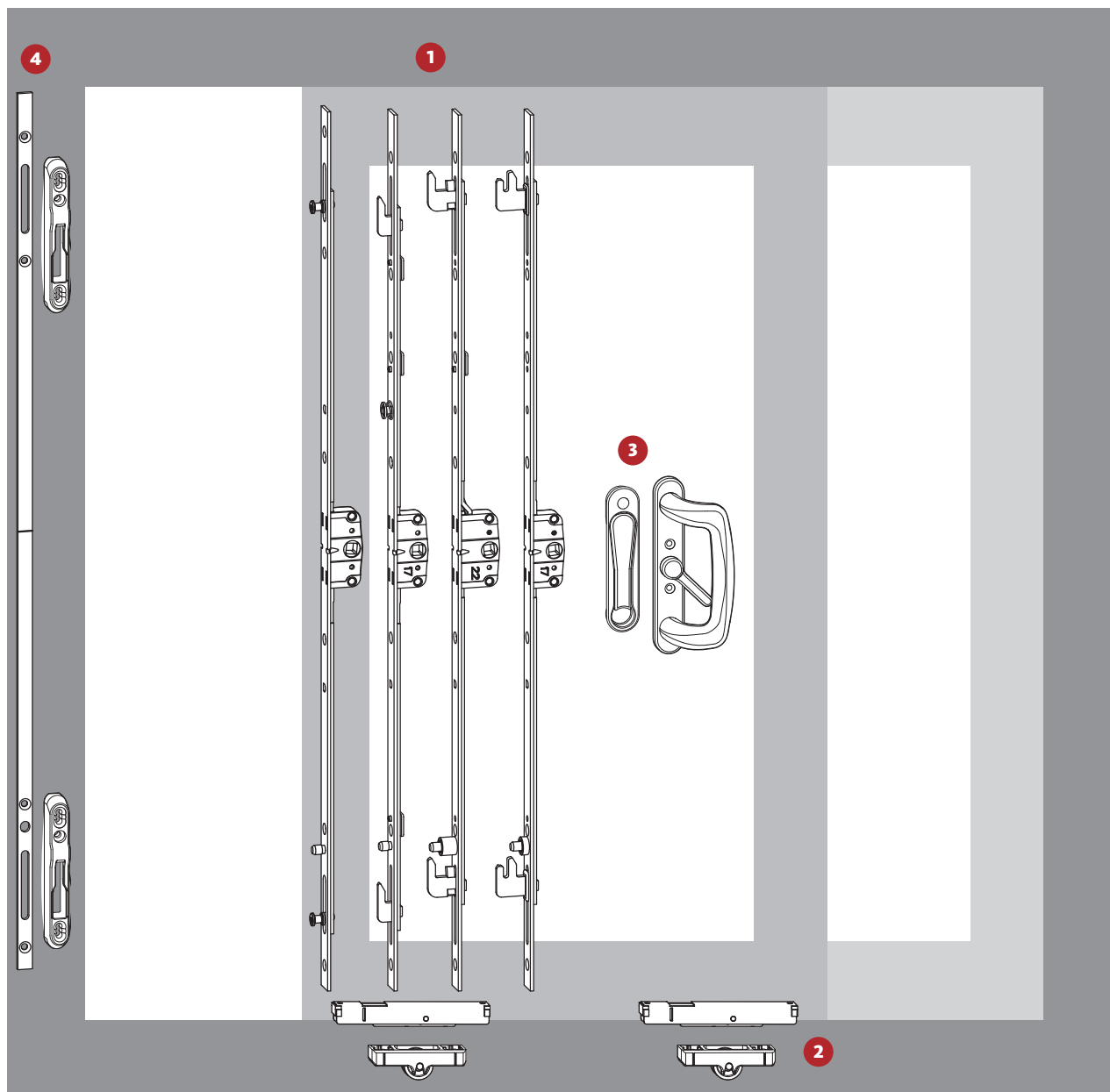
Unsurpassed versatility

The modular In-line Sliding system offers numerous solutions to configure a locking system which suits the individual requirements in security, comfort and design. Concerning the single action espagnolettes ARX offers the following options:

- 7, 17 or 22 mm backsets available
- 7 different lengths of espagnolettes: 240–1800 mm
- 2– 4 point security
- different options for locking points:
- adjustable mushroom cams (8 mm)
- 5 mm hooks
- 14 mm hooks
- 8 mm night-vent hooks
- lockable and non-lockable versions
- one-piece or individual striker options

Espagnolettes

Single action - Hardware overview

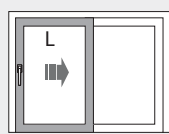


1	ESPAGNOLETTES
2	ROLLERS
3	HANDLES
4	STRIKERS - ARXslide
	ACCESSORIES - ARXslide

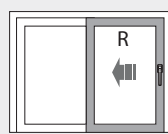
All hardware components exist in different variations. amount of hardware is needed. In applications with two movable sashes double amount of hardware is needed.

Diagrams

A

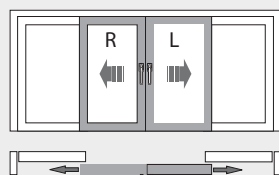


DIN left

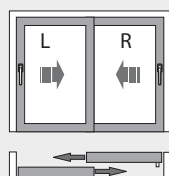


DIN right

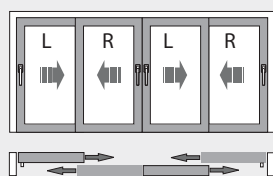
C



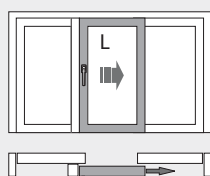
D



F



G2

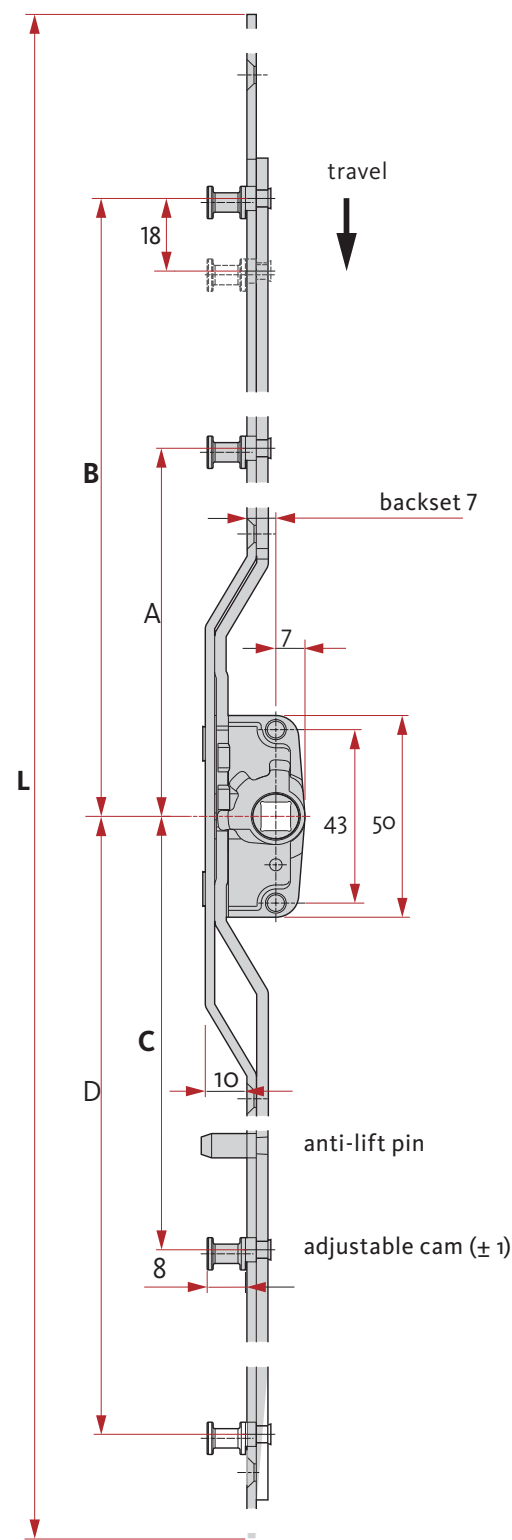


K



Espagnolettes

Single action Espagnolettes - with adjustable cams backset 7 mm



ESPAGNOLETTE, BACKSET 7 mm

Application range (mm)	Lenght(mm)	Cams	Material Nr.
400 - 600	400	2	1110657
601 - 800	600	2	1110658
801 - 1000	800	2	1110659
1001 - 1200	1000	3	1110660
1201 - 1800	1200	3	1110661
1801 - 2900	1800	4	1110662

