

ARX
SLIDE



Made in Europe

ARX
by KOVINOPLASTIKA LOŽ

LIFETIME
WARRANTY

Made in Europe

ARX
by KOVINOPLASTIKA LOŽ

ARX COAT
SURFACE
PROTECTION

ARX SLIDE

High quality, durable and simple
Sliding hardware for sliding doors and windows

2026

Bring premium quality
into your home for a lifetime.

ARX PORTFOLIO



IFT Rosenheim -
Certificate of conformity
for ARX SPIN and ARX
DOOR LOCK.

ARX SPIN



Turn and tilt hardware solutions
for windows and balcony doors.



ARX DOOR LOCK



Multipoint door lock solutions for
main and back entrance doors.



ARX CASEMENT



Solutions for
casement windows
-outward opening.



ARX SLIDE



Sliding hardware
solutions for doors
and windows.



ARX ACCESSORIES



High quality, durable
and simple accessories
for windows and doors.



Follow us:



www.arx-hardware.com



ARX – bring premium quality in your home for a lifetime

ARX is one of the leading providers of window and door hardware In Europe. Brand ARX is built on more than 67 years of foundation and experience of KOVINOPLASTIKA LOŽ. From that knowledge we are drawing the inspiration to create new and innovative solutions. Integrity in everything we do, quality of our work, and tailor-made building hardware solutions for our customers are the secret of our success and harmonious partnership with our customers. .

Window and door hardware tailored to your demands

Concerning costumers our goal is to provide functional, reliable & innovative experience of uncompromising quality that meets the highest standards of window and door hardware. We are focused on developing and applying best solutions in the field, while guaranteeing a flexible and efficient production process. Such approaches, in combination with the established knowledge, enable our experts to design and execute the most appropriate solutions tailored to your demands.

Our values, vision and mission

We are a team of engaged co-workers with the highest values like honesty, excellence, openness, endeavor and responsibility. We always strive to optimally use the knowledge and technologies, by which we develop and create the products and assemblies with higher added value, to ensure end users with a high level of security, wellbeing and best user experience. Our efforts have been rewarded by becoming established well-known development supplier. Being the best flexible and digitized niche solution developer and material modifier is our first and foremost mission.

CONTENTS

ABOUT	1
WHY ARX	6
BETTER THAN THE REST	7
STANDARDS AND CERTIFICATES	9
PRODUCT WARRANTY AND LIABILITY	10
IN-LINE	13
HIGH-QUALITY, DURABLE, SIMPLE	14
SYMBOLS LEGEND	15
SASH ARRANGEMENT	16
DIRECTION OF OPENING	16
PROFILE RECOMMENDATION	17
IN-LINE BASIC SCHEME	18
SINGLE ACTION IN-LINE ESPAGNOLETTE	20
CAM 8 mm BS 7 mm	20
CAM 8 mm BS 17 mm	21
HOOK 5 mm BS 17 mm	22
STRIKERS	23
ROLLERS	24
HANDLES	25
BUFFER STOP	25
SASH PROFILE TREATMENT	26
INDIVIDUAL STRIKER POSITIONING	27
LOCKING CAM ADJUSTMENT INSTRUCTIONS	28
MAINTENANCE INSTRUCTIONS	29
HKS	31
HIGH-QUALITY, DURABLE, SIMPLE	32
SYMBOLS LEGEND	34
SASH ARRANGEMENT	35
DIRECTION OF OPENING	35
COMPARISON OF HKS SYSTEM OPENING	36
PROFILE RECOMMENDATION	37
APPLICATION DIAGRAMS	38
Tilt & Slide - HKS	38
Tilt & Slide - HKS 160 kg	38
Tilt & Slide - HKS 100 kg	38
TILT & SLIDE - HKS 100 / 160 BASIC SCHEME	40
T&T ESPAGNOLETTE M	42
Centered / variable handle height	42
T&T ESPAGNOLETTE M - larger backsets	43
Centered / variable handle height	43
T&T ESPAGNOLETTE M - larger backsets + lockable	44
Centered / variable handle height	44
T&T ESPAGNOLETTE KV	45
Fixed handle height	45

CONTENTS

CORNER DRIVE	46
ESPAÑOLETTE EXTENSION	46
CENTER LOCK	47
Vertical	47
Horizontal	47
STRIKER	48
T&Ti STRIKER	49
SECURITY STRIKER	50
SET OF RAILS	51
Tilt & Slide - HKS	51
STAY SYSTEM	52
Tilt & Slide - HKS	52
SET OF BOGIES	52
Tilt & Slide - HKS	52
HKS 160 SET	53
COVER CAPS HKS 100	53
HANDLES	54
Window handles	54
Slide handles	55
LOCKING CAM ADJUSTMENT INSTRUCTIONS	56
Rolling cam - R	56
Rolling security cam - RS	57
STRIKER JIGS INSTALLATION INSTRUCTIONS	58
Types	58
Instructions for use	59
TOP & BOTTOM RAIL JIG - HKS	59
SASH PROFILE TREATMENT	60
Window-handle drilling	60
Gear-case routing	60
Lock-case drilling	61
SASH HARDWARE INSTALLATION INSTRUCTIONS	62
Tilt & Slide - HKS	62
FRAME HARDWARE INSTALLATION INSTRUCTIONS	64
Mounting of bogies	64
Parallel alignment of bogies	65
Mounting of guide & bottom track and stay system	66
Hanging sash	67
Installation of guide block and sash alignment	68
Sash alignment	69
Buffer installation	70
Bogie safety cover and support arm cover installation	71
MAINTENANCE INSTRUCTIONS	72
LIFT AND SLIDE	73
PASS	77
PRACTICAL AGILE SLIDING SYSTEM	77
HIGH-QUALITY, DURABLE, SIMPLE	78
SYMBOLS LEGEND	79
SASH ARRANGEMENT	80

CONTENTS

DIRECTION OF OPENING	80
PASS SYSTEM OPENING	81
APPLICATION DIAGRAM.....	82
PROFILE RECOMMENDATION	83
RETRACT & SLIDE - PASS 150 BASIC SCHEME.....	84
PRODUCT PORTFOLIO	86
Espagnolettes and extensions.....	86
Basic set	87
PROFILE TREATMENT.....	88
Espagnolette	88
Vertical back strikers	89
Corner guide strikers	90
Bogies.....	90
Middle horizontal strikers	91
STRIKER POSITIONS	92
ADJUSTMENT INSTRUCTIONS	93
MAINTENANCE INSTRUCTIONS	94
NOTES	95

NOTES _____



Quality-to-price ratio that ensures for the best market performance

Besides its distinctive quality, the ARX building hardware has an excellent quality-to-price ratio, providing you with a fast and effective strategy of winning market positions both in the Europe and globally. We provide the best quality, value, and service to meet our business partners' and users' needs, never leaving them in the lurch.

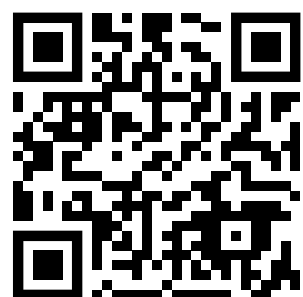
Accelerating the pace of innovation

Through the years we were never the silent observers of migration from old window and door hardware solutions to the nowadays highly technological ones, tailored for smart homes and buildings. Experiences, engineering knowledge and valuable partnerships helped us respond to and anticipate market needs, adapt our methods or materials, and innovate. Development of high-quality new products that have left a mark on the industry and decades of experience have shaped our unique path.



**There is hardware,
and then there is ARX.**

FOR FULL TERMS
AND CONDITIONS,
PLEASE VISIT:





Based on the huge versatility of our knowledge implemented into the design and applied research, we do not simply offer you products; we provide you with the following BENEFITS:



ARX lifetime warranty

For you to have complete confidence in our products, proven technologies, and expert skills, like we do, we provide you with a Lifetime Warranty on our building hardware functionality. The warranty applies exclusively to the use of the ARX building hardware, and to all manufacturers and suppliers of doors and windows who use ARX building hardware.



ARX surface protection and resistance coating ARX

Surface protection and resistance coating ARX Coat, provided by Kovino-plastika Lož is one of the best on the market.

Testing of corrosion resistant coating is carried out in our salt chamber according to standard ISO 9227 (NSS). It is done periodically, so we control the whole process. In case of deviations from perfect surface protection, immediate actions are applied to the manufacturing process to produce only the best products.

ARX building hardware suits the highest requirements of corrosion resistance as it reaches the 5th grade according to the standard EN 1670. That is an equivalent of 480 hours of salt spray.

ARX Coat is a proper surface protection, which provides good anti-corrosion durability and a trendy silver appearance, all due to our ARX internal processes.



Versatile hardware

ARX's technology enables effortless operation of window sashes and doors. The system can be fitted to a wide range of sizes and allows for simple integration of components during fabrication process.

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

- 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,
- Provides a highly automated hardware installation to the sash and window frame,
- Proper surface protection ARX Coat.

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



Manufacturer's standards and certificates

Our certificates present our dedication to the verifiable quality standards for processes and products. We are proud that we have repeatedly earned them. In every certificate, we see undisputed proof of long-term commitment to our partners, employees, and leadership.

MANAGEMENT SYSTEM CERTIFICATES:

- ISO 9001
- ISO 14001

CERTIFICATE OF CONFORMITY:

- IFT (QM 328)
- IFT (QM 342)

Kovinoplastika Lož acquired many important standards and certificates. Among them is EN1670 (grade 5) which has been held without interruption.



1. Introduction

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 slide hardware must be observed. Failure to comply with the following information exempts the manufacturer from liability.

2. Product information and stipulated application

2.1 Quality Assurance Association for Locks and Hardware

(Gütegemeinschaft Schlösser und Beschläge) published in the VHBH Directive states that sliding hardware is hardware for sliding sashes, which are used principally used as barriers to the outside.

This hardware is used for:

- bringing sashes into sliding mode, by activation of a handle, into a slide position (IL system),
- bringing sashes into sliding mode, by activation of a handle, into a slide position and bringing sashes into ventilation mode, by activation of a handle, into a vent position (PASS system),
- bringing sashes into ventilation mode, by activation of a handle, into a vent position (SP system),
- bringing sashes into tilt mode, by activation of a handle, into a tilt position (HKS system),
- bringing sashes into sliding mode, by activation of a handle, into a slide position (SP and HKS systems).

Sliding hardware is used for installation in sliding windows and doors which are to be vertically installed.

According to the definition above, the regular function of the sliding hardware is closing the sliding windows and doors and opening them in different airing positions. When the sash is closed, the resistance of a gasket normally needs to be overcome.

2.2 Misuse – exclusion of liability

Misuse is not compliant with the basic purpose of hardware. Anti-theft sliding 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.

2.3 Restrictions on the use

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

a sliding window or door fixedly open, is to install additional hardware elements.

2.4 Use in case of special requirements

Wind resistance of the closed and bolted sliding window or door depends on the actual structure of the sliding window or doors. In case a sliding window or 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 sliding windows and 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, sliding hardware meets 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 doors are required.

3. Misuse of the product

Misuse of the sliding hardware for sliding window and door (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 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 sliding window's or door's sashes (if, for example, children swing on the windows or door sashes),
- inserting a hand or an object into the rebate between the window and the sash when closing the sliding window or doors (risk of injury).

4. Product warranty

The manufacturer of ARX building hardware provides a life-time warranty on functionality and a 10-year warranty on surface protection, starting from the date of delivery of goods that is defined or can be defined and applies to the territory of the EU.

The warranty applies exclusively to the use of ARX building hardware components. The warranty applies to all manufacturers and suppliers of sliding windows and doors who use ARX building hardware, delivered at their delivery or production after April 1, 2021.

For more information please check warranty conditions on webpage - www.arx-hardware.com.

5. Product characteristics – manufacturer's instructions for use

5.1 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.

5.2 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.

5.3 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 sliding windows and door sashes), must be followed.

5.4 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 sliding window or door installation is to be done professionally,
- the sliding window or door manufacturer must deliver the instructions for use and maintenance to the user, along with the guidelines regarding product warranty.

6. 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 sliding hardware.
- only the cleaning and maintenance agents, which do not reduce the anti-corrosion hardware protection, may be used.

Hardware installation or mounting must be provided by highly-qualified experts. In case of surface treatment for sliding windows and 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.

6.1 Maintaining the quality of surface treatment

In normal climate, the 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 sliding window or door 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 sliding windows and doors must be provided; this is particularly important for sliding windows and 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.

7. 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 sliding hardware for windows and 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 sliding windows and doors,
- the manufacturers of sliding windows and 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 sliding hardware systems for windows and doors should be observed. In case of non-compliance the manufacturer is exempt from liability.



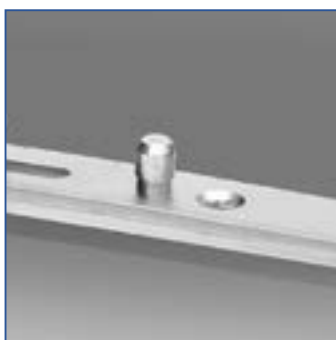
In-Line

Basic schemes
Proposed guideline
Product portfolio
Detailed information



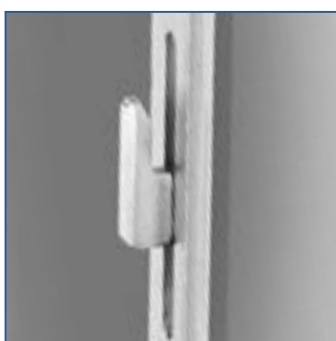
ARX Coat – High quality surface protection

ARX Coat 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.



Anti-lift pin

This simple, yet innovative pin prevents the sliding window or door from being lifted off the rails, when in closed position.



In-Line hook

Stainless steel in-line hooks offer increased security in comparison with security cams, but they lack the adjustment for gasket pressure.

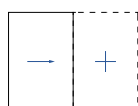


Security cam

Security cams are adjustable, so it is possible to adjust the cam to achieve better gasket pressure. With great level of compression adjustment (+/- 1 mm), it is a perfect solution for optimal sealing.

Symbols

In the part describing the In-Line system, different symbols, diagrams and tables are used in order to provide a clear picture and demonstration of the hardware application. The meanings are as follows:



In-Line



Rebate sash height



Rebate sash width



Max. sash mass



Material number



Security cam



IL Hook



IL individual striker



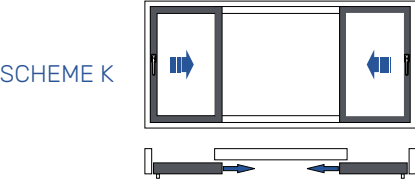
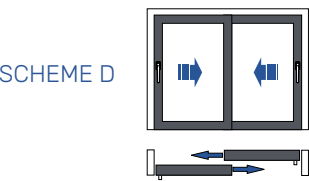
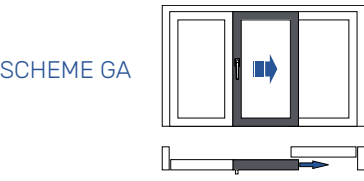
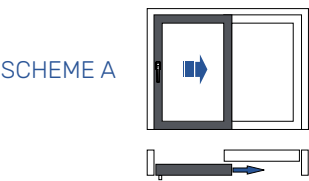
Packaging



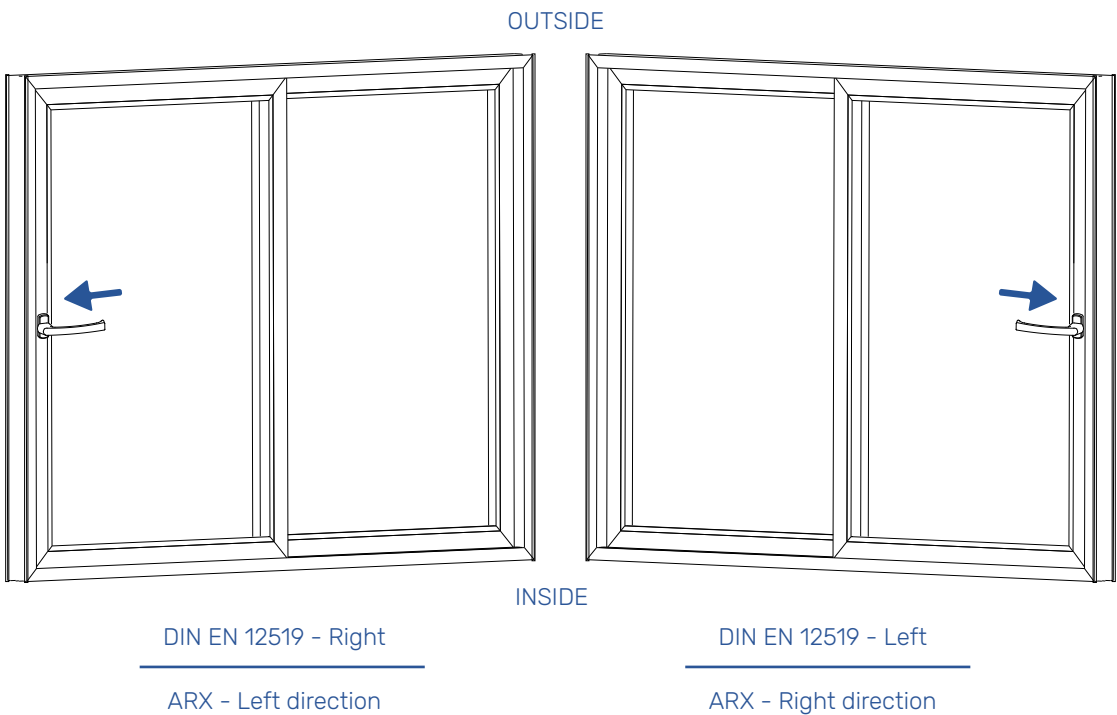
Length / dimension

Abbreviation	Description	Units
SRH	SASH REBATE HEIGHT	mm
SRW	SASH REBATE WIDTH	mm
BS	BACKSET	mm
H	NUMBER OF IL HOOKS	/
S	NUMBER OF SECURITY CAMS	/
L	LENGTH	mm
W	WIDTH	mm
M	MAX. LOAD FOR SET (2 PCS)	kg
Y	HEIGHT ADJUSTMENT	mm

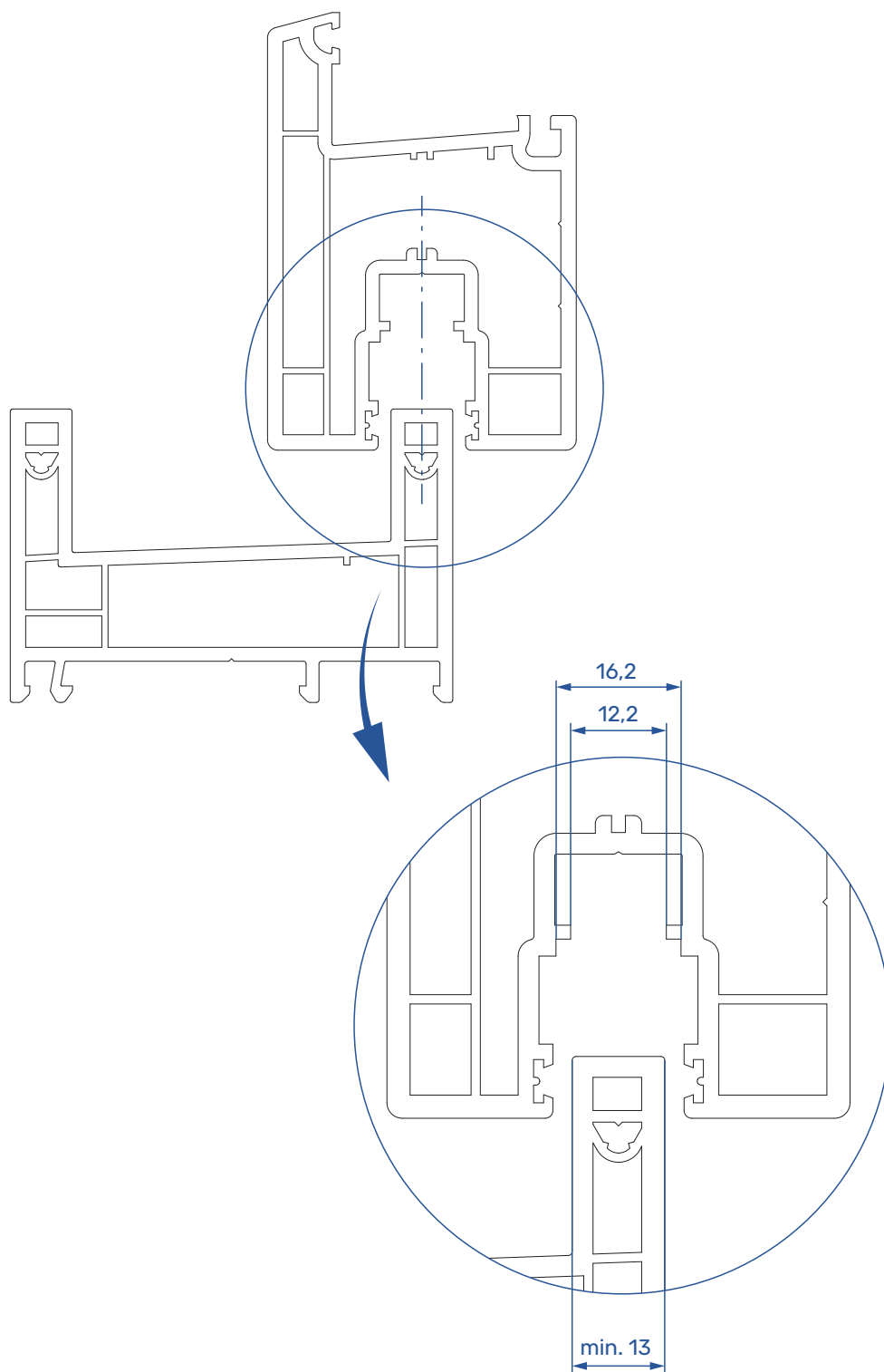
SASH ARRANGEMENT



DIRECTION OF OPENING



Profile dimensioning for PVC



IN-LINE BASIC SCHEME

1 SINGLE ACTION ESPAGNOLETTES

CAM 8 mm | BS 7
CAM 8 mm | BS 17 | LOCKABLE
HOOK 5 mm | BS 17
HOOK 5 mm | BS 17 | LOCKABLE

PAGE 20
PAGE 21
PAGE 22
PAGE 22

2 STRIKERS

INDIVIDUAL STRIKER
ONE PIECE STRIKER

PAGE 23
PAGE 23

3 ROLLERS

LIGHT ROLLER 100 kg
STANDARD ROLLER 150 kg
HEAVY DUTY ROLLER 200 kg

PAGE 24
PAGE 24
PAGE 24

4 IN-LINE HANDLES

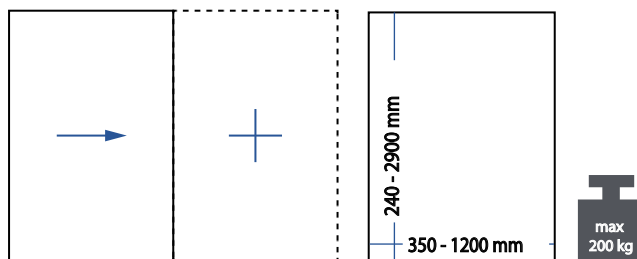
HANDLE
HANDLE - LOCKABLE
POP-UP
POP-UP - LOCKABLE

PAGE 25
PAGE 25
PAGE 25
PAGE 25

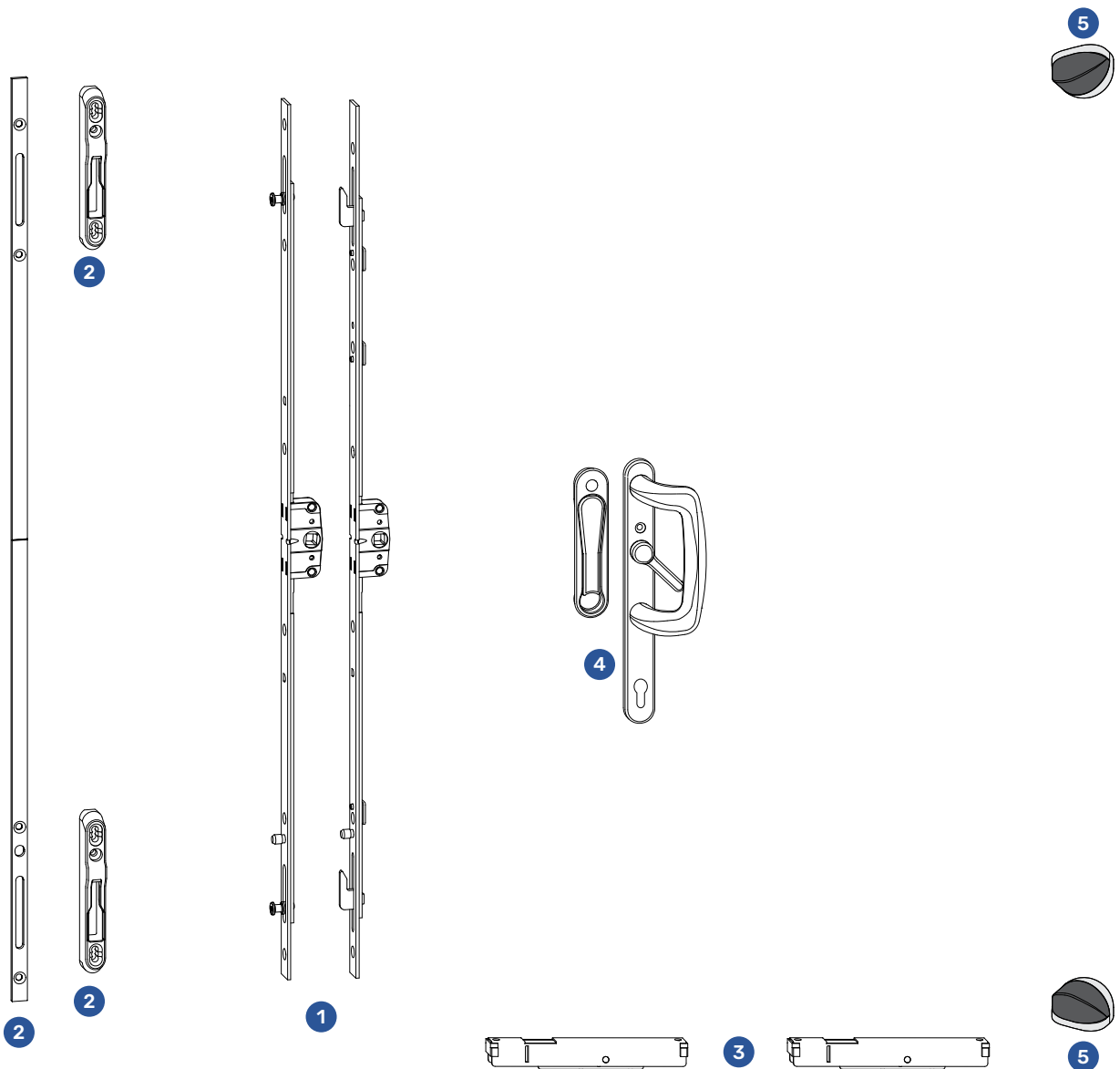
5 ACCESSORIES

BUFFER STOP

PAGE 25



* MAX. SRW / SRH RATIO = 1 : 2,5



SINGLE ACTION IN-LINE ESPAGNOLETTE

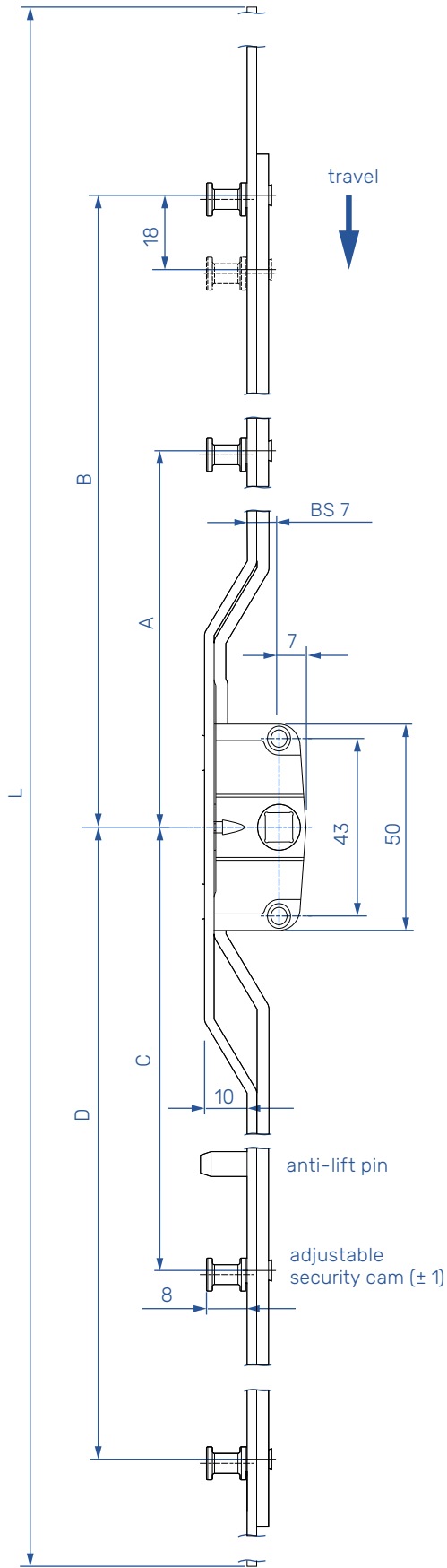
CAM 8 mm || BS 7 mm

ESPAGNOLETTES

				
SRH	L	S	PACK	MATERIAL
400 - 600	400	2	10	1110657
601 - 800	600	2	10	1110658
801 - 1000	800	2	10	1110659
1001 - 1200	1000	3	10	1110660
1201 - 1800	1200	3	10	1110661
1801 - 2900	1800	4	10	1110662