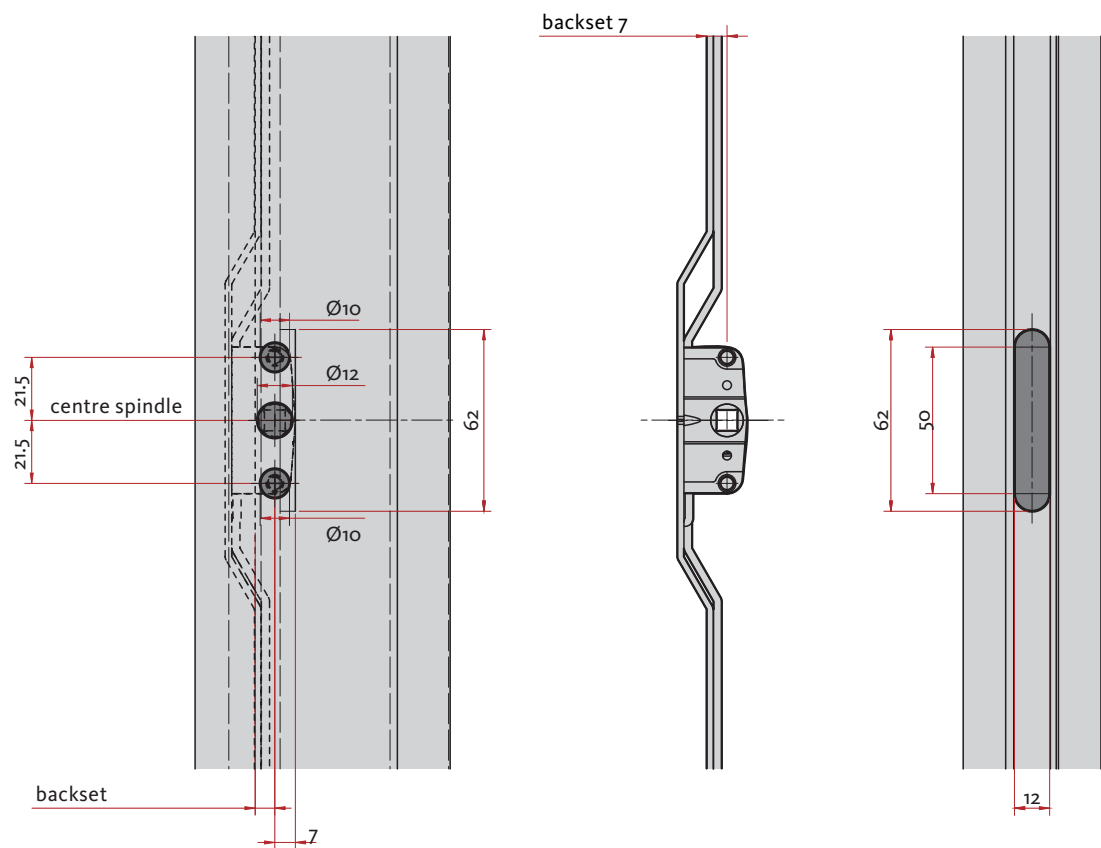
DETAILED DIMENSIONS

ESPAGNOLETTE, BACKSET 7 mm

L	A	B	C	D
400	-	143	-	127
600	-	243	-	227
800	-	343	-	327
1000	128	443	-	427
1200	128	543	-	527
1800	466	881	429	774

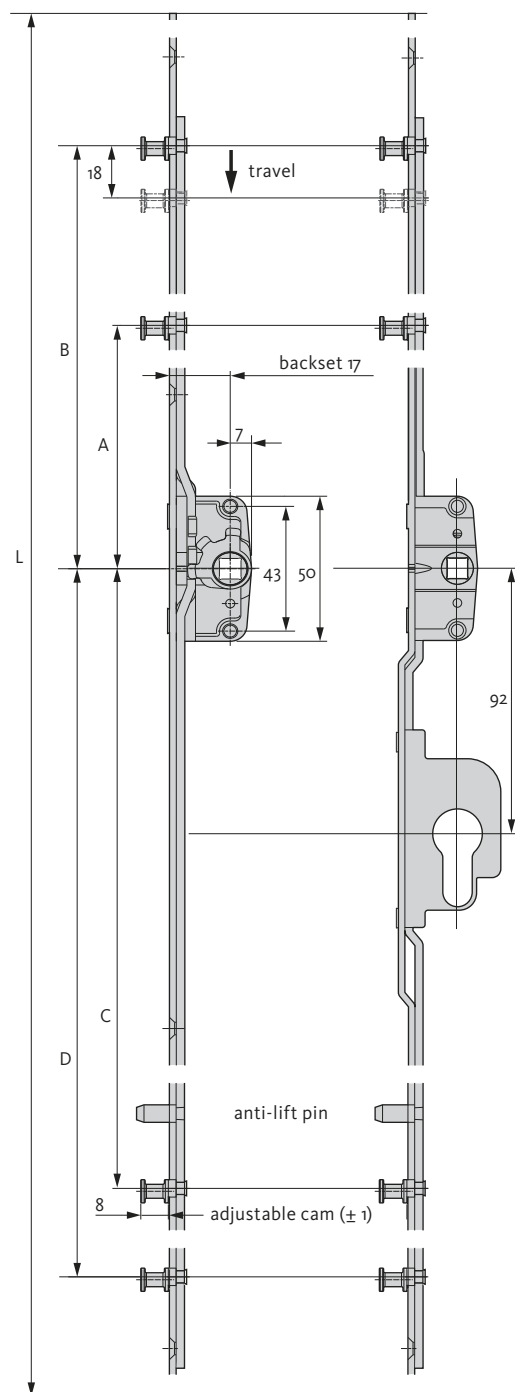
Espagnolettes

Single action Espagnolettes - with adjustable cams backset 7 mm



Espagnolettes

Single action Espagnolettes - with adjustable cams backset 17 mm



ESPAGNOLETTE, BACKSET 17 mm

Application range (mm)	Lenght(mm)	Cams	Material Nr.
240 - 400	240	2	1110663
401 - 600	400	2	1110664
601 - 800	600	2	1110665
801 - 1000	800	2	1110666
1001 - 1200	1000	3	1110667
1201 - 1800	1200	3	1110668
1801 - 2900	1800	4	1110669

ESPAGNOLETTE, BACKSET 17 mm, lockable

Application range (mm)	Lenght(mm)	Cams	Material Nr.
1801 - 2900	1800	4	1110670

DETAILED DIMENSIONS

ESPAGNOLETTE, BACKSET 17 mm

L	A	B	C	D
240		88		72
400	-	143	-	127
600	-	243	-	227
800	-	343	-	327
1000	128	443	-	427
1200	128	543	-	527
1800	466	881	429	774