KEY DIMENSIONS OF ESPAGNOLETTES

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



SINGLE ACTION IN-LINE ESPAGNOLETTE

CAM 8 mm || BS 17 mm

ESPAGNOLETTES

				
SRH	L	S	PACK	MATERIAL
240 - 400	240	2	10	1110663
400 - 600	400	2	10	1110664
601 - 800	600	2	10	1110665
801 - 1000	800	2	10	1110666
1001 - 1200	1000	3	10	1110667
1201 - 1800	1200	3	10	1110668
1801 - 2900	1800	4	10	1110669

LOCKABLE ESPAGNOLETTES

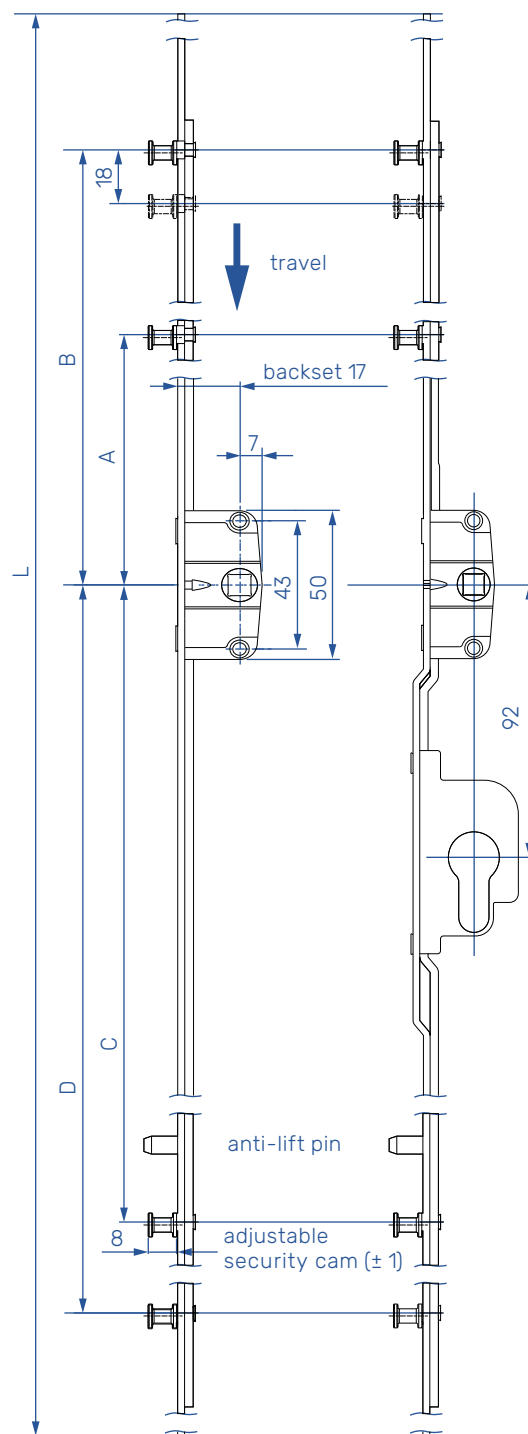
				
SRH	L	S	PACK	MATERIAL
1801 - 2900	1800	4	10	1110670

KEY DIMENSIONS OF ESPAGNOLETTES

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

KEY DIMENSIONS OF LOCKABLE ESPAGNOLETTES

L	A	B	C	D
1800	466	881	429	774



SINGLE ACTION IN-LINE ESPAGNOLETTE

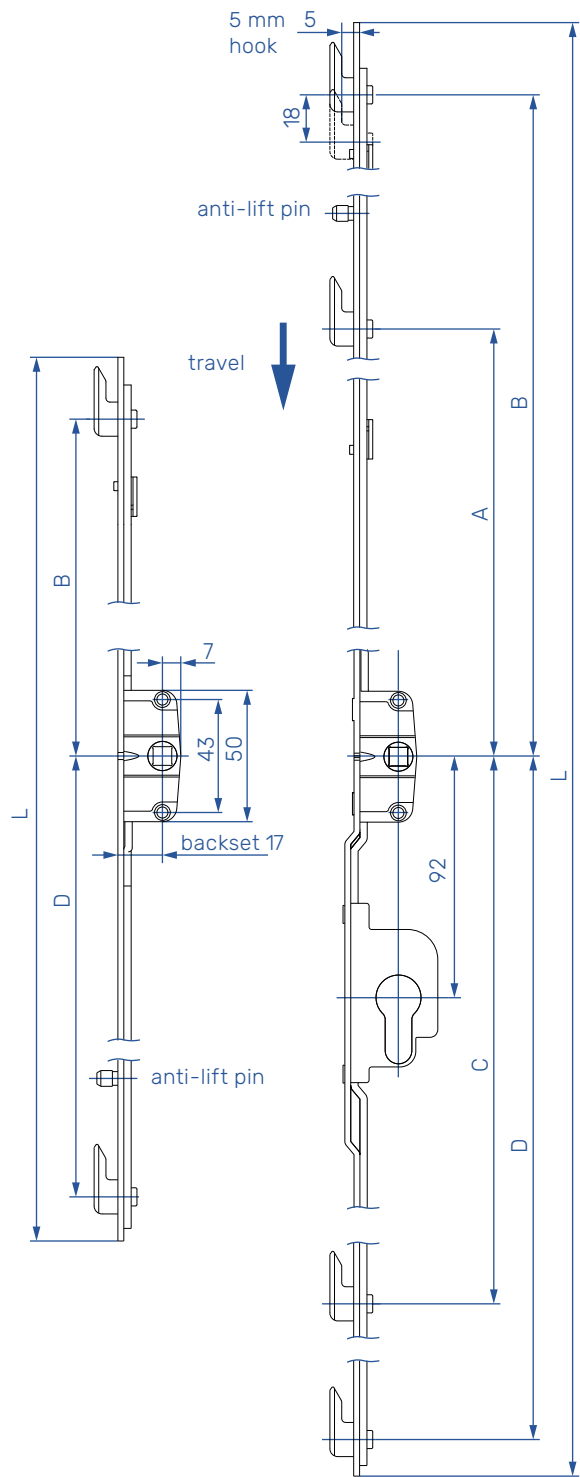
HOOK 5 mm || BS 17 mm

ESPAGNOLETTES

				
SRH	L	H	PACK	MATERIAL
600 - 1800	600	2	10	1110671
1801 - 2900	1800	4	10	1110672

LOCKABLE ESPAGNOLETTES

				
SRH	L	H	PACK	MATERIAL
1801 - 2900	1800	4	10	1110673



KEY DIMENSIONS OF ESPAGNOLETTES

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

KEY DIMENSIONS OF LOCKABLE ESPAGNOLETTES

L	A	B	C	D
1800	463	808	432	777

STRIKERS

1 INDIVIDUAL IL STRIKERS

PROFILE	PACK	MATERIAL
ALUPLAST	100	1070140
EUROPA	50	1119188
FINS	100	1070141
ORTA	100	1070140
PROFINE KBE	100	1070140
PROFINE KOMMERLING	100	1070140
PROFINE KOMMERLING SF2 - LEFT	50	1007336
PROFINE KOMMERLING SF2 - RIGHT	50	1007335
PROFINE TROCAL	100	1070141
REHAU/DECEUNINCK	100	1129151
SCHUCO	100	1070140
THYSSEN	100	1070141
VEKA	100	1070141
VHS HALO	50	1119189

2 NIGHT VENT STRIKER

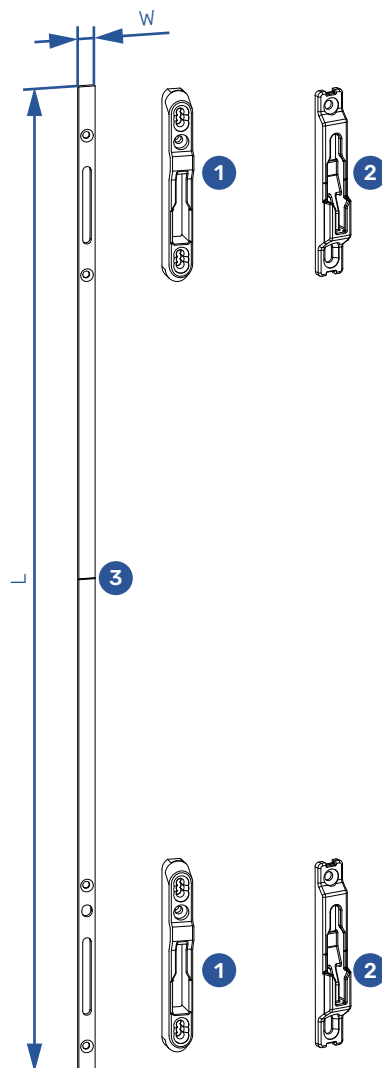
100 1155648

2.1 PACKERS

SLINOVA	100	1155650
C 70	100	1155652
GEALAN 74	100	1155660
PREMILINE	100	1155661

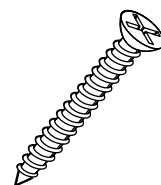
3 ONE PIECE IL STRIKERS

L	W	HOOK / CAM	PACK	MATERIAL
600	10	2	40	1110684
1800	10	4	10	1110685
1800	15	4	20	1110683
1800 ¹⁾	15	4	10	1110687



SCREWS FOR FIXING HARDWARE COMPONENTS

TYPE	DESCRIPTION	SIZE	MATERIAL
1	SCREW	4,2 x 25 mm	1134209
2	SCREW	4,2 x 35 mm	1134210

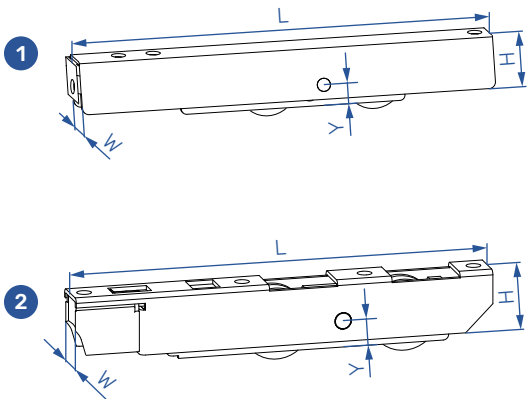


* ALL STRIKERS HAVE ANTI-LIFT PIN HOLE

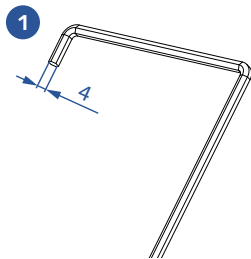
¹⁾ WITH CL HOLDER - FOR GROOVE

ROLLERS

								
TYPE	DESCRIPTION	M	H	W	Y	L	PACK	MATERIAL
1	LIGHT-WEIGHT ROLLER	100	20	12	6	157	1	1091223
2	HEAVY-DUTY ROLLER	200	20	16	5	153	1	1088924



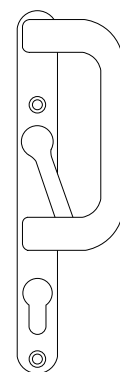
ROLLER HEIGHT ADJUSTMENT TOOLS



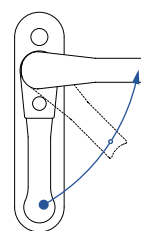
					
TYPE	DESCRIPTION	ROLLER	SIZE	MATERIAL	
1	HEX KEY	1, 3	4 mm	1095750	

HANDLES

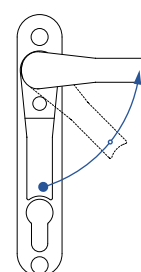
TYPE	DESCRIPTION			
		COLOR	PACK	MATERIAL
1	IN-LINE HANDLE LOCKABLE	WHITE	1	1117160
		BLACK	1	1117162
		CHROME	1	1130975
		GOLD	1	1130977
		SILVER	1	1130979
2	POP-UP HANDLE	WHITE	30	1014302
3	POP-UP HANDLE LOCKABLE	WHITE	30	1014303



1



2

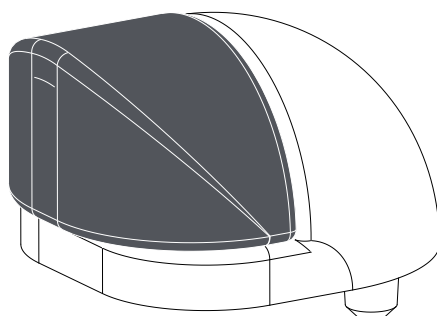


3

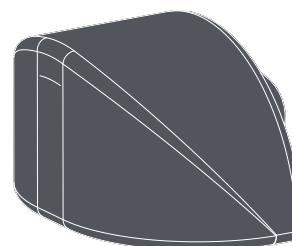
BUFFER STOP

TYPE	DESCRIPTION			
		COLOR	PACK	MATERIAL
1	BUFFER STOP WITH RUBBER	GREY BROWN	100	1120498
		BLACK	100	1120512
		WHITE	100	1120495
		SILVER	100	1120516
2	RUBBER	BLACK	100	1120500

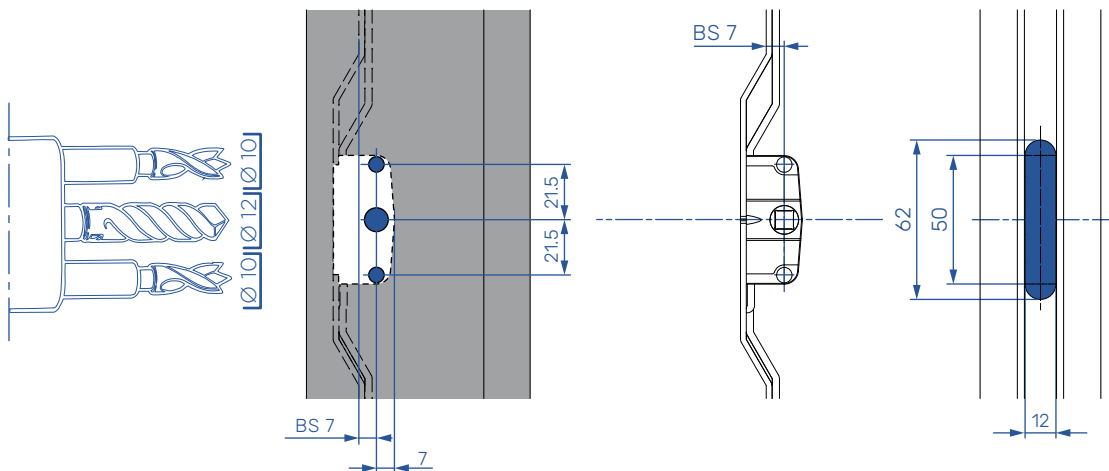
1



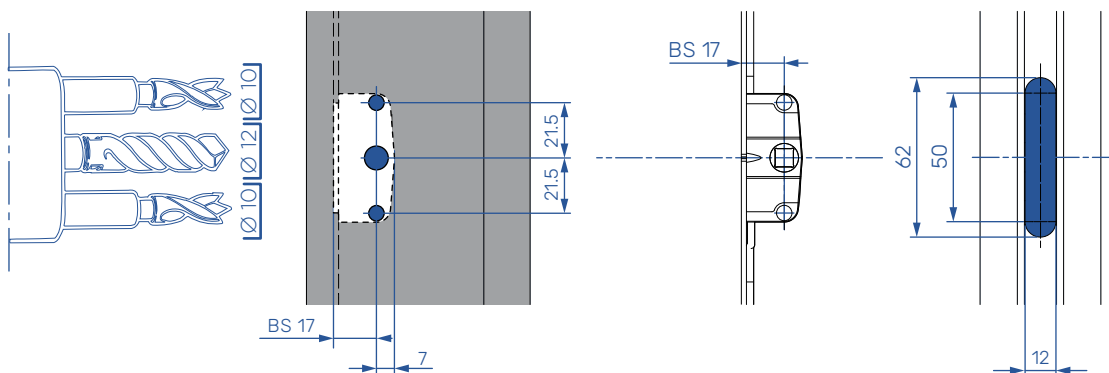
2



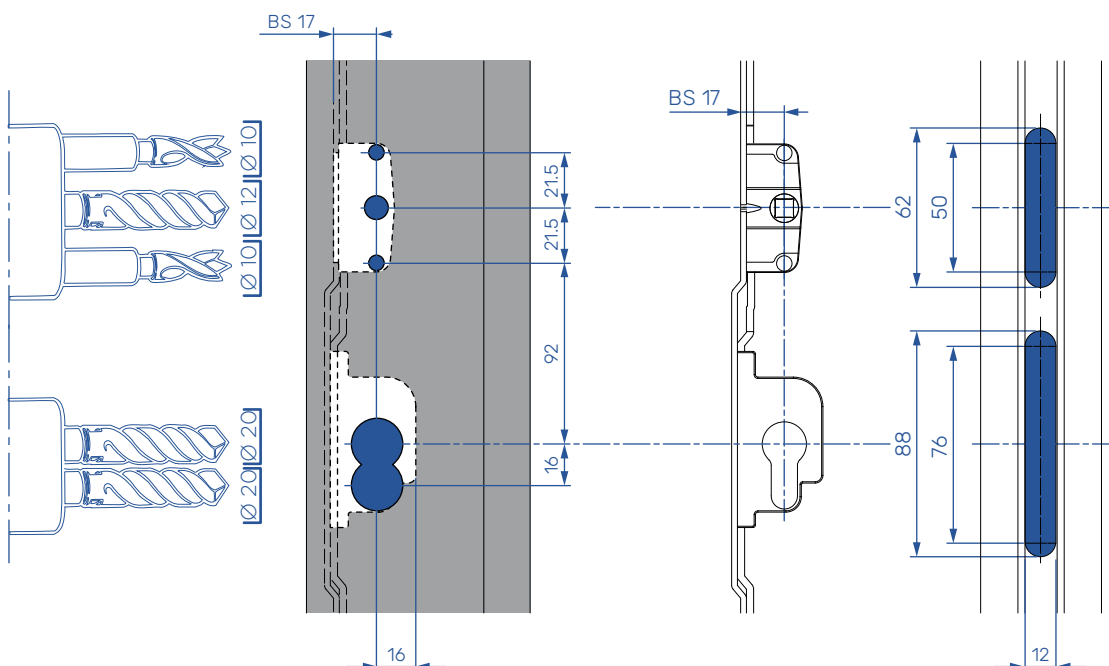
BS 7 - non lockable



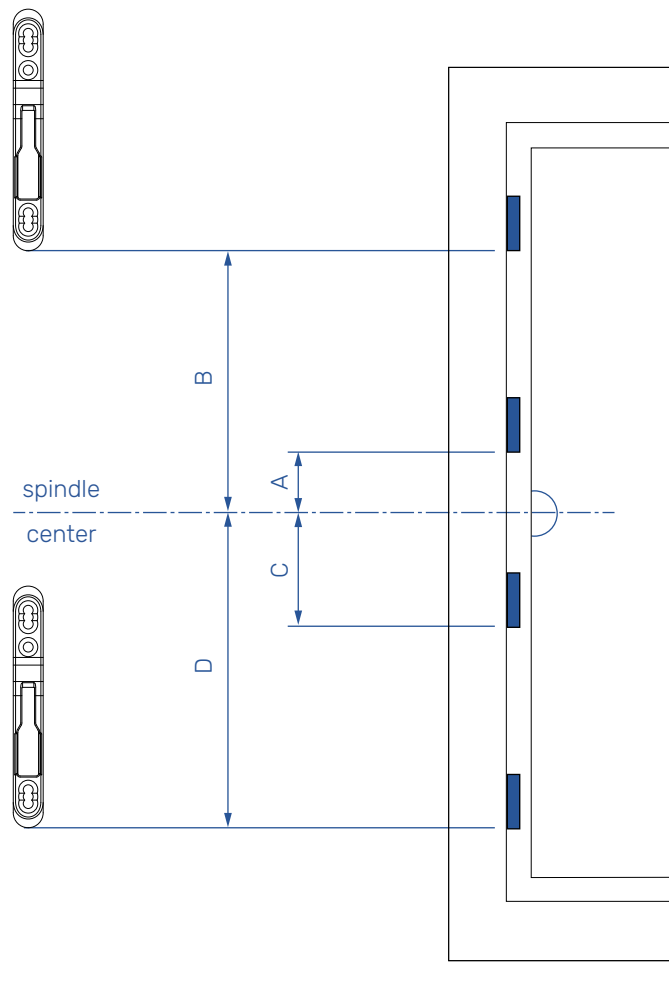
BS 17 - non lockable



BS 17 - lockable



INDIVIDUAL STRIKER POSITIONING



ESPAG. - CAM 8 mm || BS 7 mm

L	CAM	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

ESPAG. - HOOK 5 mm || BS 17 mm

L	HOOK	A	B	C	D
600	2	•	489	•	281
1800	4	411	756	484	829
1800 ¹⁾	4	411	756	484	829

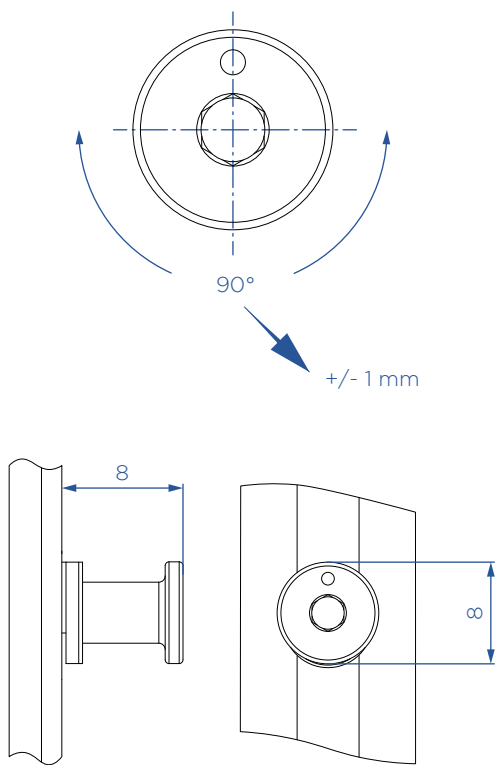
ESPAG. - CAM 8 mm || BS 17 mm

L	CAM	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 ¹⁾	4	416	761	479	824

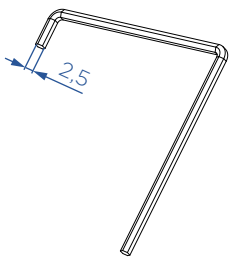
¹⁾ LOCKABLE

LOCKING CAM ADJUSTMENT INSTRUCTIONS

ADJUSTMENT



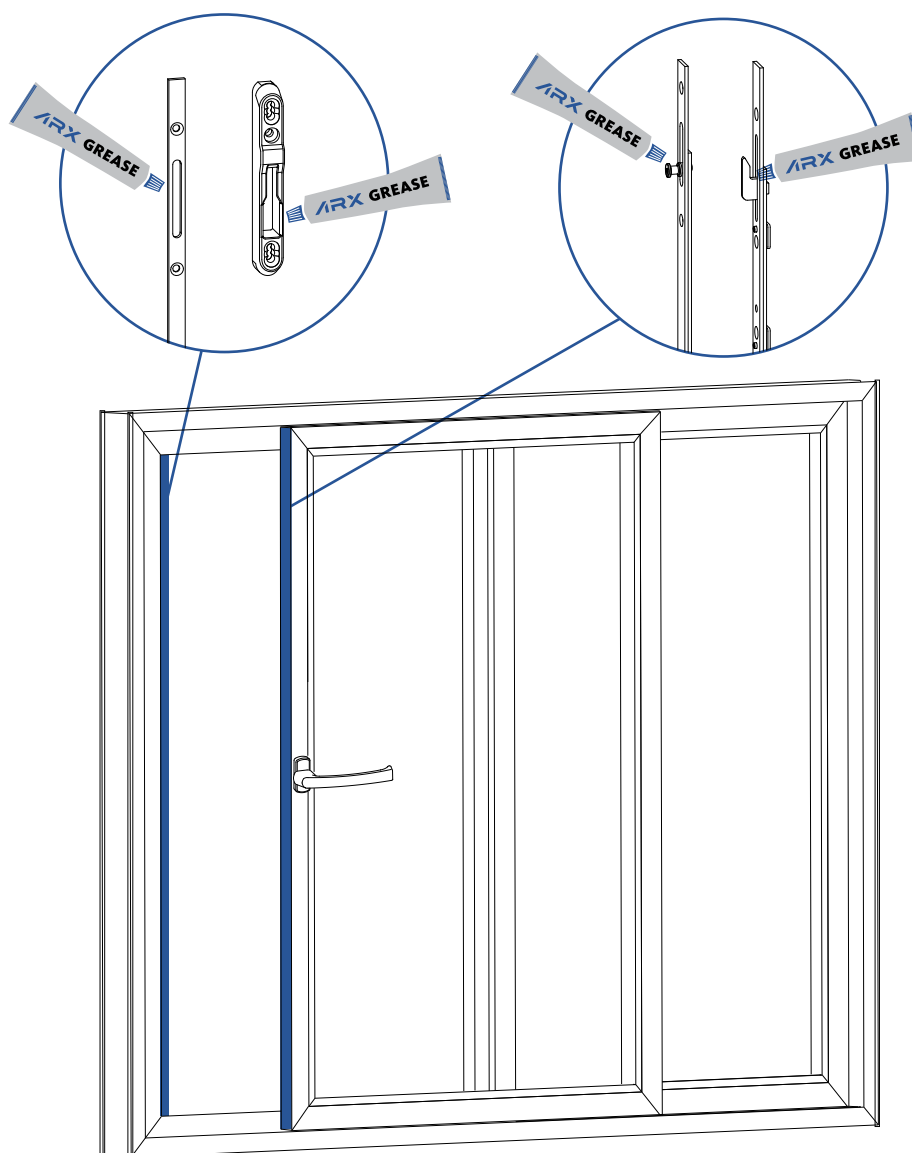
SECURITY CAM ADJUSTMENT TOOL



HEX KEY 2,5 mm

			
DESCRIPTION		SIZE	MATERIAL
HEX KEY		2,5 mm	/

MAINTENANCE INSTRUCTIONS



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 months.

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



DESCRIPTION	MATERIAL
ARX - HIGH QUALITY HARDWARE GREASE	1055144





HKS

Basic schemes
Proposed guideline
Product portfolio
Detailed information



ARX Coat – High quality surface protection

ARX Coat 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.



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.



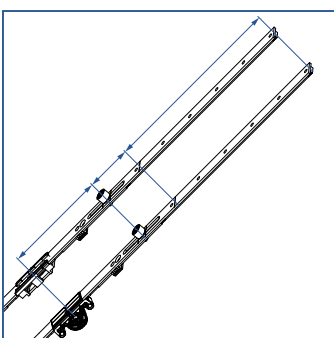
RS cam

RS cams provide superior level of security at closing points (with security strikers). Their height adjusts automatically to fit the air-gap between sash and frame. The compression can be regulated by $\pm 0.8\text{mm}$ (hex key size 2.5 or spanner size 10). The rolling cam enables smoother and easier closing operation. RS cams can be used in combination with both security strikers or standard strikers.



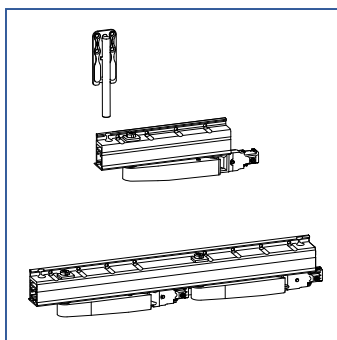
Imprinted bumps on faceplate

ARX's easy move is additionally helped by imprinted bumps on faceplates which successfully reduce friction and surface protection wear.



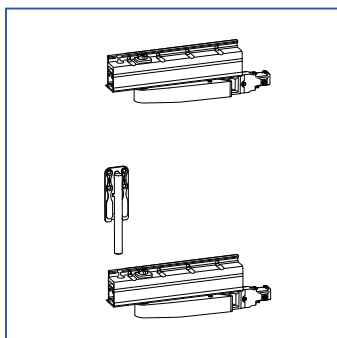
Center locks and DK M espagnolettes – uniform length

All center locks for slide hardware are made in uniform length with DK M espagnolettes. Both are made in same lengths and with the same number of cams.



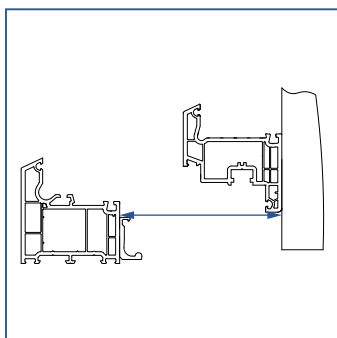
SP - max. sash weight up to 200 kg

For smaller sliding windows and doors, you can choose basic SP bogies set, which are meant to work at maximum load 160 kg. When choosing TWIN bogies with bigger sashes, this max. load capacity increases to 200 kg. That way, you can enjoy more, observing the nature through large glass window.



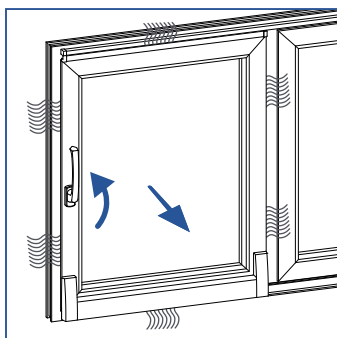
HKS - max. sash weight up to 160 kg

For smaller sliding windows and doors, you can choose basic HKS bogies set, which are meant to work at maximum load 100 kg. When adding support arms on bogies, this max. load capacity increases to 160 kg.



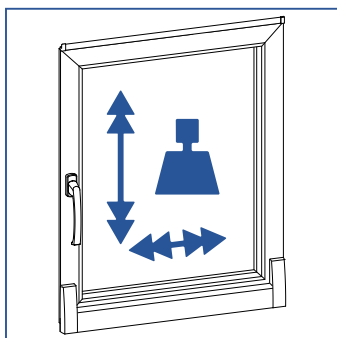
Opening width

This system allows for the sash to move from the frame up to 125 mm away. This proves that it is an excellent choice, when it comes to deep sash profiles.



SP - night ventilation

When turning the handle up, the sash retracts from the frame for 5 mm. That way the sash is securely in place because of the combination of SP strikers and RS cams. The opening between the sash and the frame allows for the air to circulate and ventilate the inside of your home.

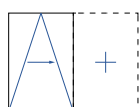


Large dimensions & heavy loads

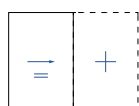
Thanks to the rugged design of its stays and bogies, the hardware can be used for sash rebate heights of up to 2700 mm. This fitting system is meeting the architectonic challenge for floor-to-ceiling window doors.

Symbols

In the part describing the Tilt & Slide and Retract & Slide systems, different symbols, diagrams and tables are used in order to provide a clear picture and demonstration of the hardware application. The meanings are as follows:



Tilt & Slide



Retract & Slide



Rebate sash height



Rebate sash width



Handle height



R cam



RS cam



Night vent



Warning



Max. sash mass



Material number



Orientation / position



Hardware shortening



R cam



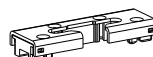
RS cam



Standard striker



Security striker



T&Ti security striker



SP striker



Screws



Packaging

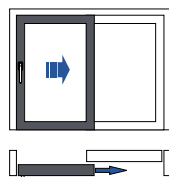


Length / dimension

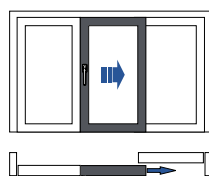
Abbreviation	Description	Units
SRH	SASH REBATE HEIGHT	mm
SRW	SASH REBATE WIDTH	mm
HH	HANDLE HEIGHT	mm
BS	BACKSET	mm
M	MAX. SASH MASS	kg
SRH : SRW	MAX. RATIO BETWEEN SRH AND SRW	/

SASH ARRANGEMENT

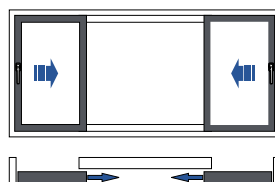
SCHEME A



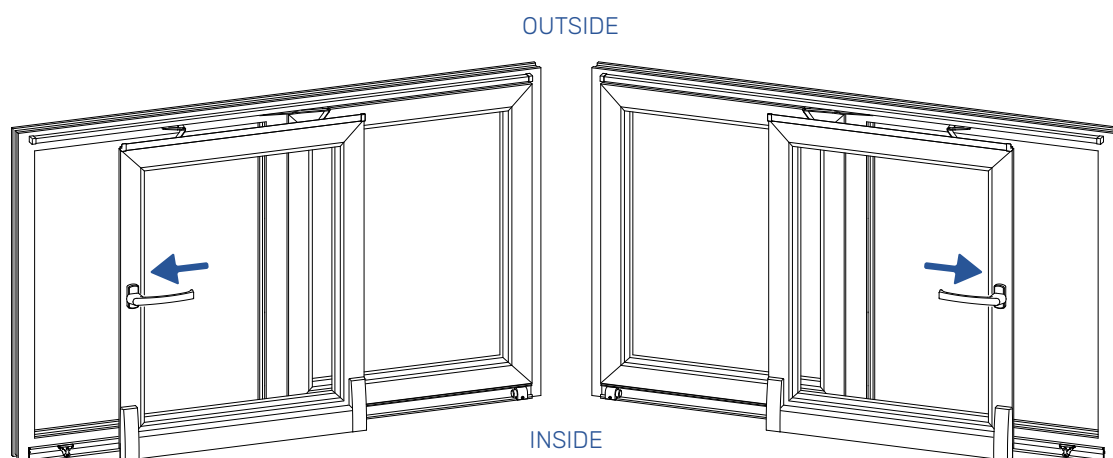
SCHEME GA



SCHEME K



DIRECTION OF OPENING



DIN EN 12519 - Right

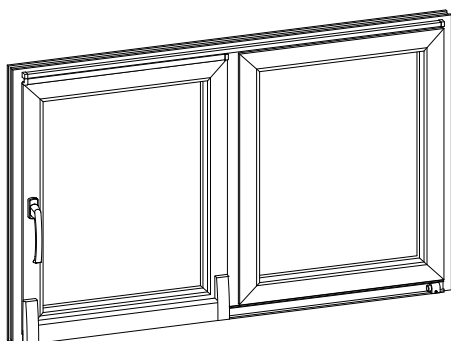
ARX - Left direction

DIN EN 12519 - Left

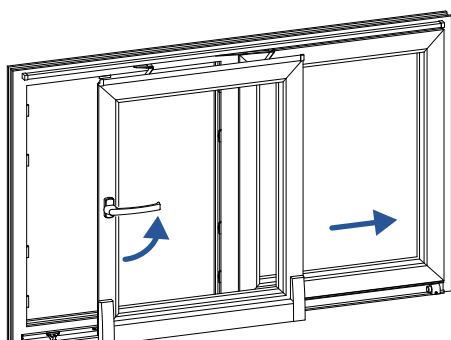
ARX - Right direction

COMPARISON OF HKS SYSTEM OPENING

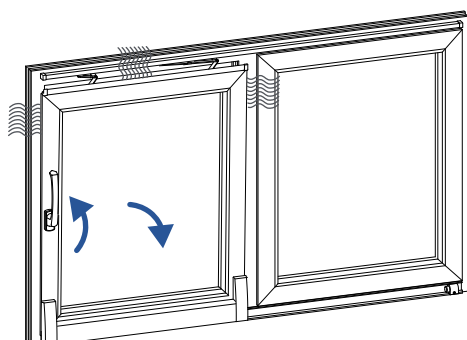
TILT & SLIDE - HKS



CLOSED POSITION

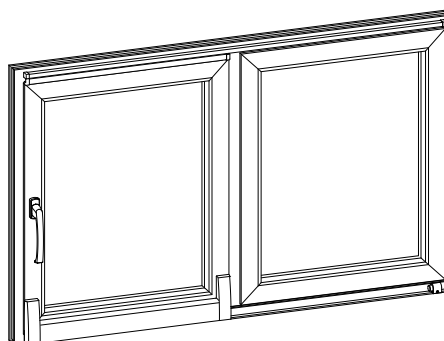


SLIDE POSITION

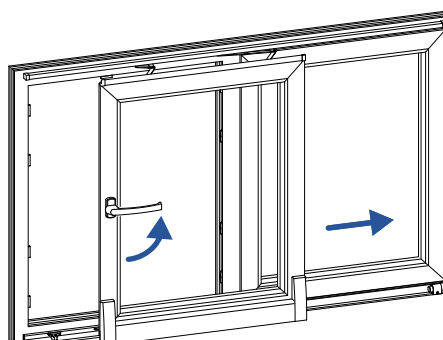


TILT POSITION

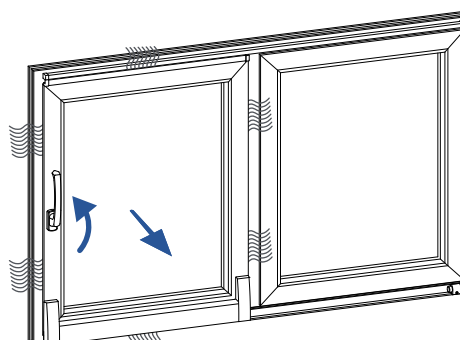
RETRACT & SLIDE - SP



CLOSED POSITION

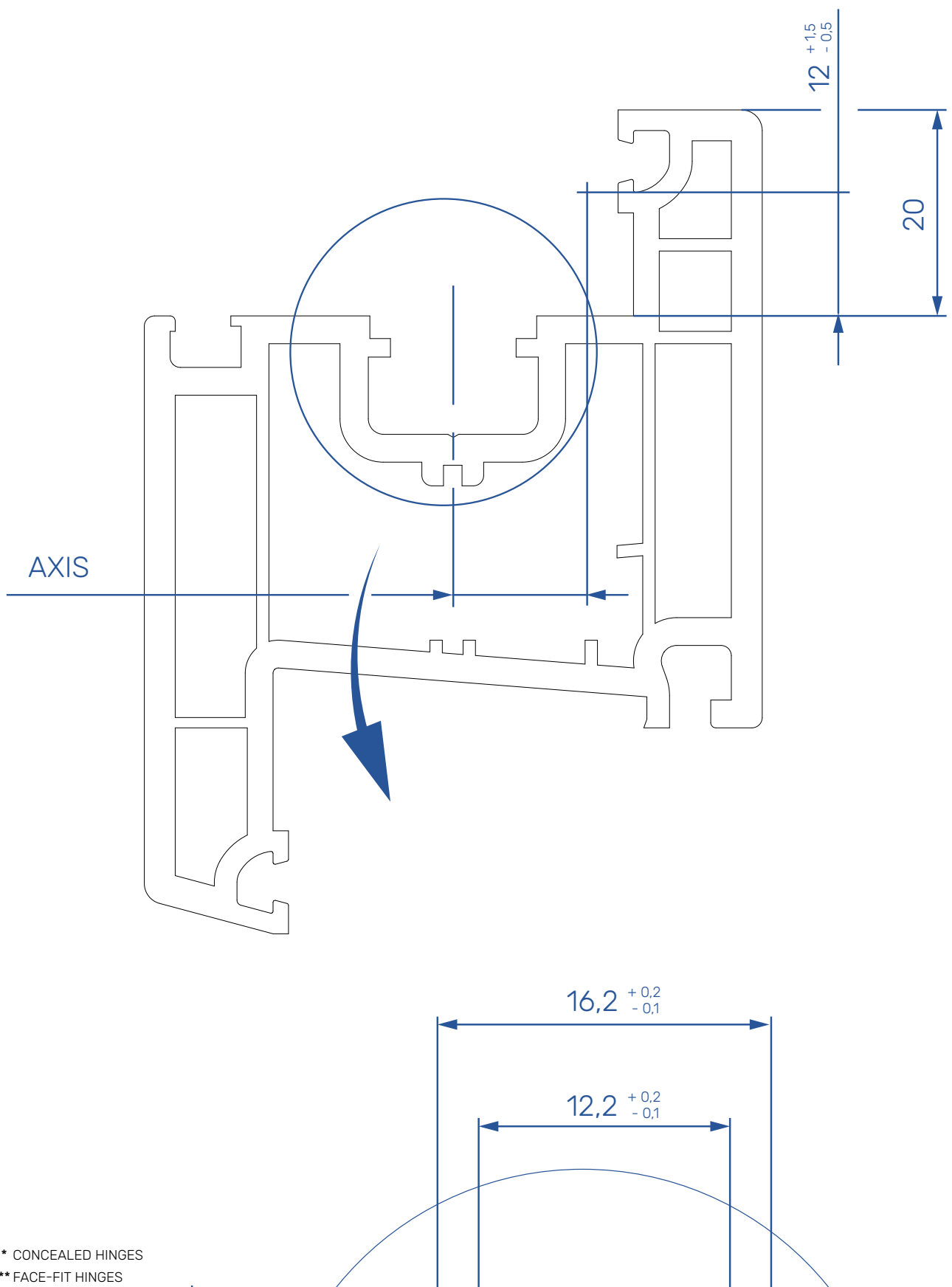


SLIDE POSITION



VENTILATION POSITION

Profile dimensioning for PVC

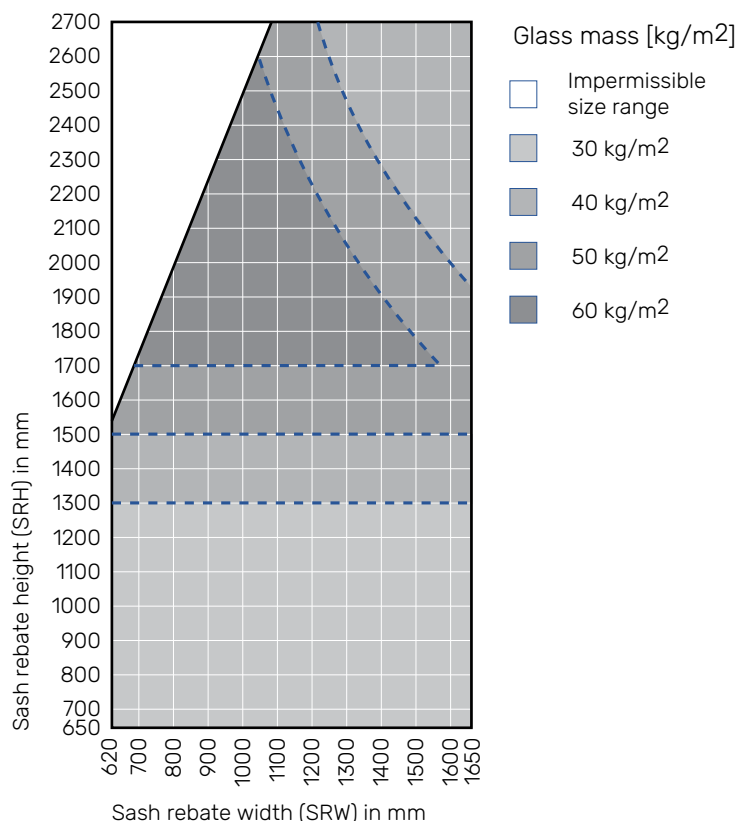


APPLICATION DIAGRAMS

Tilt & Slide - HKS

Tilt & Slide - HKS 160 kg

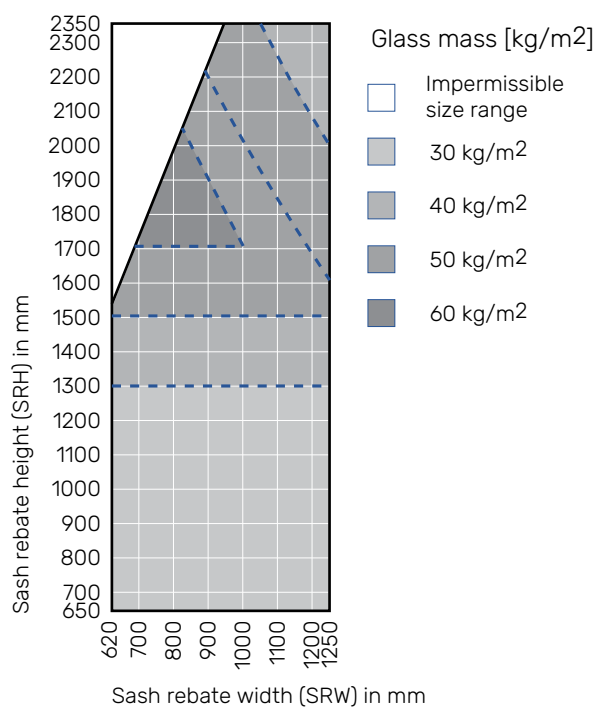
APPLICATION DIAGRAM



SRH	650 - 2700
SRW	620 - 1650
M	160
max. SRW : SRH	1 : 2,5

Tilt & Slide - HKS 100 kg

APPLICATION DIAGRAM

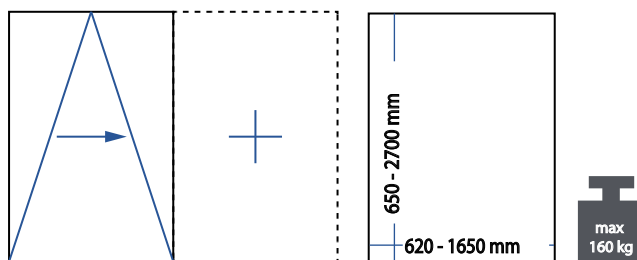


SRH	650 - 2350
SRW	620 - 1250
M	100
max. SRW : SRH	1 : 2,5



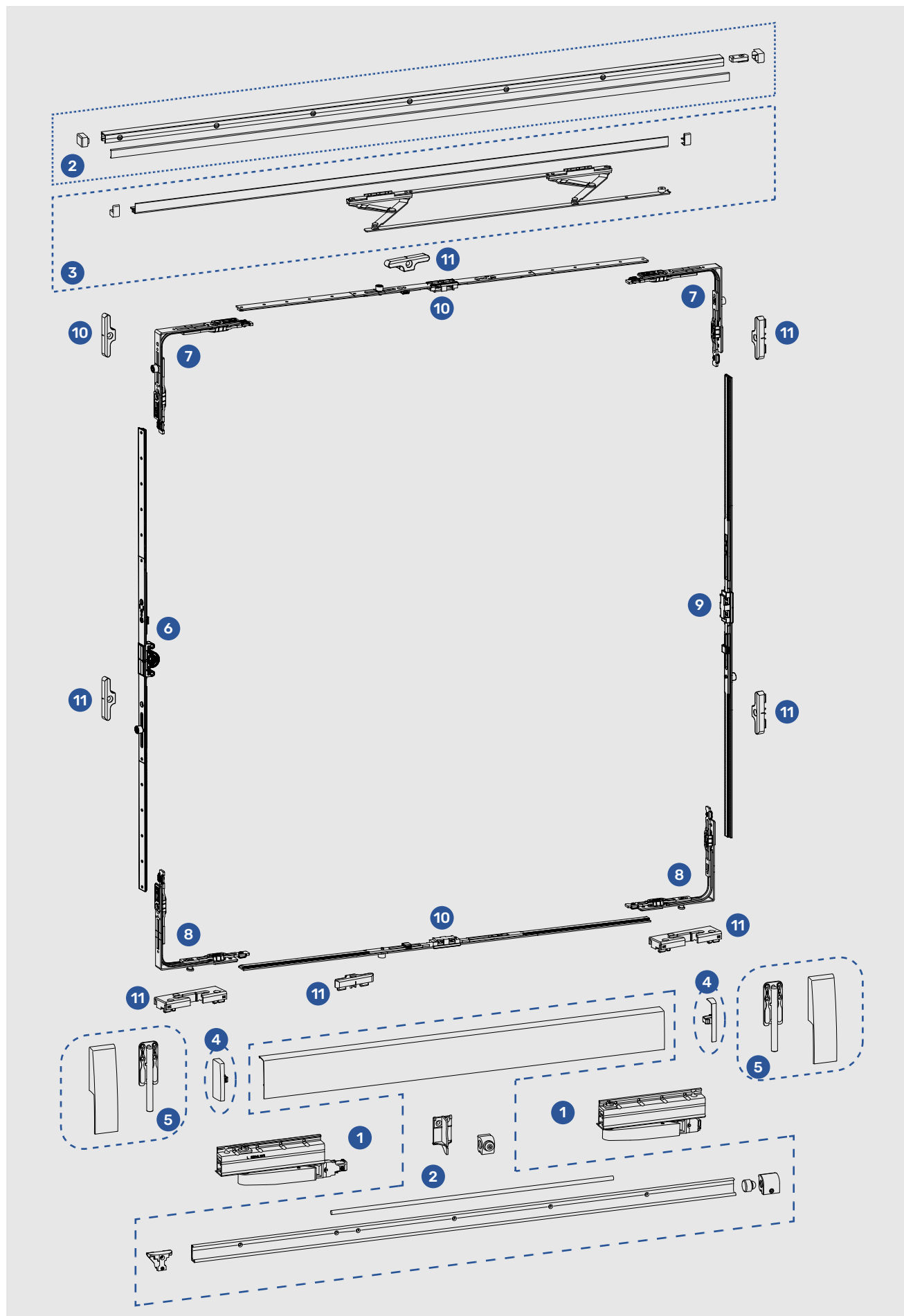
TILT & SLIDE - HKS 100 / 160 BASIC SCHEME

1	BOGIES SET	PAGE 53
2	SET OF RAILS	PAGE 51
3	STAY SYSTEM	PAGE 52
4	COVER CAP	PAGE 54
5	SET 160 kg (COVER CAP & SUPPORT ARM)	PAGE 54
6	T&T ESPAGNOLETTE	
	T&T ESPAGNOLETTE M BS14,5	PAGE 42
	T&T ESPAGNOLETTE M BS>14,5	PAGE 43
	T&T ESPAGNOLETTE M BS>14,5 LOCKABLE	PAGE 44
	T&T ESPAGNOLETTE KV BS14,5	PAGE 45
7	CORNER DRIVE - TOP	PAGE 48
8	CORNER DRIVE RS - BOTTOM	PAGE 48
9	SLIDE CENTER LOCK - VERTICAL	PAGE 49
10	SLIDE CENTER LOCK - HORIZONTAL	PAGE 49
11	STRIKERS	
	STRIKER	PAGE 48
	T&TI STRIKER	PAGE 49



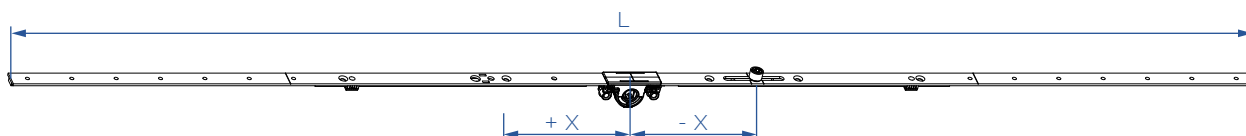
* MAX. SRW / SRH RATIO = 1 : 2,5

* HKS 100 CHOOSE 4 / HKS 160 CHOOSE 5



T&T ESPAGNOLETTE M

Centered / variable handle height



Backset 14,5 mm

SRH	HH	L	X	X			PACK.	MATERIAL
650 - 1000	300 - 500	720	-111	•	1	2	10	1088473
900 - 1400	450 - 700	1120	-111	•	1	5	10	1098964
1401 - 1800	701 - 900	1520	- 111	•	1	7	10	1098965
1601 - 2000	801 - 1000	1720	- 311	+ 309	2	8	10	1098966
2001 - 2400	1001 - 1200	2120	- 311	+ 309	2	10	10	1098967

SRH	HH	L	X	X	X	X		PACK.	MATERIAL
900 - 1400	450 - 700	1120	•	-211	+ 209	•	2	6	1098973
1401 - 1800	701 - 900	1520	•	-211	+ 209	•	2	8	1098974
1601 - 2000	801 - 1000	1720	•	- 311	+ 109	+ 559	3	9	1098975
2001 - 2400	1001 - 1200	2120	-631	- 311	+ 309	+ 629	4	12	1098976

SRH	HH	L	X	X			PACK.	MATERIAL
650 - 1000	300 - 500	720	-111	•	1	2	10	1101035
900 - 1400	450 - 700	1120	-111	•	1	5	10	1101036
1401 - 1800	701 - 900	1520	- 111	•	1	7	10	1101037
1601 - 2000	801 - 1000	1720	- 311	+ 309	2	8	10	1101038
2001 - 2400	1001 - 1200	2120	- 311	+ 309	2	10	10	1101039

SRH	HH	L	X	X	X	X		PACK.	MATERIAL
900 - 1400	450 - 700	1120	•	- 211	+ 209	•	2	6	1105851
1401 - 1800	701 - 900	1520	•	- 211	+ 209	•	2	8	1105852
1601 - 2000	801 - 1000	1720	•	- 311	+ 109	+ 559	3	9	1105853
2001 - 2400	1001 - 1200	2120	-631	- 311	+ 309	+ 629	4	12	1105854

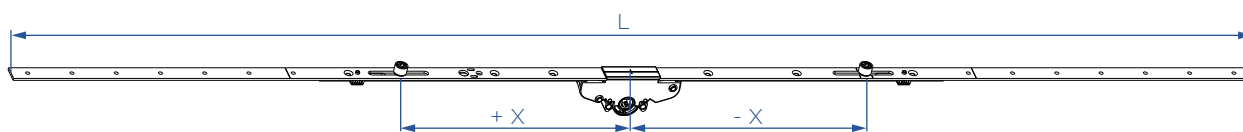
Backset 7,5 mm

SRH	HH	L	X	X	MS			PACK.	MATERIAL
470-820 ¹⁾	210-410	540	•	•	•	•	•	10	1083123
600-1000 ¹⁾	300-500	720	-111	•	•	1	2	10	1083124
900-1400	450-700	1120	-111	•	+ 99,5	1	5	10	1083125
1401-1800	701-900	1520	- 111	•	+ 99,5	1	7	10	1083126
1601-2000	801-1000	1720	- 311	+ 309	- 121,5	2	8	10	1083127
2001-2400	1001-1200	2120	- 311	+ 309	- 121,5	2	10	10	1083128

* SRH 2401 - 2700 ADD EXTENSION 400 1102897

T&T ESPAGNOLETTE M - LARGER BACKSETS

Centered / variable handle height



Backset 25 mm

										
SRH	HH	L	X	X	X	X			PACK.	MATERIAL
650 - 1000	300 - 500	720	•	•	-111	•	1	2	6	1104485
900 - 1400	450 - 700	1120	•	+209	-211	•	2	6	6	1104486
1401 - 1800	701 - 900	1520	•	+209	-211	•	2	8	6	1104487
1601 - 2000	801 - 1000	1720	+559	+109	-311	•	3	9	6	1104488
2001 - 2400	1001 - 1200	2120	+629	+ 309	-311	- 631	4	12	6	1104489

Backset 30 mm

										
SRH	HH	L	X	X	X	X			PACK.	MATERIAL
650 - 1000	300 - 500	720	•	•	-111	•	1	2	6	1107648
900 - 1400	450 - 700	1120	•	+209	-211	•	2	6	6	1107649
1401 - 1800	701 - 900	1520	•	+209	-211	•	2	8	6	1107650
1601 - 2000	801 - 1000	1720	+559	+109	-311	•	3	9	6	1107651
2001 - 2400	1001 - 1200	2120	+629	+ 309	-311	- 631	4	12	6	1107652