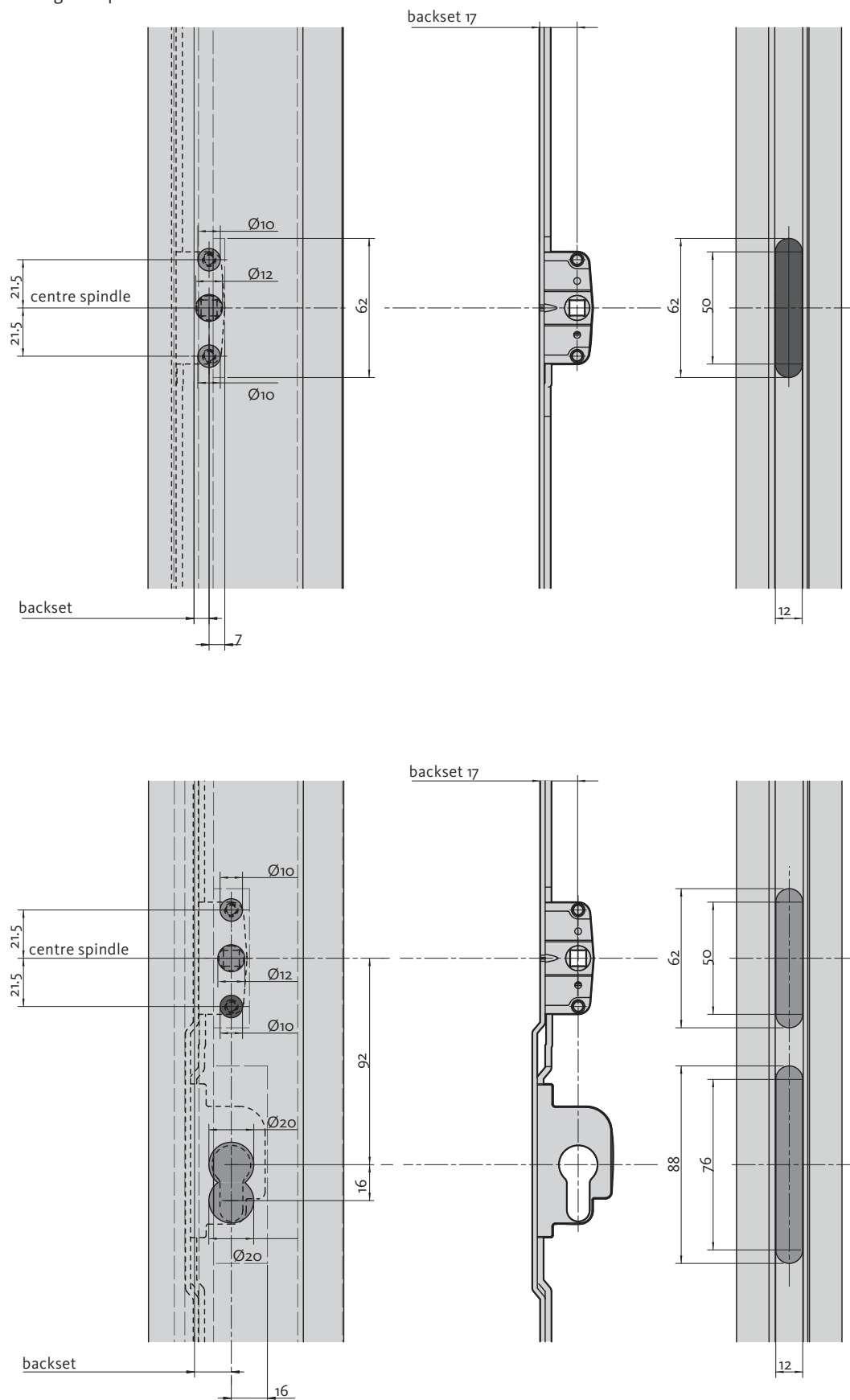
ESPAGNOLETTE, BACKSET 17 mm, lockable

L	A	B	C	D
1800	466	881	429	774

Espagnolettes

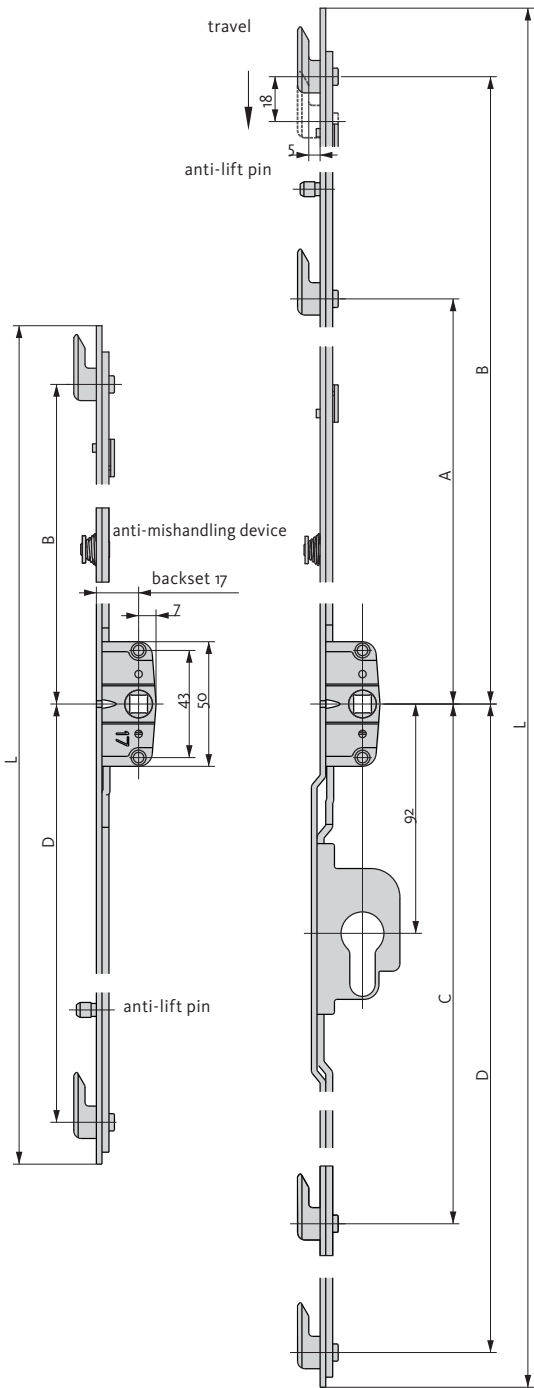
Single action Espagnolettes - with adjustable cams backset 17 mm

Drilling and routing hole-pattern



Espagnolettes

Single action Espagnolettes - with 5 mm hooks backset 17 mm



ESPAGNOLETTE, BACKSET 17 mm

Application range (mm)	Lenght(mm)	Hooks 5mm	Material Nr.
601 - 1800	600	2	1110671
1801 - 2900	1800	4	1110672

ESPAGNOLETTE, BACKSET 17 mm, lockable

Application range (mm)	Lenght(mm)	Hooks 5mm	Material Nr.
1801 - 2900	1800	4	1110673