Backset 35 mm

										
SRH	HH	L	X	X	X	X			PACK.	MATERIAL
650 - 1000	300 - 500	720	•	•	-111	•	1	2	6	1107654
900 - 1400	450 - 700	1120	•	+209	-211	•	2	6	6	1107655
1401 - 1800	701 - 900	1520	•	+209	-211	•	2	8	6	1107656
1601 - 2000	801 - 1000	1720	+559	+109	-311	•	3	9	6	1107657
2001 - 2400	1001 - 1200	2120	+629	+ 309	-311	- 631	4	12	6	1107658

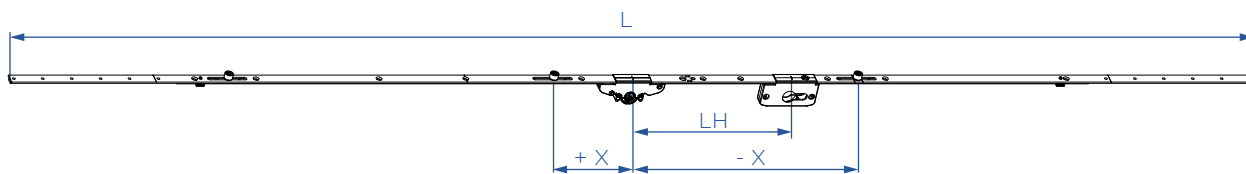
Backset 45 mm

										
SRH	HH	L	X	X	X	X			PACK.	MATERIAL
650 - 1000	300 - 500	720	•	•	-111	•	1	2	6	1104491
900 - 1400	450 - 700	1120	•	+209	-211	•	2	6	6	1104492
1401 - 1800	701 - 900	1520	•	+209	-211	•	2	8	6	1104493
1601 - 2000	801 - 1000	1720	+559	+109	-311	•	3	9	6	1104494
2001 - 2400	1001 - 1200	2120	+629	+ 309	-311	- 631	4	12	6	1104495

* SRH 2401 - 2700 ADD EXTENSION 400 1102897

T&T ESPAGNOLETTE M - LARGER BACKSETS + LOCKABLE

Centered / variable handle height



Backset 25 mm

SRH	HH	L	X	X	X	X	LH		PACK.	MATERIAL
1601 - 2000	801 - 1000	1720	+559	+109	-311	•	220	3	10	6 1104477

Backset 30 mm

SRH	HH	L	X	X	X	X	LH		PACK.	MATERIAL
1601 - 2000	801 - 1000	1720	+559	+109	-311	•	220	3	10	6 1107659

Backset 35 mm

SRH	HH	L	X	X	X	X	LH		PACK.	MATERIAL
1601 - 2000	801 - 1000	1720	+559	+109	-311	•	220	3	10	6 1107662

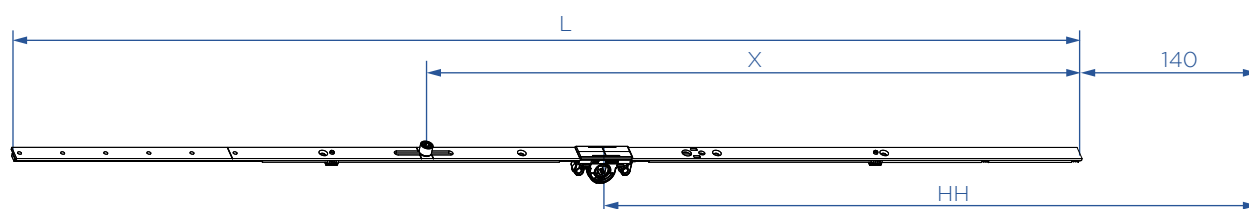
Backset 45 mm

SRH	HH	L	X	X	X	X	LH		PACK.	MATERIAL
1601 - 2000	801 - 1000	1720	+559	+109	-311	•	220	3	10	6 1104482

* SRH 2401 - 2700 ADD EXTENSION 400 1102897

T&T ESPAGNOLETTE KV

Fixed handle height



Backset 14,5 mm

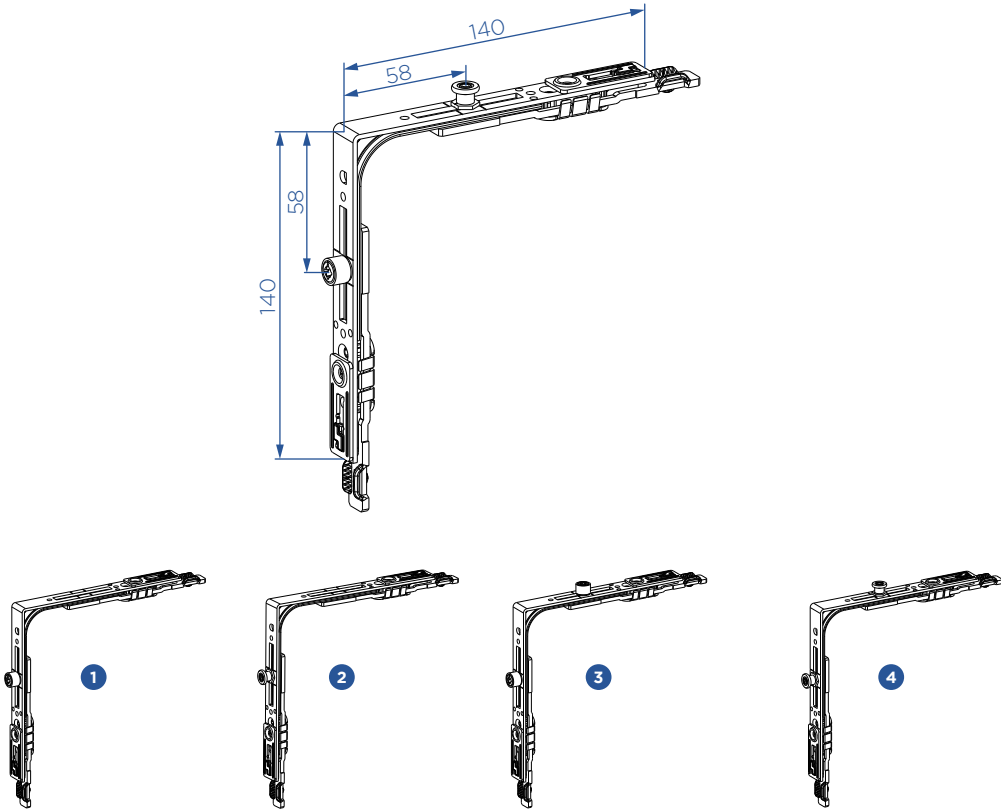
								
SRH	HH	L	X	X			PACK.	MATERIAL
650 - 800	263	520	•	•	•	1	10	1115131
801 - 1000	413	720	•	•	•	3	10	1115132
801 - 1000	413	720	389	•	1	3	10	1115133
1001 - 1200	513	920	539	•	1	4	10	1115134
1201 - 1400	563	1120	539	•	1	6	10	1115135
1401 - 1600	563	1320	539	•	1	7	10	1115136
1601 - 1800	563	1520	539	•	1	8	10	1115137
1601 - 1800	1000	1520	539	•	1	8	10	1115167
1801 - 2000	1000	1720	1209	539	2	11	10	1115138
2001 - 2200	1000	1920	1209	539	2	12	10	1115139
2201 - 2400	1000	2120	1209	539	2	13	10	1115140

									
SRH	HH	L	X	X	MS			PACK.	MATERIAL
801-1000	413	720	389	•	145	1	3	10	1142916
1001-1200	513	920	539	•	244	1	4	10	1142919
1201-1400	563	1120	539	•	244	1	6	10	1142921
1401-1600	563	1320	539	•	244	1	7	10	1142922
1601-1800	563	1520	539	•	244	1	8	10	1142923
1601-1800	1000	1520	539	•	244	1	8	10	1142924
1801-2000	1000	1720	1209	539	977	2	11	10	1142925
2001-2200	1000	1920	1209	539	977	2	12	10	1142926
2201-2400	1000	2120	1209	539	977	2	13	10	1142927

* SRH 2401 - 2700 ADD EXTENSION 400 1102897

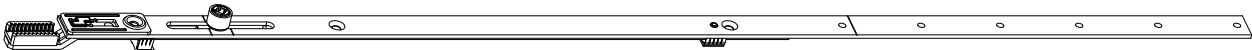
CORNER DRIVE

TYPE	DESCRIPTION	CAM	   			
			1	4	10	MATERIAL
1	Corner drive	1 R	1	4	10	1103158
2	Corner drive	1 RS	1	4	10	1100983
3	Corner drive	2 R	2	4	10	1103159
4	Corner drive	2 RS	2	4	10	1100984



- * HKS REQUIRES RS CAMS AT THE BOTTOM (TILT) - 2 PCS PER SASH
- * SP REQUIRES RS CAM IN EACH CORNER (VENTILATION) - 4 PCS PER SASH

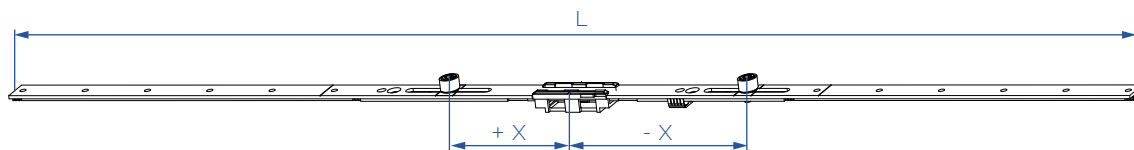
ESPAGNOLETTE EXTENSION



							
DESCRIPTION	A	L	X			PACK.	MATERIAL
400	200	400	79	3	1	10	1102897
600	200	600	79	4	1	10	1102898
800	200	800	79	5	1	10	1102899

- * SRH 2401 - 2700 ADD EXTENSION 400 1102897

CENTER LOCK



Vertical

							
SRH	L	X	X			PACK.	MATERIAL
650 - 1000	720	•	- 111	1	2	10	1095173
1001 - 1400	1120	•	- 111	1	5	10	1095174
1401 - 1800	1520	•	- 111	1	7	10	1095175
1801 - 2000	1720	+ 309	- 311	2	8	10	1095176
2001 - 2400	2120	+ 309	- 311	2	10	10	1095177

							
SRH	L	X	X			PACK.	MATERIAL
650 - 1000	720	•	- 111	1	2	10	1143006
1001 - 1400	1120	•	- 111	1	5	10	1143007
1401 - 1800	1520	•	- 111	1	7	10	1143008
1401 - 1800	1520	+ 309	- 311	2	7	10	1146736
1801 - 2000	1720	+ 309	- 311	2	8	10	1143009
2001 - 2400	2120	+ 309	- 311	2	10	10	1143010

Horizontal

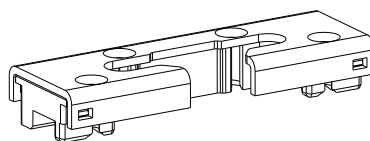
							
SRW	L	X				PACK.	MATERIAL
620 - 1000	720	- 111		1	2	10	1095173
1001 - 1400	1120	- 111		1	5	10	1095174
1401 - 1650	1520	- 111		1	7	10	1095175

							
SRH	L	X	X			PACK.	MATERIAL
620 - 1000	720	•	- 111	1	2	10	1143006
1001 - 1400	1120	•	- 111	1	5	10	1143007
1401 - 1650	1520	•	- 111	1	7	10	1143008
1401 - 1650	1520	+ 309	- 311	2	7	10	1146736

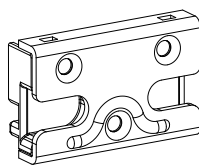
* SRH 2401 - 2700 ADD EXTENSION 400 1102897



STRIKER	PACK.	MATERIAL
ALUPLAST 2000/ 3000/ 4000/ 5000/ 6000/ 8000	300	1083204
BRUGMANN BluEvolution	300	1083202
DECEUNINCK 2500/ 2800	300	1151423
EUROCELL Modus	300	1107664
GEALAN 7000/ 8000 /S9000	300	1083203
INOUTIC Prestige/ Arcade	300	1083206
INOUTIC Elegante	300	1131423
LINIAR	300	1097948
PIMAPEN Carisma S-7000	300	1131423
PROFINE KBE 76/ 70AD	300	1083205
PROFINE KÖMMERLING Eurofutur Clasic/ Elegance/ 88 Plus/ C70/ 76 MD	300	1083205
PROFINE TROCAL 70.A5 AD/ 70.M5 MD/ 76 AD/ 76 MD	300	1083205
REHAU Geneo/ Synego/ S706/ S730	300	1083204
REHAU Artevo	300	1151366
ROLOPLAST 7000/ 7500/ 7500 3D	300	1083204
SALAMANDER 3D/ Streamline 76	300	1083204
SCHÜCO Corona AD/ CT70 AD/ CT70 MD/ S182 MD	300	1083204
SELECTA Advance 70	300	1083205
VEKA Matrix/ Softline/ Softline 82/ Topline	300	1083202
WEISS WP3000/ WP4000/ WP5000	300	1083204
WHS Halo System 10	300	1083204



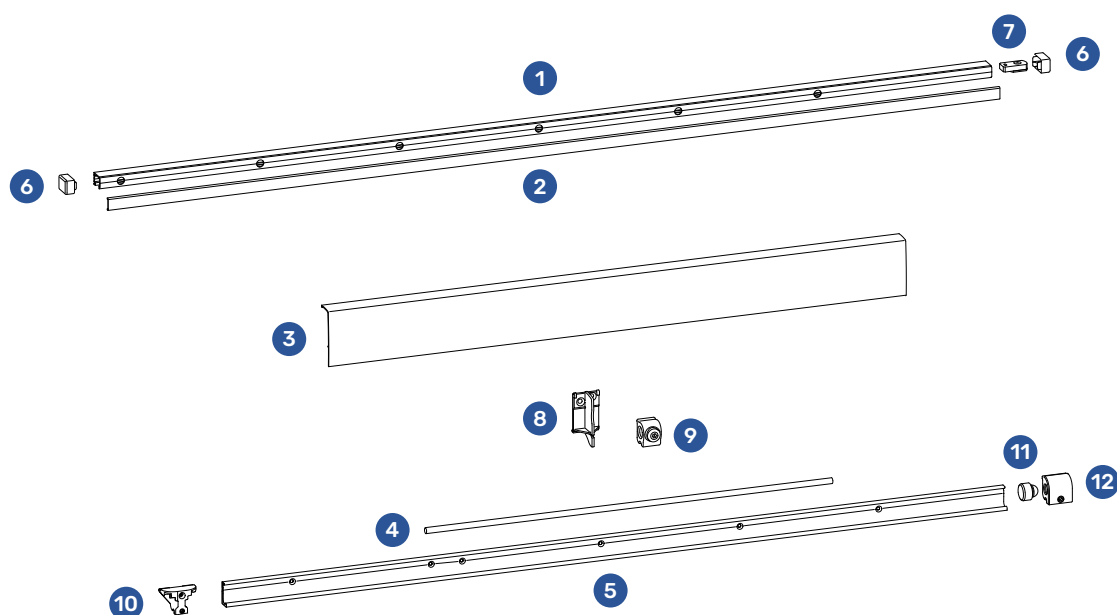
T&TI STRIKER	POS.	PACK.	MATERIAL
ALUPLAST 2000/ 3000	L	100	1132231
	R		1132232
ALUPLAST 4000/ 5000/ 6000/ 8000	L	100	1132233
	R		1132234
BRUGMANN BluEvolution	L	100	1132249
	R		1132250
DECEUNINCK 2500/ 2800	L	100	1135570
	R		1135571
EUROCELL Modus	L	100	1132235
	R		1132236
GEALAN 7000/ 8000 /S9000	L	100	1132235
	R		1132236
INOUTIC Prestige/ Arcade	L	100	1132245
	R		1132246
INOUTIC Elegante	L	100	1135570
	R		1135571
LINIAR	L	100	1132249
	R		1132250
PIMAPEN Carisma S-7000	L	100	1135570
	R		1135571
PROFINE KBE 76/ 70AD	L	100	1132235
	R		1132236
PROFINE KÖMMERLING Eurofutur Clasic/ Elegance/ 88 Plus	L	100	1132239
	R		1132240
PROFINE KÖMMERLING C70/ 76 MD	L	100	1132235
	R		1132236
PROFINE TROCAL 70.A5 AD/ 70.M5 MD/ 76 AD/ 76 MD	L	100	1132235
	R		1132236
REHAU S706/ S730	L	100	1132241
	R		1132242
REHAU Geneo/ Synego	L	100	1139277
	R		1139278
REHAU Artevo	L	100	1151364
	R		1151363
ROLOPLAST 7000/ 7500/ 7500 3D	L	100	1132243
	R		1132244
SALAMANDER 3D/ Streamline 76	L	100	1132243
	R		1132244
SCHÜCO Corona AD/ CT70 AD/ CT70 MD/ S182 MD	L	100	1132231
	R		1132232
SELECTA Advance 70	L	100	1132235
	R		1132236
VEKA Matrix/ Softline/ Softline 82/ Topline	L	100	1132249
	R		1132250
WEISS WP3000/ WP4000/ WP5000	L	100	1132231
	R		1132232
WHS Halo System 10	L	100	1132233
	R		1132234



SECURITY STRIKER	PACK.	MATERIAL
ALUPLAST 2000/ 3000	100	1083219
ALUPLAST 4000/ 5000/ 6000/ 8000	100	1083216
BRUGMANN BluEvolution	100	1083214
DECEUNINCK 2500/ 2800	100	1135572
EUROCELL Modus	100	1083217
GEALAN 7000/ 8000/ S9000	100	1083217
INOUTIC Prestige/ Arcade	100	1083218
INOUTIC Elegante	100	1135572
LINIAR	100	1083214
PIMAPEN Carisma S-7000	100	1135572
PROFINE KBE 76/ 70AD	100	1083217
PROFINE KÖMMERLING Eurofutur Clasic/ Elegance/ 88 Plus	100	1098310
PROFINE KÖMMERLING C70/ 76 MD	100	1083217
PROFINE TROCAL 70.A5 AD/ 70.M5 MD/ 76 AD/ 76 MD	100	1083217
REHAU S706/ S730	100	1089625
REHAU Geneo/ Synego	100	1139279
REHAU Artevo	100	1151365
ROLOPLAST 7000/ 7500/ 7500 3D	100	1098609
SALAMANDER 3D/ Streamline 76	100	1098609
SCHÜCO Corona AD/ CT70 AD/ CT70 MD/ S182 MD	100	1083219
SELECTA Advance 70	100	1083217
VEKA Matrix/ Softline/ Softline 82/ Topline	100	1083214
WEISS WP3000/ WP4000/ WP5000	100	1083219
WHS Halo System 10	100	1083216

SET OF RAILS

Tilt & Slide - HKS

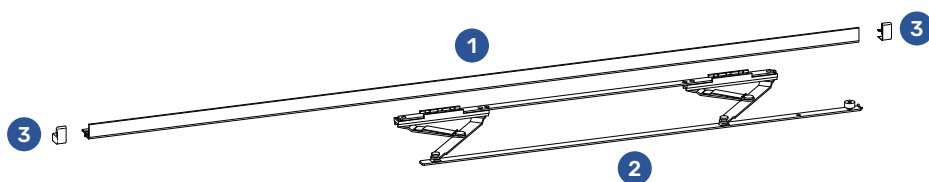


SRW	L	COLOR	MATERIAL	TYPE	DESCRIPTION	PACK
620 - 900	1930	WHITE	1092851	1	GUIDE TRACK	1
		SILVER	1092850	2	SCREW COVER PROFILE	1
		BROWN	1092852	3	COVER PROFILE	1
		MIDDLE BRONZE	1105246	4	CONNECTING ROD	1
901 - 1050	2230	WHITE	1092855	5	BOTTOM TRACK	1
		SILVER	1092854	6	COVER CAP FOR GUIDE TRACK	2 (L&R)
		BROWN	1092856	7	BUFFER - TOP	1
		MIDDLE BRONZE	1105249	8	COVER FILLET SUPPORT	1
1051 - 1250	2630	WHITE	1092859	9	SUPPORT BLOCK	1
		SILVER	1092858	10	GUIDE BLOCK	1
		BROWN	1092860	11	RUBBER MUSHROOM PART	1
		MIDDLE BRONZE	1105267	12	BUFFER - BOTTOM	1
1251 - 1450*	3030	WHITE	1092863			
		SILVER	1092862			
		BROWN	1092864			
		MIDDLE BRONZE	1105268			
1451 - 1650 ¹⁾	3430	WHITE	1092867			
		SILVER	1092866			
		BROWN	1092868			
		MIDDLE BRONZE	1105269			

¹⁾ SRW = 1251 - 1650 mm & SRH = 2350 - 2700 mm, MUST USE HKS 160 kg SET

STAY SYSTEM

Tilt & Slide - HKS



SRW	L	COLOR	MATERIAL
620 - 900	900	WHITE	1092875
		SILVER	1092874
		BROWN	1092876
		MIDDLE BRONZE	1105271
901 - 1250	1250	WHITE	1092879
		SILVER	1092878
		BROWN	1092880
		MIDDLE BRONZE	1105272
1251 - 1650 ¹⁾	1650	WHITE	1092883
		SILVER	1092882
		BROWN	1092884
		MIDDLE BRONZE	1105273

TYPE	DESCRIPTION	PACK
1	STAY CONNECTING PROFILE	1
2	STAY ARM	1
3	COVER CAP FOR STAY CON. PROFILE	2 (L&R)

¹⁾ SRW = 1251 - 1650 mm & SRH = 2350 - 2700 mm, MUST USE HKS 160 kg SET

SET OF BOGIES

Tilt & Slide - HKS



* PICTURE SHOWS LEFT ORIENTATION

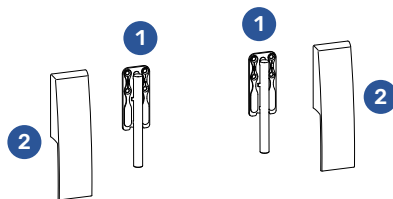
DESCRIPTION	POS	MATERIAL
BOGIES SET 100 KG	R	1083332
	L	1083331

TYPE	DESCRIPTION	PACK
1	MASTER BOGIE	1
2	SLAVE BOGIE	1

* SRW = 1251 - 1650 mm & SRH = 2350 - 2700 mm, MUST USE HKS 160 kg SET

* BOGIES COME IN SET OF 1x MASTER & 1x SLAVE BOGIE

HKS 160 SET



DESCRIPTION	COLOR	MATERIAL	TYPE	DESCRIPTION	PACK
SET 160 KG (COVER CAP + SUPPORT ARM)	WHITE SILVER BROWN MIDDLE BRONZE	1092887 1092886 1092888 1105274	1 2	SUPPORT ARM COVER CAP - BOTTOM	2 (L&R) 2 (L&R)

* SRW = 1251 - 1650 mm & SRH = 2350 - 2700 mm, MUST USE HKS 160 kg SET

* HKS 160 SET COMES IN SET OF L and R SUPPORT ARM & L and R SUPPORT ARM COVER CAP

COVER CAPS HKS 100

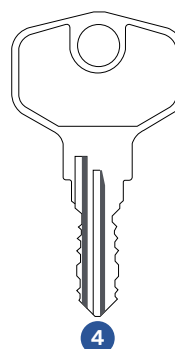
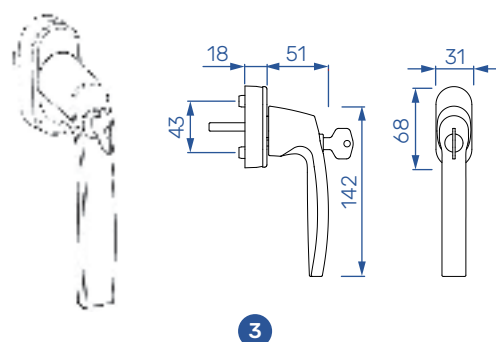
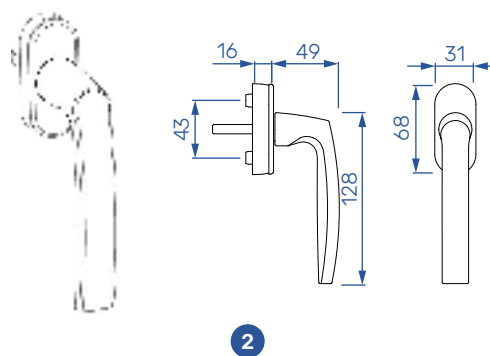
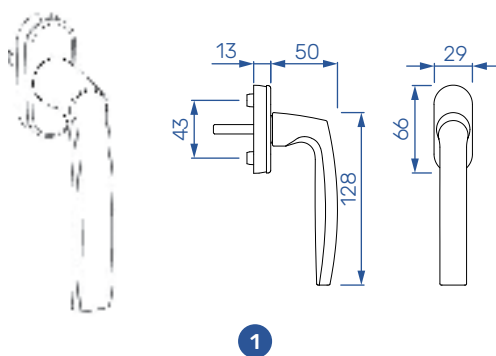


DESCRIPTION	COLOR	MATERIAL	TYPE	DESCRIPTION	PACK
COVER CAP 100 KG - BOTTOM	WHITE SILVER BROWN MIDDLE BRONZE	1092897 1092896 1092898 1105277	1	COVER CAP 100 KG - BOTTOM	2 (L&R)

* WHEN USING HKS 160 SET, COVER CAPS HKS 100 ARE NOT NEEDED

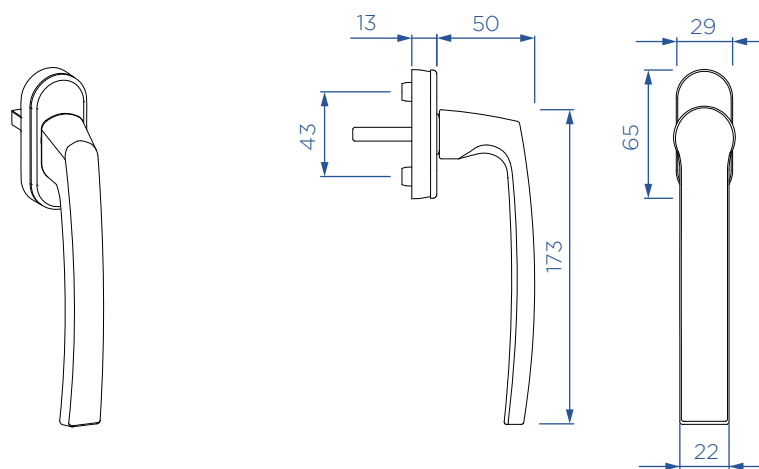
* COVER CAPS COME IN SET OF L and R COVER CAP

Window handles



TYPE	DESCRIPTION	L	COLOR	PACK	MATERIAL
1	STANDARD HANDLE	32	F4 - dark bronze	20	1053207
		37	F1 - silver	20	1053212
		37	F4 - dark bronze	20	1053213
		37	F9 - titan	20	1053214
		37	RAL 9010 - white	20	1053215
		37	RAL 8707 - brown	20	1053216
		42	F1 - silver	20	1100839
		42	RAL 9010 - white	20	1058068
		42	RAL 8707 - brown	20	1058069
2	SECUSTIC HANDLE	37	F1 - silver	10	1053222
		37	F4 - dark bronze	10	1053223
		37	F9 - titan	10	1053224
		37	RAL 9010 - white	10	1053225
		37	RAL 8707 - brown	10	1053226
3	SECUSTIC HANDLE WITH SAFETY LOCK	37	F1 - silver	10	1053232
		37	F4 - dark bronze	10	1053235
		37	F9 - titan	10	1053236
		37	RAL 9010 - white	10	1053237
		37	RAL 8707 - brown	10	1053238
4	SPARE KEY FOR HANDLE	/	/	1	1119964

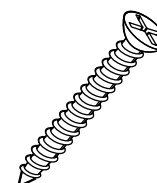
Slide handles



DESCRIPTION	L	COLOR	PACK	MATERIAL
SLIDE HANDLE	35	F9010 - white	60	1066771
	35	F8707 - dark brown	60	1066773
	42	F9010 - white	60	1107644
	42	F1 - silver	60	1123358