DETAILED DIMENSIONS

ESPAGNOLETTE, BACKSET 17 mm

L	A	B	C	D
600	-	243	-	228
1800	463	808	432	777

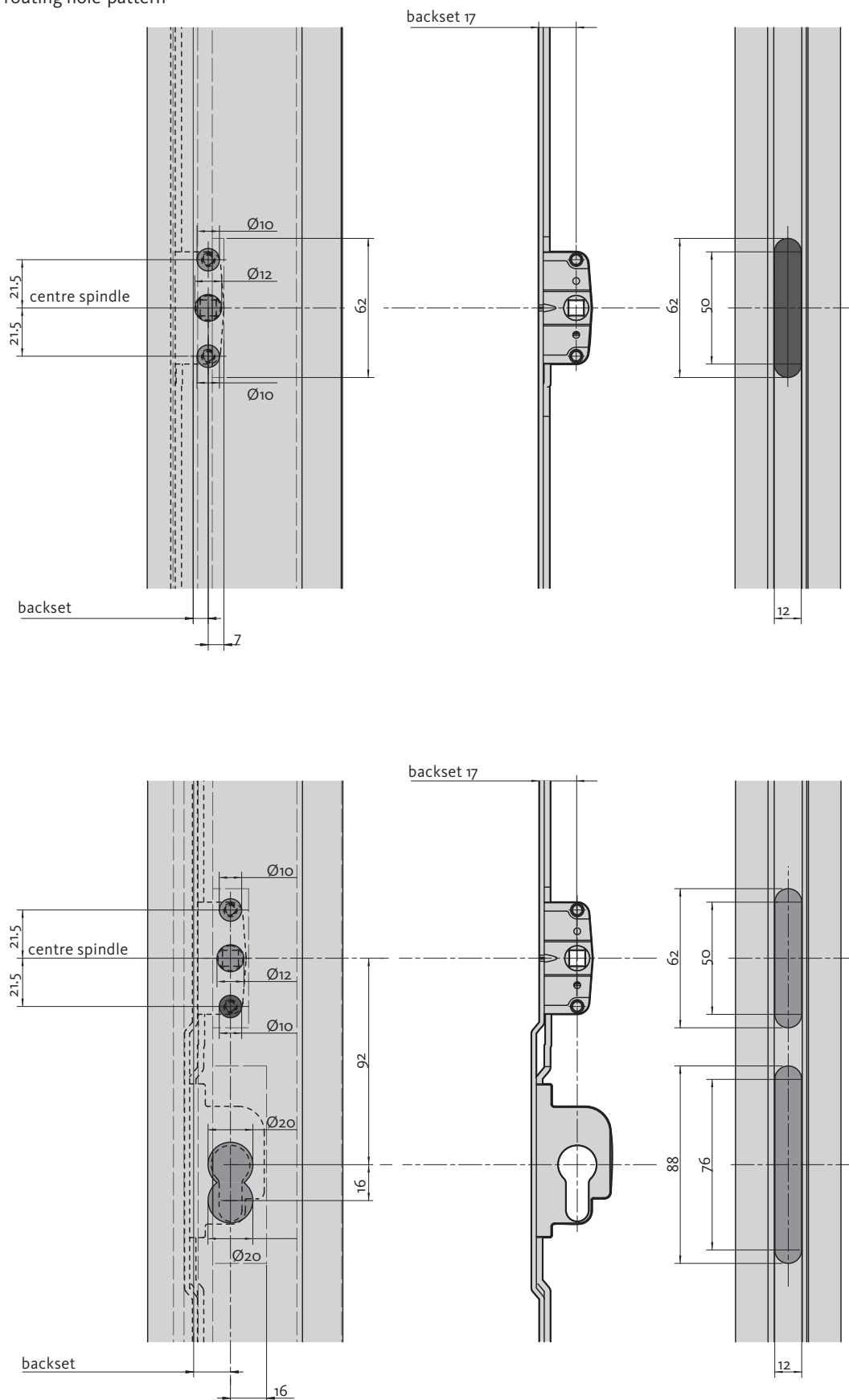
ESPAGNOLETTE, BACKSET 17 mm, lockable

L	A	B	C	D
1800	463	808	432	777

Espagnolettes

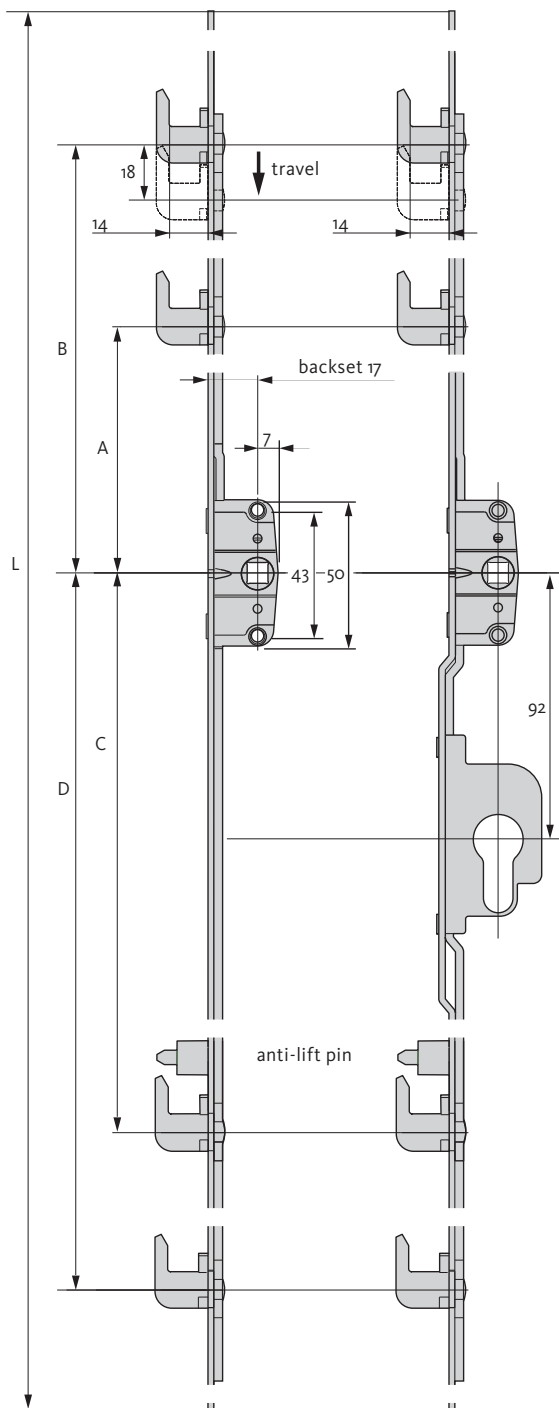
Single action Espagnolettes - with 5 mm Hook backset 17 mm

Drilling and routing hole-pattern



Espagnolettes

Single action Espagnolettes - with 14 mm hooks backset 17 mm



ESPAGNOLETTE, BACKSET 17 mm

Application range (mm)	Lenght(mm)	Hooks 5mm	Material Nr.
601 - 1800	600	2	1110674
1801 - 2900	1800	4	1110675

ESPAGNOLETTE, BACKSET 17 mm, lockable

Application range (mm)	Lenght(mm)	Hooks 5mm	Material Nr.
1801 - 2900	1800	4	1110676

DETAILED DIMENSIONS

ESPAGNOLETTE, BACKSET 17 mm

L	A	B	C	D
600	-	242	-	228
1800	463	808	432	777

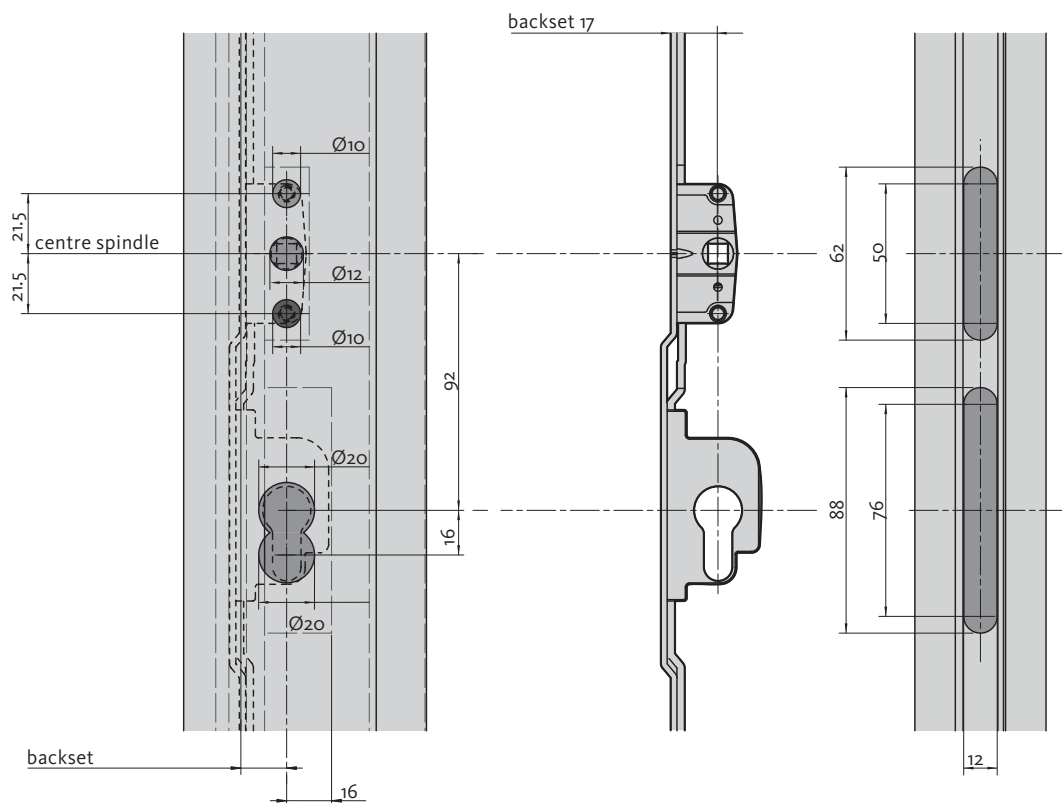
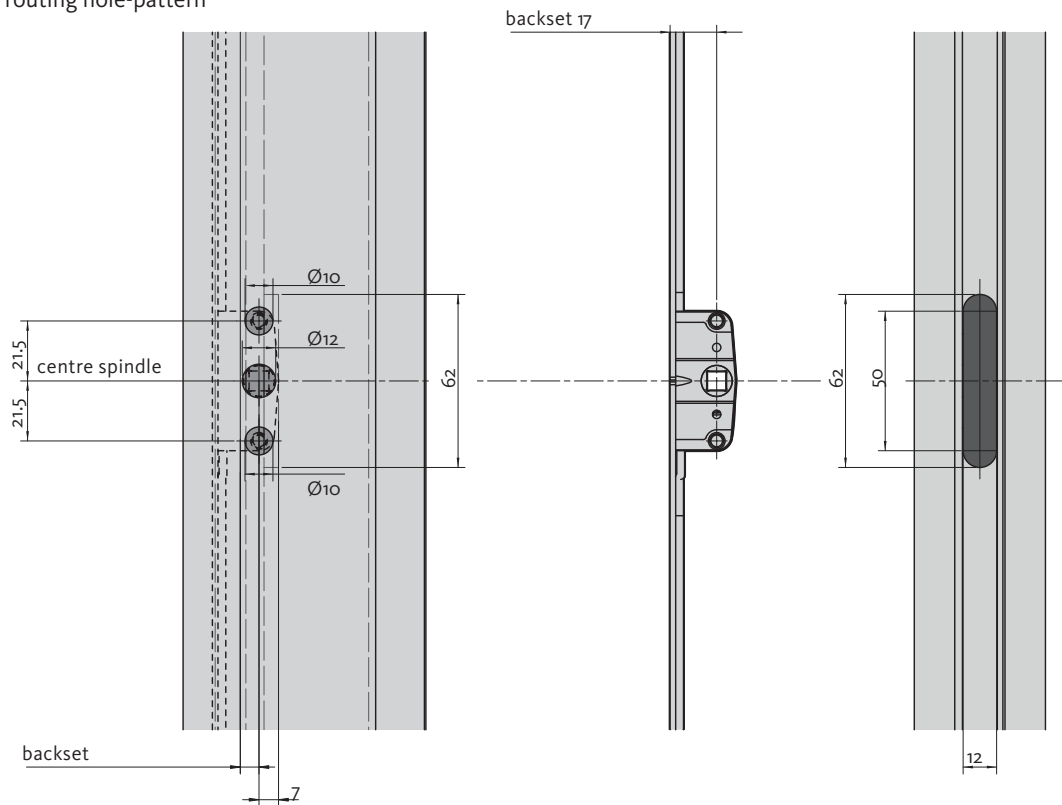
ESPAGNOLETTE, BACKSET 17 mm, lockable

L	A	B	C	D
1800	463	808	432	777

Espagnolettes

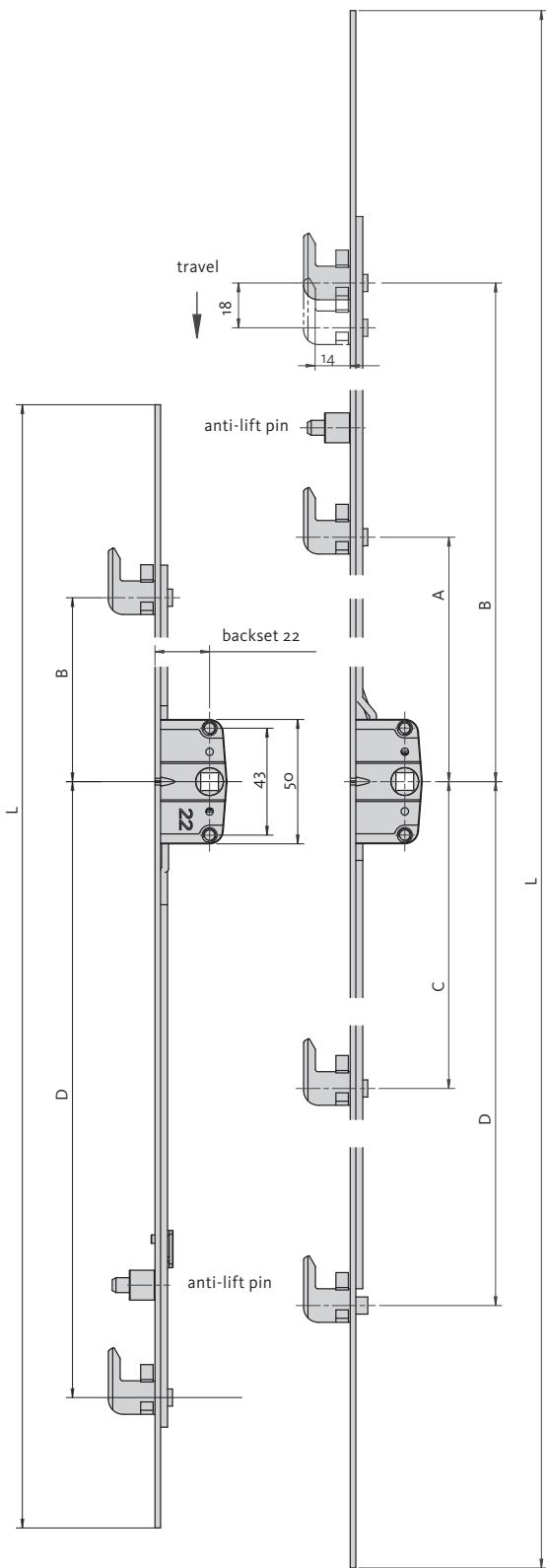
Single action Espagnolettes - with 14 mm hooks and anti-mishandling device backset 17 mm

Drilling and routing hole-pattern



Espagnolettes

Single action Espagnolettes - with 14 mm hooks backset 22 mm



ESPAGNOLETTE, BACKSET 22 mm

Application range (mm)	Lenght(mm)	Hooks 14 mm	Material Nr.
600 - 1800	600	2	1110677
1801 - 2900	1800	4	1110678