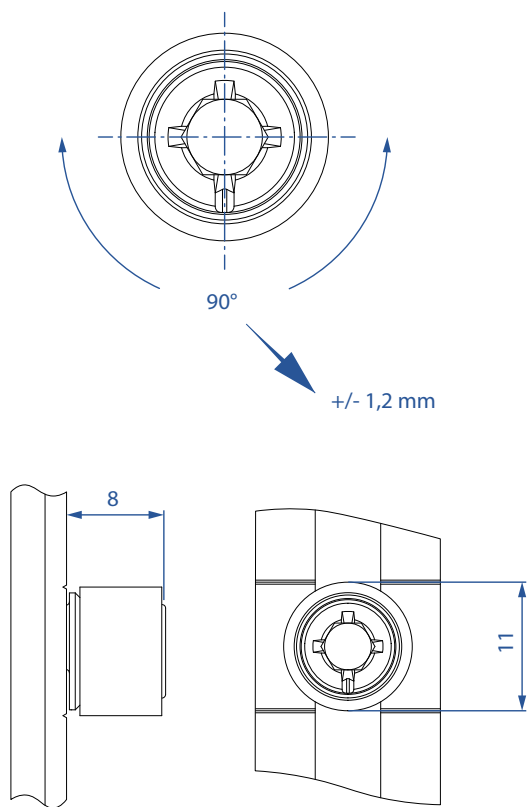
SCREWS FOR FIXING HARDWARE COMPONENTS

TYPE	DESCRIPTION	SIZE	MATERIAL
1	SCREW	4,2 x 25 mm	1134209
2	SCREW	4,2 x 35 mm	1134210

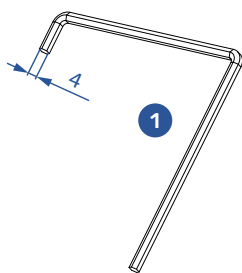


LOCKING CAM ADJUSTMENT INSTRUCTIONS

Rolling cam - R



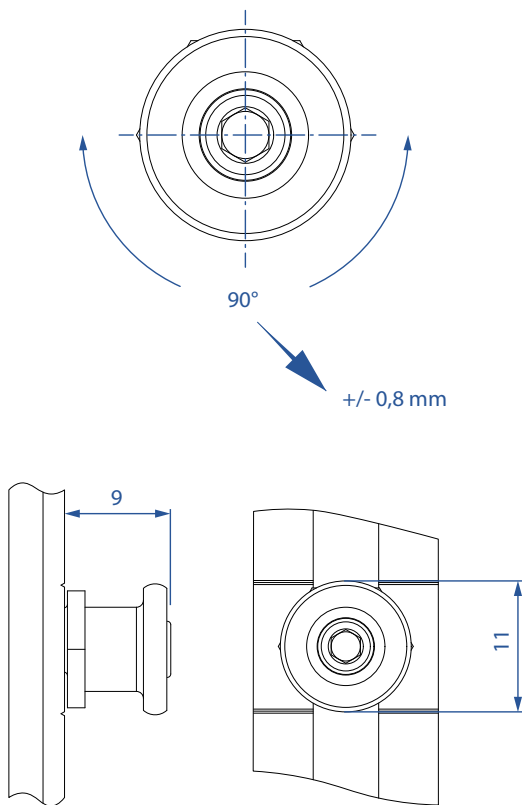
R CAM ADJUSTMENT TOOL



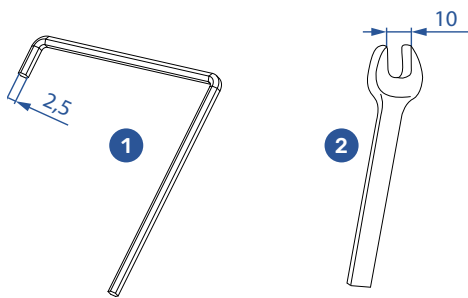
TYPE	DESCRIPTION	SIZE	MATERIAL
1	HEX KEY	4 mm	1095750

LOCKING CAM ADJUSTMENT INSTRUCTIONS

Rolling security cam - RS



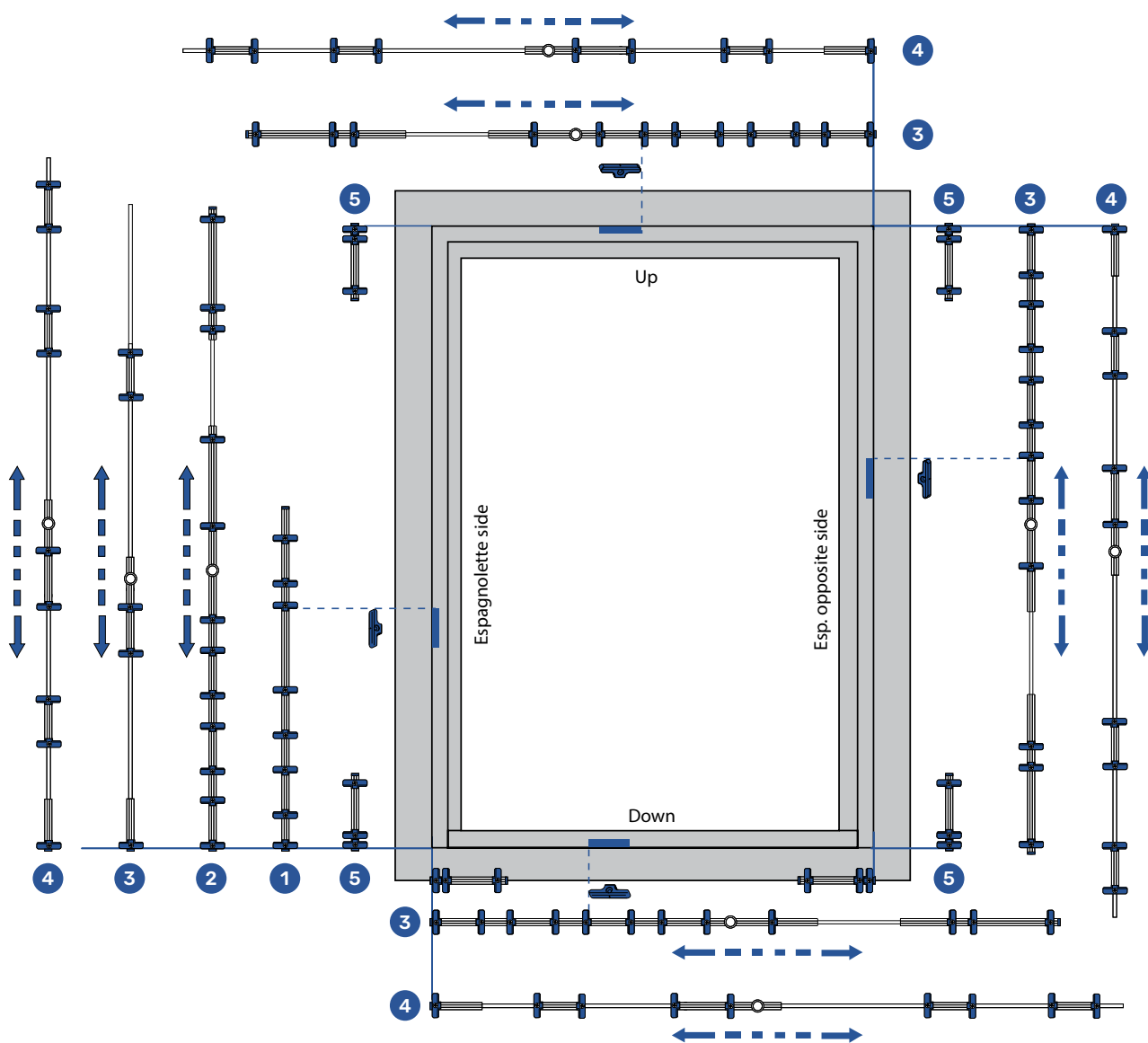
RS CAM ADJUSTMENT TOOL



TYPE	DESCRIPTION	SIZE	MATERIAL
1	HEX KEY	2,5 mm	1148205
2	SPANNER	10 mm	/

STRIKER JIGS INSTALLATION INSTRUCTIONS

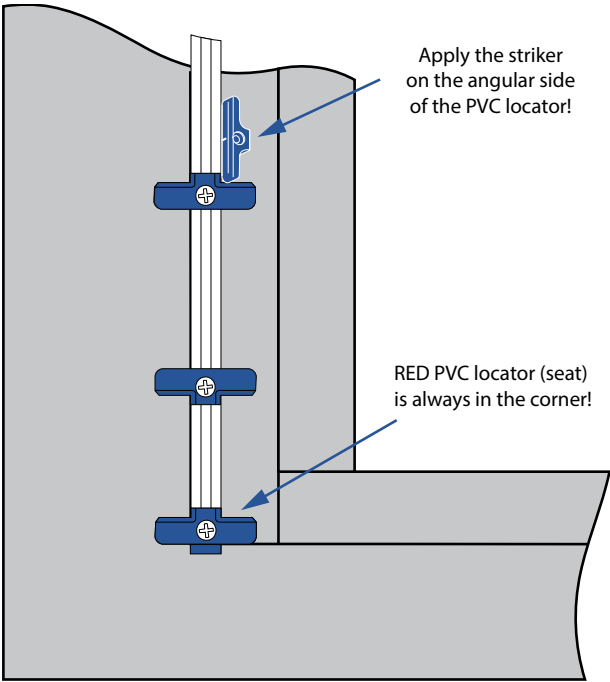
Types



TYPE	DESCRIPTION	NOTE	MATERIAL
1	Constant handle height espagnolette	SRH < 1600	1103566
2	Constant handle height espagnolette - telescopic jig	SRH > 1601	1103570
3	Centered handle height espagnolette - telescopic jig	SRH < 1600	1103572
3a	TYPE 3 - with additional cam	SRH < 1600	1103573
4	Centered handle height espagnolette - telescopic jig	SRH > 1601	1103574
4a	TYPE 4 - with additional cam	SRH > 1601	1103575
5	SP striker jig	/	1108013
6	TILT striker JIG	/	1108014

STRIKER JIGS INSTALLATION INSTRUCTIONS

Instructions for use

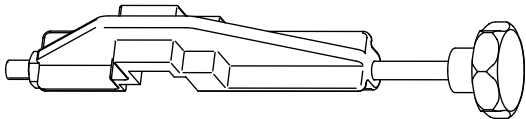


CAM scheme



COLOR of PVC LOCATOR	DESCRIPTION	NOTES
RED	Seat - NO locking cam	No striker
YELLOW	Corner drive locking cam	Located next to the seat
YELLOW	Espagnolette & center lock locking cam	/
GREEN	N / A	/
BLUE	N / A	/
BROWN	N / A	/

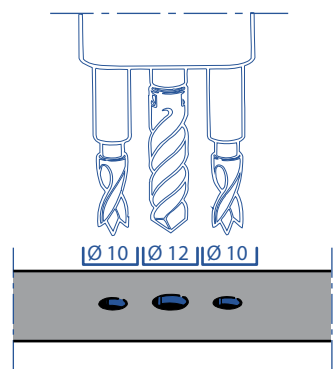
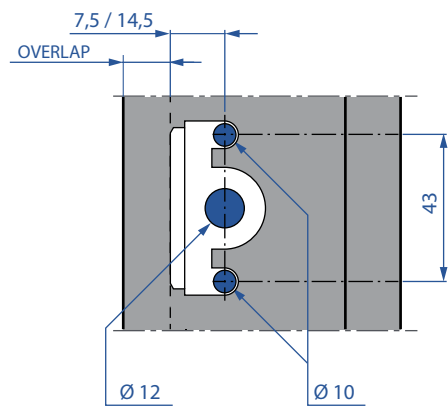
TOP & BOTTOM RAIL JIG - HKS



DESCRIPTION	PACK	PACK
HKS & SP TOP AND BOTTOM RAIL JIG	1	1105239

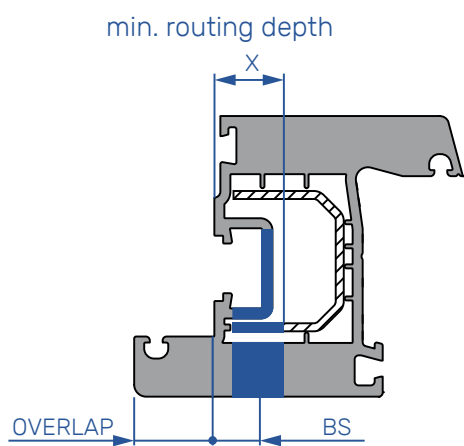
Window-handle drilling

GEAR-CASE SPROCKET AND LUGS' DRILL HOLE

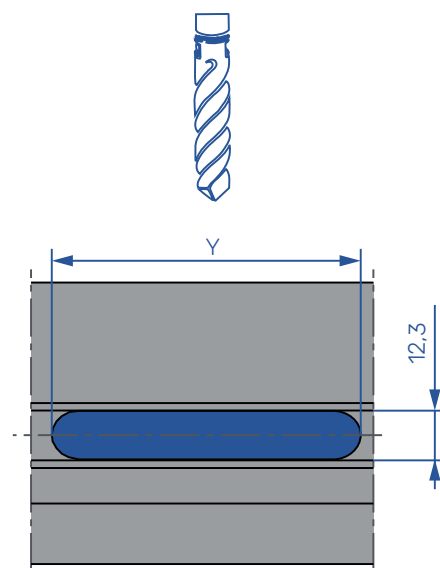


Gear-case routing

ESPAÑOLETTE GEAR-CASING



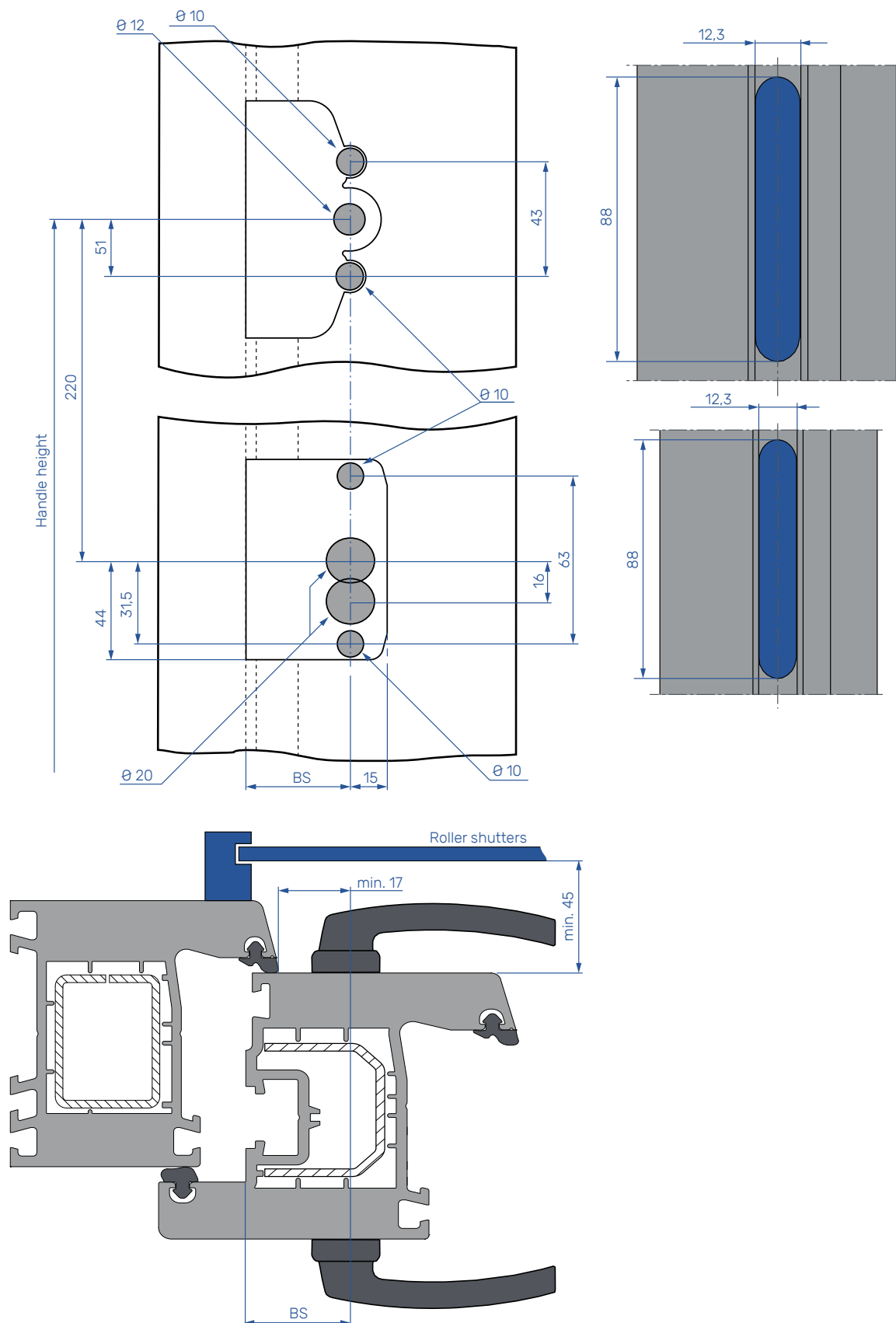
BS	X
7,5	20
14,5	27



BS	Y
7,5	34
14,5	64

Lock-case drilling

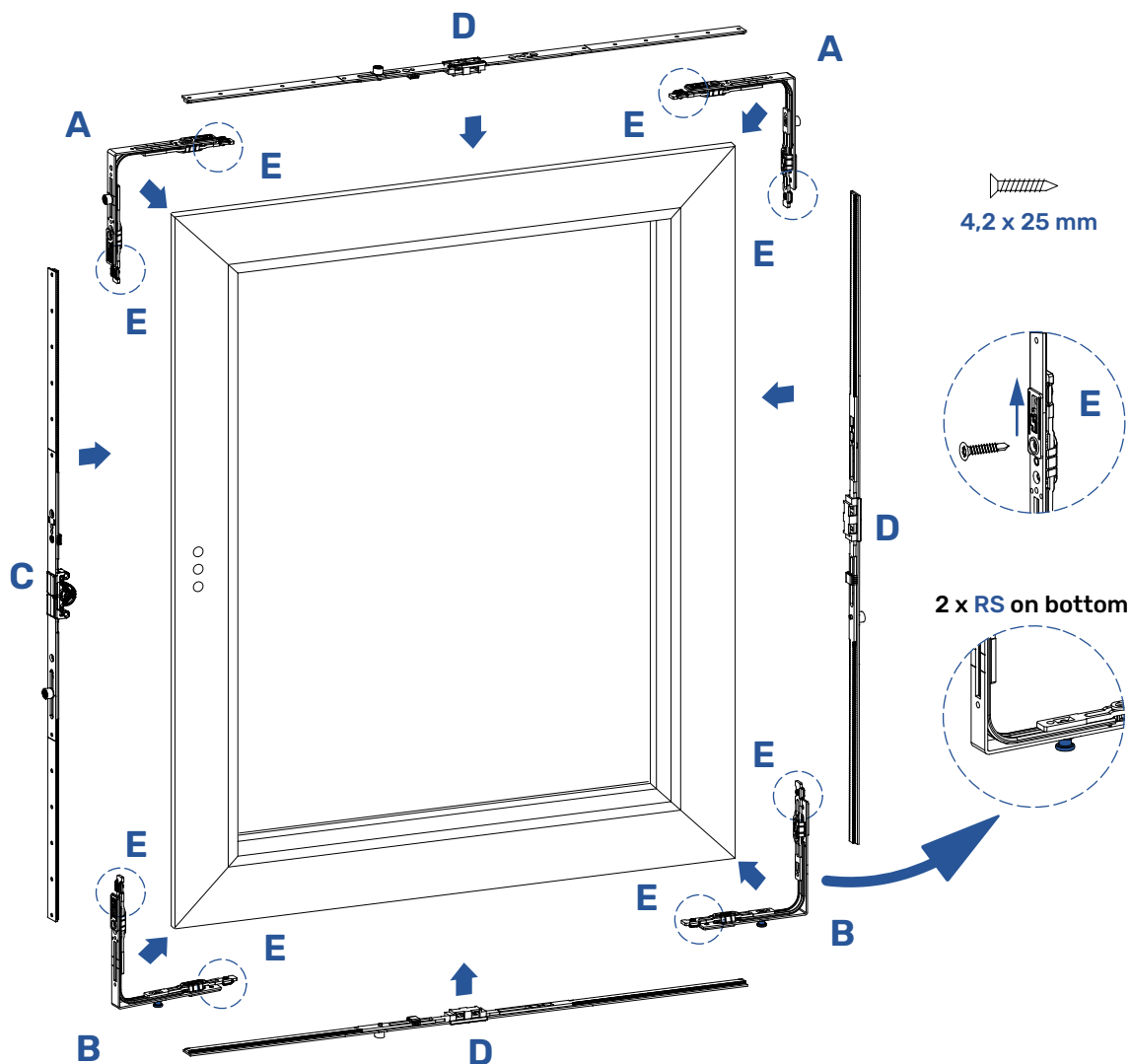
ESPAÑOLETTE LOCK-CASING



BS = 25, 30, 35 and 45 mm

SASH HARDWARE INSTALLATION INSTRUCTIONS

Tilt & Slide - HKS

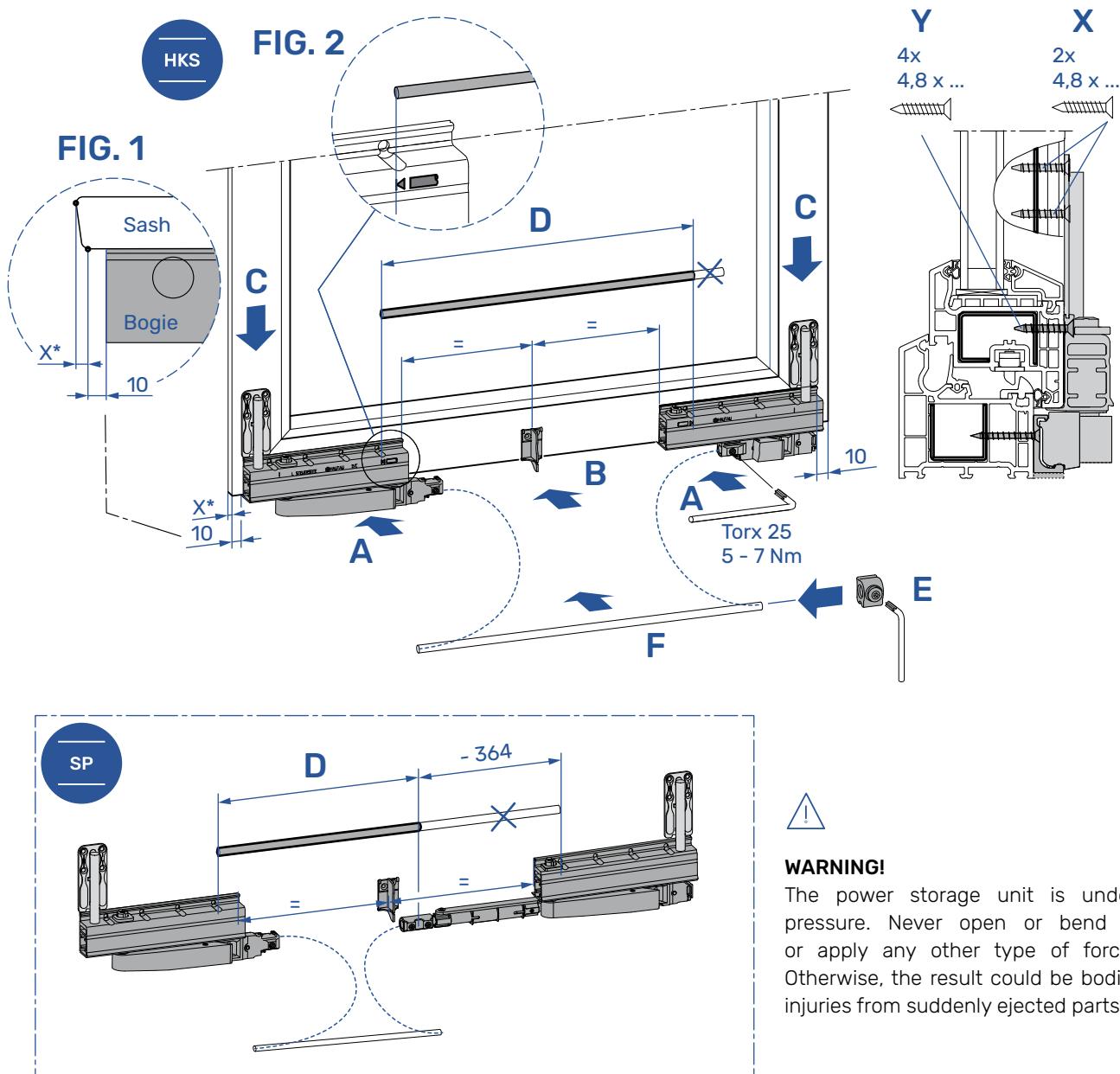


- 1 Install 2 corner drives on top (A) and 2 corner drives on bottom (B) with RS cam. Bottom corner drives must have at least one RS cam each, for tilt.
- 2 Shorten the espagnolette (C) and central locks (D) according to the rebate dimensions of the sash.
- 3 Install the shortened espagnolette (C) and center locks (D).
- 4 Move the sliders (E) on corner drives, to lock the hardware in place.
- 5 Fix the hardware to the sash with 4,2 x 25 mm screws.



FRAME HARDWARE INSTALLATION INSTRUCTIONS

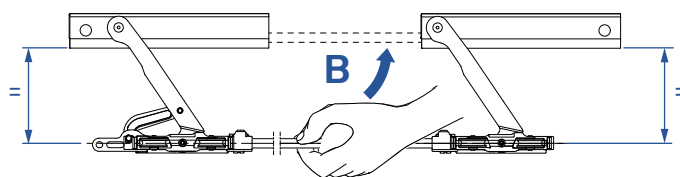
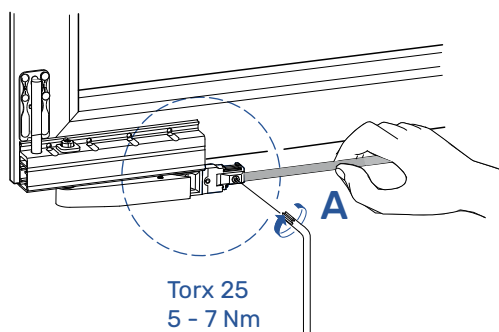
Mounting of bogies



- 1 Install and fix the bogies (A) with screws. Ensure the flush position by keeping the 10 mm distance from the outer sash edges (FIG. 1).
- 2 Fix cover fillet support (B) in the middle of bogies. For SRW > 1450 mm, install 2 fillet supports equally between bogies.
- 3 For HKS 160 insert the support arms (C) and fix it with screws.
- 4 Cut the connecting track (D) to size according to the marks on bogies (FIG. 2).
- 5 For SRW > 1450 mm move the support block (E) into the middle of the connecting rod (D) and tighten the Torx screw.
- 6 Install connecting rod in bogies (F) and tighten the Torx screws.