DETAILED DIMENSIONS

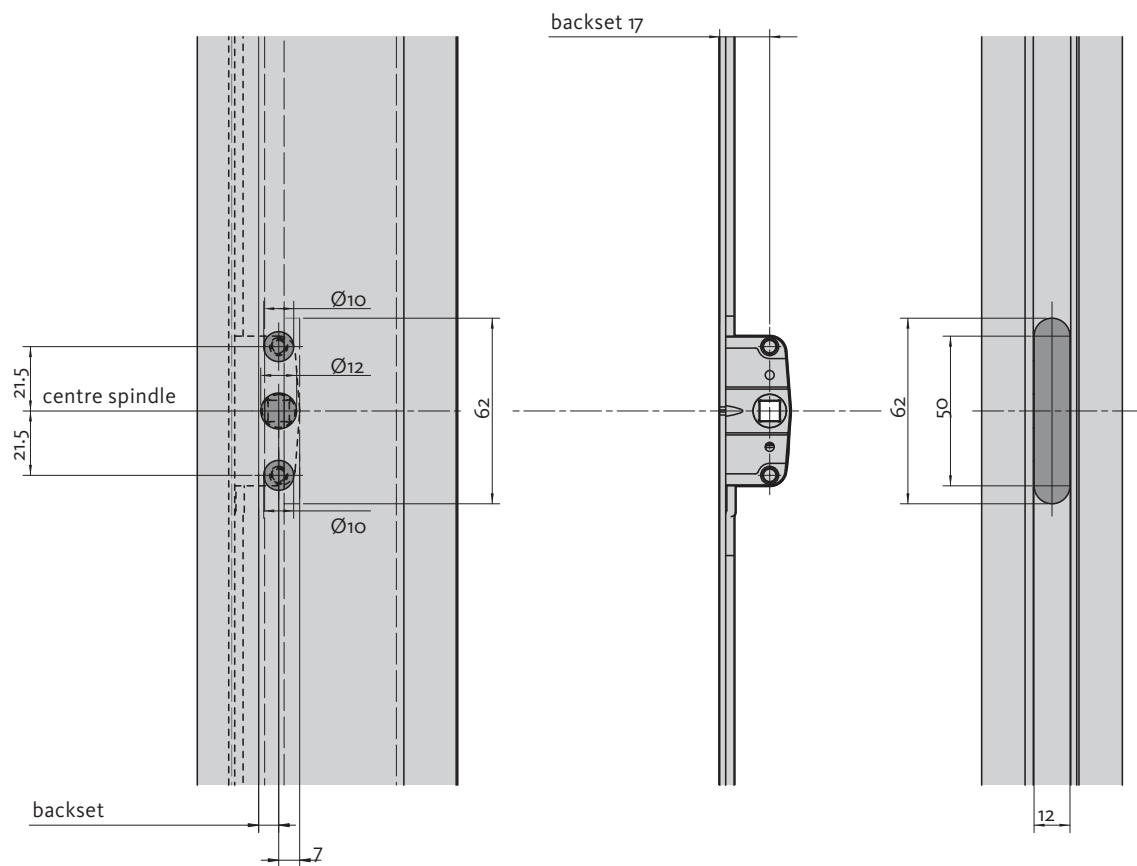
ESPAGNOLETTE, BACKSET 22 mm

L	A	B	C	D
600	-	242	-	228
1800	463	808	432	777

Espagnolettes

Single action Espagnolettes - with 14 mm hooks backset 22 mm

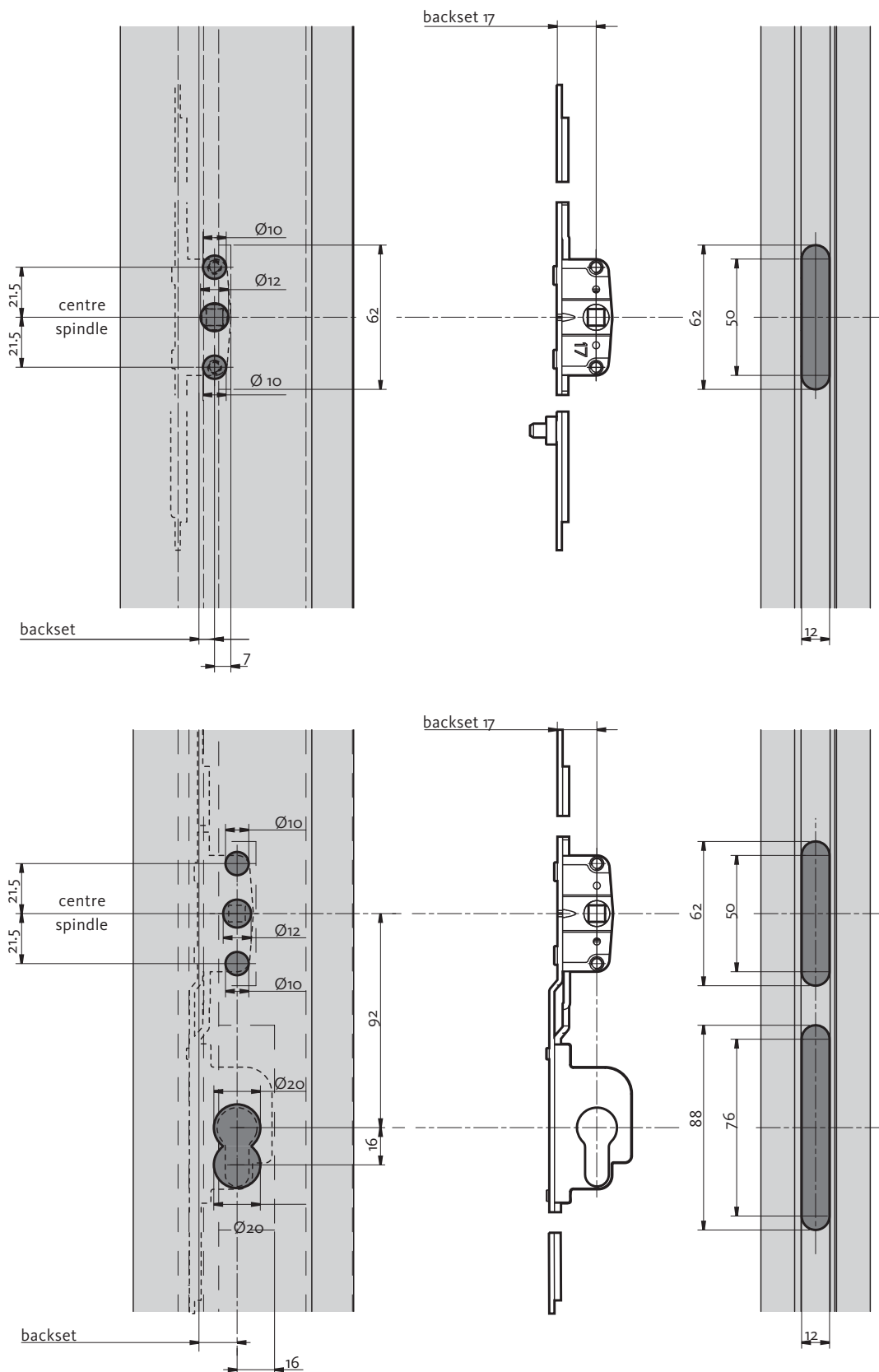
Drilling and routing hole-pattern



Espagnolettes

Single action Espagnolettes - with 14 mm night vent hooks backset 17 mm

Drilling and routing hole-pattern



Strikers



SINGLE STRIKERS

Can be used on all locking points (with cams, 5 mm hocks, 14 mm hooks, 8 mm night-vent hooks, 14 mm claws) even on the locking point with anti-lift pin nearby.

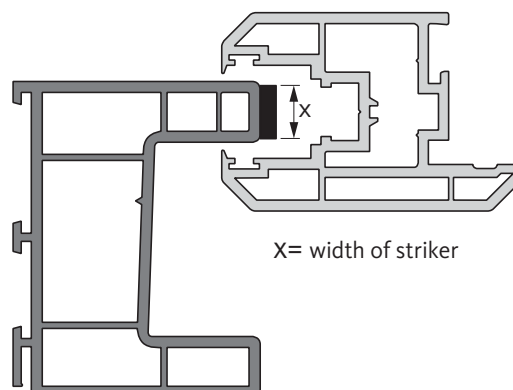
Strikers is dependent from profile!

STRIKER - FRAME		Pack.	Material Nr.
ALUPLAST			1070140
FINTRAL			1070141
KBE			1070140
KÖMMERLING SF2	- RIGHT		1007336
KÖMMERLING SF2	- LEFT		1007335
KÖMMERLING SF3			1070140
SCHÜCO			1070140
THYSSEN Prestige			1070141
TROCAL Innonova			1070141
VEKA			1070141

One-piece strikers

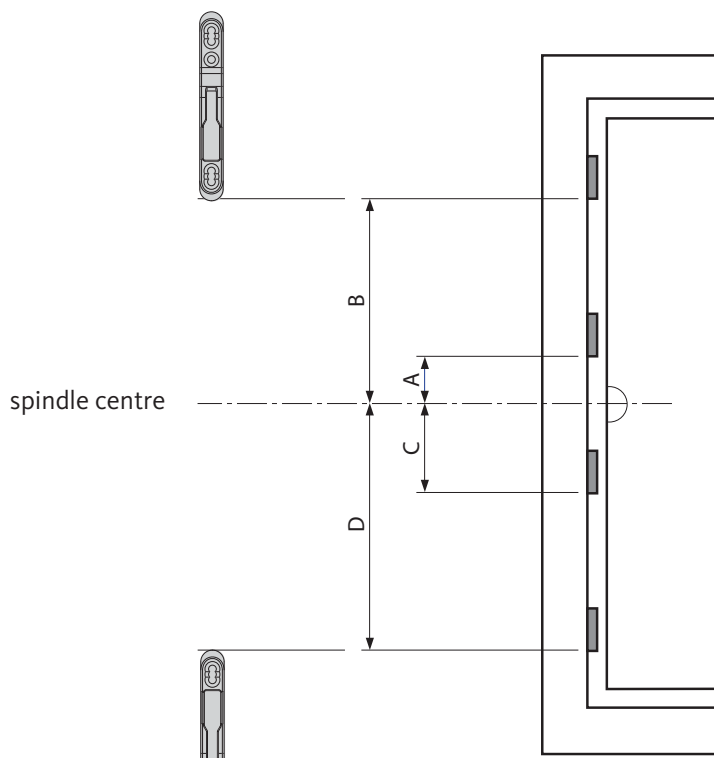
Lenght/mm	Width/mm	Typology	Material Nr.
600	15		1110682
1800	15		1110683
600	10		1110684
1800	10		1110685
685	15		1110686
1800	15		1110687

Profile section PVC



Installation of strikers - single action espagnolettes

Striker positions (mm)



Dimensions noted from spindle centre to the end of striker (point of entry side)

ESPAÑOLETTE, BACKSET 7 mm

Lenght (mm)	cams	A	B	C	D
400	2	-	93	-	177
600	2	-	193	-	277
800	2	-	293	-	377
1000	3	78	393	-	477
1200	3	78	493	-	577
1800	4	416	761	479	824

ESPAÑOLETTE, BACKSET 17 mm

Lenght (mm)	cams	A	B	C	D
240	2	-	38	-	122
400	2	-	93	-	177
600	2	-	193	-	277
800	2	-	293	-	377
1000	3	78	393	-	477
1200	3	78	493	-	577
1800	4	416	761	479	824
1800 Lockable	4	416	761	479	824

ESPAÑOLETTE, hook 5 mm, backset 17 mm

Lenght (mm)	cams	A	B	C	D
600	2	-	189	-	281
1800	4	411	756	484	829
1800 Lockable	4	411	756	484	829

ESPAÑOLETTE, hook 5 mm, backset 17 mm, with anti-mishandling device

Lenght (mm)	cams	A	B	C	D
600	2	-	189	-	281
1800 Lockable	4	411	756	484	829

ESPAÑOLETTE, hook 14 mm, backset 17 mm

Lenght (mm)	cams	A	B	C	D
600	2	-	189	-	281
1800	4	411	756	484	829
1800 Lockable	4	411	756	484	829

ESPAÑOLETTE, hook 14 mm, backset 22 mm,

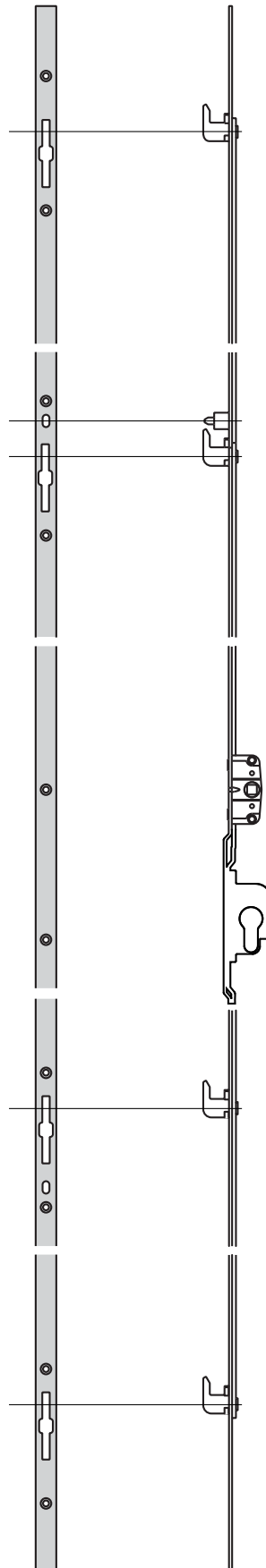
Lenght (mm)	cams	A	B	C	D
600	2	-	189	-	281
1800	4	411	756	484	829

ESPAÑOLETTE, night-vent hook, backset 17 mm

Lenght (mm)	cams	A	B	C	D
600	2	-	189	-	281
600 Lockable	2	-	189	-	281
1800 Lockable	4	411	756	484	829

Strikers - Installation of one and two piece strikers

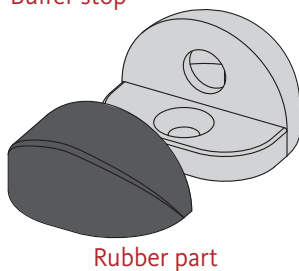
One-piece striker for single action espagnolettes



Accessories

BUFER STOP

Buffer stop



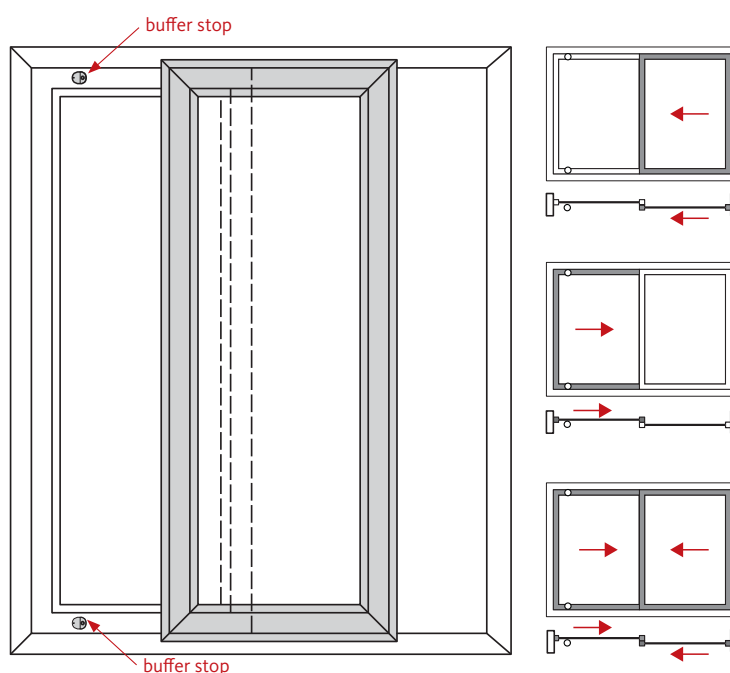
The buffer stop prevents the frame from being damaged when the window or door is being slammed shut. In case of diagrams with 2 overlapping movable sashes (diagram D and F) and the use of no pop-up handle on the backmost sash the handle on the backmost sash is protected as well.

Buffer stop (includes rubber part, without screws)

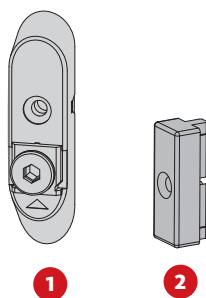
Description	Colour	Material Nr.
BUFFER STOP	Grey brown, RAL 8019	1077003
	Jet black, RAL 9005	1077005
	Traffic white, RAL 9016 White aluminium, RAL 9006	1077002

Rubber part

Description	Colour	Material Nr.
RUBER PART	Jet black, RAL 9005	1077004



ANTI-MISHANDLING DEVICE



This device allows the locking points to be moved only when the door has been closed, thus preventing damage to the mechanism.

Possible damage arising from the door being slammed shut with the hardware in the locked position is eliminated.

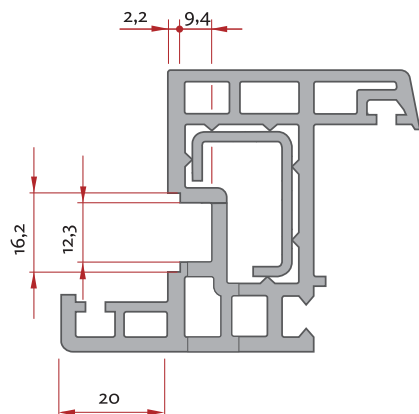
Can be used in combination with espagnolettes with 14 mm hooks or claws.

1	MISHANDLING DEVICE PM	1011131
2	MISHANDLING FRAME PART	1099327

SASH - SASH PROFILE, WINDOW HANDLE, DRILL HOLES AND INSTALATION

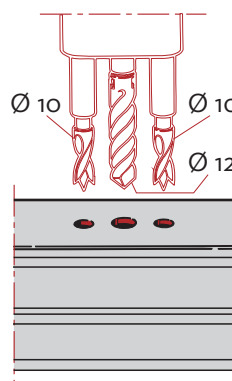
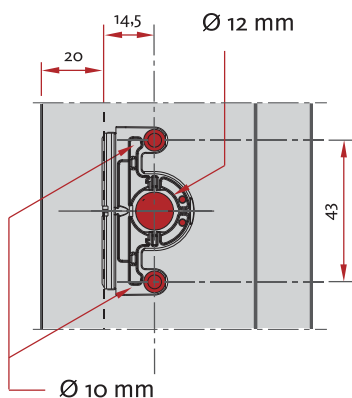
SASH CROSS SECTION

DIMENSION FOR HARDWARE



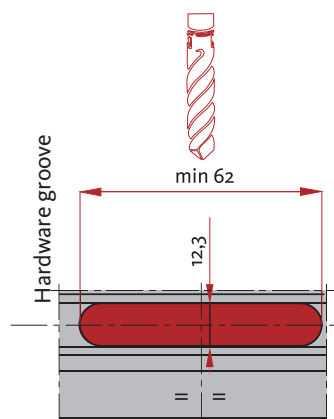
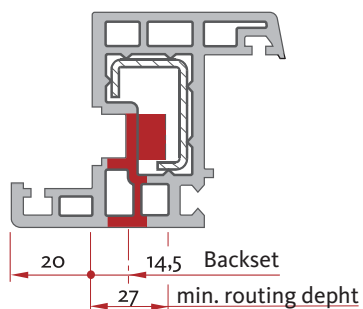
WINDOW-HANDLE DRILLING

GEAR-CASE SPROCKET AND LUGS' DRILL HOLES FOR THE WINDOW-HANDLE

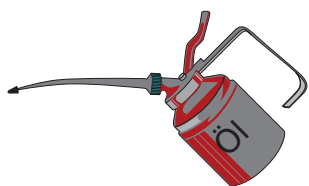
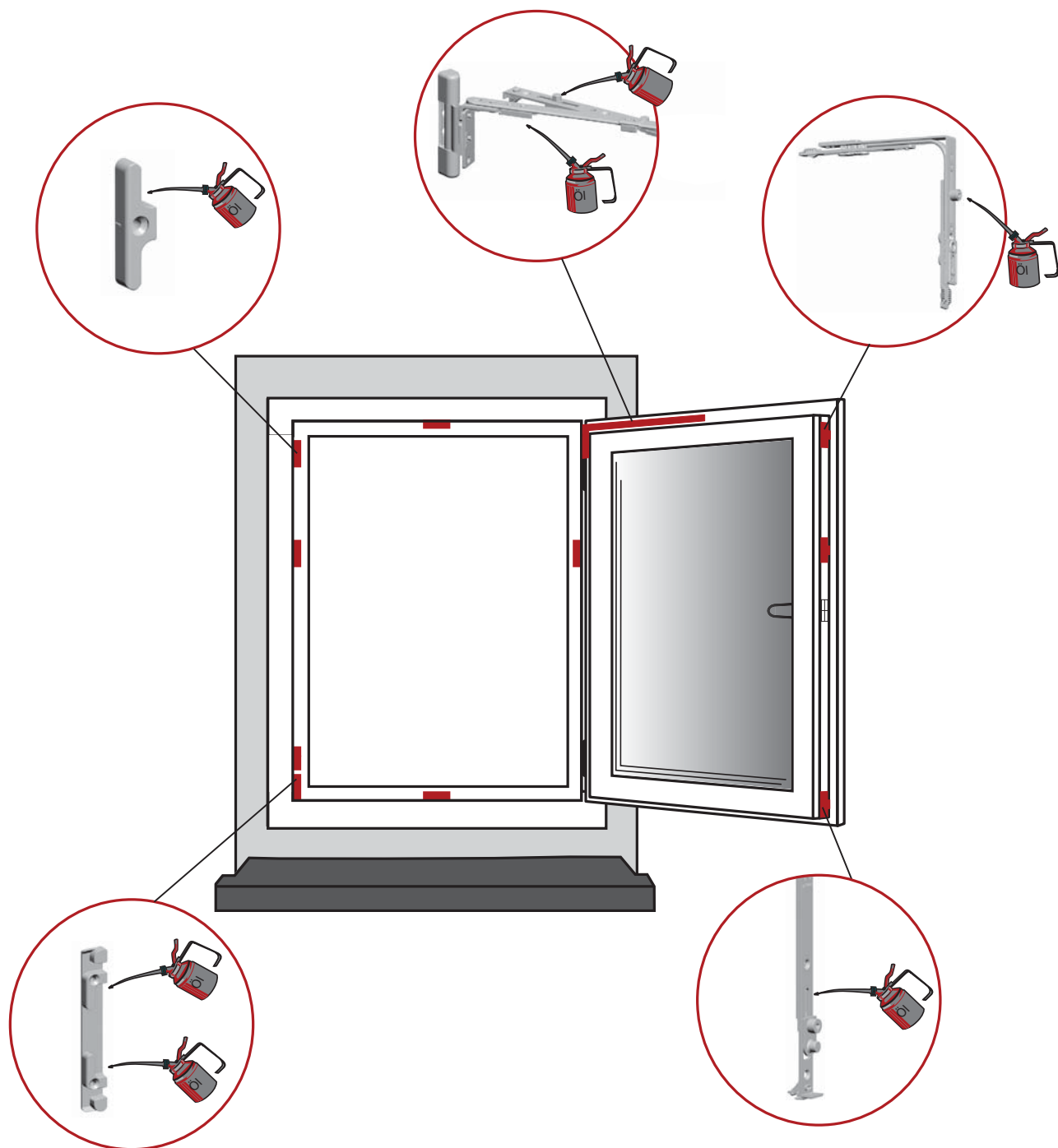


ROUTING

ESPAGNOLETTE GEAR-CASING



MAINTENANCE RECOMMENDATIONS



Regular greasing and oiling of operation-relevant components in the sash and frame is recommended at least once a year. In case of frequent use as in schools, hotels the oiling is recommended once in six month.

Acid free and non-resinous grease and/or oil from a specialized dealer has to be used.

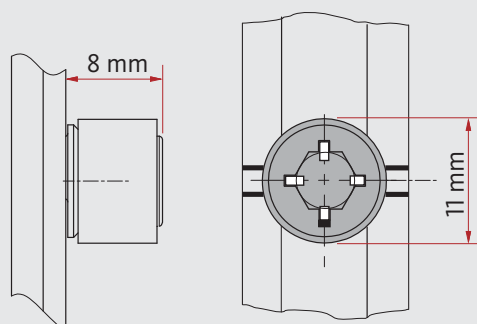
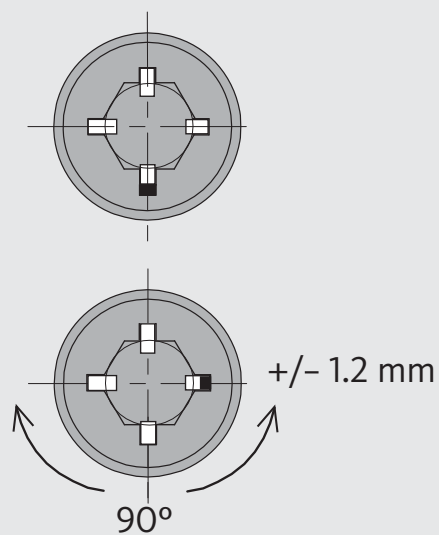


● ARX GREASE

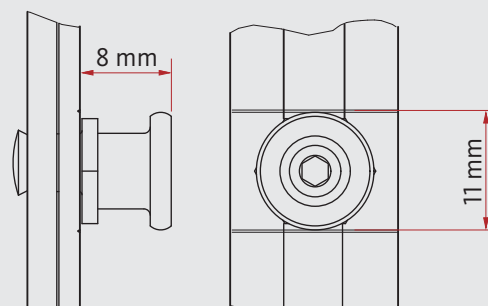
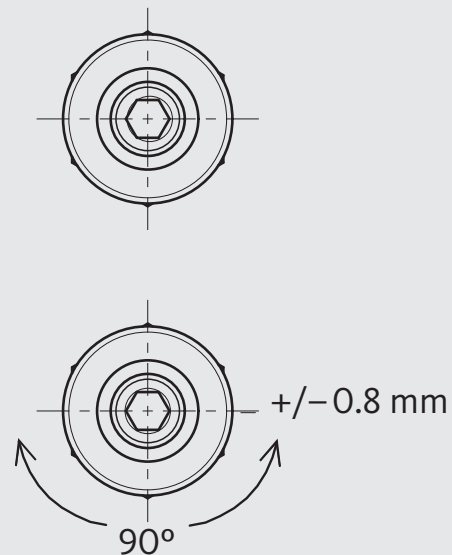
1055144

LOCKING PIN ADJUSTMENT INSTRUCTIONS

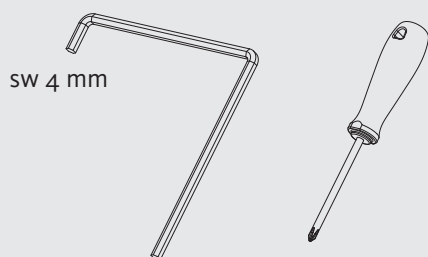
Locking pin R



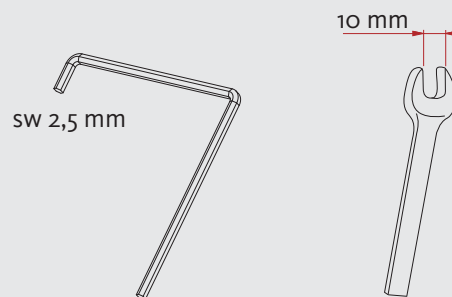
Locking pin RS



Adjustment tool



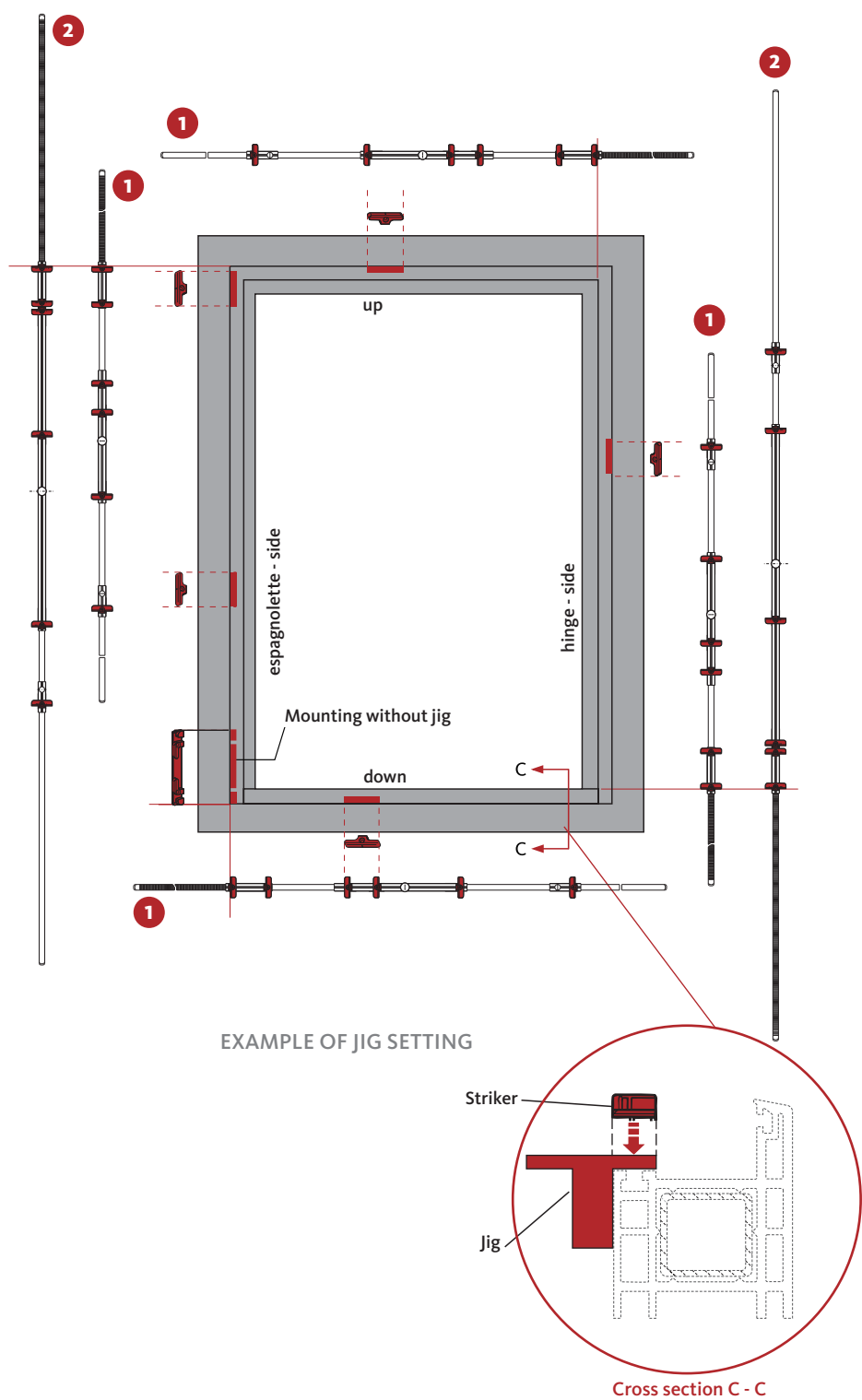
Adjustment tool



● ALLEN KEY 4mm
SCREW DRIVER PH3

1090862
1080695

STRIKER POSITIONING JIGS



Type	Description	Material Nr.
1	Teleskopic jig - variable handle height (window)	1103572
2	Teleskopic jig - variable handle height (door)	1103574



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