FRAME HARDWARE INSTALLATION INSTRUCTIONS

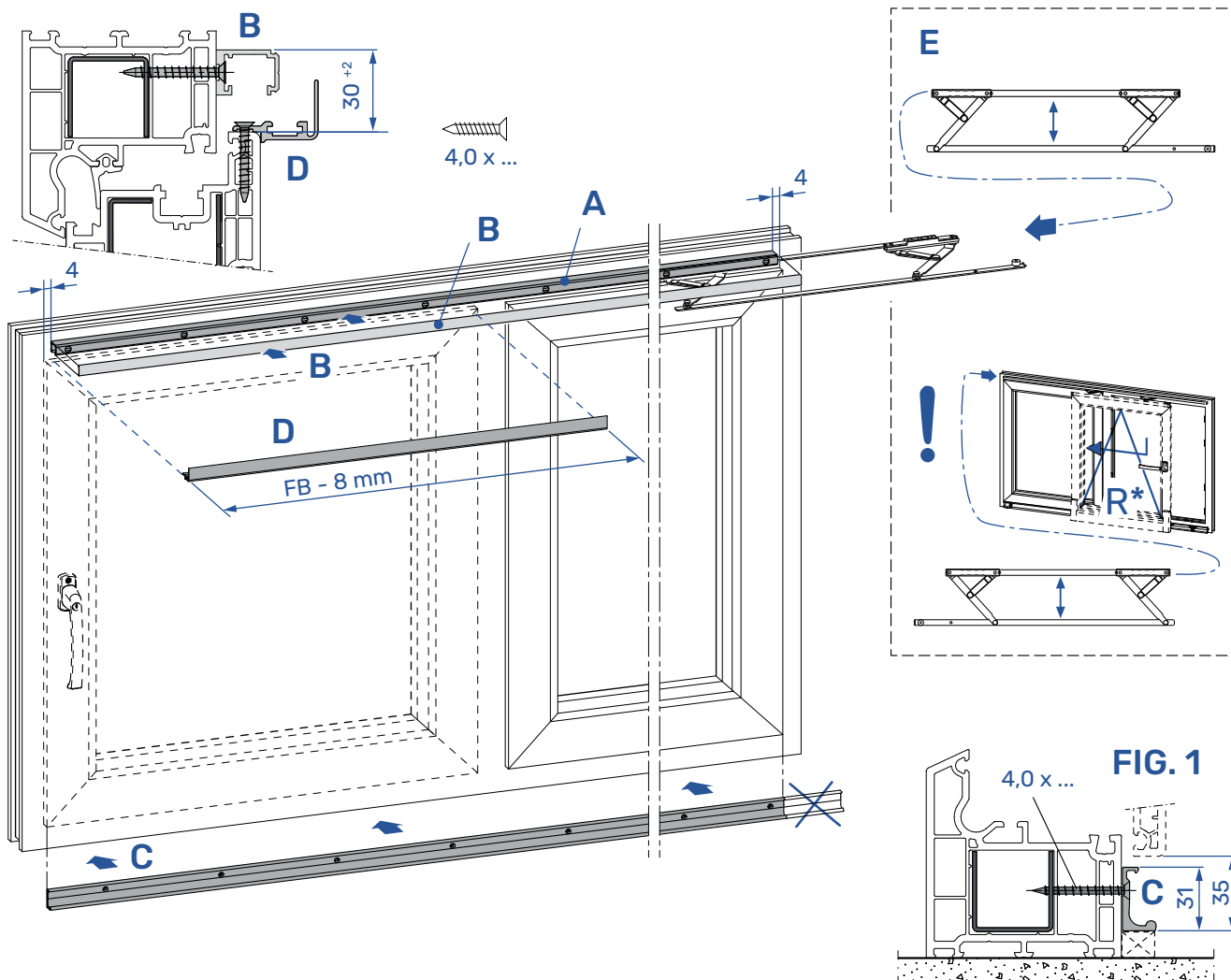
Parallel alignment of bogies



- 1 Grab the connecting rod (A) and bring it into position "close" (B).
- 2 Tighten the connecting rod at the master bogie.
- 3 Now, both bogies should be in parallel position. Tighten also the slave bogie.

FRAME HARDWARE INSTALLATION INSTRUCTIONS

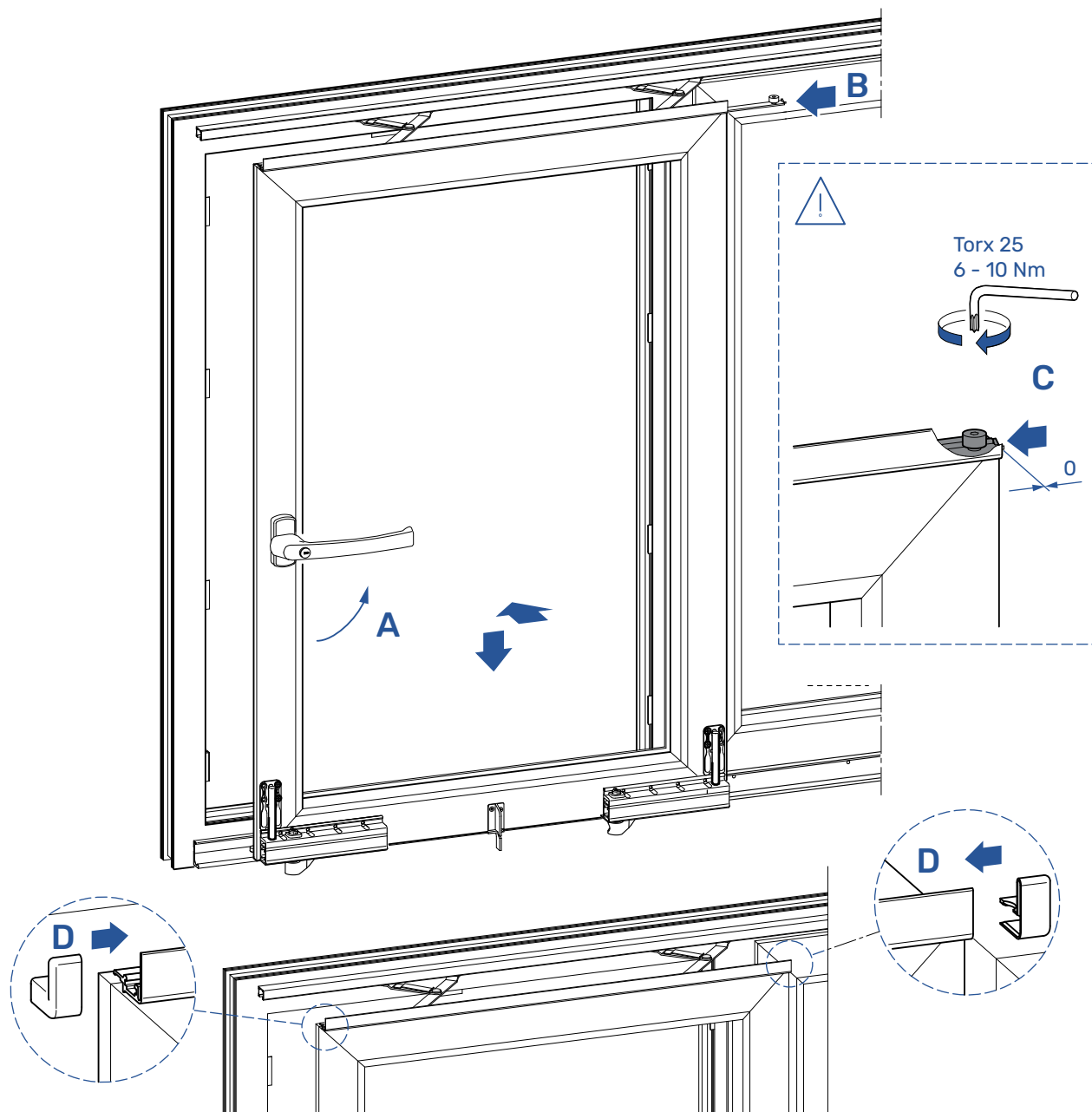
Mounting of guide & bottom track and stay system



- 1 Cut the guide track (A) to the correct dimension - distance between outer edges of sliding and fixed sash, minus 8 mm. For correct position, use the montage jig 1105239. Fix the guide track (A) with **flathead** screws.
- 2 Shorten the cover profile (B) according to the size of the guide track (A) and clip it on the guide track (A).
- 3 Cut the bottom track (C) to the correct dimension - distance between outer edges of sliding and fixed sash. For correct position, use the montage jig 1105239. Fix the bottom track (C) with **flathead** screws.
- 4 Cut the stay connecting profile (D) to the width of outer edge of sliding sash minus 8 mm. Fix it on the top of the sash in the middle, with screws.
- 5 Open the stay system (E) and push it into the guide track (A).

FRAME HARDWARE INSTALLATION INSTRUCTIONS

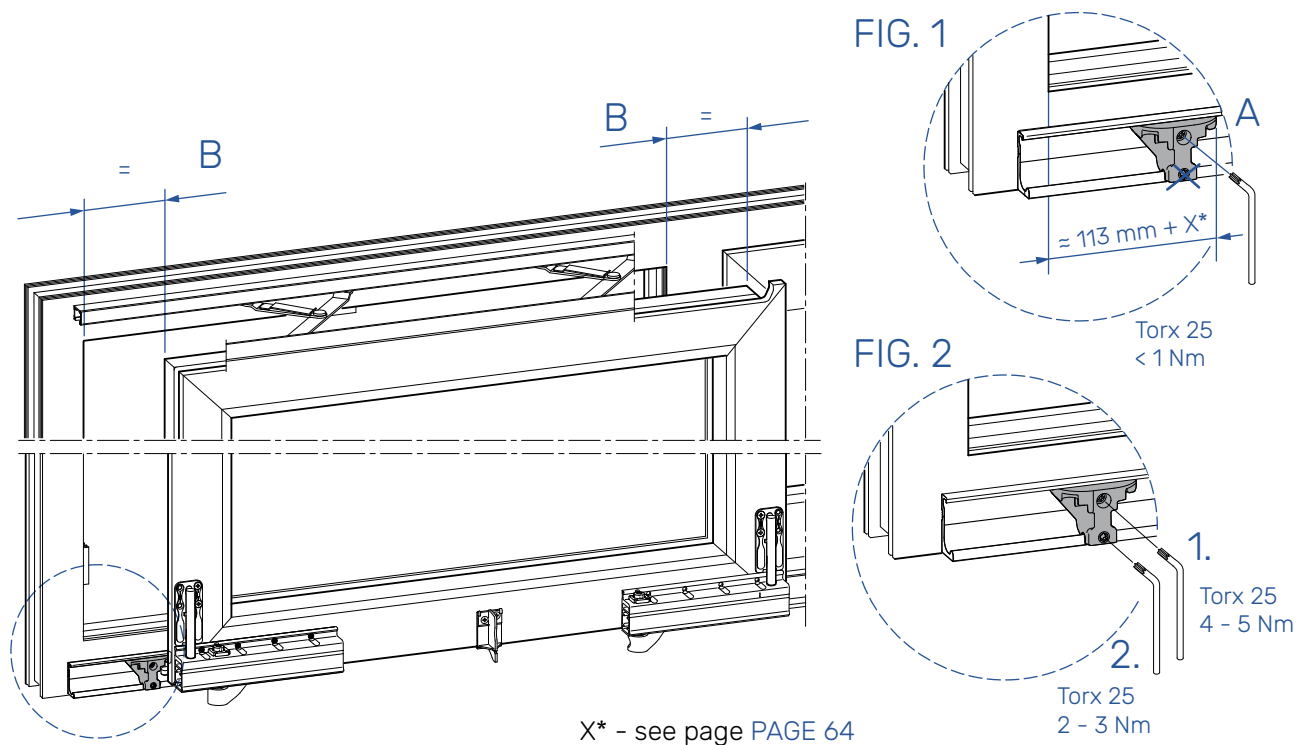
Hanging sash



- 1 Bring handle into slide position (A). Lift the sash slightly in oblique position and place it together with bogie rollers on front edge of bottom track.
- 2 Push stay system (B) into stay connecting profile. Align the stay system into flush position (C) with the connecting profile. After that, tighten the screw. The screw must be positive fitted into the hole of the stay connecting profile!
- 3 Attach cover caps (D) on ends of stay connecting profile.

FRAME HARDWARE INSTALLATION INSTRUCTIONS

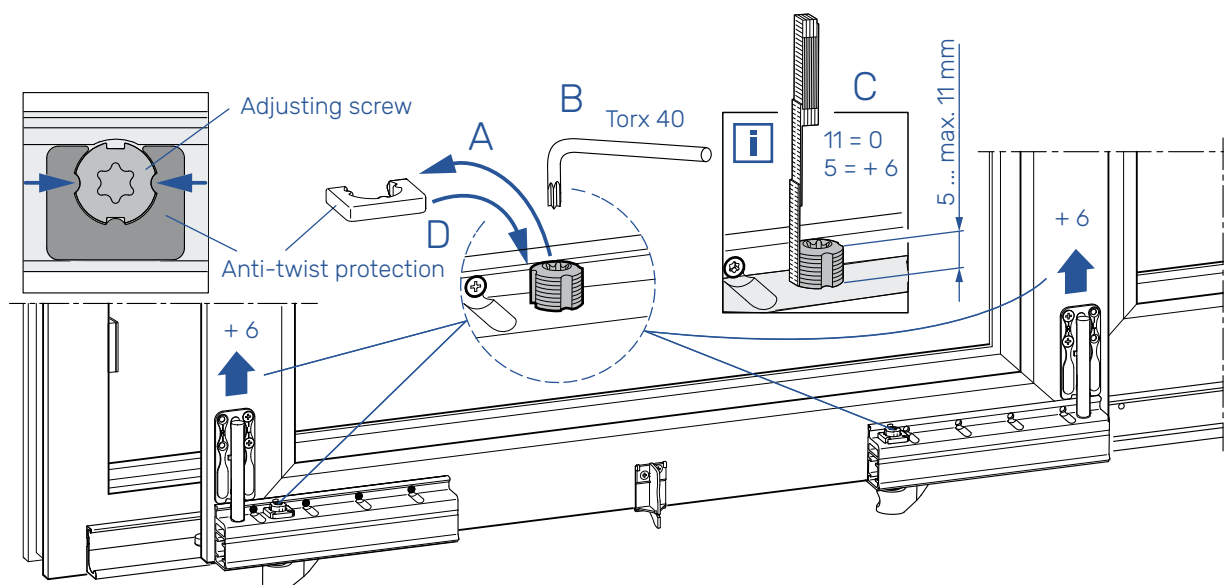
Installation of guide block and sash alignment



- 1 Set guide block (A) on handle side at a distance of approx. 113 mm + X^* from the inner edge of the frame (FIG.1). Tighten the guide block slightly using the upper screw.
- 2 Put the sash into tilt position and check fittings cavity (B) on both sides (12 mm). Reset guide block, if necessary.
- 3 Tight the screws on the guide block (FIG.2).

FRAME HARDWARE INSTALLATION INSTRUCTIONS

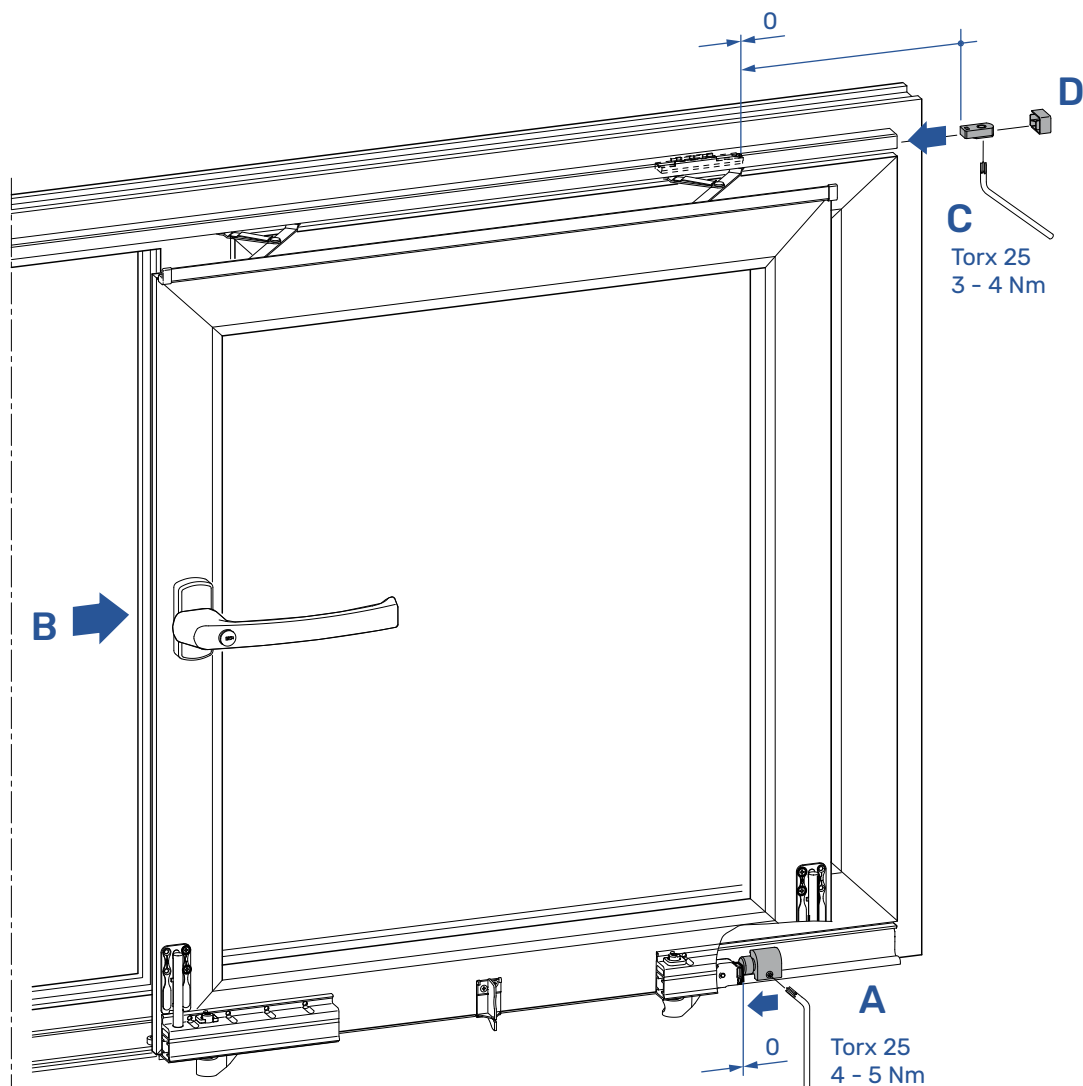
Sash alignment



- 1 Check fittings cavity top and bottom on both sides (not shown). If necessary, align the sash as follows.
- 2 Remove anti-twist protections (A).
- 3 Lift bogies (B) by means of adjusting screws in order to align sash. The adjusting screws are allowed to be turned out max. 11 mm (C). Do not overdo it!
- 4 Put anti-twist protections on adjusting screws (D); at first, correct orientation of adjusting screws, if necessary.

FRAME HARDWARE INSTALLATION INSTRUCTIONS

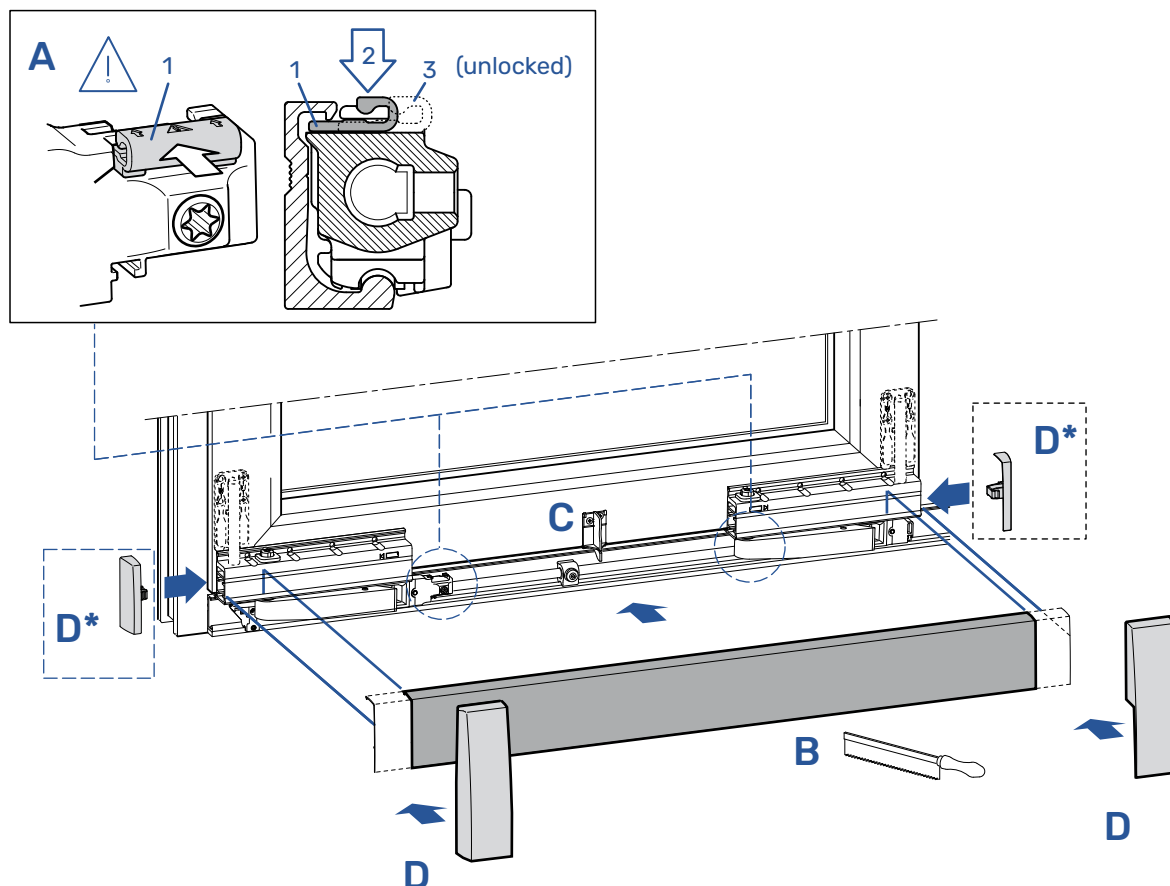
Buffer installation



- 1 Screw bottom buffer (A) with attached rubber in required position on bottom track with Torx 25.
- 2 Move the sash (B) right to the buffer.
- 3 Insert top buffer (C) into guide track (until stay system) and tighten it firmly with Torx 25.
- 4 Attach cover caps (D) on ends of the guide track.

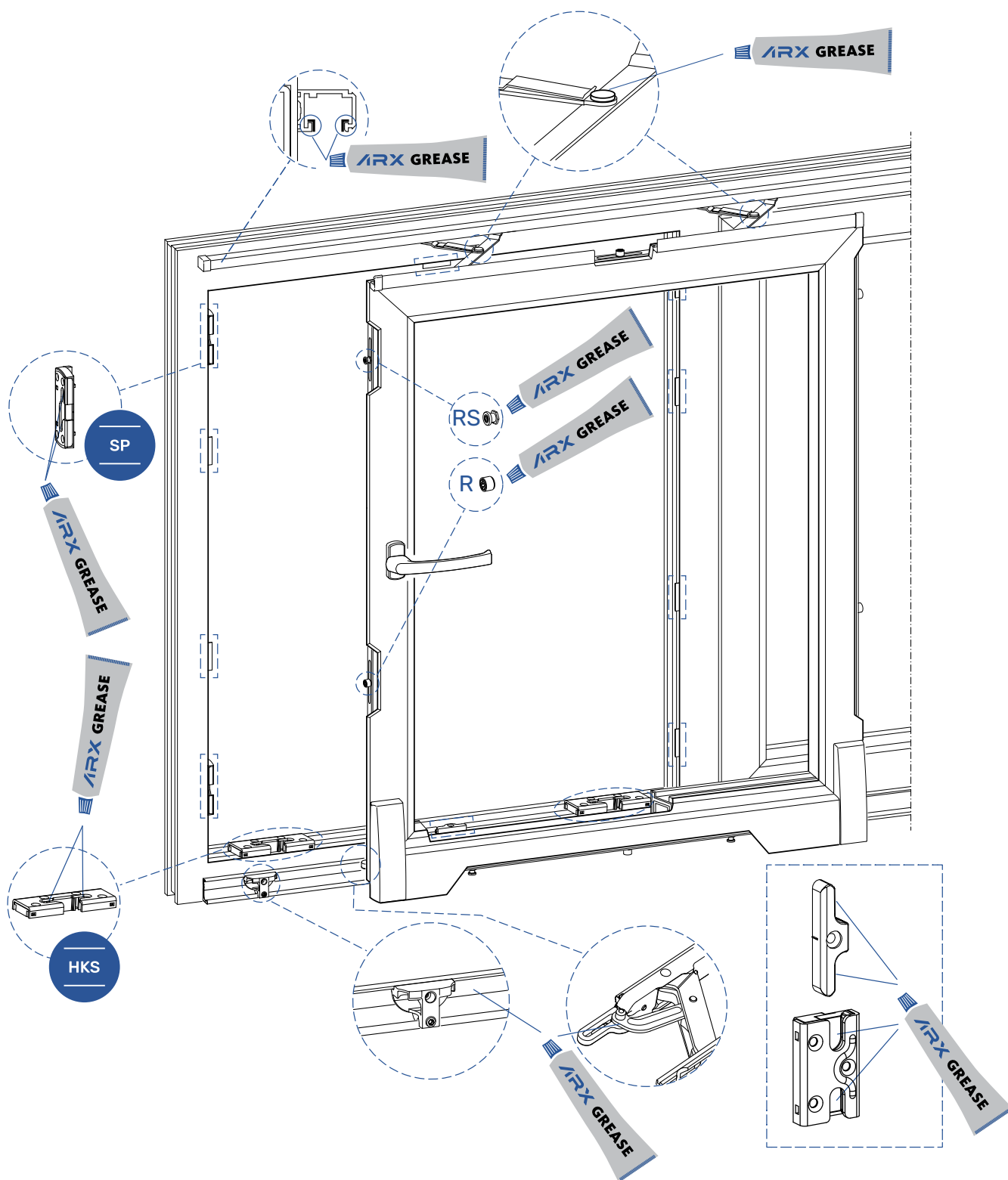
FRAME HARDWARE INSTALLATION INSTRUCTIONS

Bogie safety cover and support arm cover installation



- 1** Move bogie safety device (1) of both bogies backwards until they engage in position as shown (2). Operating sliding window mustn't have safety device disengaged (3). (A)
- 2** Cut cover profile (B) to size according to bogie marks.
- 3** Align cover profile (B) according to bogie marks and clip it on the bogies as well as on the cover fillet support(s) (C).
- 4** Clip cover caps (D*) to cover bogies (HKS 100) or clip cover caps (D) to cover bogies with support arms (HKS 160 and SP).

MAINTENANCE INSTRUCTIONS



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 months.

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



DESCRIPTION	MATERIAL
ARX - HIGH QUALITY HARDWARE GREASE	1055144



HS Lift and Slide

Basic schemes
Product portfolio

HS 330 - LIFT AND SLIDE BASIC SCHEME

1 ESPAGNOLETTE BS 37,5

DESCRIPTION	NOTE	MATERIAL
1700		1149783
2200		1149785
2400		1149786
2700		1149787

2 SET OB BOGIES

300KG 1150005

2.1 SET OB BOGIES

400KG 1149788

3 BRACKET ROUND

DESCRIPTION	NOTE	MATERIAL
750		1149776
1500		1149778
2500		1149780

4 ADDITIONAL PARTS

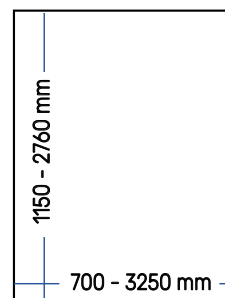
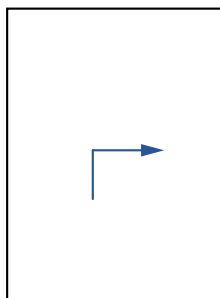
DESCRIPTION	NOTE	MATERIAL
ALUPLAST BLACK	PVC	1149796
ALUPLAST WHITE	PVC	1149774
SALAMANDER WHITE	PVC	1156221
ELVIAL WHITE	ALU	1156222
ALUMINKO WHITE	ALU	1156223
ETEM WHITE	ALU	1156224

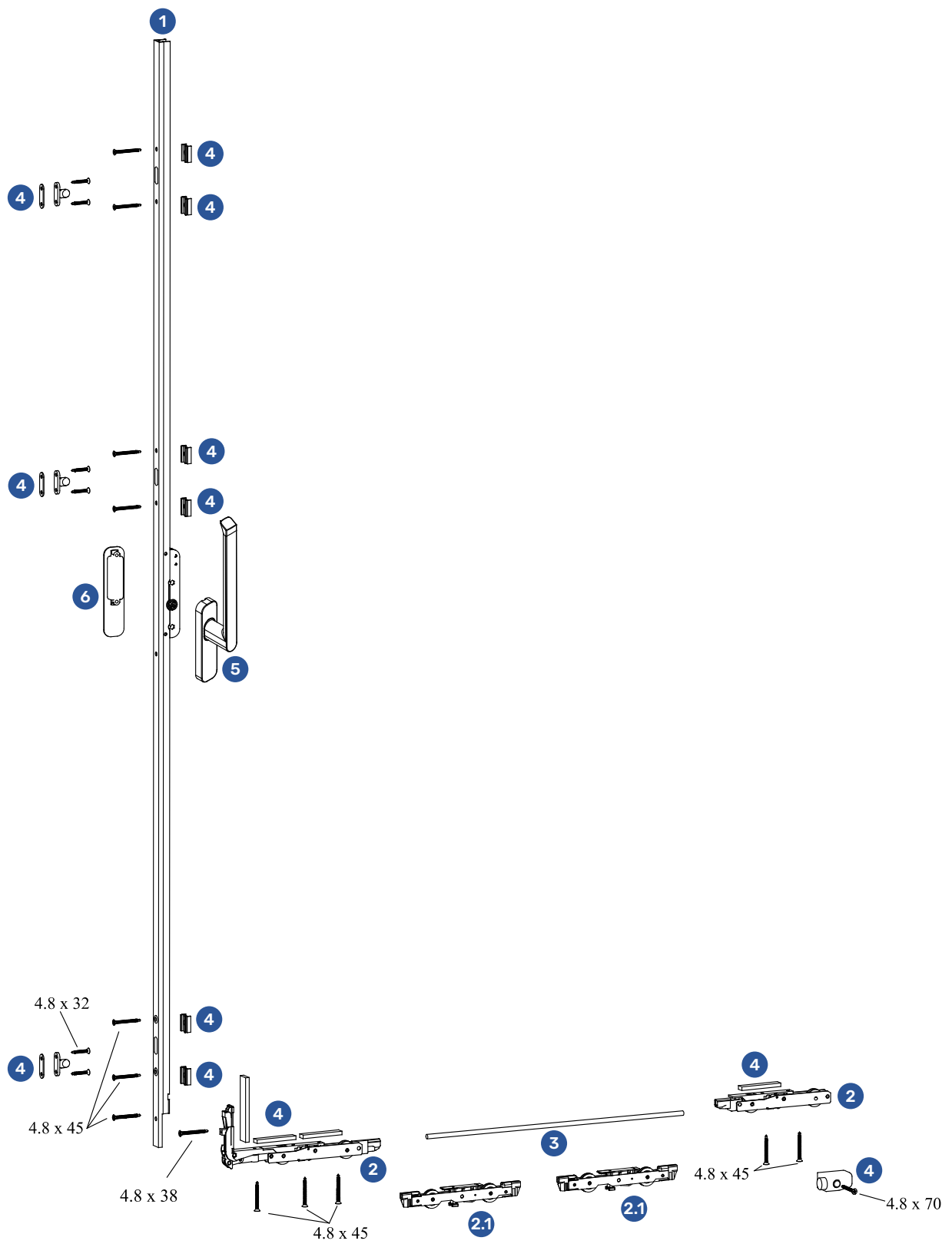
5 HANDLE INNER

DESCRIPTION	NOTE	MATERIAL
WHITE RAL 9016		1149801
BLACK RAL 9005		1149802
ANTHRACIT R7016		1149803

6 EXTERNAL LUG

DESCRIPTION	NOTE	MATERIAL
WHITE RAL9016		1149798
BLACK RAL9005		1149799
ANTRACIT RAL7016		1149800

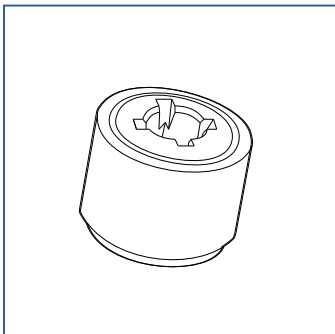






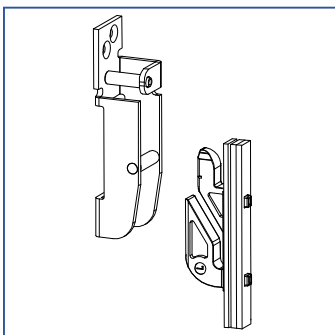
PASS Practical Agile Sliding System

Basic schemes
Proposed guideline
Product portfolio
Detailed information



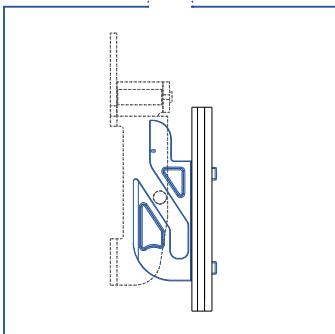
R cam

R cams incorporate a regulatory function which allows installer or user to optimize the window compression by +/- 0,8 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.



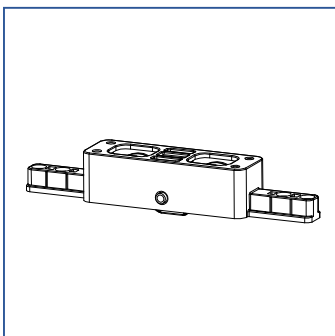
Hooks

Hook's brilliant design for closing and gasket compression improves sealing properties of windows and balcony doors. They also allow the window or door to be in one of 3 stages - open position, ventilation position and closed position.



Night ventilation

When the striker pins begin to roll on the hooks, release the handle in a horizontal position. That way the hook won't be full engaged with the striker, but rather half engaged. That way the opening between the sash and the frame will measure 5 mm and it will allow for the air to circulate and ventilate the inside of your home.

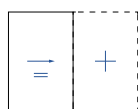


Max. sash weight up to 150 kg

Each window or door contains two PASS bogies, which are made from zamac, which bring additional rigidity and strength to the bogies in comparison with plastic.

Symbols

In the part describing the Retract & Slide systems, different symbols, diagrams and tables are used in order to provide a clear picture and demonstration of the hardware application. The meanings are as follows:



Retract and slide



Rebate sash height



Rebate sash width



Handle height



Night vent



Length / dimension



Warning



Max. sash mass



Material number



Orientation / position



Packaging

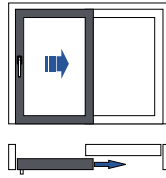


Hardware shortening

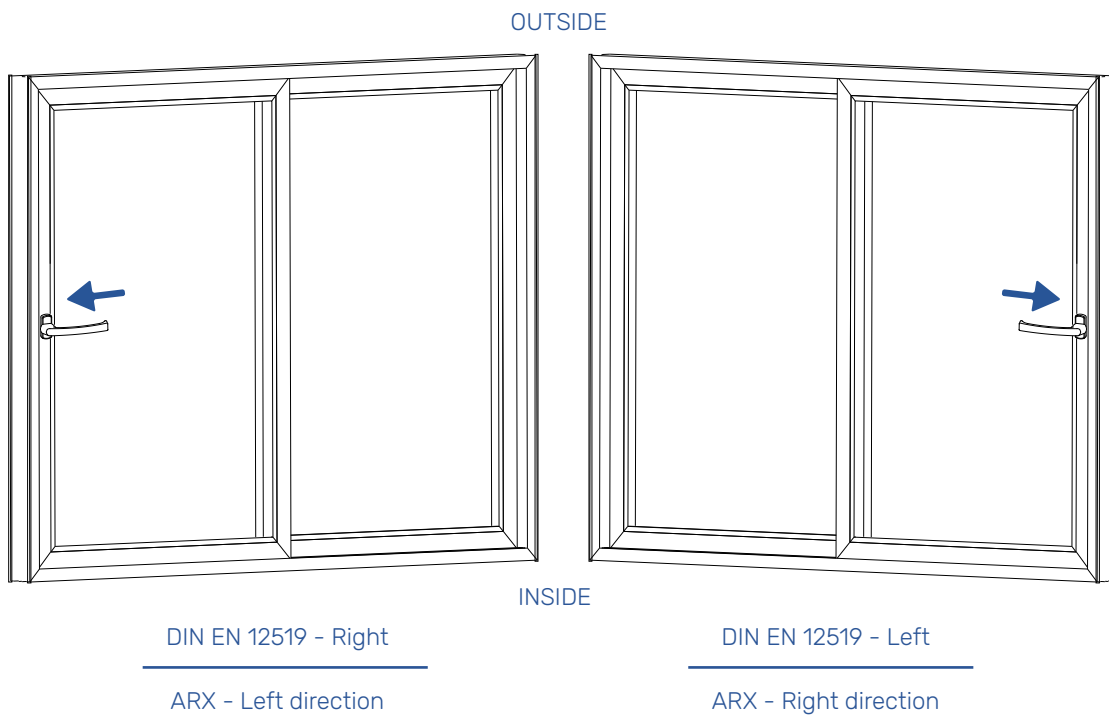
Abbreviation	Description	Units
SRH	SASH REBATE HEIGHT	mm
SRW	SASH REBATE WIDTH	mm
HH	HANDLE HEIGHT	mm
BS	BACKSET	mm
M	MAX. SASH MASS	kg
SRH : SRW	MAX. RATIO BETWEEN SRH AND SRW	/

SASH ARRANGEMENT

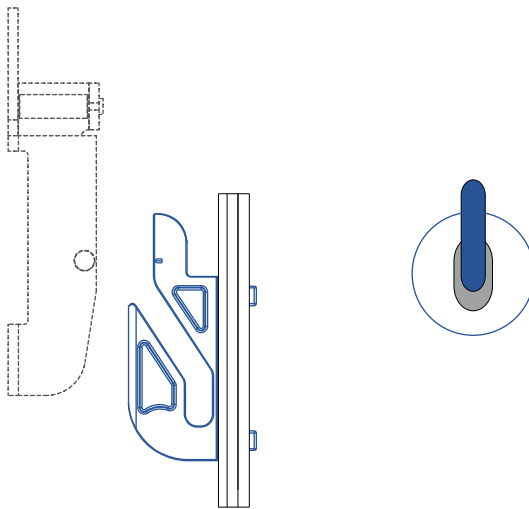
SCHEME A



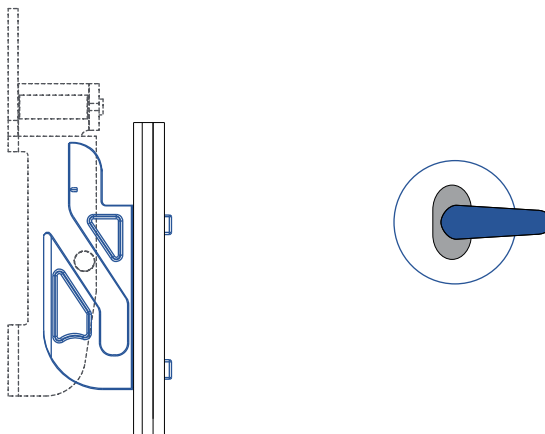
DIRECTION OF OPENING



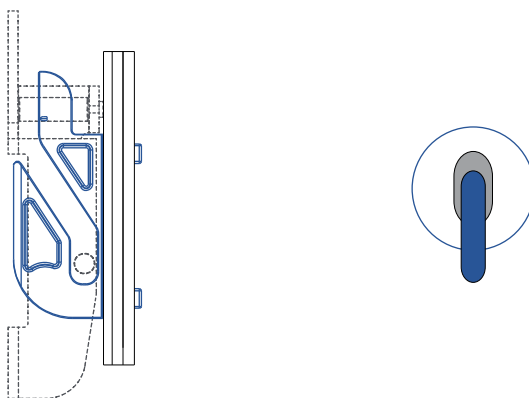
PASS SYSTEM OPENING



OPEN POSITION

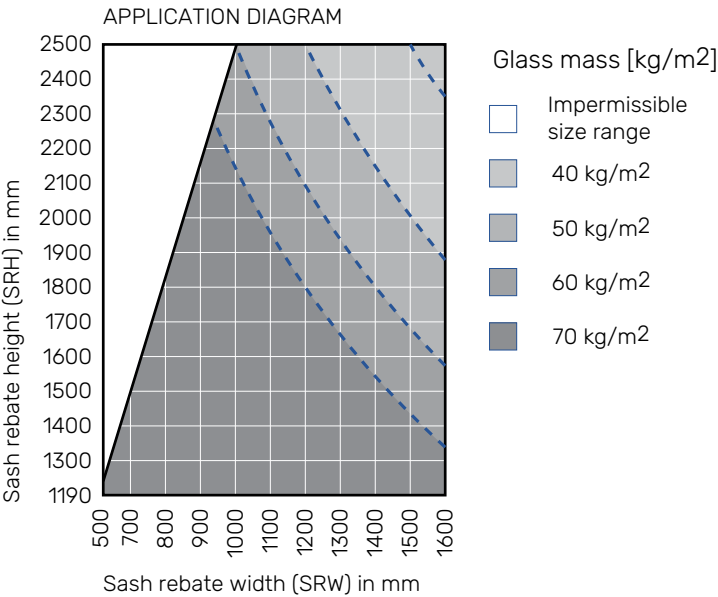


VENTILATION POSITION



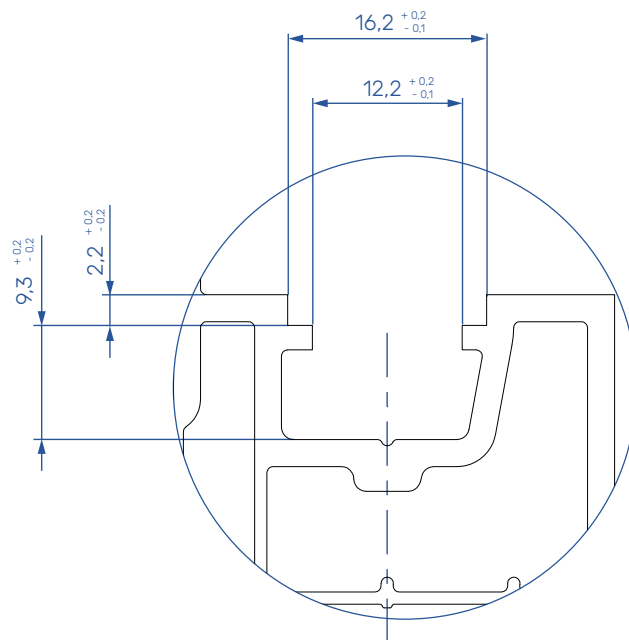
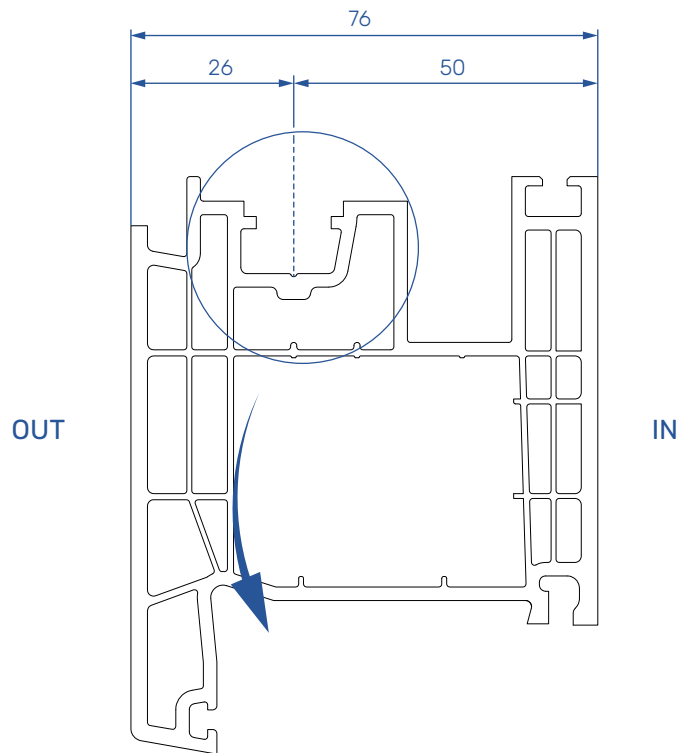
CLOSED POSITION

APPLICATION DIAGRAM



SRH	1190 - 2500
SRW	500 - 1600
M	150
max. SRW : SRH	1 : 2,5

Profile dimensioning - PROFINE Premislide



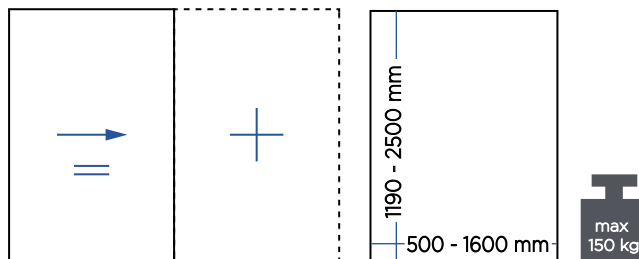
RETRACT & SLIDE - PASS 150 BASIC SCHEME

1 BASIC SET

1143090

2 ESPAGNOLETTE & HOOK STRIKER SET ¹⁾

SRH	HH	POS	MATERIAL
1190-1390	500	L	1143080
1190-1390	500	R	1143081
1391-1585	500	L	1143080
1391-1585	500	R	1143081
1586-1800	500	L	1143080
1586-1800	500	R	1143081
1801-2000	500	L	1143080
1801-2000	500	R	1143081
1690-1890	1000	L	1143082
1690-1890	1000	R	1143083
1891-2090	1000	L	1143082
1891-2090	1000	R	1143083
2091-2300	1000	L	1143082
2091-2300	1000	R	1143083
2301-2500	1000	L	1143082
2301-2500	1000	R	1143083
1690-1890 ²⁾	1000	L	1143084
1690-1890 ²⁾	1000	R	1143085
1891-2090 ²⁾	1000	L	1143084
1891-2090 ²⁾	1000	R	1143085
2091-2300 ²⁾	1000	L	1143084
2091-2300 ²⁾	1000	R	1143085
2301-2500 ²⁾	1000	L	1143084
2301-2500 ²⁾	1000	R	1143085



ONLY FOR PROFINE PREMISLIDE PROFILE - BACKSET 40 mm

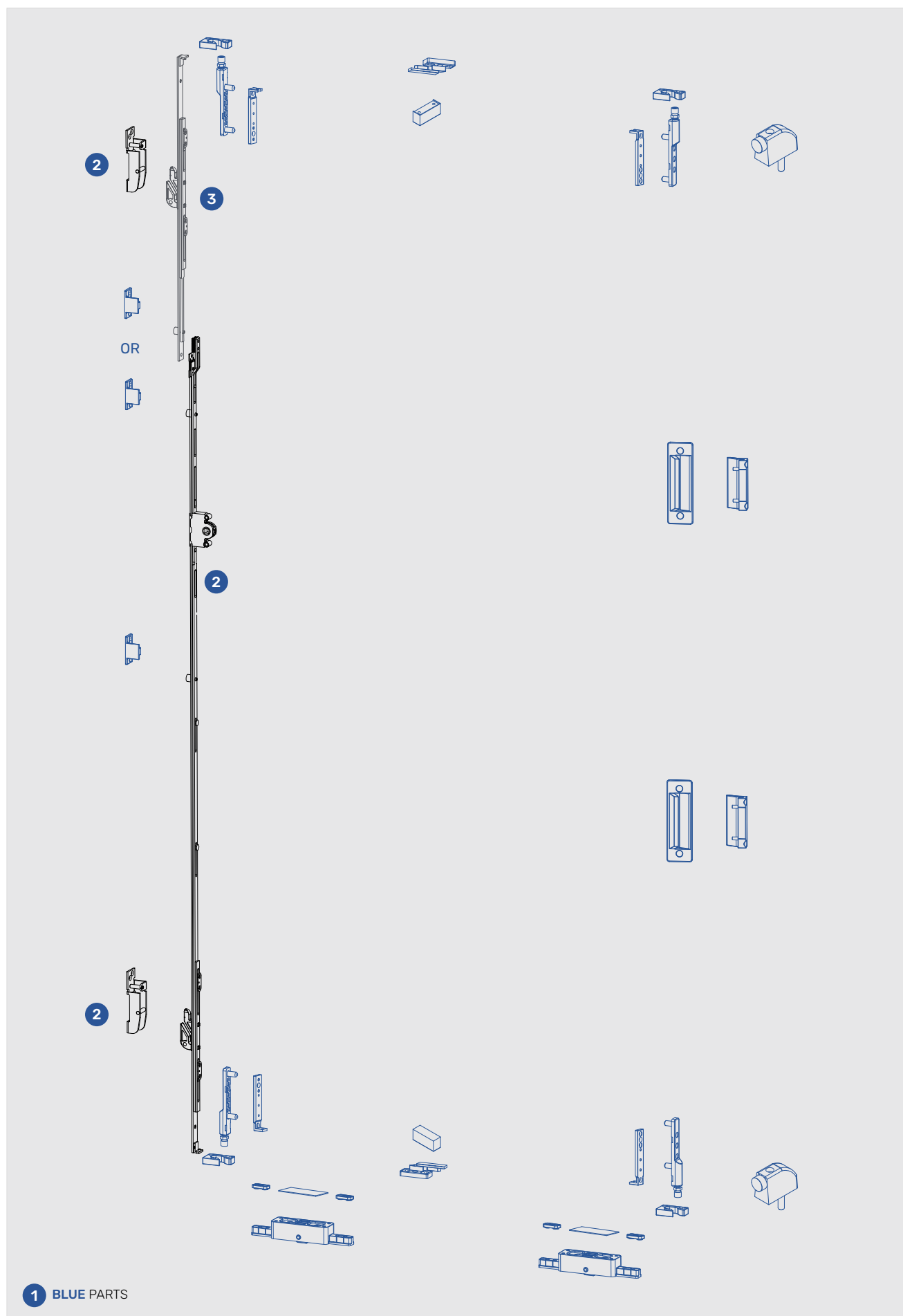
3 ESPAGNOLETTE EXTENSION

SRH	HH	POS	MATERIAL
1190-1390	500	L	1143086
1190-1390	500	R	1143087
1390-1585	500	L	1143088
1390-1585	500	R	1143089
1586-1800	500	L	1143086
1586-1800	500	R	1143087
1801-2000	500	L	1143088
1801-2000	500	R	1143089
1690-1890	1000	L	1143086
1690-1890	1000	R	1143087
1891-2090	1000	L	1143088
1891-2090	1000	R	1143089
2091-2300	1000	L	1143086
2091-2300	1000	R	1143087
2301-2500	1000	L	1143088
2301-2500	1000	R	1143089

¹⁾ 1x ESPAGNOLETTE + 2x HOOK STRIKER

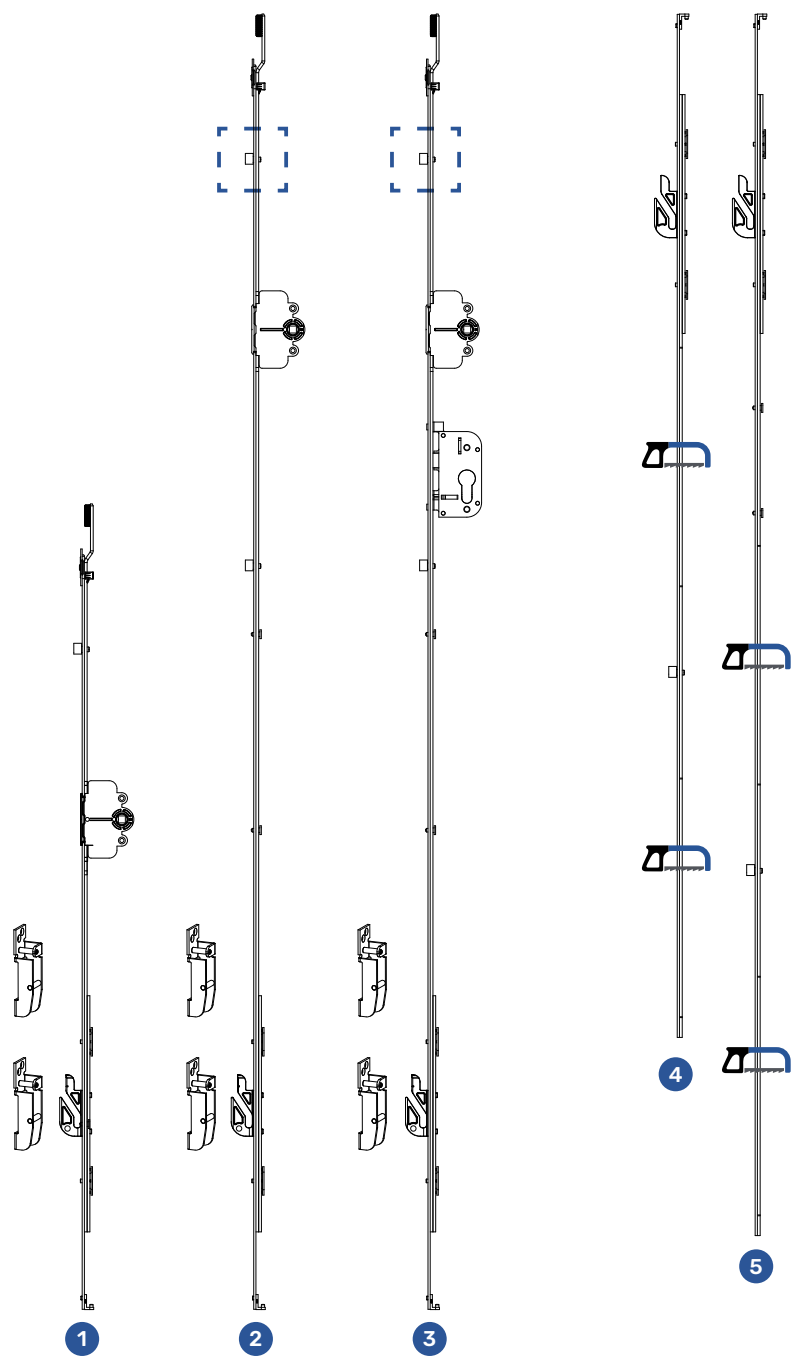
²⁾ LOCKABLE VERSION - PROFILE CYLINDER NOT INCLUDED

* MAX. SRW / SRH RATIO = 1 : 2,5



Espagnolettes and extensions

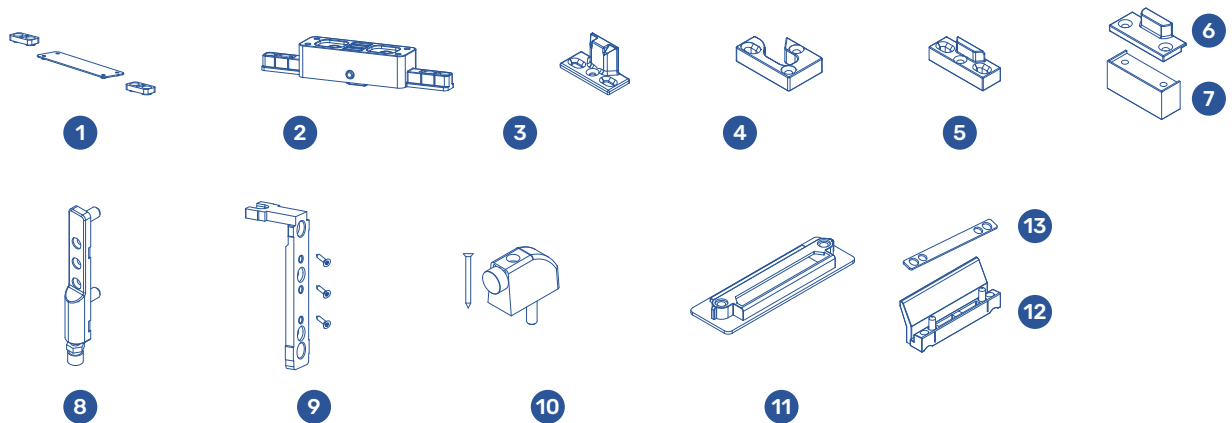
					
POS	Description	LENGTH	POS	PACK	MATERIAL
1	ESPAGNOLETTE 770 HH500 BS40 + 2x HOOK STRIKER SET	770	L	5	1143080
			R	5	1143081
2	ESPAGNOLETTE 1270 HH1000 BS40 + 2x HOOK STRIKER SET	1270	L	5	1143082
			R	5	1143083
3	ESPAGNOLETTE 1270 HH1000 BS40 WITH LOCK + 2x HOOK STRIKER SET	1270	L	5	1143084
			R	5	1143085
4	ESPAGNOLETTE EXTENSION 1032	1032	L	5	1143086
			R	5	1143087
5	ESPAGNOLETTE EXTENSION 1232	1232	L	5	1143088
			R	5	1143089



USED ONLY WHEN SRH = 1690 - 2090 mm

Basic set

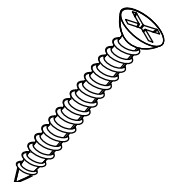
POS*	Description	PACK IN SET	MATERIAL
1	BOGIE PACKERS - PROFINE PREMISLIDE	2	1143090
2	BOGIES 150 KG	2	
3	R CAM STRIKER	2	
4	CORNER GUIDE STRIKER	4	
5	MIDDLE HORIZONTAL STRIKER - FRAME PART	2	
6	MIDDLE HORIZONTAL STRIKER - SASH PART	2	
7	MIDDLE HORIZONTAL STRIKER - SASH PART PACKER	2	
8	SASH GUIDE	4	
9	CORNER SASH GUIDE WITH SCREWS	4	
10	SASH BUFFER WITH SCREW	2	
11	VERTICAL BACK STRIKER - FRAME PART	2	
12	VERTICAL BACK STRIKER - SASH PART	2	
13	VERTICAL BACK STRIKER - SASH PART PACKER	2	



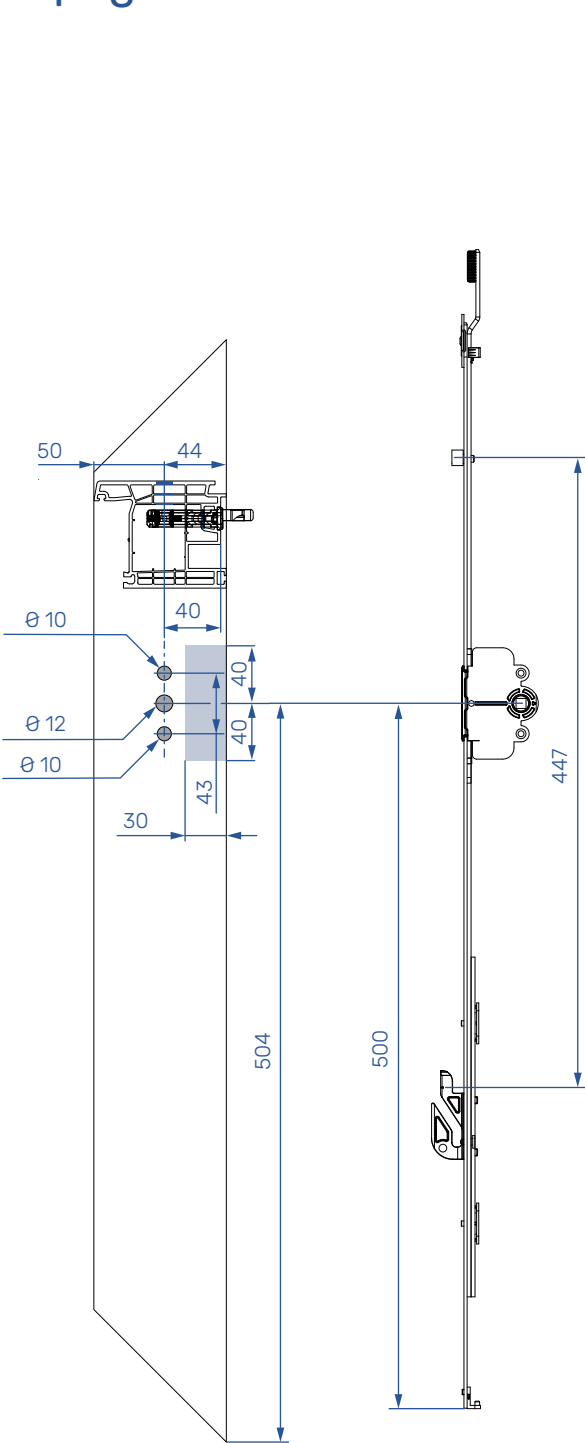
* ALL THE PARTS COMBINED REPRESENT 1 SET

SCREWS FOR FIXING HARDWARE COMPONENTS

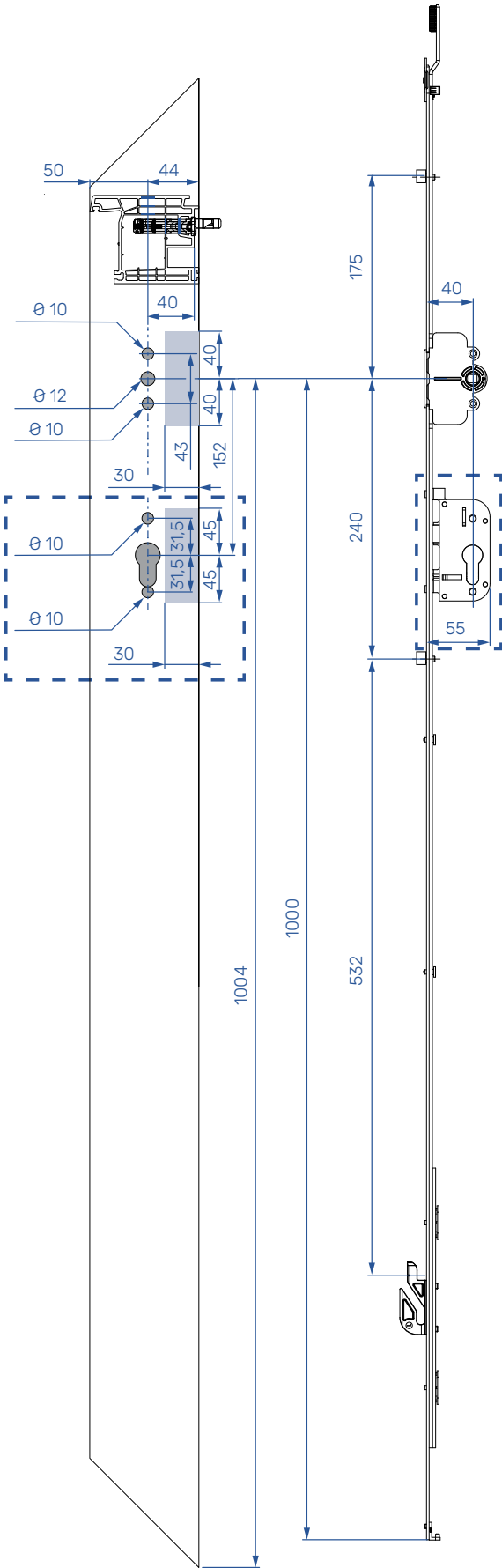
TYPE	DESCRIPTION	SIZE	MATERIAL
1	SCREW	4,2 x 25 mm	1134209
2	SCREW	4,2 x 35 mm	1134210



Espagnolette

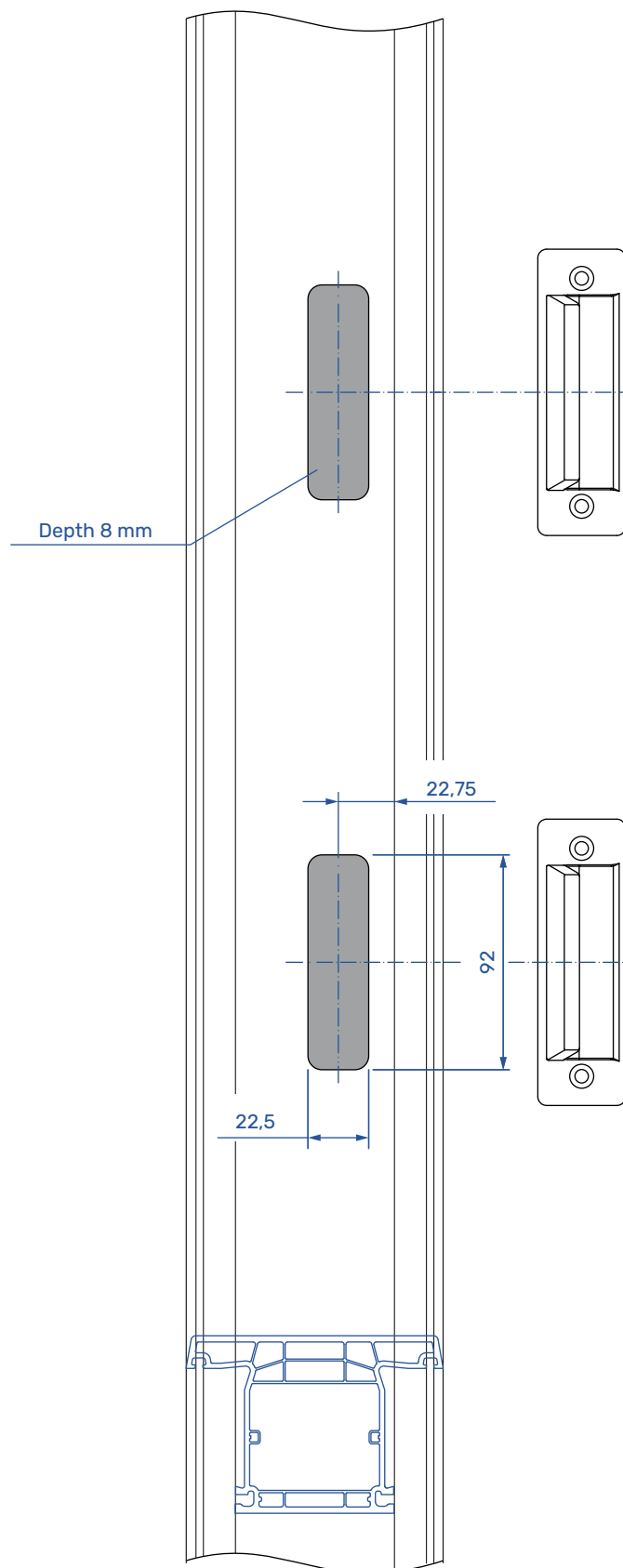


ESPAGNOLETTE 770 HH500 BS40

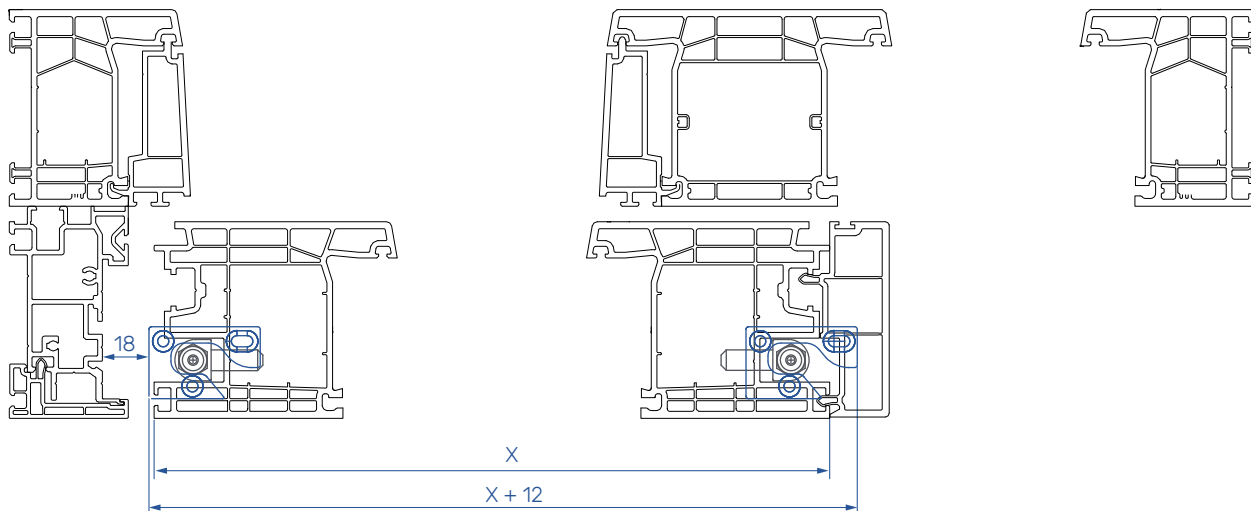


ESPAGNOLETTE 1270 HH1000 BS40

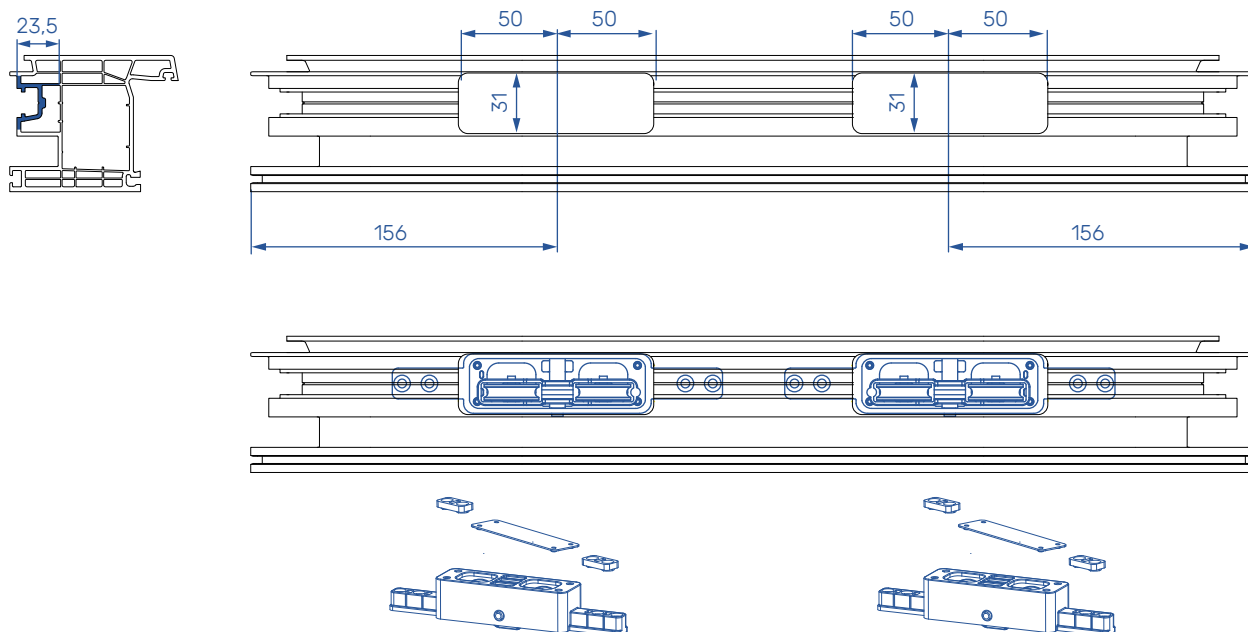
Vertical back strikers



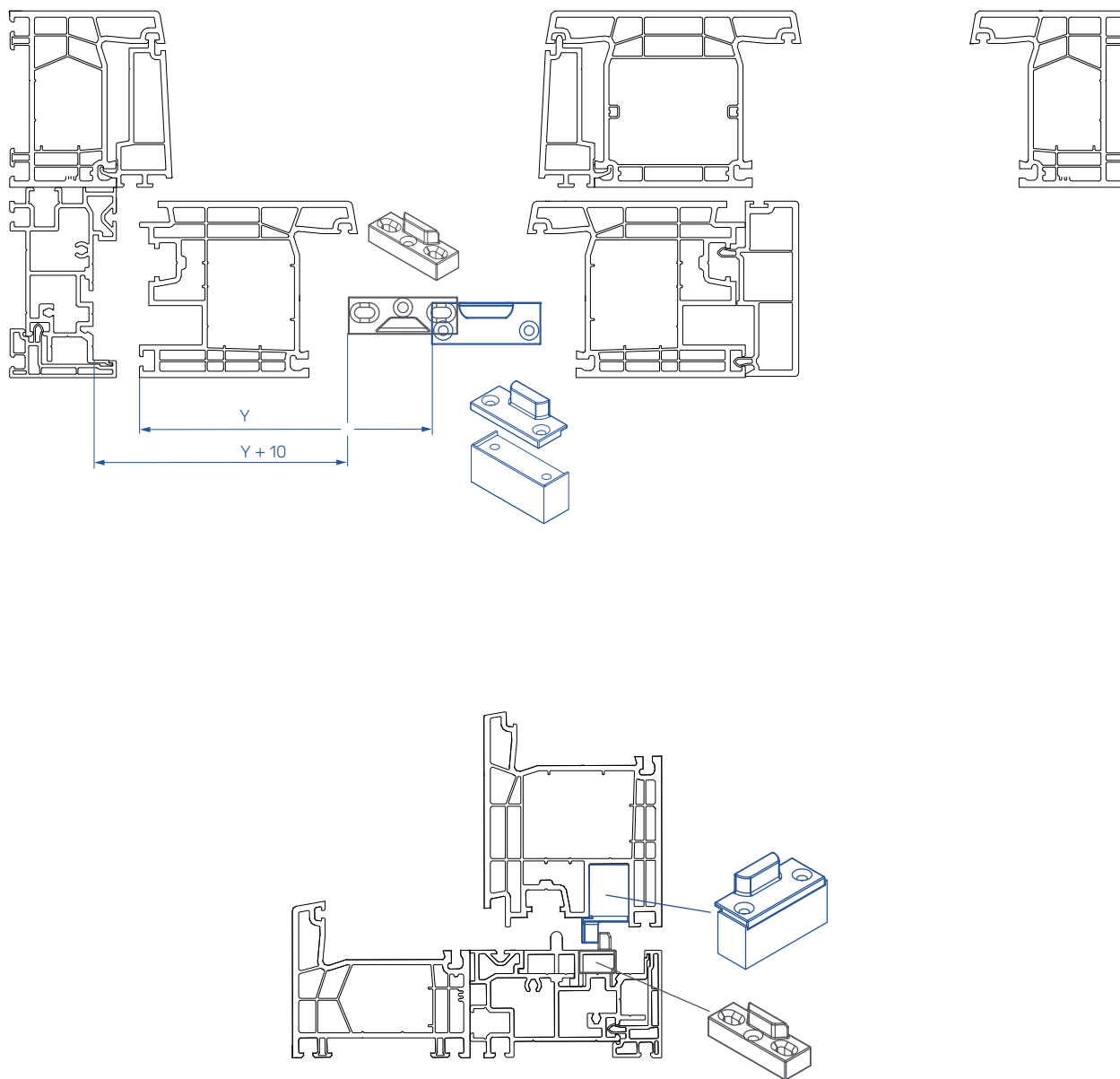
Corner guide strikers



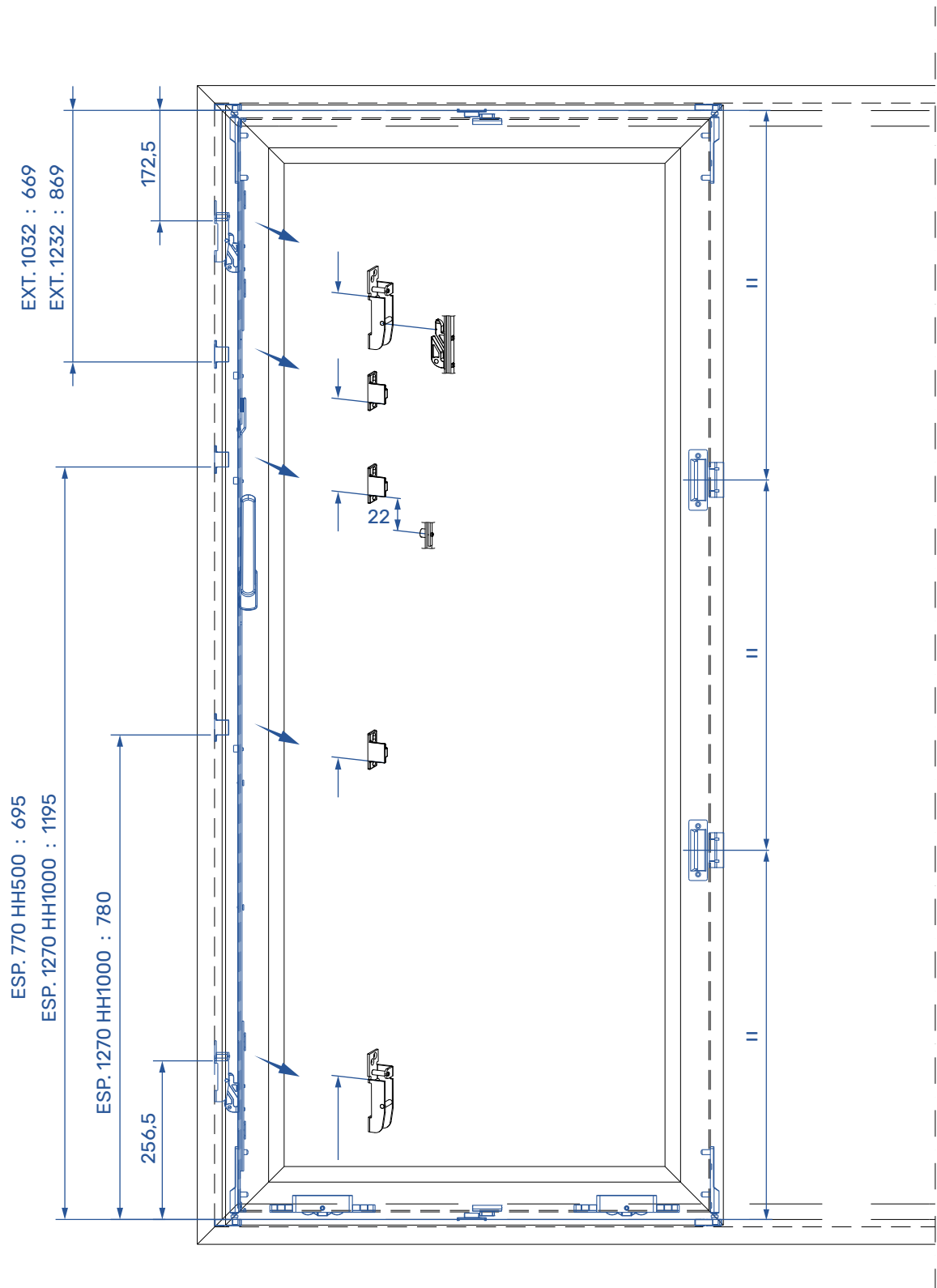
Bogies



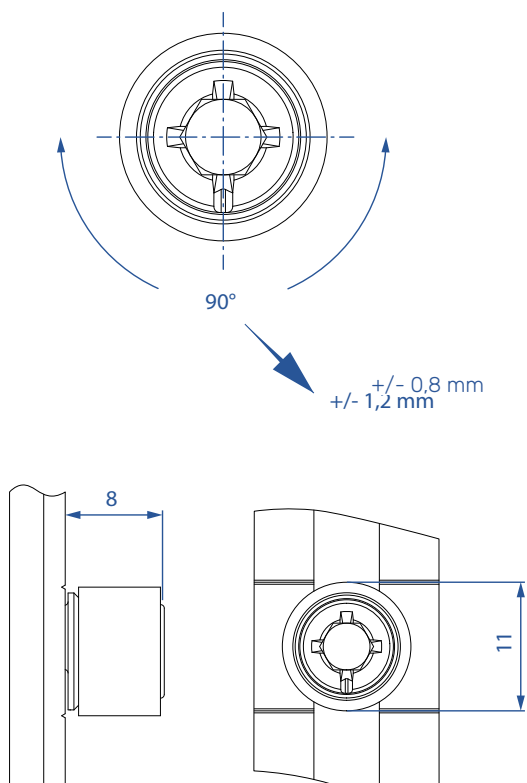
Middle horizontal strikers



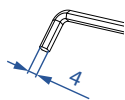
STRIKER POSITIONS



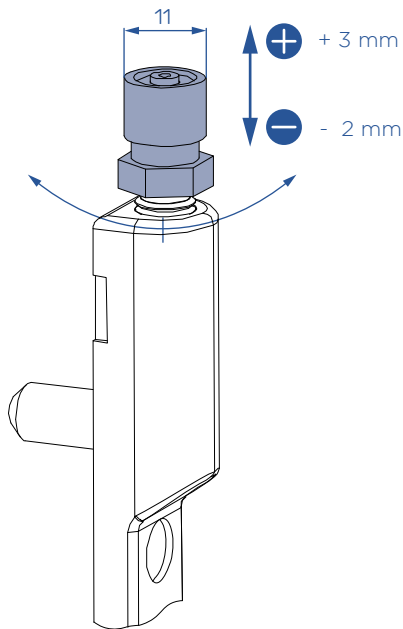
ADJUSTMENT INSTRUCTIONS



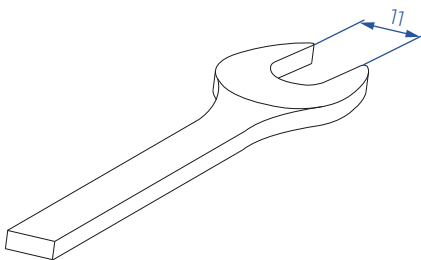
R CAM ADJUSTMENT TOOL



1



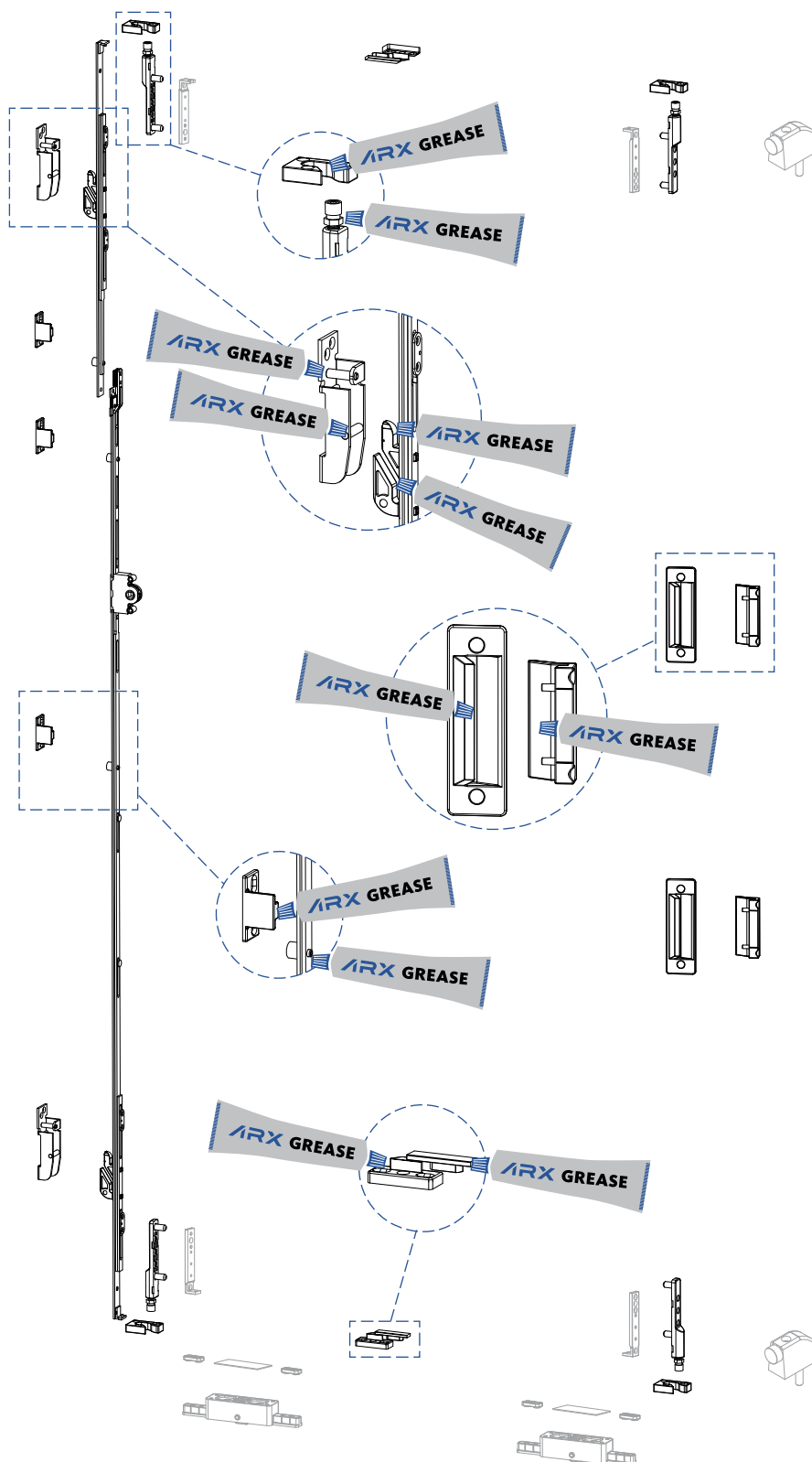
SASH GUIDE PIN ADJUSTMENT TOOL



2

TYPE	DESCRIPTION	SIZE	MATERIAL
1	HEX KEY	4 mm	1095750
2	WRENCH KEY	11 mm	/

MAINTENANCE INSTRUCTIONS



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 months.

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



DESCRIPTION	MATERIAL
ARX - HIGH QUALITY HARDWARE GREASE	1055144



ARX building hardware

- INSTALLATION INSTRUCTIONS,
- INSTRUCTIONS FOR USE,
- PRODUCT PORTFOLIO PRESENTATION,
- NOVELTIES.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



Kovinoplastika Lož d.o.o.
Cesta 19. oktobra 57, Lož
1386 Stari trg pri Ložu
Slovenia

Follow us:

