



TECHNICAL MANUAL

SCREEN BLINDS



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ISOTRA*Quality*

A mark symbolising long tradition, inestimable investment into development, the use of quality materials, state-of the-art technologies, reliable work from hundreds of employees and numerous other parameters, contributing one entity - the final product of ISOTRA.

CE Product Marking



DECLARATION OF PERFORMANCE

No. 001/2013

Producer: ISOTRA a.s., Bílovecká 2411/1, 746 01 Opava, IČ: 47679191

Hereby declares that:

Type: SCREEN – outside curtains (outside roller blind) with motor driving

Model: ZIP

Has been designed and manufactured in conformity with Regulation (EU) No 305/2011 of the European Parliament and of the Council (CPR).

Product description and designed use:

Screen ZIP is a product of interior and exterior shading technique, which has vertically mounted tube with winding fabrics. Screen ZIP is operated with motor. Control may be to the left or right side of the roller. The engine upper and lower roller position is determined electronically within the engine.

SCREEN ZIP is unique screen system. Thanks to the special guidance of the fabric in the side rails SCREEN ZIP substantially increases resistance to wind shutters in the closed position partially replaces anti-insect screen.

The product is used for shading according to the type of fabric up to 100%, to protect against glare (the sun, streetlights, car), to adjust the intensity of light passing through from the exterior to protect privacy (before observing from the outside) and complete blackout.

The product is designed for installation into the jamb. The blind is mounted with the help of screws with anchors on the wall before opening the window or the window frame.

Evaluation system: 4

Product evaluation according system 4 was performed by:

Product evaluation was made by component supplier: RESTENDE S.r.l, Via Chiringella, 74 – 20864 Agrate Brianza (MB), Italy

Declared performance:

Essential characteristics	Performance	Harmonized standard
Wind resistance	3	EN 13561:2009

The performance of ZIP is in conformity with the performance declared in declared performance.

ZIP does not contain substances which are within the meaning of Article 33 of the European Parliament and Council Regulation (EC) No 1907/2006 (REACH) subject to the obligation to inform the customer.

This declaration has been issued under the sole responsibility of the manufacturer.

Opava: 01. 07. 2013

Ing. Bohumír Blachut
General manager

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IČO: 47679191, DIČ: CZ47679191

DECLARATION OF PERFORMANCE

No. 002/2013

Producer: ISOTRA a.s., Bílovecká 2411/1, 746 01 Opava, IČ: 47679191

Hereby declares that:

Type: SCREEN – outside curtains (outside roller blind) with motor driving

Model: GW

Has been designed and manufactured in conformity with Regulation (EU) No 305/2011 of the European Parliament and of the Council (CPR).

Product description and designed use:

Screen GW is a product of interior and exterior shading technique, which has vertically mounted tube with winding fabrics. Screen GW is operated with motor or manually. Control may be to the left or right side of the roller. The engine upper and lower roller position is determined electronically within the engine.

SCREEN GW is a modern element of shading. The product is suitable for shading both interior and exterior and is suitable for both office buildings and houses. SCREEN GW is offered with a cover profile with the possibility to operate by the side cable or guide rail.

The product is used for shading according to the type of fabric up to 100%, to protect against glare (the sun, streetlights, car), to adjust the intensity of light passing through from the exterior to protect privacy (before observing from the outside) and for complete blackout.

The product is designed for installation into the jamb. The blind is mounted with the help of screws with anchors on the wall before opening the window or the window frame.

Evaluation system: 4

Product evaluation according system 4 was performed by:

Product evaluation was made by component supplier: RESTENDE S.r.l, Via Chiringella, 74 – 20864 Agrate Brianza (MB), Italy

Declared performance:

Essential characteristics	Performance	Harmonized standard
Wind resistance	3	EN 13561:2009

The performance of SCREEN GW is in conformity with the performance declared in declared performance.

SCREEN GW does not contain substances which are within the meaning of Article 33 of the European Parliament and Council Regulation (EC) No 1907/2006 (REACH) subject to the obligation to inform the customer.

This declaration has been issued under the sole responsibility of the manufacturer.

Opava: 01. 07. 2013

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DECLARATION OF PERFORMANCE

No. 003/2013

Producer: ISOTRA a.s., Bílovecká 2411/1, 746 01 Opava, IČ: 47679191

Hereby declares that:

Type: SCREEN – outside curtains (outside roller blind) with motor driving

Model: LITE

Has been designed and manufactured in conformity with Regulation (EU) No 305/2011 of the European Parliament and of the Council (CPR).

Product description and designed use:

Screen LITE is a product of interior and exterior shading technique, which has vertically mounted tube with winding fabrics. Screen LITE is operated with motor or manually. Control may be to the left or right side of the roller. The engine upper and lower roller position is determined electronically within the engine.

SCREEN LITE is a lightweight variant of SCREEN GW. SCREEN LITE is offered with a cover profile with the possibility to operate by the side cable or guide rail.

The product is used for shading according to the type of fabric up to 100%, to protect against glare (the sun, streetlights, car), to adjust the intensity of light passing through from the exterior to protect privacy (before observing from the outside) and for complete blackout.

The product is designed for installation into the jamb. The blind is mounted with help of screws with anchors on the wall before opening the window or the window frame.

Evaluation system: 4

Product evaluation according system 4 was performed by:

Product evaluation was made by component supplier: RESTENDE S.r.l, Via Chiringella, 74 – 20864 Agrate Brianza (MB), Italy

Declared performance:

Essential characteristics	Performance	Harmonized standard
Wind resistance	3	EN 13561:2009

The performance of SCREEN LITE is in conformity with the performance declared in declared performance.

SCREEN LITE does not contain substances which are within the meaning of Article 33 of the European Parliament and Council Regulation (EC) No 1907/2006 (REACH) subject to the obligation to inform the customer.

This declaration has been issued under the sole responsibility of the manufacturer.

Opava: 01. 07. 2013

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DECLARATION OF PERFORMANCE

No. 035/2013

Producer: ISOTRA a.s., Bílovecká 2411/1, 746 01 Opava, IČ: 47679191

Hereby declares that:

Type: SCREEN – outside curtains (outside roller blind) with motor driving

Model: ZIP ECONOMY

Has been designed and manufactured in conformity with Regulation (EU) No 305/2011 of the European Parliament and of the Council (CPR).

Product description and designed use:

Screen ZIP ECONOMY is a product of interior and exterior shading technique, which has vertically mounted tube with winding fabrics. Launch and recovery controls the motor. Control may be to the left or right side of the roller. The engine upper and lower roller position is determined electronically within the engine.

SCREEN ZIP ECONOMY is unique screen system. Thanks to the special guidance of the fabric in the side rails SCREEN ZIP ECONOMY substantially increases resistance to wind shutters in the closed position partially replaces anti-insect screen.

The product is used for shading according to the type of fabric up to 100%, to protect against glare (the sun, streetlights, car), to adjust the intensity of light passing through from the exterior to protect privacy (before observing from the outside) and complete blackout.

The blind is mounted screws with anchors on the wall before opening the window or the window frame only with the front mounting of the guide rail.

Evaluation system: 4

Product evaluation according system 4 was performed by:

Product evaluation made by: ČSĽ, a.s. Praha, pracoviště Zlín, K Cibelně 304, 764 32 Zlín – Louky a vydal hodnocení HSZ-13-014/OV.

Declared performance:

Essential characteristics	Performance	Harmonized standard
Wind resistance	3	EN 13561:2009

The performance of ZIP ECONOMY is in conformity with the performance declared in declared performance.

ZIP ECONOMY does not contain substances which are within the meaning of Article 33 of the European Parliament and Council Regulation (EC) No 1907/2006 (REACH) subject to the obligation to inform the customer.

This declaration has been issued under the sole responsibility of the manufacturer.

Opava: 01. 09. 2014

Ing. Bohumír Blachut
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DECLARATION OF PERFORMANCE

č. 034/2017

Producer: **ISOTRA a.s., Bilovecká 2411/1, 746 01 Opava, IČ: 47679191**

Hereby declares that:

Type: **SCREEN – outside curtains (outside roller blind) with motor driving**

Model: **HR10-ZIP**

Has been designed and manufactured in conformity with Regulation (EU) No 305/2011 of the European Parliament and of the Council (CPR).

Product description and designed use:
The product is used for shading according to the type of fabric up to 100%.

Evaluation system: 4

Harmonized standard:
EN 13561:2015

Declared performance:

Essential characteristics	Performance
Wind resistance	Class 3
Thermal transmittance value g_{gl}	0,03 - 0,6 (according to selected fabric)*

*valid for glazing with parameters $g = 0,39$ and $U_g = 1,2 \text{ W/m}^2\text{K}$

The performance of HR10-ZIP is in conformity with the performance declared in declared performance.
This declaration has been issued under the sole responsibility of the manufacturer ISOTRA a.s., Bilovecká 2411/1, 746 01 Opava.

Opava, 1.02.2018


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zastoupení v ČR: Ing. Petr Sedláček, Ing. Jitka Štáhl
 IČO: 47679191, DIČ: CZ47679191




Declaration of Properties

No. 036/2017

Manufacturer: **ISOTRA a. s., Bilovecká 2411/1, 746 01 Opava, IČ No.: 47679191**

hereby declares that:

type: **SCREEN – exterior motor-driven shade (exterior roller blind)**

product: **SCREEN SKY**

was designed and manufactured in accordance with Regulation (EU) No 305/2011 of the European Parliament and of the Council (CPR).

Product description and designed use:
The product is used for shading according to the type of fabric up to 100%.

Evaluation system: 4

Harmonized standard:
EN 13561:2015

Declared performance:

Essential characteristics	Performance
Wind resistance	Class 2
Thermal transmittance value g_{gl}	0,03 - 0,6 (according to selected fabric)*

*valid for glazing with parameters $g = 0,39$ and $U_g = 1,2 \text{ W/m}^2\text{K}$

The performance of SCREEN SKY is in conformity with the performance declared in declared performance.
This declaration has been issued under the sole responsibility of the manufacturer ISOTRA a.s., Bilovecká 2411/1, 746 01 Opava.

Opava, 01.02.2017


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Length expansion of screen roller shutters

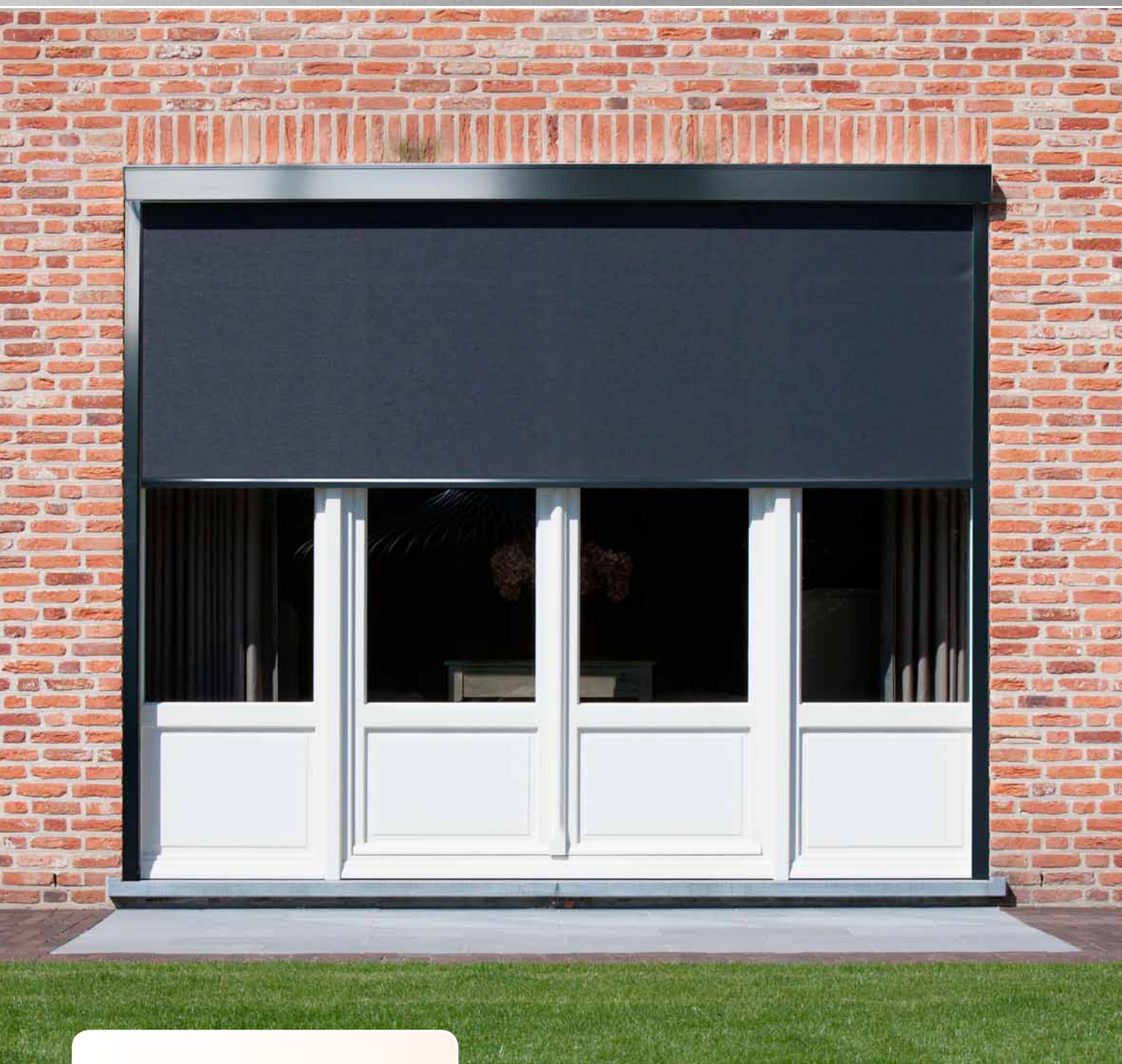
When the temperature of aluminium goes up, the metal expands; this phenomenon is called thermal expansion. The coefficient of thermal expansion of aluminium alloy is $23.5 \mu\text{m}/(\text{m} \cdot \text{K})$.

Example:

A screen roller shutter at a temperature of 20°C measures 4000 mm, if it is heated to a temperature of 50°C - on a sunny day, it will then measure 4003 mm due to thermal expansion. As a result of the change in aluminium temperature, there will be an increase in length of +3 mm. When installing a screen roller shutter in the surrounding buildings, it is important to take into account that there may be dimensional changes of the screen roller shutter with respect to the ambient temperature.

When focusing on positioning options, it is important to consider the thermal expansion of the aluminium profile in relation to the temperature of the surrounding environment. We recommend positioning at an ambient temperature of $+23$ through -5°C .

SCREEN ALFA-ZIP

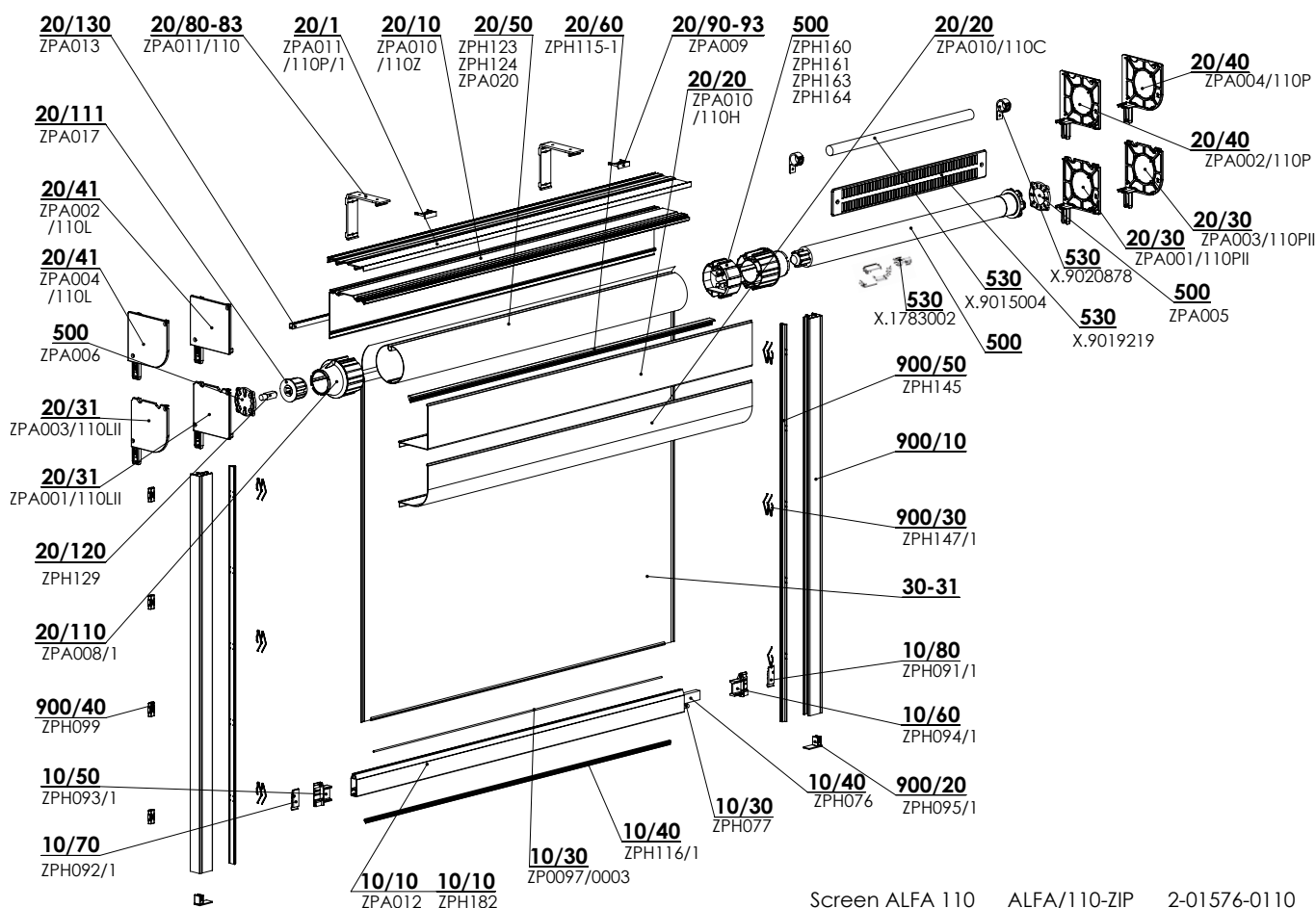


- ▲ 2 types of modern boxes: square box for austere architecture or rounded box for more traditional buildings, both types available in 3 sizes
- ▲ Weighted bottom slat to guide and tension the fabric
- ▲ the highest wind resistance (wind class 6)
- ▲ Simple and fast assembly
- ▲ Guaranteed area up to 18 m²
- ▲ Possibility to couple up to 3 roller blinds
- ▲ Possibility of solar power supply

ISOTRA *Quality*

SCREEN ALFA-ZIP

Basic Product Specification



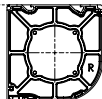
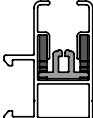
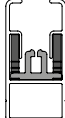
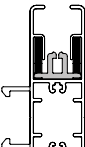
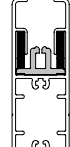
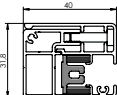
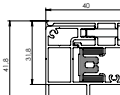
Control

Serves for lifting and lowering the screen blind. Two types of control are available:

Motor - standard asynchronous tubular motor Maestria Wt, or optional asynchronous tubular motors Maestria iO, Sunea Screen IO, Geiger, Altus RTS (minimum blind width 795 mm), control by solar power with motor Sunea 40 io, Sunea RTS (minimum blind width 595 mm) Isotra Basic, Isotra Basic Solar 20/12, see page 37.

Crank - self-braking worm-worm wheel mechanism, with 1:4 transmission ratio, with a built-in end stop (prevents wrong rolling up of the fabric).

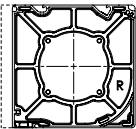
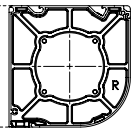
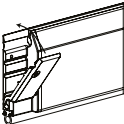
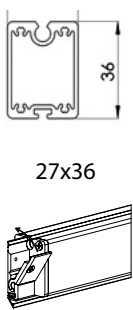
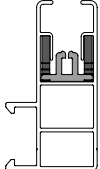
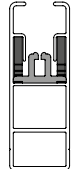
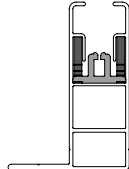
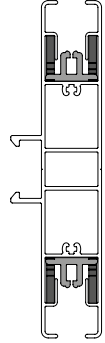
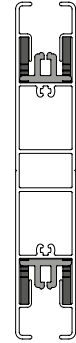
Specification (for motor)

	Box		Bottom rail	Bottom rail	Side guidance							
	square	rounded	high	high	guide rail							
Abbreviation	BOX for SCREEN ALFA		ZPA012	ZPH182	ZPA016 /839	ZPA016 /830	ZPH214 /837	ZPA016 /838	ZPH071	ZPH072	ZPA016/840-1	ZPA037/849
Dimension (mm)	90x90 110x110 150 x 150	90x90 110x110 150 x 150	18x50*	27x36**	30x40	20x40	40x70	40x40	30x80	20x80	31,8x40	41,8x40
Material	Al	Al	Al	Al	Al	Al	Al	Al	Al	Al	Al	Al
			 18x50	 27x36	 type 839	 type 830	 type 837	 type 838	 type 865	 type 866	 type 840-1	 type 849
Colors	Standard: RAL 9006 White aluminium RAL 9006S Light silver structure RAL 9007 Grey aluminium RAL 9007S Silver structure RAL 9010 white			RAL 9010M White matte RAL 9010S White structure RAL 7016 Anthracite grey RAL 7016M Anthracite gray matte RAL 7016S Anthracite gray structure RAL 8014S Sepia brown structure			RAL 8014M Brown matte RAL 7012 Basalt grey RAL 7021 Black grey DB 702 Pearl light grey DB 703 Pearl dark grey Other RAL colours upon request*					

* for box 90x90, 110x110, 150x150

** for box 110x110, 150x150 (for hadnlel, for motor)

Specification (for handle)

	Box		Bottom rail	Bottom rail	Side guidance				
	square	rounded	high	high	guide rail				
Abbreviation	BOX for SCREEN ALFA		ZPA012	ZPH182	ZPH152	ZPH153	ZPH154	ZPH156	ZPH155
Dimension (mm)	90x90 110x110 150 x 150	90x90 110x110 150 x 150	18x50**	27x36***	30x55	20x55	40x55	30x110	20x110
Material	Al	Al	Al	Al	Al	Al	Al	Al	Al
									
					type 829	type 820	type 828	type 855	type 856
Colors	Standard: RAL 9006 White aluminium RAL 9007 Grey aluminium RAL 9010 Pure white RAL 7016 Anthracite grey RAL 7016S Anthracite grey structured RAL 8014 Sepia brown RAL 7012 Basalt grey RAL 7021 Black grey DB 703 DB 702 Other RAL colours upon request*								

*out of the plastic parts

** for box 90x90,110x110,150x150

*** only for box 110x110,150x150 (for handle, for motor)

Fabrics of the Blackout type:

The opaque layer is located on the side of the window for each type of installation. In the case of outdoor installation, strong winds can cause a slight lifting of the base slat and fabric and therefore 100% blackout cannot always be guaranteed. In the case of Blackout fabrics, the zippers are fastened on the face side and not on the opaque layer, so it is possible that under strong wind or oblique view of the guide rail a piece of cloth from the zipper tape can be seen, but this is of little importance compared to tightness of the fabric (reducing the waves).

Common phenomena of technical fabrics

The fabric may curl around the welds or in the middle of the fabric, it is the so-called tree effect. This phenomenon is common because different forces act on the fabric during use. Another phenomenon may be visible bruises on the fabric caused by the roller. These disappear at higher temperatures when the fabric levels.

Common phenomena for the self-supporting Alfa-ZIP screen roller shutter

The self-supporting version of the roller shutter does not use a mounting profile or a „wall-ceiling“ bracket, and therefore there is a natural slight deflection of the box in the width of the roller shutter. This deflection creates an optical gap between the upper edge of the box and the soffit, where the self-supporting screen is mounted.

Standard dimensions for box 90

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	max.
handle	400	3200**	400	2500*	8
motor RTS,iO,WT	795	3200**	400	2500*	8

* Max. height with STNZ, STNBZ, SCR4005, SLTZB92, SERGE 3Z fabrics is only 1800 mm

** For the self-supporting Alfa-ZIP screen roller shutter, the maximum width is 1500 mm.

Standard dimensions for box 110

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	max.
handle	400	3900**	400	3500*, **	8
motor RTS,iO,WT	795	4200**	400	3500*, **	15

* Max. height with STNZ, STNBZ, SCR4005, SLTZB92, SERGE 3Z fabrics is only 2600 mm

** For the Alfa-ZIP self-supporting roller shutter, the maximum width is 3500 mm and the maximum height is 3000 mm.

Standard dimensions for box 150

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	
handle	400	3000	400	5000*	12
motor RTS, iO, WT	795	6000	400	5000*	18

NOTE: Cannot be used for a self-supporting screen roller shutter Alfa150.

* Max. height with STNZ, STNBZ, SCR4005, SLTZB92, SERGE 3Z fabrics is only 4500 mm

SCREEN ALFA-ZIP (2-01576-0110)

position	item name	business name	drawing number
10	Split profiles – SCREEN ALFA – ZIP		see Split profiles - SCREEN ALFA - ZIP
20	BOX for SCREEN ALFA 110 – QUARTER-ROUND		see BOX for SCREEN ALFA 110
20	BOX for SCREEN ALFA 110 – SQUARE		see BOX for SCREEN ALFA 110
30-31	SPLIT fabric (m2) for SCREEN		see SCREEN pattern chart
500	Motors (SOMFY, GEIGER, BECKER) SCREEN SC700/800		see Motors SCREEN ALFA
530	Standard accessories (Solar)		see Solar for SCREEN
900-910	Guiding – ALFA rail – LEFT/RIGHT		see Guiding – rail – left/right

Split profiles – SCREEN ALFA – ZIP (3-03571-PU11)

position	item name	business name	drawing number
10/50	Profile of bottom slat – ALFA - LEFT BLACK	ZPH093/1	3-03657-9004
10/70	Safety lock of bottom slat end piece ALFA – LEFT BLACK	ZPH092/1	3-03659-9004
10/10	Bottom profile Alfa	ZPA012	7-303495-0000
10/10	Bottom profile -SC 1000	ZPH182	6-015158-0000
10/30	Plastic bar 3,0 mm PVC	ZP0097/0003	6-016911-0003
10/40	Bottom slat seal ALFA	ZPH116/1	7-303664-0000
10/30	Profile of bottom slat weight dia. 8 mm – Fe/Zn	ZPH077	6-013966-0000
10/40	Profile of bottom slat weight 20x12 mm – Fe/Zn	ZPH076	6-013971-0000
10/50	Profile of bottom slat weight dia. 8 mm – Fe/Zn	ZPH077	6-013966-0000
10/60	Profile of bottom slat weight 20x12 mm – Fe/Zn	ZPH076	6-013971-0000
10/70	Safety lock of bottom slat SC800 – RIGHT BLACK	ZPH091	6-013963-9004
10/80	Safety lock of bottom slat end piece SC800 – RIGHT BLACK	ZPH097	6-013965-9004

BOX for SCREEN ALFA-ZIP - 110 (2-01578-PU11 square / 2-01579-PU11 quarter-round)

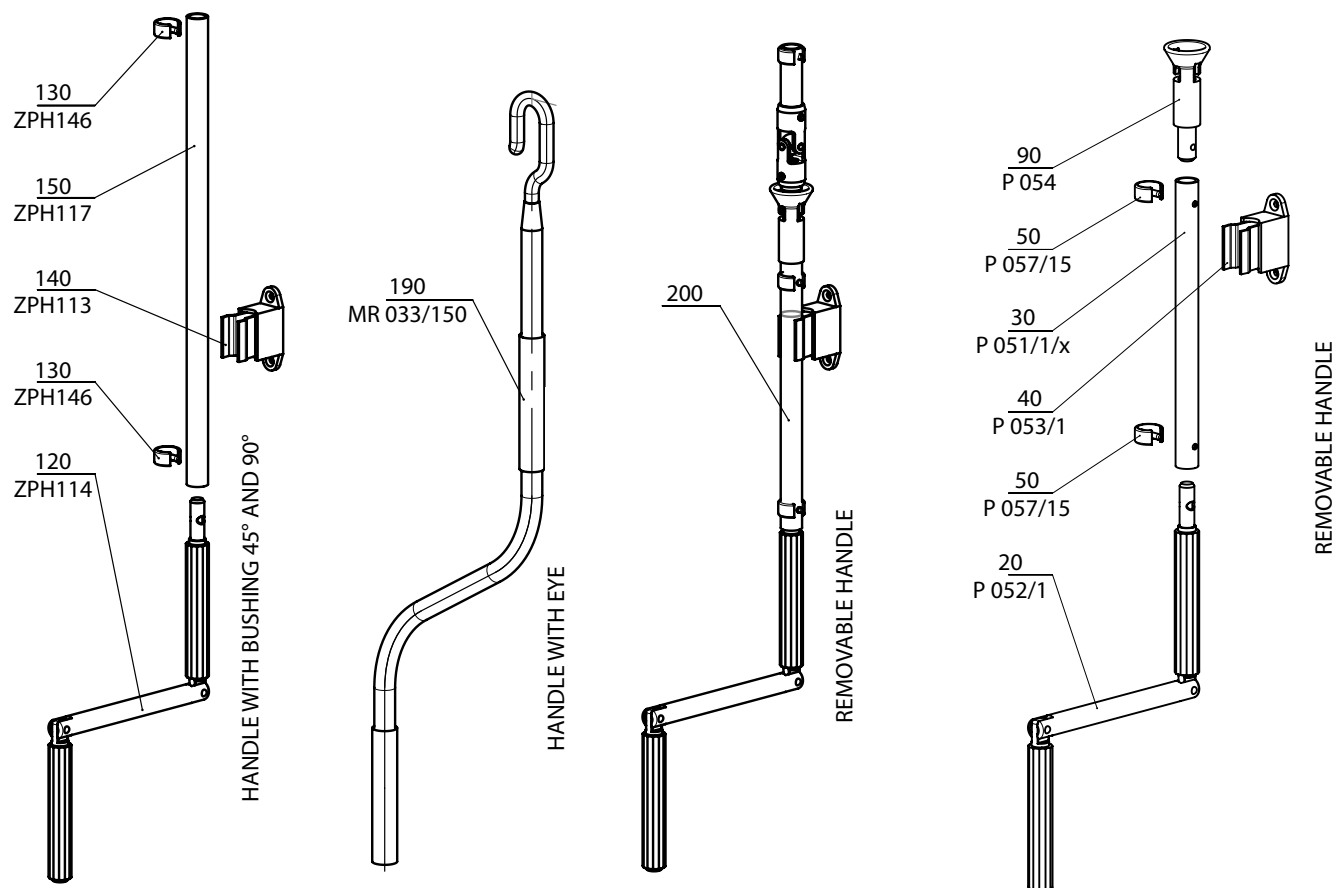
position	item name	business name	drawing number
20/1	Profile – holder Alfa 110 Pergola	ZPA011/110P/1	7-303888-0000
20/10	Profile – box Alfa 110 rear	ZPA010/110Z	7-303491-0000
20/20	Profile – box Alfa 110 front, quarter-round	ZPA010/110C	7-303480-0000
20/20	Profile – box Alfa 110 front, square	ZPA010/110H	7-303479-0000
20/30	Side piece 110 Alfa H1-1 P N	ZPA001/110P/3	3-04130-0000
20/30	Side piece 110 Alfa H1-1 L N	ZPA001/110L/3	3-04131-0000
20/31	Side piece 110 Alfa K1-1 P N	ZPA003/110P/3	3-04132-0000
20/31	Side piece 110 Alfa K1-1 L N	ZPA003/110L/3	3-04133-0000
20/40	Side piece 110 Alfa H1 L N	ZPA001/110L/1	7-304064-0000
20/40	Side piece 110 Alfa H2 P N	ZPA002/110P/1	7-304065-0000
20/41	Side piece 110 Alfa H2 L N	ZPA002/110L/1	7-304066-0000
20/41	Side piece 110 Alfa K2 P N	ZPA004/110P/1	7-304069-0000
20/41	Side piece 110 Alfa K2 L N	ZPA004/110L/1	7-304070-0000
20/50	Roller tube SC700 / 800 Al dia. 55 mm – 6 m	ZPH123	6-014027-0000
20/50	Roller tube SC700 / 800 Al dia. 67 mm – 6 m	ZPH124	6-013982-0000
20/50	Roller tube dia. 85x1, 20 mm – 6 m	ZPA020	6-016860-0000
20/60	Tape for fabric guiding - ALFA	ZPH115-1	7-303663-0000
20/80-83	Holder Alfa 110 wall–ceiling	ZPA011/110	3-03496-0000
20/90-93	Safety lock – wall–ceiling	ZPA009	3-03483-0000
20/110	End piece of shaft dia. 85 mm – through	ZPA008/1	3-04003-9004
20/111	Insert for shaft end piece – dia. 50 mm	ZPA017	3-03486-9004
20/120	Pin of roller tube cap - 12mm Fe/Zn	ZPH129	6-013985-0000
20/130	Thin-walled Al profile - U, 10x10x1,5	ZPA013	6-011349-0000

Guiding – ALFA rail – LEFT/RIGHT (2-01580-PU11L/2-01580-PU11P)

position	item name	business name	drawing number
900/20	End piece VL - 40 mm	ZPH095/1	3-03667-9004
900/30	Spring of guide rail ZIP SC800	ZPH147/1	7-303662-0000
900/40	Clip of guide rail SC800	ZPH099	6-013993-0000
900/50	Guide profile SC800 for zip v3	ZPH145	6-014155-0000

SCREEN ALFA-ZIP

Control - handle



2-01372-XXXX-0

2-01436-XXXX-A

Control handle - SCREEN ALFA-ZIP (2-01372-XXXX_0)

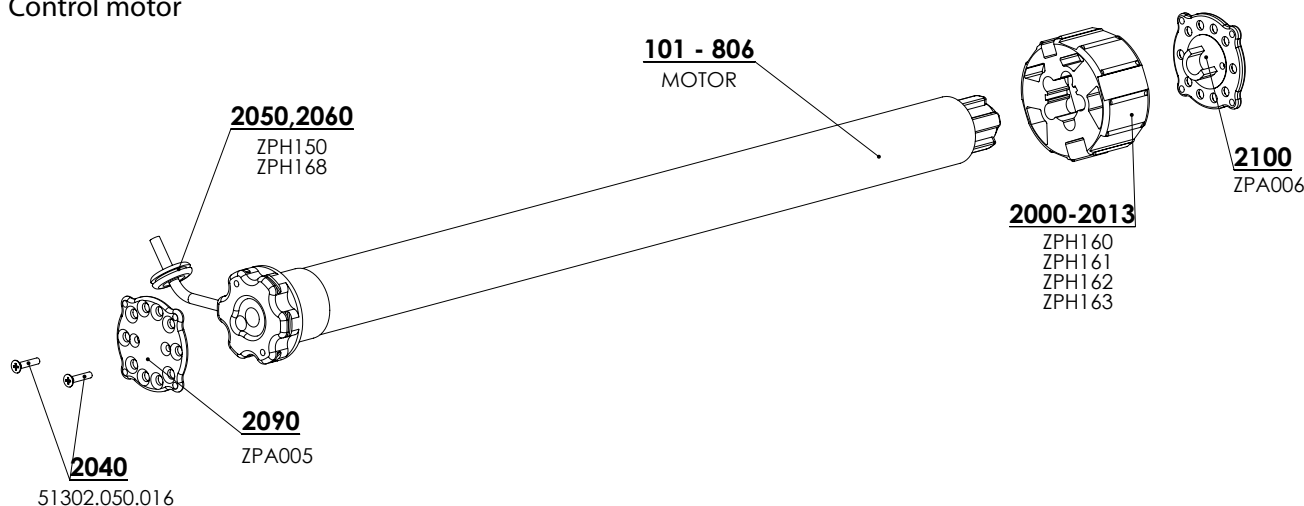
position	item name	business name	drawing number
120	Cranked handle	ZPH114	6-014323-0000
130	Locking ring with pin	ZPH146	6-014451-0000
140	Handle holder	ZPH113	6-014319-0000
150	Connecting tube PVC – dia 12 mm	ZPH117	6-014324-0000
190	Handle for awnings 1500 mm	MR 033/150	6-011095-1500
200	Handle removable for SCREEN		2-01436-0000

Handle removable for SCREEN ALFA-ZIP (2-01436-XXXX_0)

position	item name	business name	drawing number
20	Cranked handle Al – dia 12 mm grey	P 052/1	6-006682-0000
30	Connecting tube Al – dia 15 mm elox	P 051/1/X	7-301797-PU52
40	Handle holder– universal grey	P 053/1	6-006683-7045
50	Locking ring with pin 15 mm grey	P 057/15	6-006467-7035
90	Handle funnel square	P 054	6-001190-0000

SCREEN ALFA-ZIP

Control motor



Motors (SOMFY) Screen ALFA90/ALFA-ZIP (2-00530-0002)

position	item name	business name	drawing number
101-103	Motor ALTUS 50 RTS	MR 091/06	6-011170-xxxx
201-203	Motor Sunea 50 Screen io	ZP0084	6-012559-xxxx
301-303	Motor MAESTRIA +50 IO	ZP0084/1	6-012538-xxxx
401-403	Maestria +50 WT	ZP0093/06	6-015258-0617
2040	Screw 4.8×19 DIN 7982, countersunk, Philips head	51302.050.016	6-013928-0000
2050	Cable grommet RUBBER dia. 7	ZPH150	6-014339-0000
2060	Cable collar 300×4.8 – BLACK	ZPH168	6-014438-0000
2090	Bearing plate – flat	ZPA005	3-03484-9004
2100	Bearing plate with clip	ZPA006	3-03485-9004
2110	Carrier DS 85 Imbac	ZPA014	6-015621-0000

Motors (Geiger) Screen ALFA-ZIP (2-00530-0002)

position	item name	business name	drawing number
10	Motor Geiger Solid Line Zip AIR 6/16	PR0790/06	6-015903-0006
11	Motor Geiger Solid Line Zip AIR 10/16	PR0790/10	6-015903-0010
12	Motor Geiger Solid Line Zip AIR 20/16	PR0790/20	6-015903-0020
70	Carrier SOLID line AIR – dia. 95	ZPA015/95	6-015904-0095
70	Carrier SOLID line AIR – dia. 78	ZPA015/78	6-015904-0078
70	Carrier SOLID line AIR – dia. 85	ZPA015/85	6-015904-0085
200	Cable grommet RUBBER dia. 7	ZPH150	6-014339-0000
320	Screw 4.8×19 DIN 7982 C-H A2 countersunk, Philips head		6-013928-0000
330	Cable collar 300×4.8 – BLACK	ZPH168	6-014438-0000
340	Screw 3.5×19 DIN 7982 C-H A2 countersunk, Philips head		6-014439-0000
350	Bolt M6×10 DIN 965-H, A2, countersunk, Philips head		6-014497-0000
400	Bearing plate – flat	ZPA005	3-03484-9004
410	Bearing plate with clip	ZPA006	3-03485-9004

Motors (Becker) Screen ALFA-ZIP (6-015258 / 6-012538 / 6-002624 / 6-014483)

position	item name	business name	drawing number
500	Motor BECKER 50 E 08/17	X.2010/1301590	6-017861-0008
500	Motor BECKER 50 E 12/17	X.2010/1301600	6-017861-0012
500	Motor BECKER 50 E 20/17	X.2010/1301450	6-017861-0020
500	Motor BECKER 50 Screen C 08/17 PLUS	X.2010/1302170	6-018761-0008
500	Motor BECKER 50 Screen C 12/17 PLUS	X.2010/1302180	6-018761-0012
500	Motor BECKER 50 Screen C 20/17 PLUS	X.2020/1301860	6-018761-0020

*Note: E=electronic motor / C=radio motor

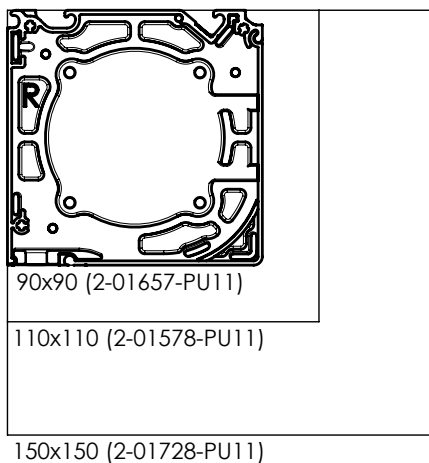
Motors (ISOTRA BASIC) Screen ALFA-ZIP-BOX 110

position	item name	business name	drawing number
600	Motor ISOTRA BASIC, 10Nm/17,with integrated receiver, SC zip	X.AM45 10/17S	6-019173-0010
600	Motor ISOTRA BASIC, 15Nm/17,with integrated receiver, SC zip	X.AM45 15/17S	6-019173-0015
600	Motor ISOTRA BASIC, 20Nm/17, with integrated receiver, SC zip	X.AM45 20/17S	6-019173-0020

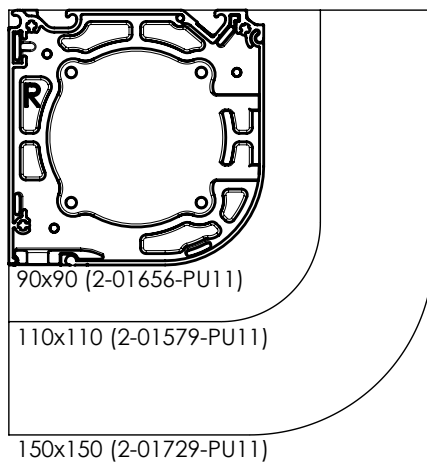
SCREEN ALFA-ZIP

Technical specification

Upper profile – square

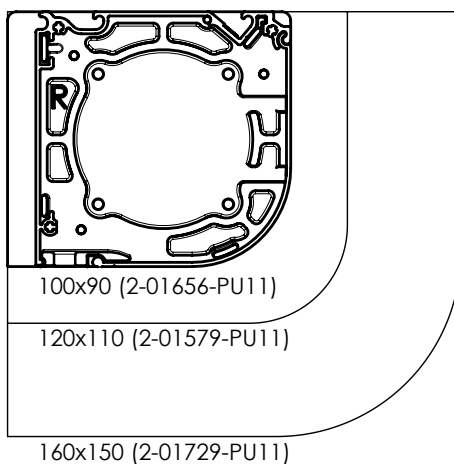
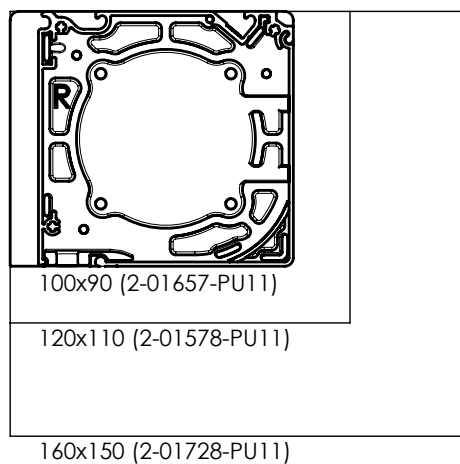


Upper profile – quarter-round



Upper profile – square – with wider side piece
- cannot be used for a self-supporting screen roller shutter

Upper profile – quarter-round – with wider side piece
- cannot be used for a self-supporting screen roller shutter

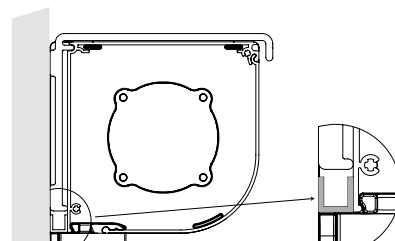


Rear parts of the box

U-section – horizontal

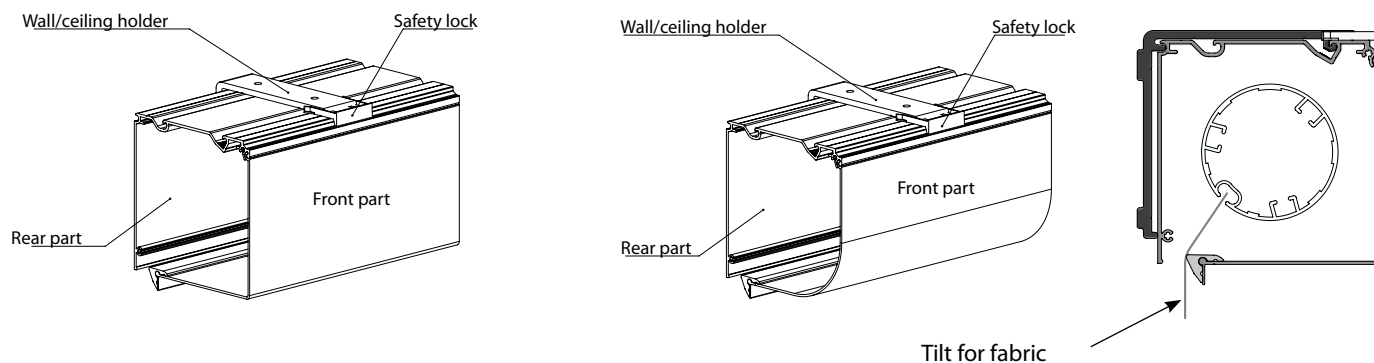
The gap between the box and the wall can be filled horizontally by a U-section having the dimensions of $10 \times 10 \times 10$ mm, where the length is determined by the box width.

Use: for guide rails A839 and A829



U-profile width - horizontal

Wall/ceiling holder



Material: extruded aluminium with powder coating finish

For the installation of all sizes of the upper profile independent of the guide rails:

Standard number of wall/ceiling holders:

Width [mm]	"Standard number of wall / ceiling brackets (box 90, 110, 150)"
0 - 1500	2 pcs
1501 - 3000	3 pcs
3001 - 4500	4 pcs
4501 - 6000	5 pcs

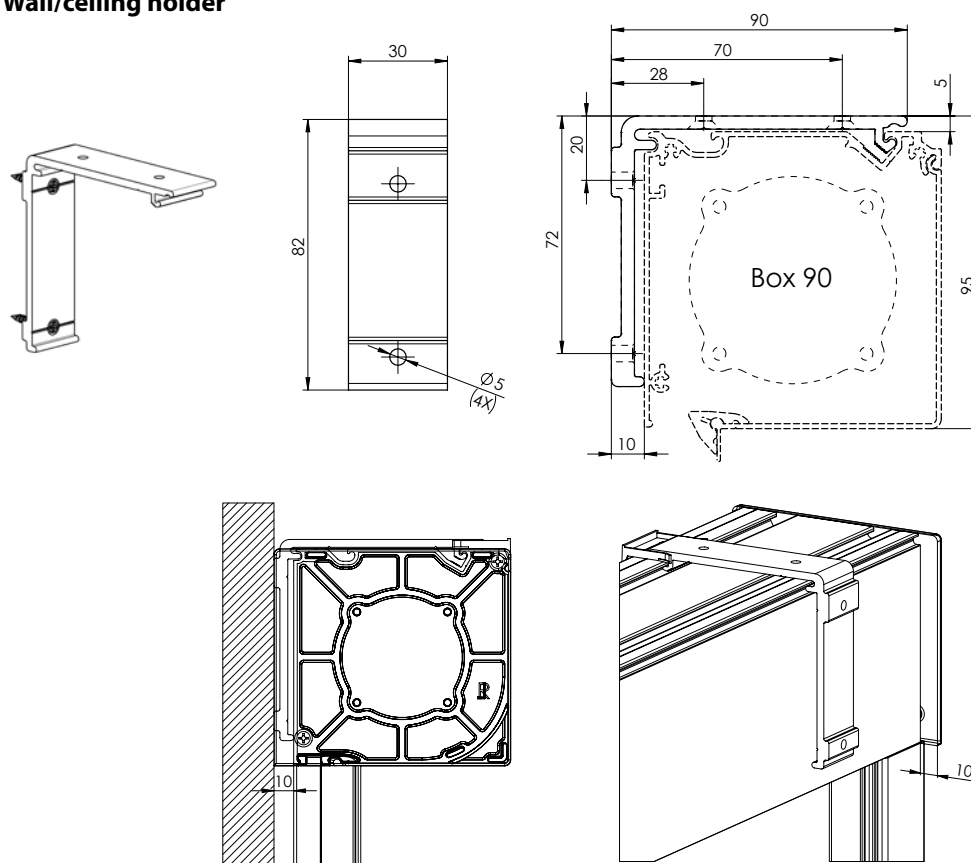
For the self-supporting screen roller shutter - if the limit dimensions W_{MAX} and H_{MAX} are not met, no mounting profile or wall-ceiling brackets will be supplied.

If the mounting bracket is used, we recommend using guide rails of types A829, A839, A828, A838, A837, A865 a A855.

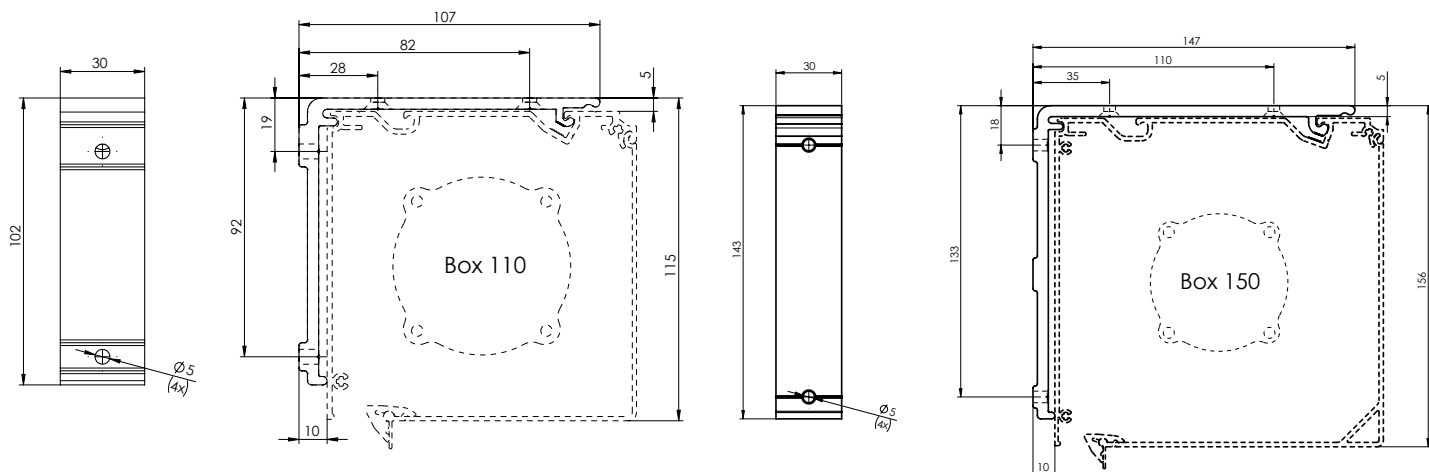
Wall/ceiling holder width: 30 mm

Shifts the rear side of the upper profile as well as guide rail holders by 10 mm to the front.

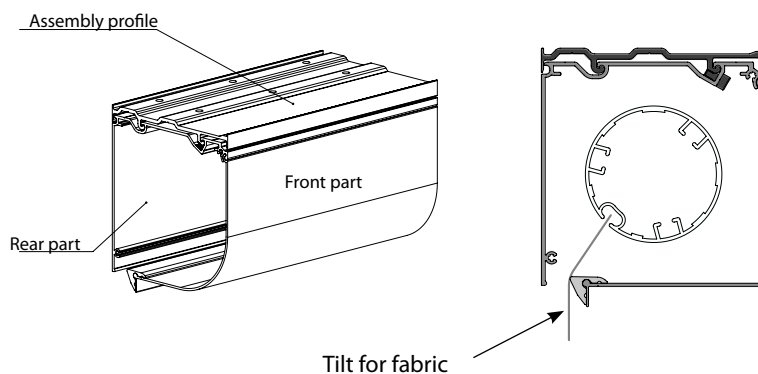
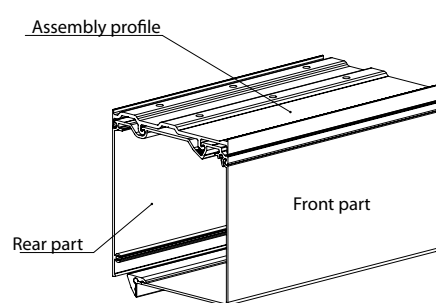
Wall/ceiling holder



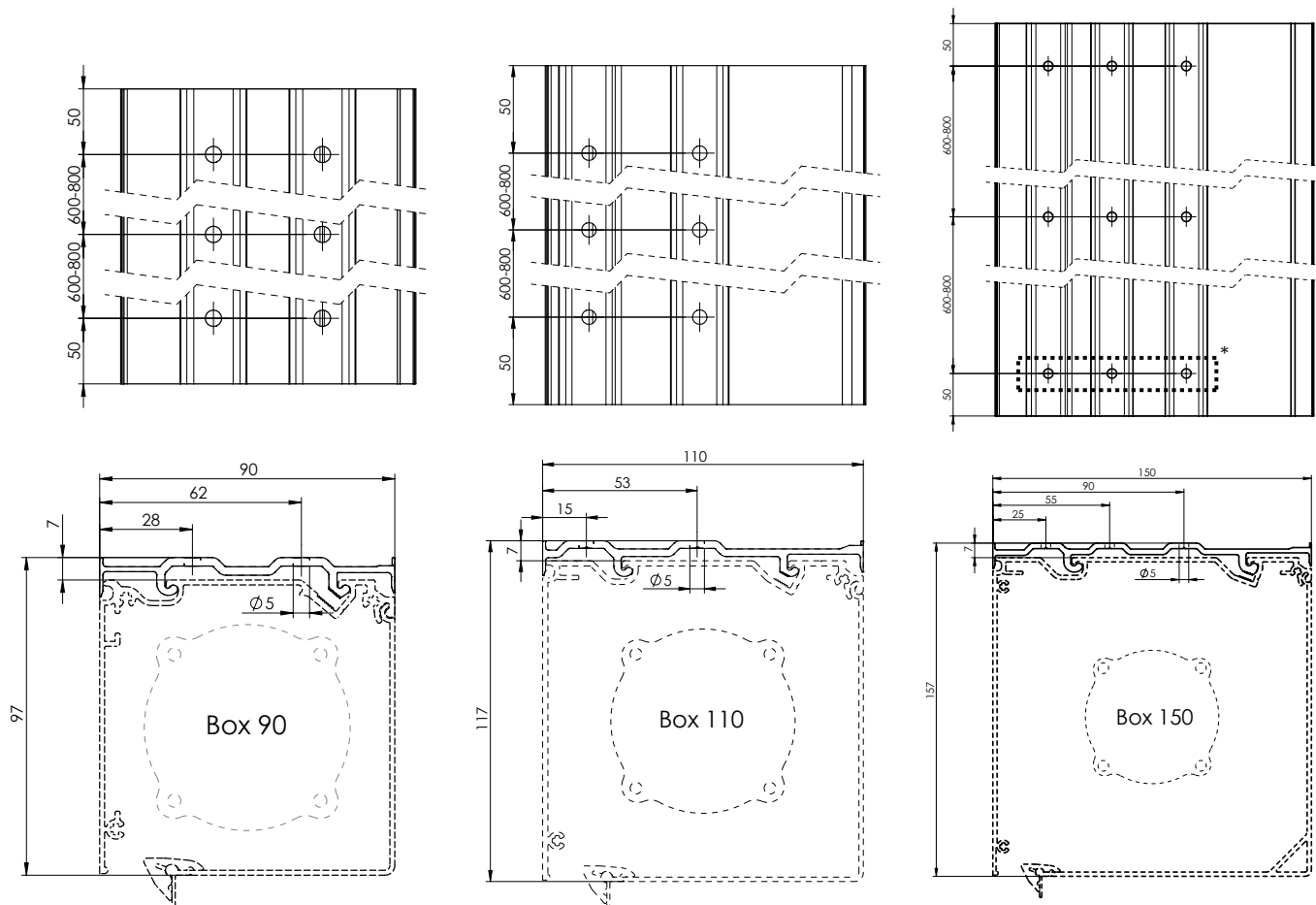
rebound 10 mm for ALFU
when using wall/ceiling holder
for all sizes



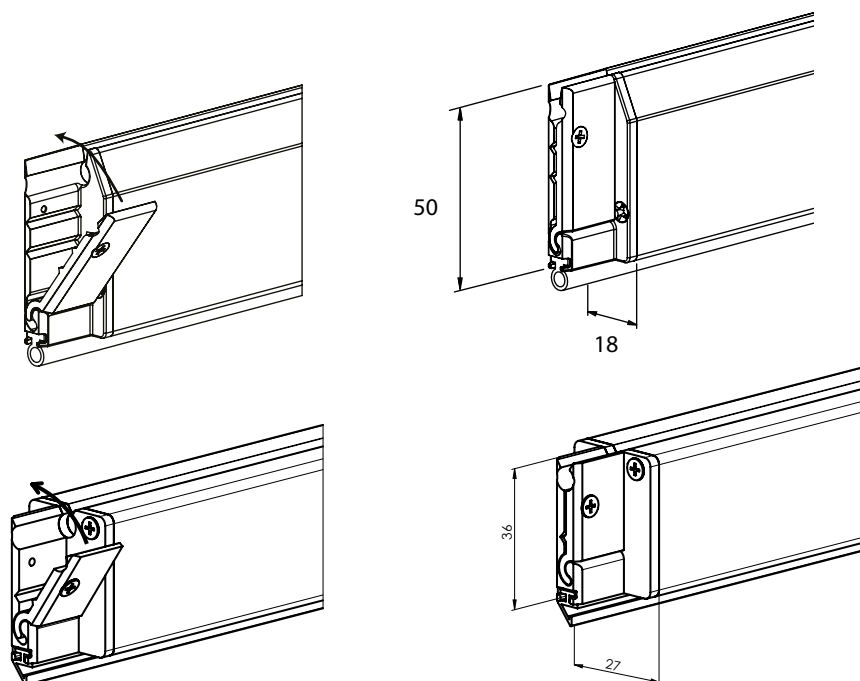
Holder for pergola (assembly profile)



Holder for pergola (assembly profile) Recommended opening distance.



Bottom profile, large
(7-303495-0000)



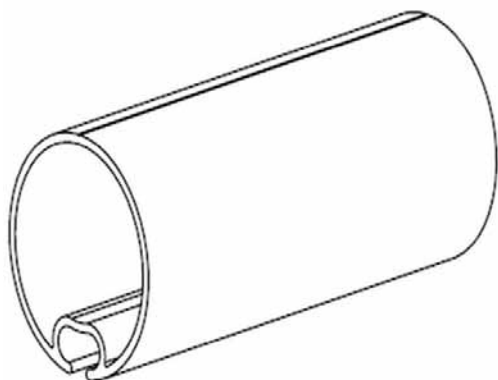
Material: extruded aluminium profiles:

- with powder coating finish
- with an area for the weighting strip
- with a fabric groove
- with a sealing rubber groove

The fabric is attached to the bottom slat by a plastic rod $\varnothing$ 3 mm.

Sliding blocks - side covers for good attachment of the fabric

Roller tube, dia. 55 mm – 6 m, dia. 67 – 6m, dia. 85 mm – 6 m, pr. 100 mm - 6m
(6-014027-0000, 7-303497-0000, 6-016860-0000, 6-018526-00006)



Material: extruded aluminium for tubes $\varnothing$ 55mm and $\varnothing$ 67mm and galvanised steel for tubes $\varnothing$ 85 mm a $\varnothing$ 100 mm.

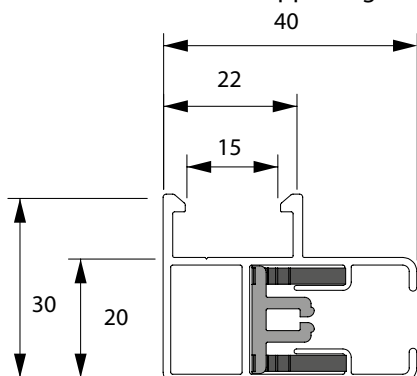
With a fabric groove for attaching the fabric using a plastic rod $\varnothing$ 4 mm for tube $\varnothing$ 55mm and $\varnothing$ 67mm and using a plastic rod $\varnothing$ 6 mm for tubes $\varnothing$ 85 mm a $\varnothing$ 100 mm.

Guide rails for motor

Material: extruded aluminium with powder coating finish

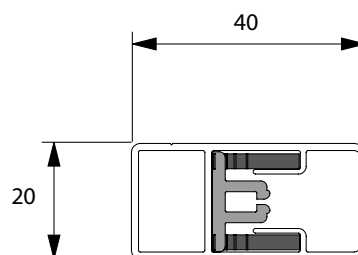
Guide rail A839 (7-303494)

- standard guide for attachment clips or small distances relative to the side (10 mm).
- cannot be used for a self-supporting screen roller shutter



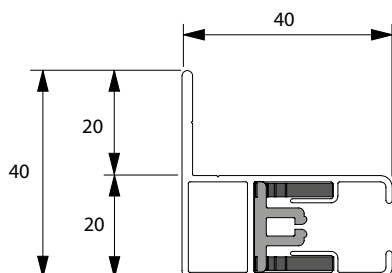
Guide rail A830 (7-303492)

- flat guide rails without attachment clips.



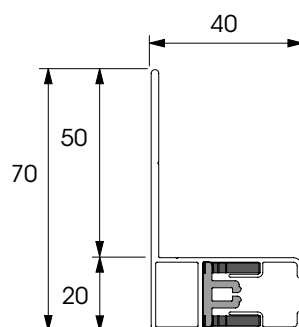
Guide rail A838 (7-303493)

- guide rail with a short mounting flange.



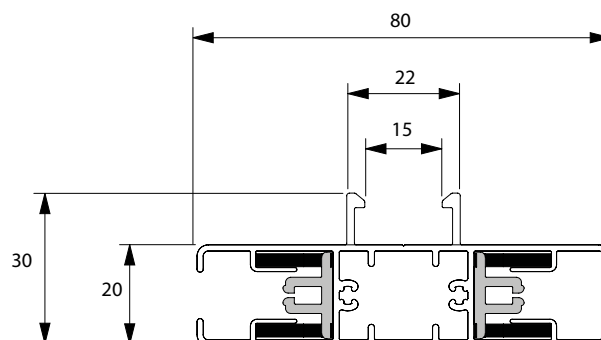
Guide rail A837 (6-018856)

- guide rail with a long mounting flange.



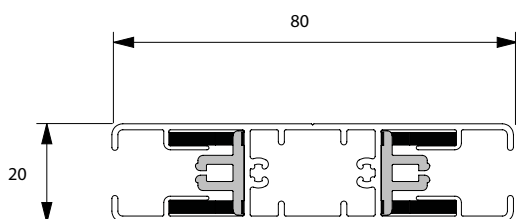
Guide rail A865 (6-014420)

- auxiliary guide rail.
- cannot be used for a self-supporting screen roller shutter



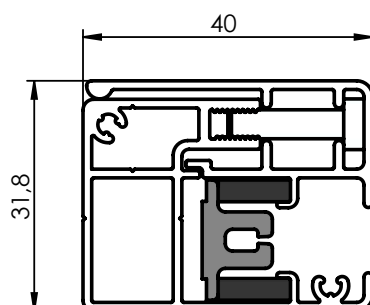
Guide rail A866 (6-014421)

- auxiliary guide rail.



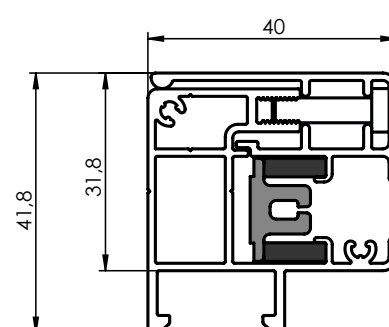
Guide rail A840-1A840-1

- (7-304469-0000 + 7-304468-0000)
- folded guide rail, not for crank
- not suitable for mounting on a frame in combination with a wall/ceiling holder



Guide rail A849 (7-304470-0000 + 7-304468-0000)

- folded guide rail, not for crank
- eliminates the 10 mm gap when using the wall-ceiling bracket, can be used in combination with mounting blocks

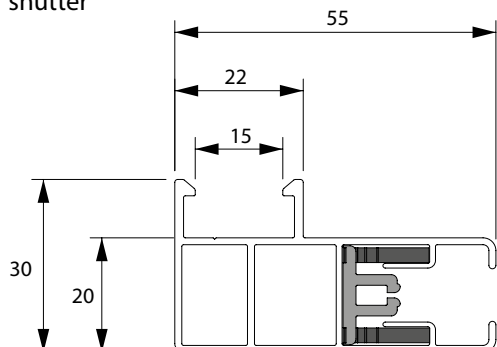


Guide rails for crank

Material: extruded aluminium profiles with a powder coated finish

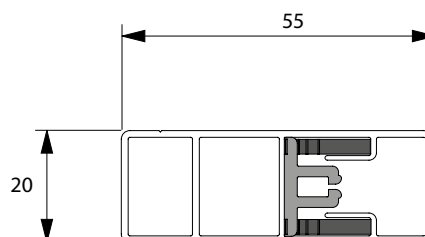
Guide rail A829 (6-013989)

- standard guide for attachment clips or small distances relative to the side (10 mm).
- cannot be used for a self-supporting screen roller shutter



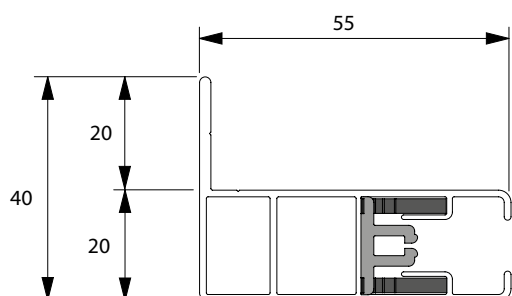
Guide rail A820 (6-014152)

- flat guide rails without attachment clips.



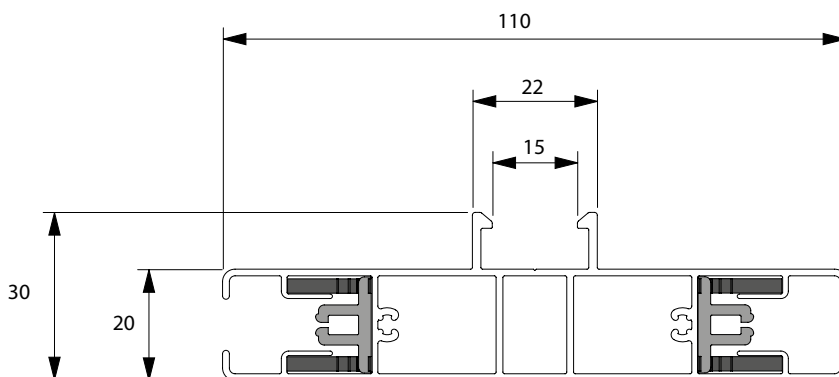
Guide rail A828 (6-014153)

- guide rail with a short mounting flange.



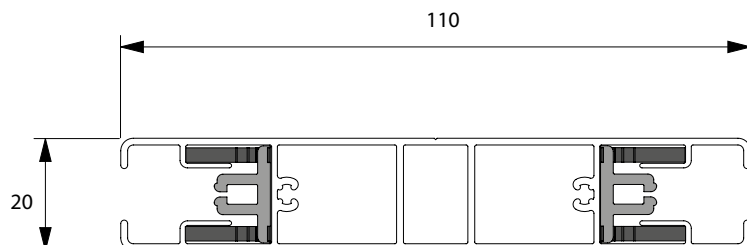
Guide rail A855 (6-014827)

- auxiliary guide rail
- cannot be used for a self-supporting screen roller shutter



Guide rail A856 (6-014154)

- auxiliary guide rail



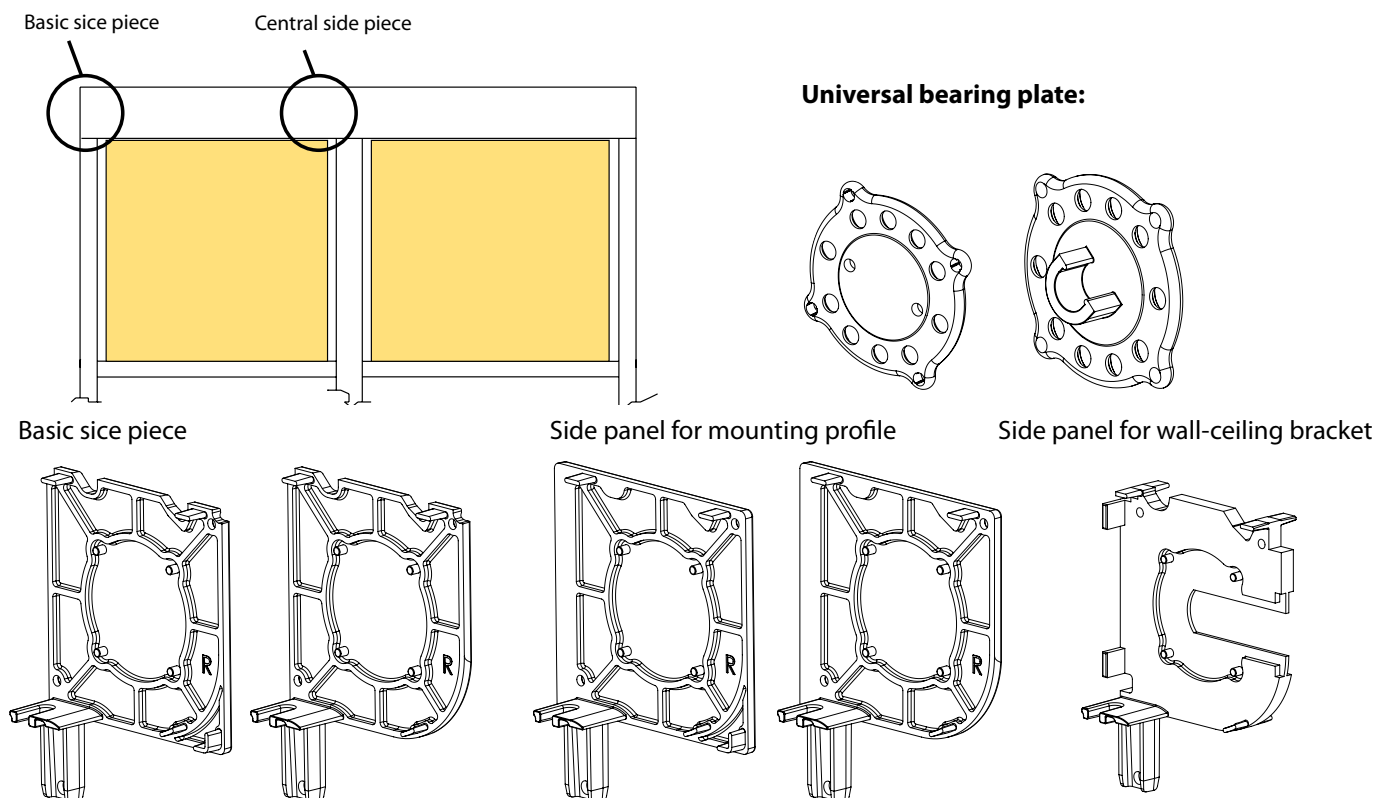
Guide rails - frontway/sideway drilling (200 mm on both sides from the edges)

up to a height of 1500 mm	2 openings (on the edges)
more than 1500 mm up to 3000 mm	3 openings (2 openings on the edges + 1 centre opening)
from 3000 mm up to 4500 mm	4 openings (2 openings on the edges + 2 centre openings)
from 4500 mm	5 openings (2 openings on the edges + 3 centre openings)

Side pieces:

- Basic side piece:**
- aluminium side piece with pins – die cast,
 - aluminium side piece complete with universal bearing plates made from black synthetic material.

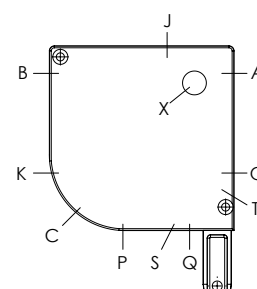
- Central side piece:**
- aluminium side piece with pins – die cast,
 - holds the bearing in coupled roller blinds, or the universal bearing plate.

**Location of controls – output**

Type of installation	Control	O			A			J			T			B			K		
		90	110	150	90	110	150	90	110	150	90	110	150	90	110	150	90	110	150
A-AE	Motor	x	x	x	x	x	x	o	x	x									
	Crank 45°										x	x	x						
	Crank 90°	x	x	x	x	x	x												
	Crank																		
B-BE	Crank with eye																		
	Motor							o	x					x	x		x	x	
	Crank 45°																		
	Crank 90°													x	x		x	x	
	Crank																		
	Crank with eye																		

Type of installation	Control	P			Q			C		S			X		
		90	110	150	90	110	150	90	110	90	110	150	90	110	150
A-AE	Motor								x				x	x	
	Crank 45°														
	Crank 90°														
	Crank				o	o									
B-BE	Crank with eye				o										
	Motor				o	o							x	x	
	Crank 45°							x	x						
	Crank 90°														
	Crank				o	o									
	Crank with eye														

x	Possible
x	Only possible with square boxes
	Usage with gearbox with short eye
	Usage with gearbox with long eye
J	To be installed to ceiling/head-sill or inside, because of water penetration
o	Not possible

Operating outlets

Control – crank

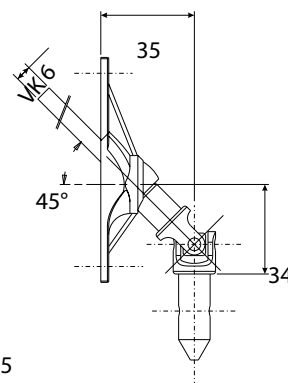
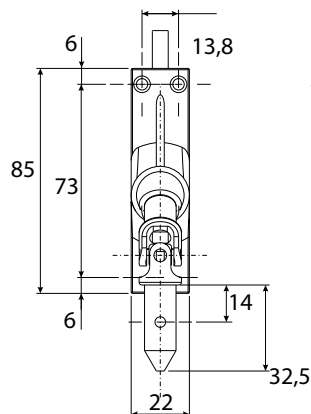
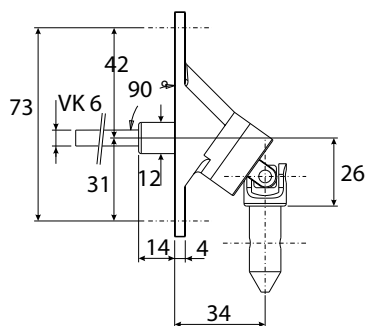
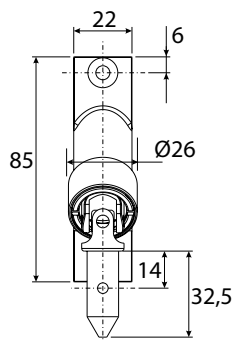
Interior control

Standard:

- grey plasticised foldable crank,
- cardan joint – 90° or 45° or 0° (crank material: 6 mm square, 320 mm length),
- magnetic bracket securing the crank to the wall,
- the crank length depends on the screen height: $L = H - 150$ mm (with 90° joint), $L = H - 350$ mm (with 45° and 0° joint).

Options:

- detachable crank with a special coupling,
- without detachable crank, with a special coupling.



cardan joint 90°

cardan joint 45°

Note: the hinged joint plate cannot be fixed directly to the box, more space around the box is therefore required.

Exterior operation

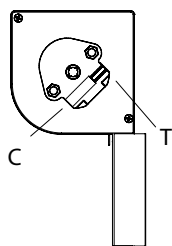
Standard:

- Handle operation with eye, removable handle with laying hook; length 1500 mm

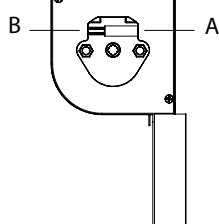
Option:

- other handle lengths are possible at extra cost

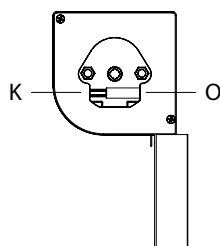
Attention: ensure sufficient space on the side (± 10 mm) due to hook rotation in the eye.



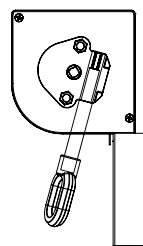
crank 45°
outlet C - T



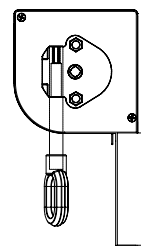
crank 90°
outlet A - B



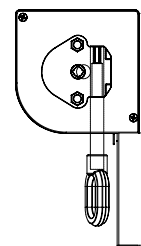
crank 90°
outlet O - K



crank + eye
outlet S

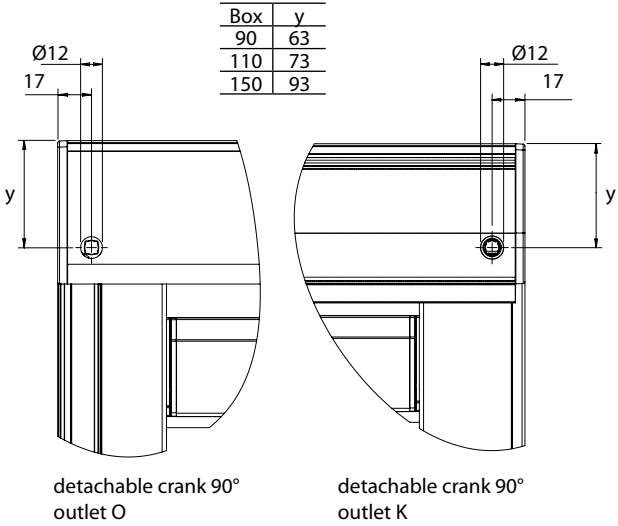
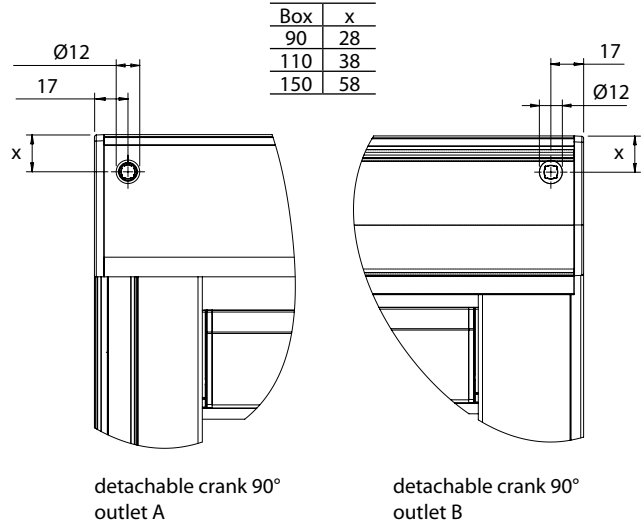


crank + eye
outlet P



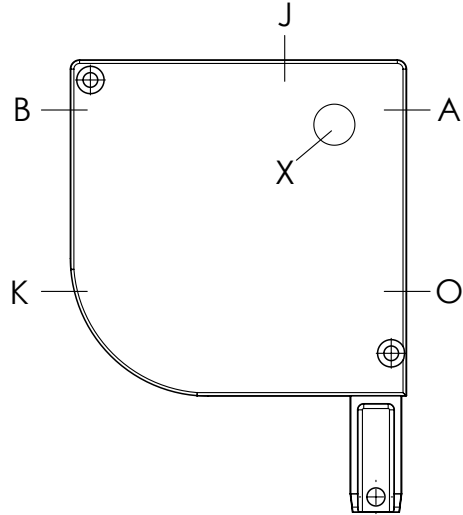
crank + eye
outlet Q

Operating outlets for crank through wall

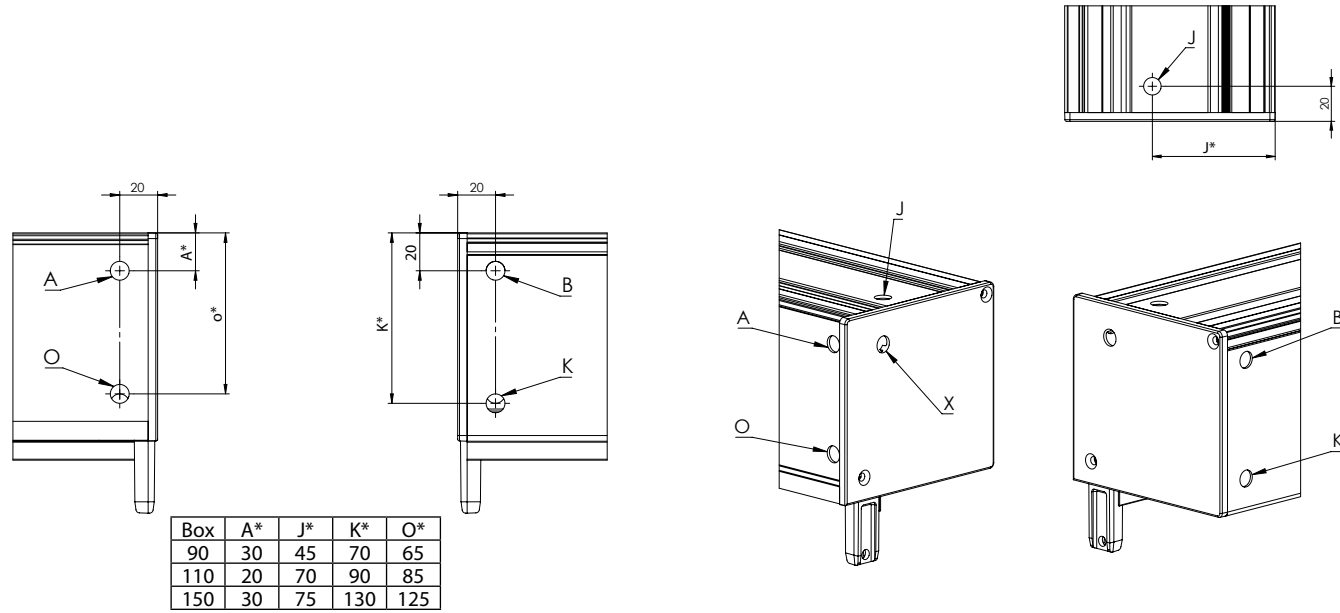


Control – motor

It is possible to choose the cable location



left, terminal X (from side piece) only for box 110, 150
right, terminal X (from side piece) only for box 110, 150



Screen roller blinds

It is possible to use one box for 2 or 3 screen roller blinds.

DVC: screens directly next to each other

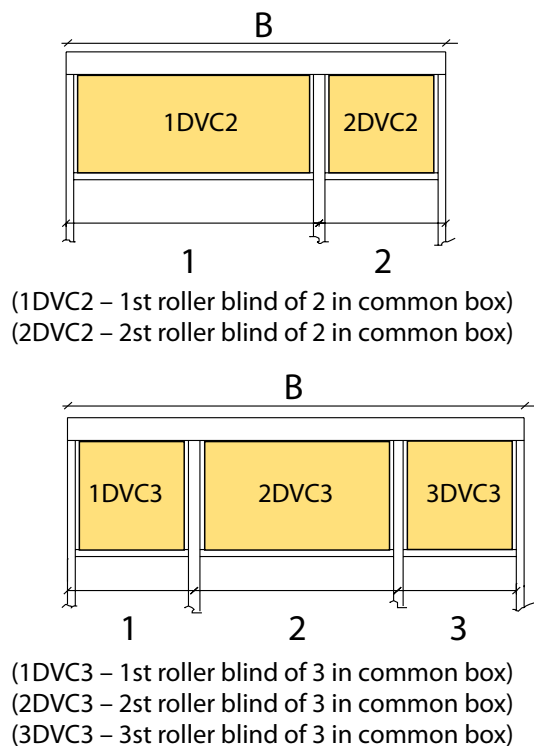
- with guide rails in the middle: A865/A866 - for motor
A855/A856 - for handle

Possible with 1, 2, or 3 controllers.

- The minimum width of a single screen roller blind depends on the type of control.
- The maximum overall width depends on the type of control.
- Crank and electrical operation can be coupled up to 6 m.
- Central control is possible with multiple controllers.
- It is recommended to place the operating unit to the largest screen when possible.

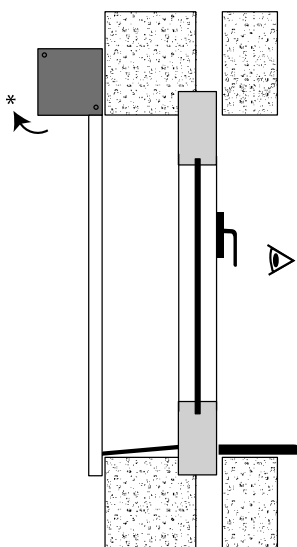
It is not possible to use any coupled version for the ALFA90 with handle control and for the ALFA150 (handle, motor).

The coupled version cannot be used for self-supporting screen roller shutters.

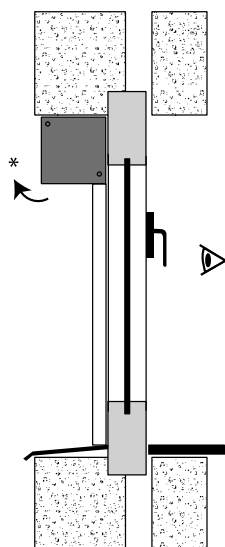


Types of installation

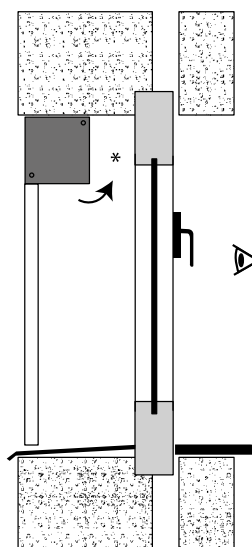
Type A-AE (on the wall)



Type A-AE (into the reveal)



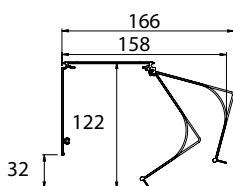
Type B-BE (into the reveal) *



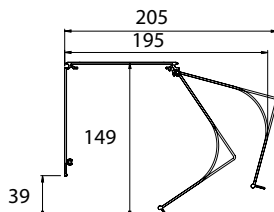
- A – outward winding "A" (standard)
- AE – outward winding "AE" (lighter exterior)
- B – inward winding "B" (lighter exterior)
- BE – inward winding "BE" (lighter exterior)

* space for box opening

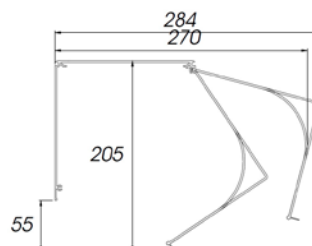
Type 90



Type 110



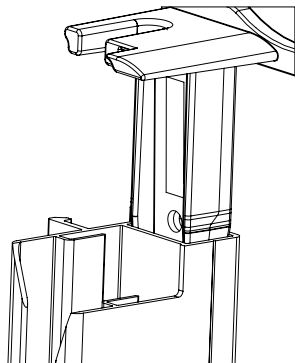
Type 150



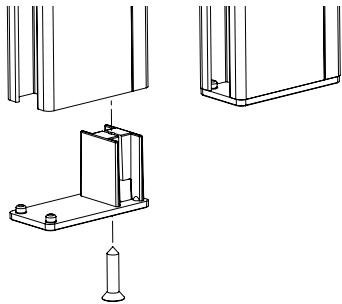
Pin guide assembly

The box is installed in guide rails, and the rails move over the bracket pins.

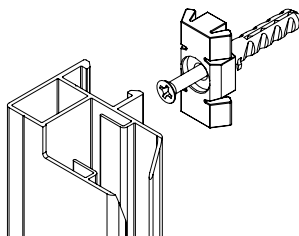
Pin guide assembly



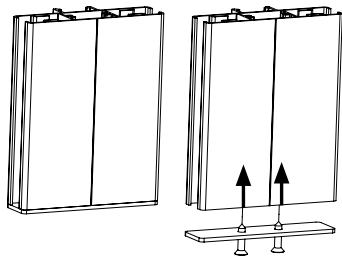
End stop



Holders for guide rails A829, A839, A855, A865



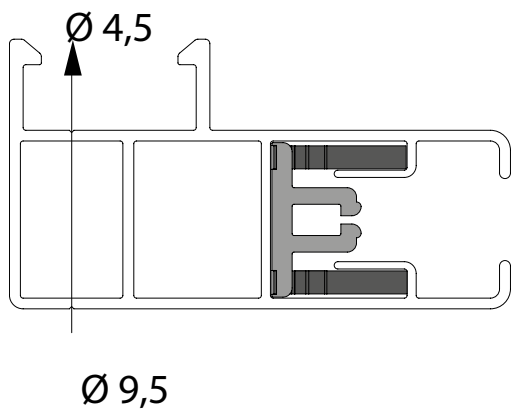
End stop on the auxiliary guide rail



With AI end stops on the bottom part for the end stop of bottom rail; thickness 2 mm.

Certain guide rails may be supplied with predrilled openings.

Drilling on the front:



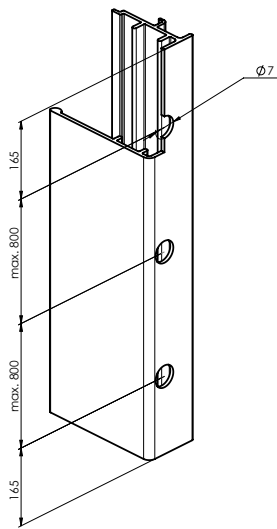
Guide rails for drilled openings on the front side:

Drilling	A829/A839	A820/A830	A828/A838, A837	A855/A865	A856/A866
front side	YES	YES	NO	YES	YES

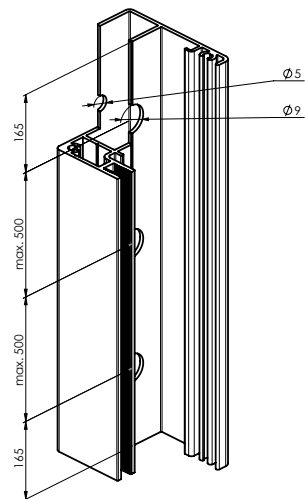
* A820/A830 standard pre-drilled
* A829/A839 drilled only on request

A840-1: drilling on the front/sideways

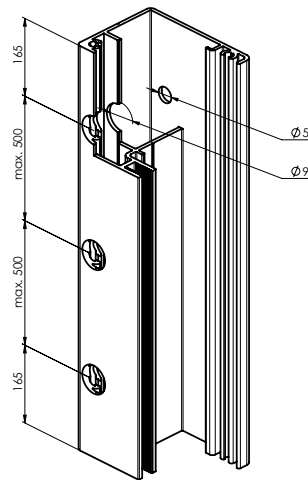
A840-1 drilling of the side guide channel cup



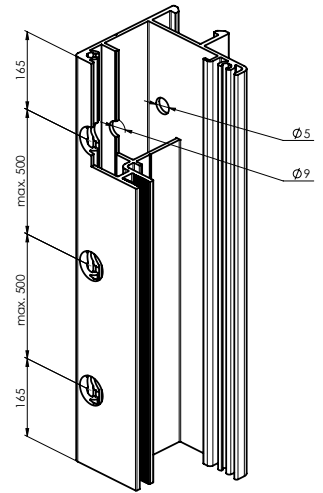
A840-1b sideways drilling



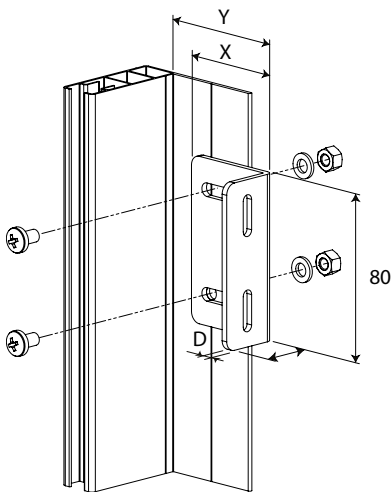
A840-1c front drilling



A849:drilling on the front



Holder for guide rails A828 and A838, A837:



X × H × D	X	Y	drawing number
50 × 30 × 3	50	50–65	6-014549-0000
60 × 30 × 3	60	60–75	6-014550-0000
100 × 30 × 3	100	100–115	6-014552-0000
130 × 30 × 3	130	130–145	6-014542-0000

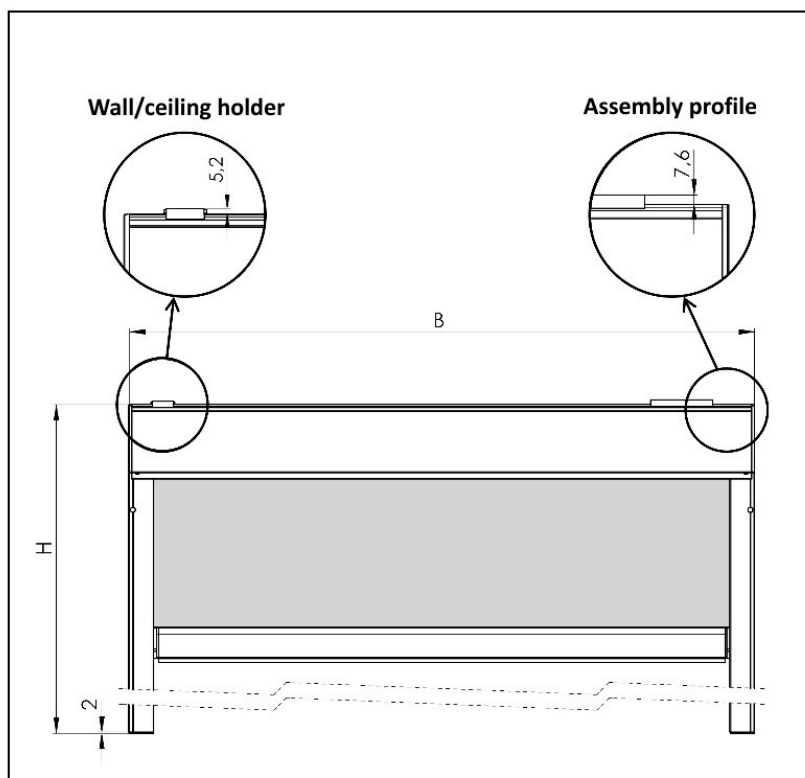
SCREEN ALFA-ZIP

Taking measurements of the ALFA-ZIP screen roller shutters

Final width B = distance between side pieces.

Final height H = height of the box and guide rail end pieces (thickness of guide rail end pieces = 3 mm) exclusive of the wall/ceiling holder or exclusive of the assembly profile.

More information in the separate document **Measurement and assembly instructions**.



Assembly of the ALFA-ZIP screen roller shutters

There are several methods of roller blind installation depending on the installation situation.

Note: For the self-supporting version of the screen roller shutter assembly, please refer to Variant A, Method 2.

Variant A: Using the wall/ceiling holders

Method 1. Attaching the box using wall/ceiling holders, sliding the guide rails on the side piece pin, and securing the guide rails by bolts.

Method 2. Placing the complete assembly of the box and guide rails in or above the window opening and securing by bolts (used where there is insufficient space for sliding the guide rails on the side piece pin, for example due to the presence of a window sill, or for the self-supporting version of the screen roller shutter).



spirit level

METHOD 1. Attaching the box using wall/ceiling holders, sliding the guide rails on the side piece pin, and securing the guide rails by bolts.

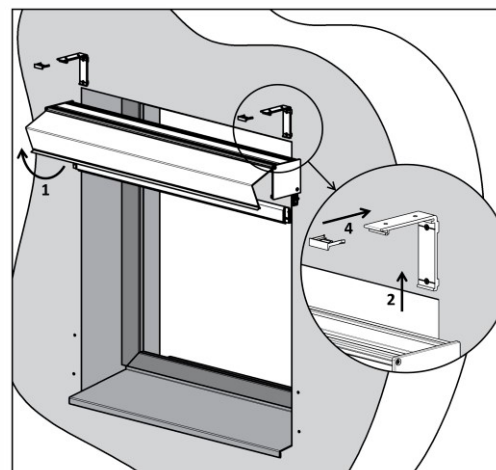
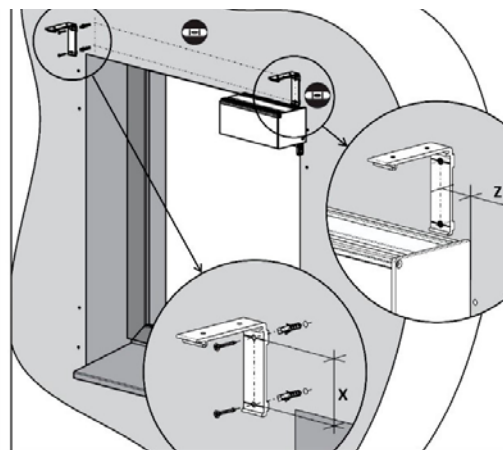
Box type	X
90	52 mm
110	73 mm
150	115 mm

Step 1: Drilling the holes for the wall/ceiling holders

1. Place the wall/ceiling holders to the assembly surface. Use the upper holes for ceiling mounting, and the rear holes for wall mounting.
2. The box must be perfectly horizontal, and therefore make sure whether the wall/ceiling holders are properly aligned. To do this, use a tube spirit level and a plumb line, or another suitable tool.
3. The wall/ceiling holders must be installed 40–100 mm from the box sides. Any additional holders are to be installed evenly distributed along the box width and they are intended to prevent arching of wider boxes.

Step 2: Installing the box to the wall/ceiling holder

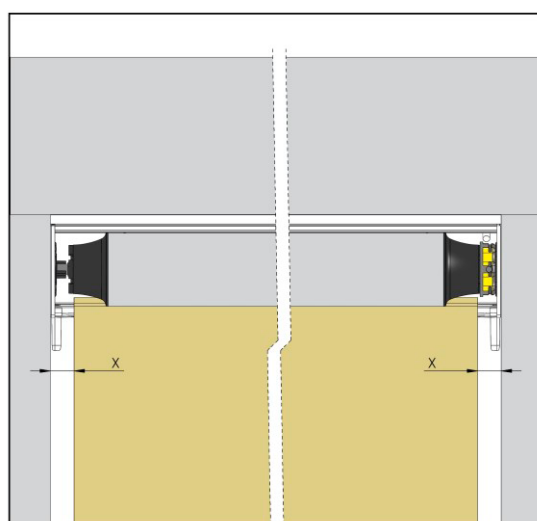
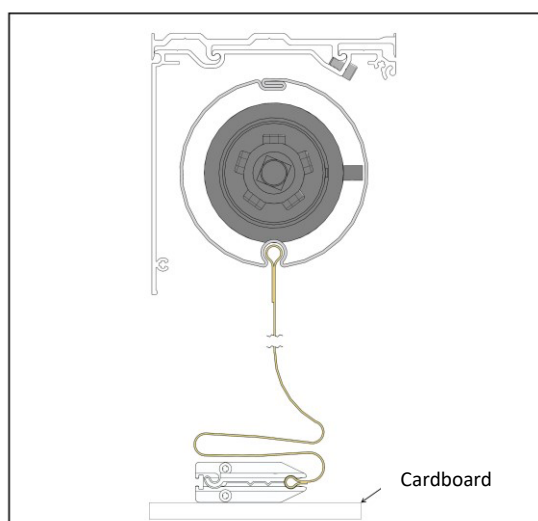
1. Remove the front cover of the box.
2. Fit the box to the wall/ceiling holders.
3. Make sure the box is correctly fitted to all holders.
4. Fit and push the safety locks; they must click to correct position.



Step 3: Centring the fabric in the box

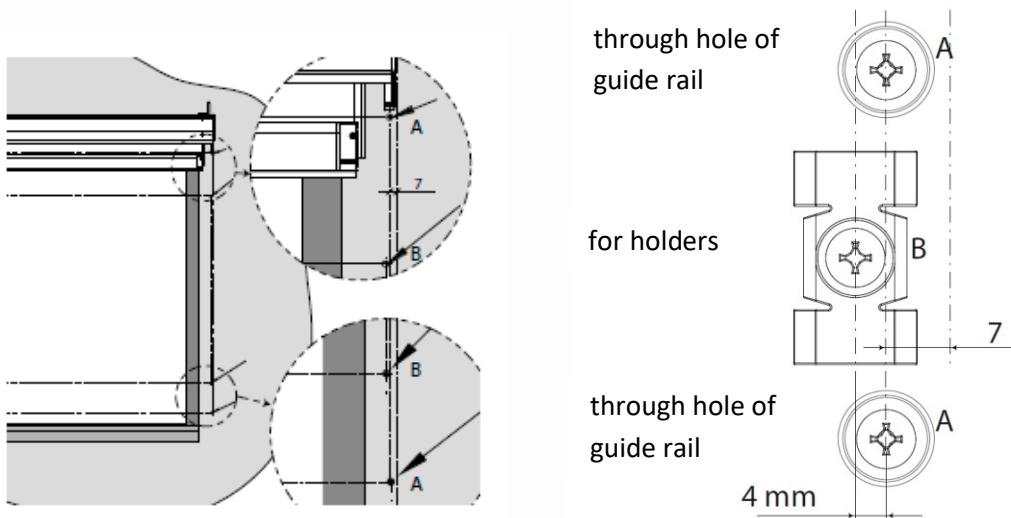
1. Unroll the fabric completely from the roller (the fabric remains slid in the roller groove). Doing this, prevent soiling of the fabric and damage to the lower profile.
2. Centre the fabric in the roller so that it is in the centre of the box (not in the centre of the roller).
3. Check whether the fabric rolls up evenly → perform 2–3 control cycles. (CAUTION! End positions of the motor have not been set yet!)

End the check by moving the lower rail approx. 15 cm under the box.

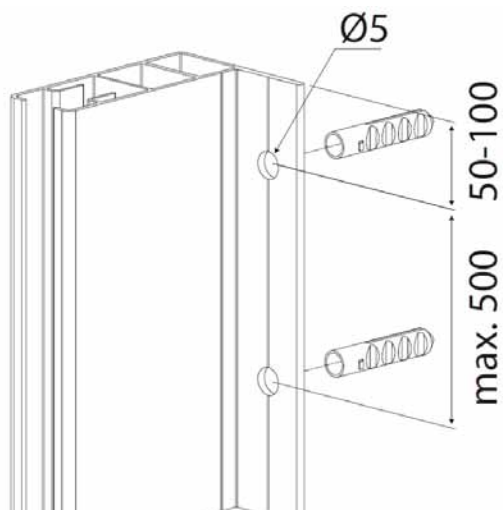


Step 4: Drilling holes for the guide rails**Guide rails A839, A829:**

1. Indicate holes to be drilled to the wall or another assembly surface.
2. Use predrilled guide rails to do this.
3. A indicates holes for attaching the guide rails (see Fig. below).
4. B indicates holes for the holders (see Fig. below).

**Guide rails A830, A820:**

Use predrilled holes in the rails to attach the guide rails A830, A820.

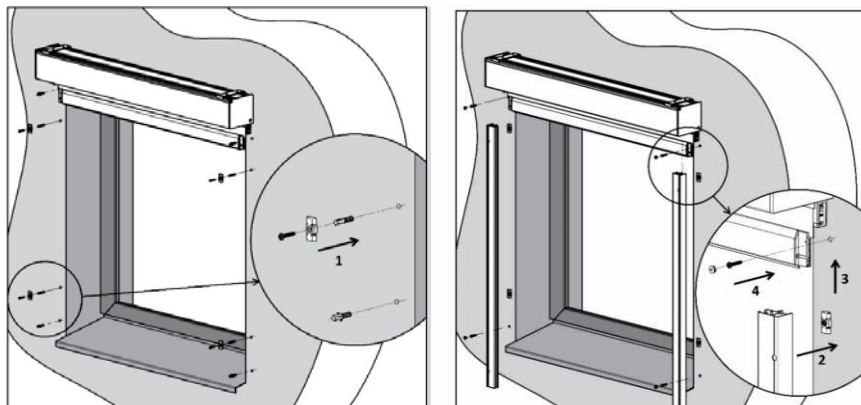
Guide rails A838, A828, A837:

***A840-1** – see assembly instruction

Step 5: Installing the guide rails

Guide rails A839, A829:

1. Attach the holders to the assembly surface.
2. Click the guide rails to the holders head-on.
3. Slide the guide rails to the side piece pins and make sure whether the bottom slat end pieces fit properly in the guide rail slots and whether the fabric zipper fits in the plastic insert in the bottom slat.
4. Attach the guide rails to the assembly surface through holes A.



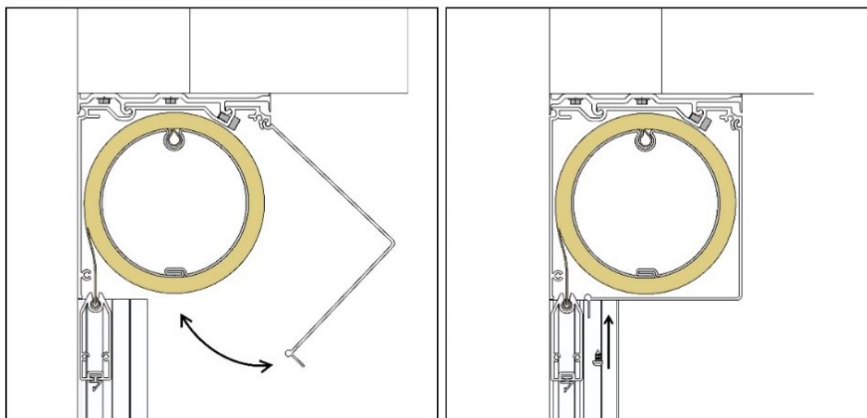
Guide rails A830, A820, A838, A828, A837:

Slide the guide rails on the side piece pins and attach them to the assembly surface through holes A.

Step 6: Attaching the front cover

Reinstall the box front cover.

After the installation of the roller shutter it is necessary to remove the sidewall remove the cable clamp.



Step 7: Adjusting the motor

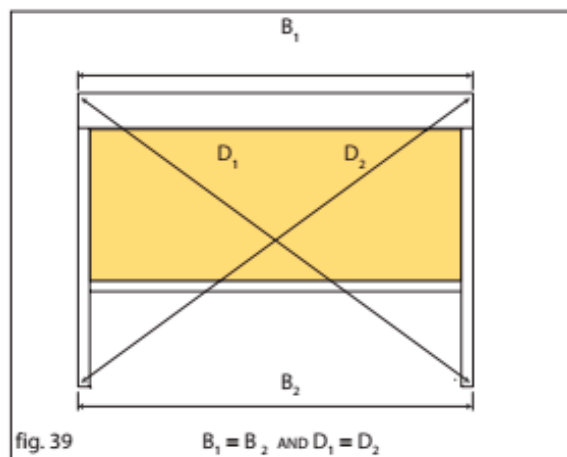
Set the end positions of the motor depending on the motor type (see manuals for motors).

Step 8: Checking the assembly

Always make sure the roller blind is properly installed:

1. First, check **horizontality** of the box.
2. Check whether both guide rails are parallel to one another and, at the same time, perpendicular to the box.
3. Measure and compare the diagonals accurate to the nearest millimetre.

If the box and guide rails are not installed correctly, the bottom slat will wind into the box at an angle, causing the fabric to crinkle or pull out from the plastic insert in the guide rail.



Method 2. Placing the complete assembly of the box and guide rails in or above the window opening and securing by bolts (used where there is insufficient space for sliding the guide rails on the side piece pin, for example due to the presence of a window sill or for the self-supporting version of the screen roller shutter).

Step 1: Drilling the holes for the wall/ceiling holders

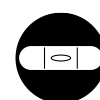
1. Place the wall/ceiling holders to the assembly surface. Use the upper holes for ceiling mounting, and the rear holes for wall mounting.
2. The box must be perfectly horizontal, and therefore make sure whether the wall/ceiling holders are properly aligned. To do this, use a tube spirit level and a plumb line, or another suitable tool.
3. The wall/ceiling holders must be installed 40–100 mm from the box sides. Any additional holders are to be installed evenly distributed along the box width and they are intended to prevent arching of wider boxes.

For the self-supporting version, skip Step 1 and continue to Step 2.

Step 2: Drilling the holes for the guide rails**Guide rails A839, A829:**

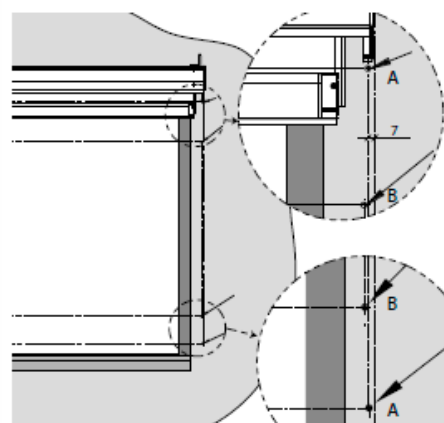
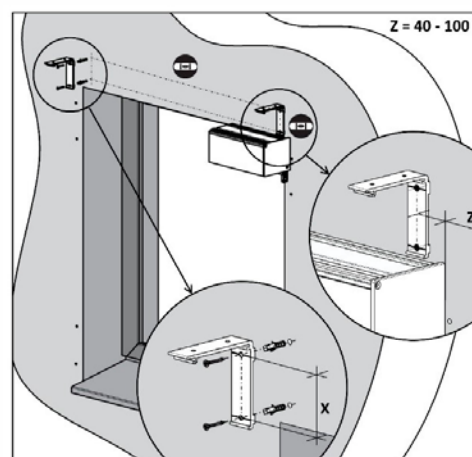
1. Indicate holes to be drilled to the wall or another assembly surface. Use predrilled guide rails to do this.
2. A indicates holes for attaching the guide rails (see Fig. below).
3. B indicates holes for the holders (see Fig. below).

Attach the holders to the assembly surface.



spirit level

Box type	X
90	52 mm
110	73 mm
150	115 mm



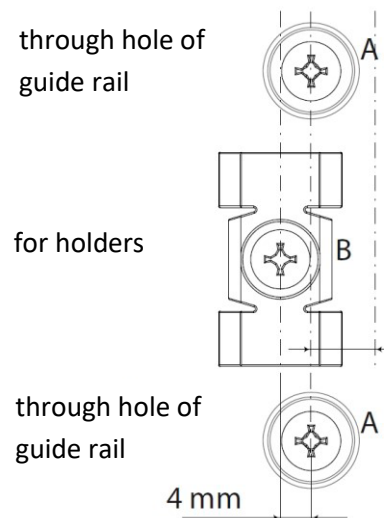
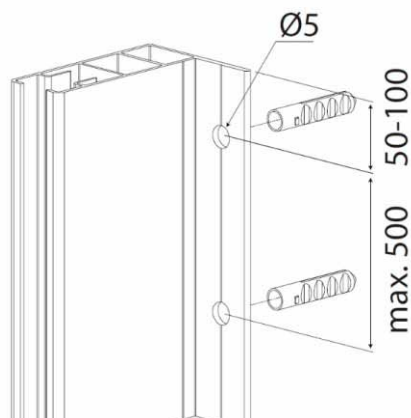
Guide rails A830, A820:

Use predrilled holes in the rails to attach the guide rails A830, 820.

For installation of the guide rails, it is necessary to use screws with a washer or with a larger support surface of the head.

Guide rails A838, A828, A837:

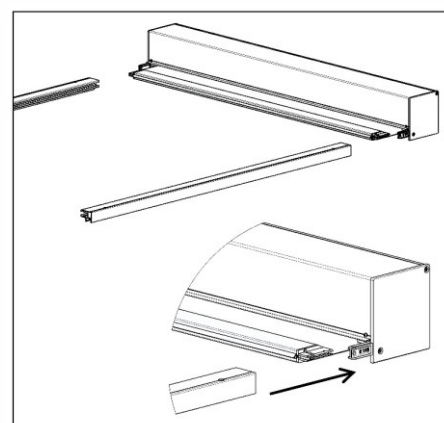
For installation of the guide rails, it is necessary to use screws with a washer or with a larger support surface of the head.



*A840-1 - see assembly instruction

Step 3: Sliding the guide rails on the side piece pins

1. Place the roller blind box on the cardboard packaging (take care not to damage the surface treatment).
2. Then slide the predrilled guide rails to the side piece pins.
3. Make sure whether the bottom slat end pieces fit properly in the guide rail slots and whether the fabric zipper fits in the plastic insert in the guide rail.

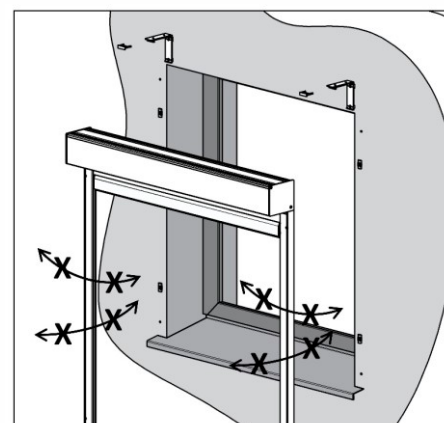
**Step 4: Fitting the box and guide rails**

Lift the box with the guide rails. Do this in cooperation with at least two other persons depending on the box width. Place the complete assembly to the window opening.

For installation of the guide rails, it is necessary to use screws with a washer or with a larger support surface of the head.

During assembly, extra care must be taken to avoid breaking the sideboard spike.

The self-supporting version of the roller shutter does not use a mounting profile or a „wall-ceiling“ bracket, and therefore there is a natural slight deflection of the box in the width of the roller shutter. This deflection creates an optical gap between the upper edge of the box and the soffit, where the self-supporting screen is mounted.



Caution! Make sure not to break off the pins by sliding the guide rails too forward, backward, or sideward.

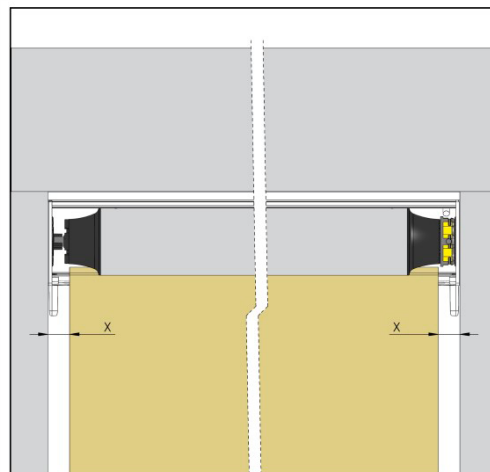
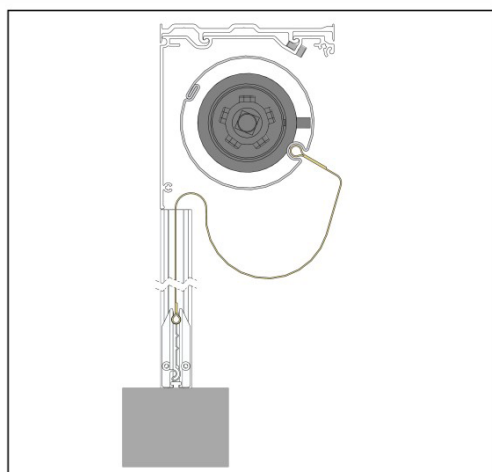
Step 5: Attaching the box to the wall/ceiling holders, and attaching the guide rails

1. Fit the box to the wall/ceiling holders.
2. Make sure the box is correctly fitted to all holders.
3. Fit and push the safety locks; they must click to correct position.
4. For guide rails A839, 829: click them to the holders head-on and attach to the assembly surface through holes A.
5. For guide rails A830, 820, A838, A837, A828: attach them to the assembly surface through holes A.

Step 6: Centring the fabric in the box

1. Unroll the fabric completely from the roller (the fabric remains slid in the roller groove). Doing this, prevent soiling of the fabric and damage to the lower profile.
2. Centre the fabric in the roller so that it is in the centre of the box (not in the centre of the roller).
3. Check whether the fabric rolls up evenly → perform 2–3 control cycles. (CAUTION! End positions of the motor have not been set yet!)

End the check by moving the lower rail approx. 15 cm under the box.



Step 7: Adjusting the motor

Set the end positions of the motor depending on the motor type (see manuals for motors).

It is necessary to connect the motor cables according to the drawing from the supplier and must be carried out by trained professionals. The entire electrical line must be de-energized during connection. The motors are in the factory settings, and during assembly it is necessary to perform the settings according to the manufacturer's instructions, including the end stops.

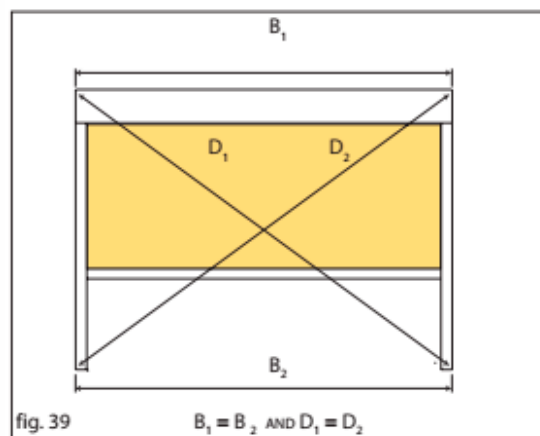
ATTENTION! The lower end position must never be exceeded. This could lead to reverse winding of the fabric and damage to

Step 8: Checking the assembly

Always make sure the roller blind is properly installed:

1. First, check **horizontality** of the box.
2. Check whether both guide rails are parallel to one another and, at the same time, perpendicular to the box.
3. Measure and compare the diagonals accurate to the nearest millimetre.

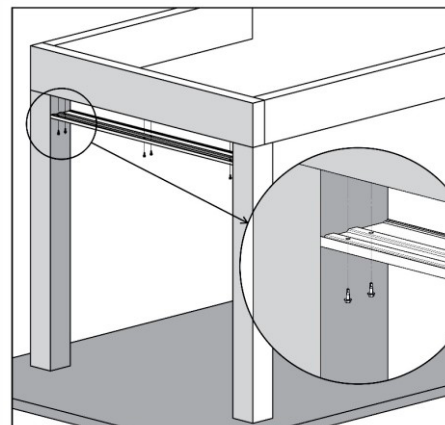
If the box and guide rails are not installed correctly, the bottom slat will wind into the box at an angle, causing the fabric to crinkle or pull out from the plastic insert in the guide rail.



Variant B: Using the assembly profile

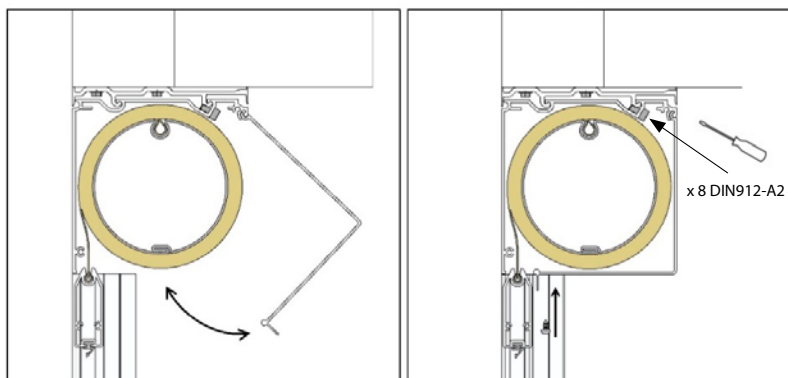
Step 1: Attaching the profile

1. Place the profile to the assembly surface and indicate the spots according to the predrilled holes. **The assembly surface must be perfectly horizontal!**
2. Predrill the holes according to the fasteners used and attach the assembly profile.



Step 2: Installing the box to the assembly profile

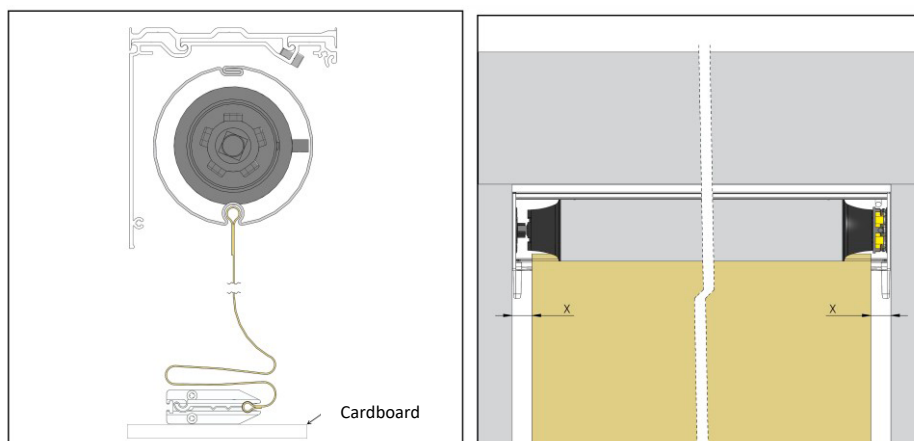
1. Remove the front cover of the box.
2. Fit the box to the assembly profile.
3. Make sure the box is correctly fitted to both locks throughout its length.
4. Drive the provided M4 bolts to predrilled holes in the box.



Step 3: Centring the fabric in the box

1. Unroll the fabric completely from the roller (the fabric remains slid in the roller groove). Doing this, prevent soiling of the fabric and damage to the lower profile.
2. Centre the fabric in the roller so that it is in the centre of the box (not in the centre of the roller).
3. Check whether the fabric rolls up evenly → perform 2–3 control cycles. (CAUTION! End positions of the motor have not been set yet!)

End the check by moving the lower rail approx. 15 cm under the box.



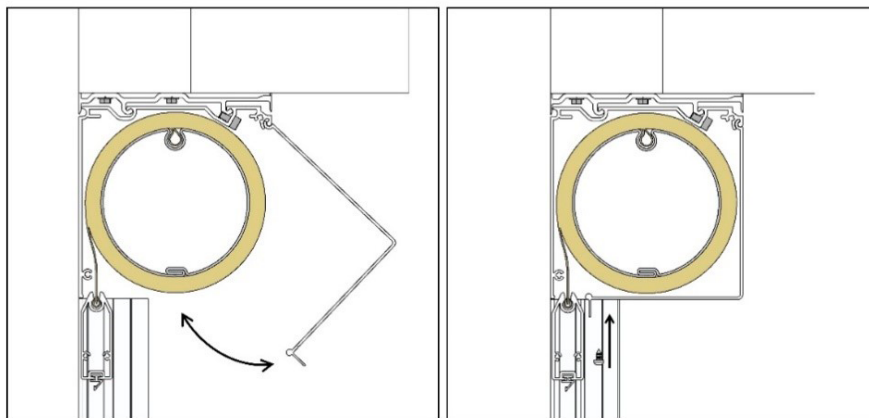
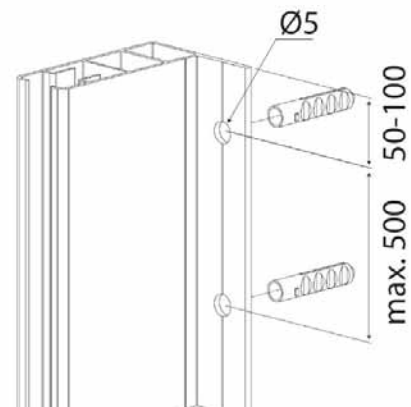
Step 4: Attaching guide rails

1. Slide the guide rails to the side piece pins.
2. Make sure whether the bottom slat end pieces fit properly in the guide rail slots and whether the fabric zipper fits in the plastic insert in the guide rail.
3. Fasten the rails with bolts

Step 5: Attaching the front cover

Reinstall the box front cover.

After the installation of the roller shutter it is necessary to remove the sidewall remove the cable clamp.

**Step 6: Adjusting the motor**

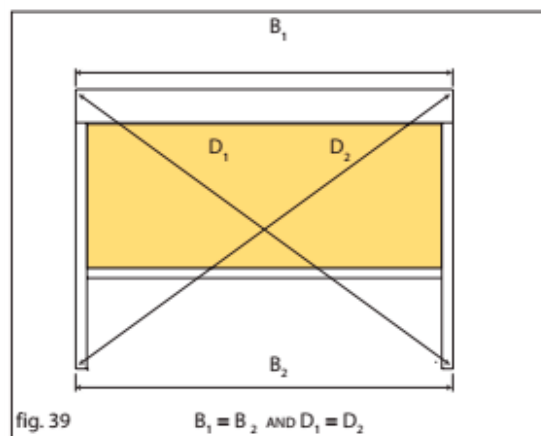
Set the end positions of the motor depending on the motor type (see manuals for motors).

Step 7: Checking the assembly

Always make sure the roller blind is properly installed:

1. First, check **horizontality** of the box.
2. Check whether both guide rails are parallel to one another and, at the same time, perpendicular to the box.
3. Measure and compare the diagonals accurate to the nearest millimetre.
- 4.

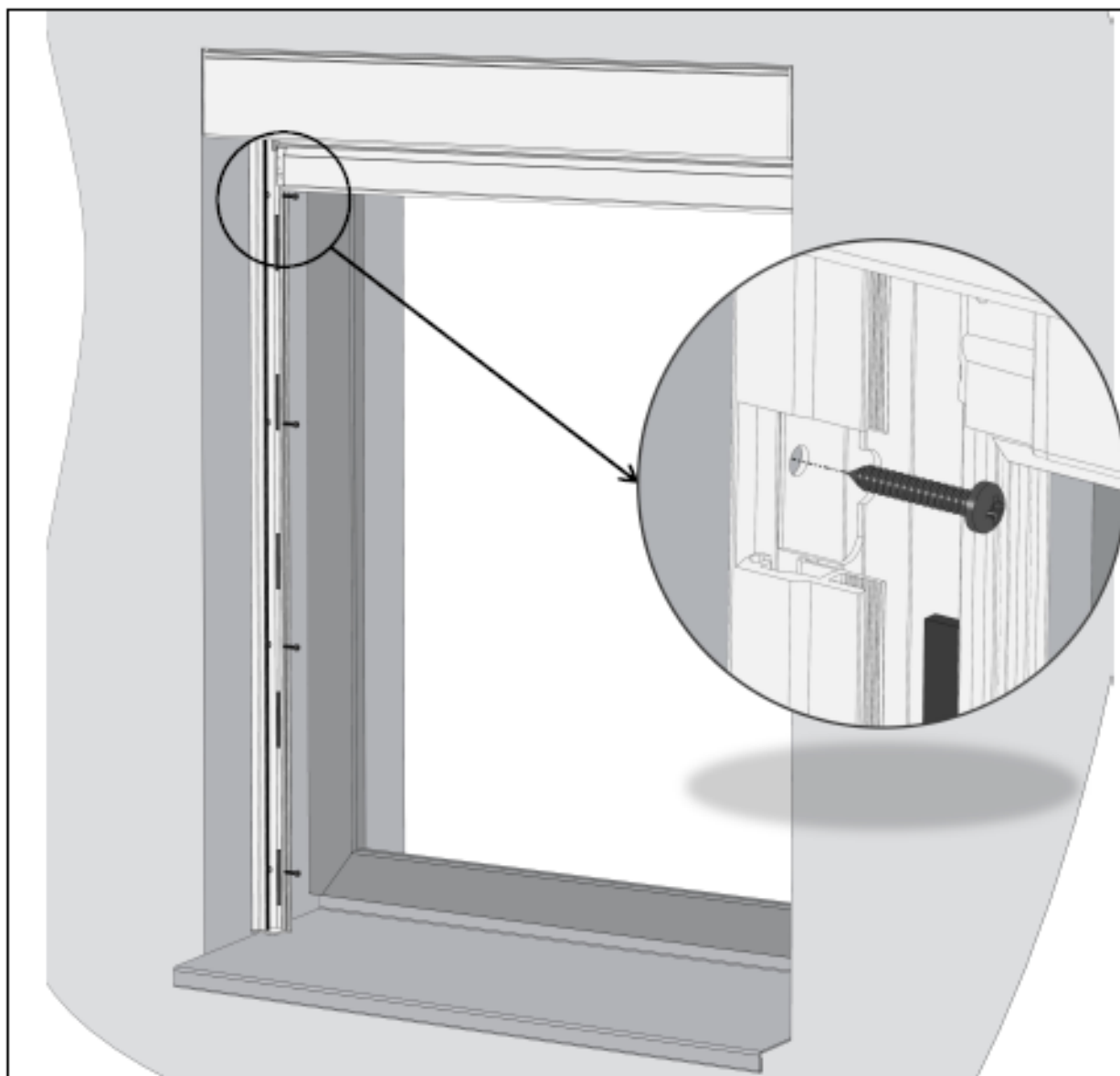
If the box and guide rails are not installed correctly, the bottom slat will wind into the box at an angle, causing the fabric to crinkle or pull out from the plastic insert in the guide rail.



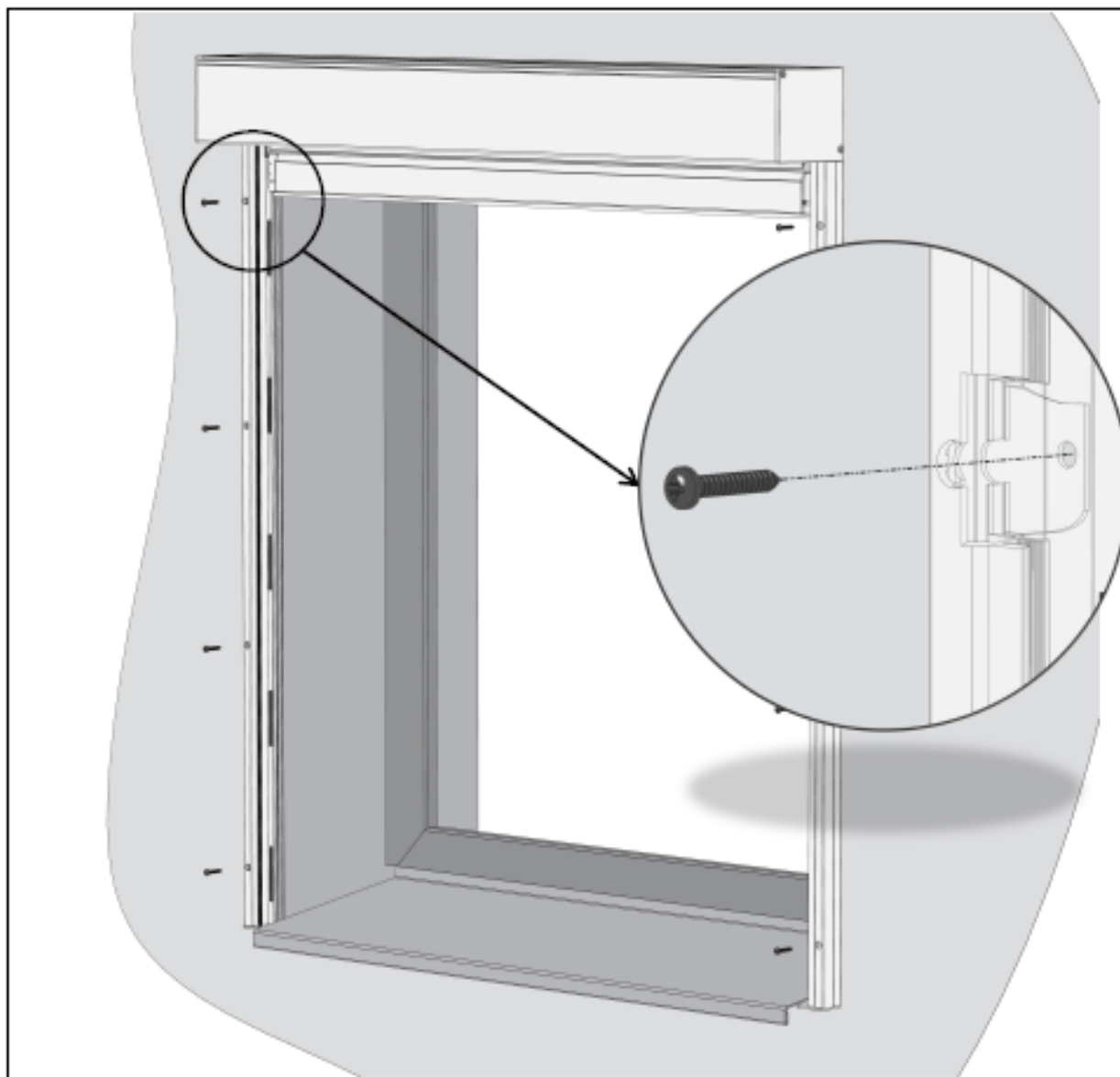
* Assembly – sectional guide rail A840-1

1. Assembling the guide rail

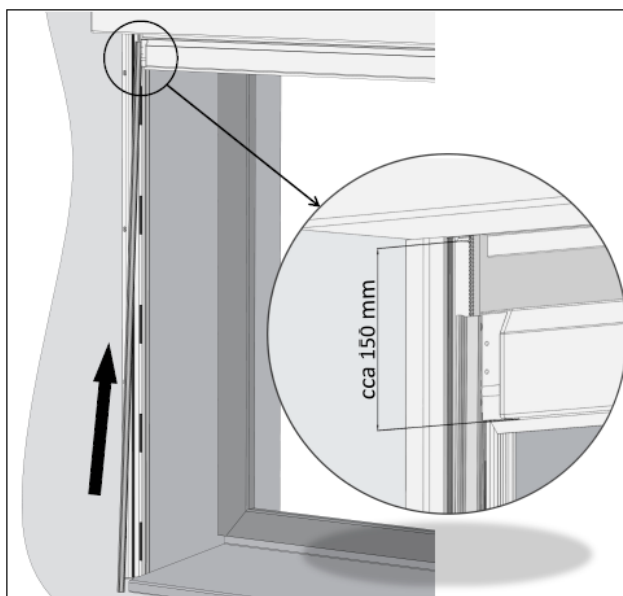
1.a Side assembly of the guide rail



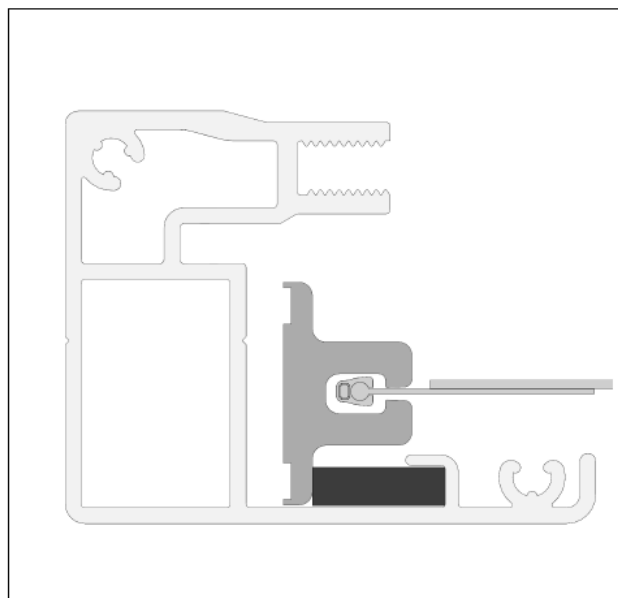
1.b Front assembly of the guide rail



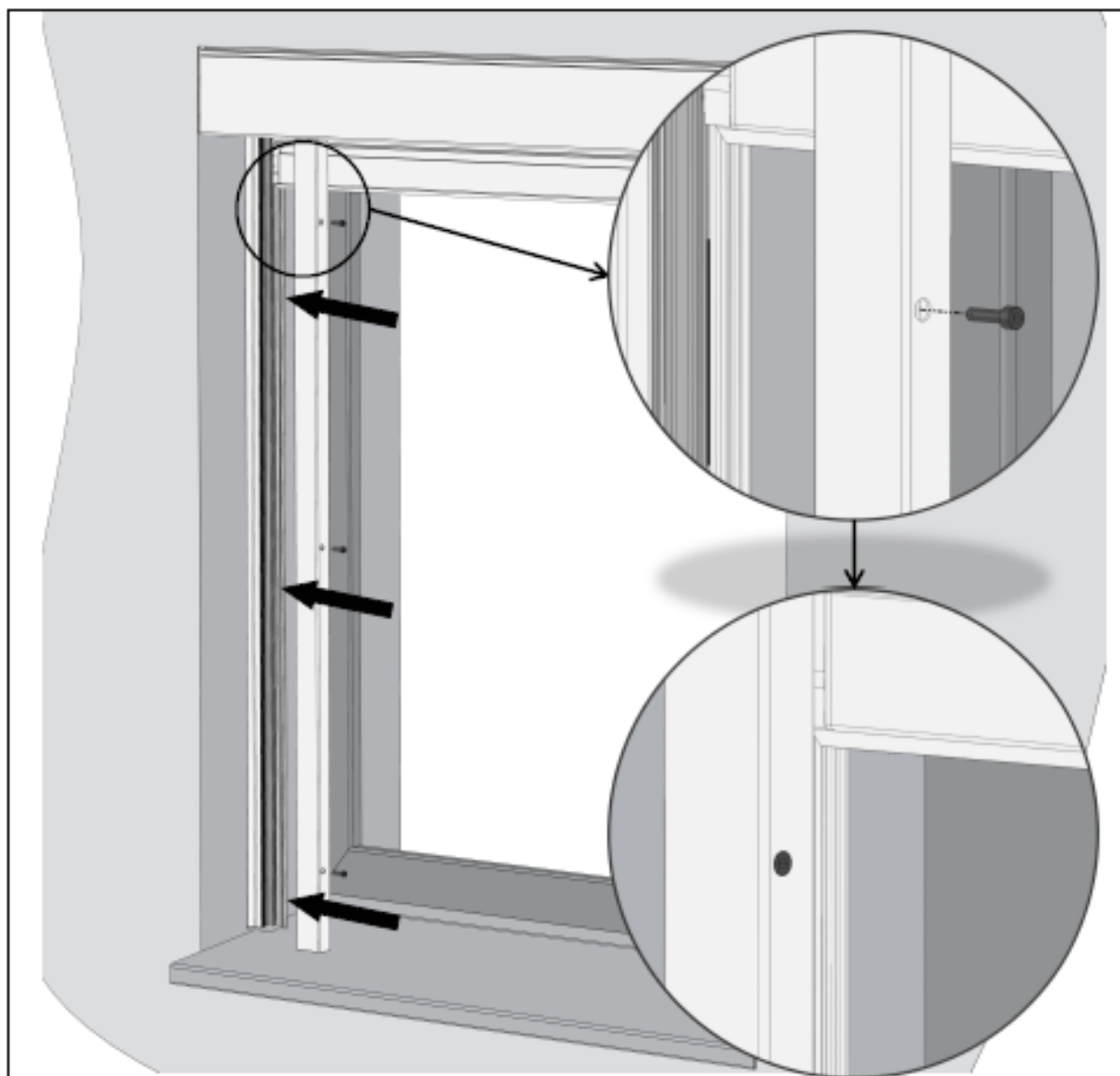
2. Fitting the zipper profile



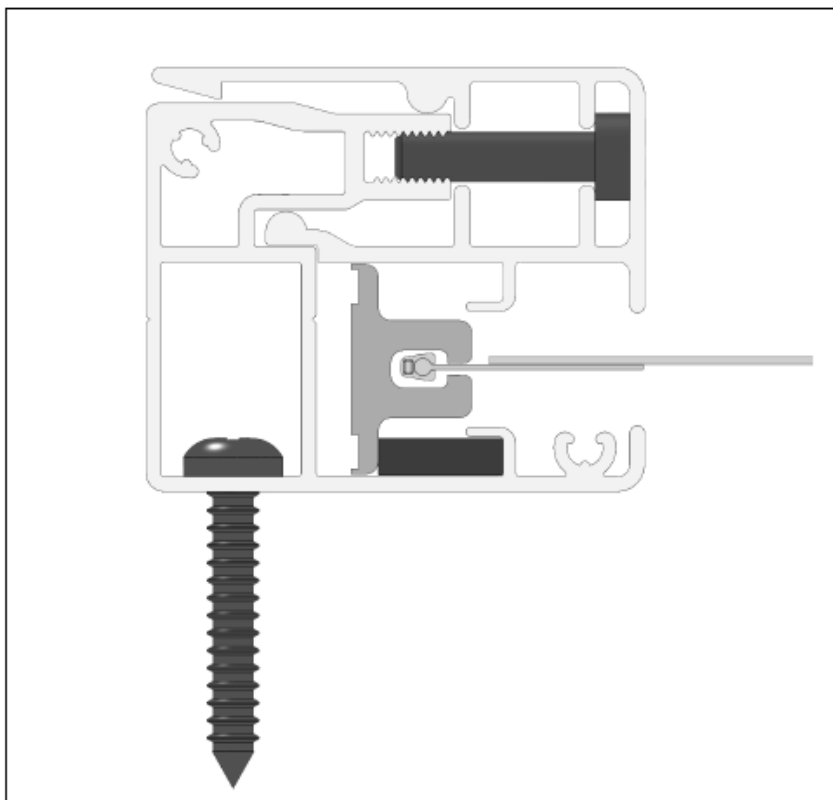
Cross-section of the rail A840-1 after fitting the zipper profile



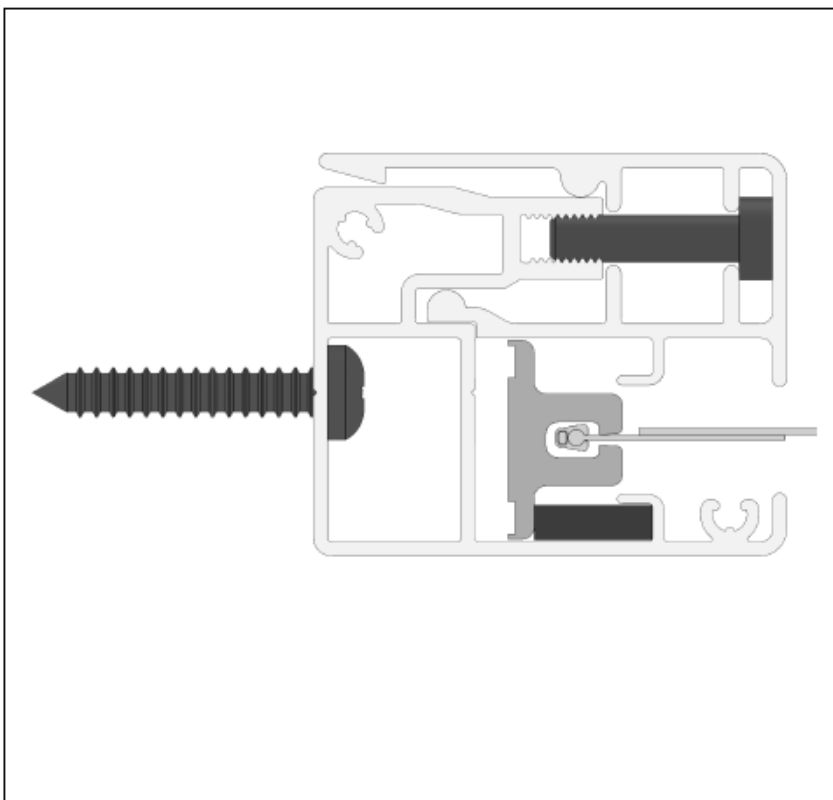
3. Fitting the lock A840-1



3.a Cross-section of the rail A840-1 after front-mounting



3.a Cross-section of the rail A840-1 after side-mounting

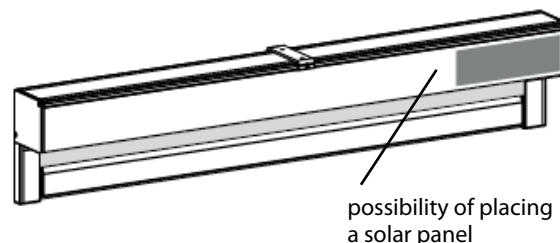


SCREEN ALFA-ZIP SOLAR (2-01576-SOLAR)

Screen blind with exterior solar power supply is a unique and fully automated blind that is wirelessly controlled and has zero power consumption. This blind works on the principle of the so-called photovoltaic phenomenon – i.e. the conversion of solar radiation into electricity. This is the most environmentally friendly and energy-saving roller shutter solution. The drive is powered by a long-life battery recharged by a solar panel that works in all weather conditions. One solar unit is adapted for only one screen roller blind.

Parameters of this product:

- Box design angular only
- Pipe $\varnothing$ 55, $\varnothing$ 67, $\varnothing$ 85
- Standard - internal battery for box 150 only
- Optional – use of external battery for box 90 and 110
- The solar panel is always on the motor side
- Installation of the B-BE type (in the block) is not possible
- Possibility of multiple blinds in a common box, provided that each roller shutter will have its own motor and external battery.
- only bottom rail 18x50



Standard dimensions for box 90

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	max.
solar system Sunea	595	2500	400	3000	8
self-supporting system	795	1500	400	2500	8

The ISOTRA BASIC SOLAR kit cannot be used for the 90 box.

Standard dimensions for box 110

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	max.
solar system Isotra Basic	795	4200	400	3500	15
solar system Sunea	595	3200	400	3500	8
self-supporting system	795	3500	400	3000	15

Standard dimensions for box 150

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	max.
solar system Isotra Basic	795	6000	400	5000	18
solar system Sunea	595	3500	400	3500	8

Solar set ISOTRA BASIC:

- Motor ISOTRA BASIC SOLAR 20/12
- Solar panel ISOTRA BASIC
- Built-in Li-on battery 12V, 2500 mAh
- Charger ISOTRA BASIC
- Controllers ISOTRA BASIC
- Smart Zigbee

Item name	Business name	Drawing number
motor ISOTRA BASIC Solar 20/12	X.AM45C	6-019352-0020
solar panel ISOTRA BASIC	X.AC605-03	6-019694-0000
controller ISOTRA BASIC, 1-canal, Zigbee - silver	X.AC153-01	6-019351-0001
controller ISOTRA BASIC, 16-canals, Zigbee - silver	X.AC153-06	6-019351-0006
charger ISOTRA BASIC, DC12, 6V	X.AC-DC12.6V	6-09353-0000
Smart Zigbee	X.AC526-01	6-019354-0000

Solar set SUNEa

- motor SOLAR KIT SUNEa
- Solar panel Oximo WireFree resin 3.2 W Solar panel
- Oximo WireFree batteries, NiMH 12V, 2.2 Ah
- Oximo WireFree Wiring Harness Adapter Cable

itemname	business name	drawingnumber
Motor SOLAR KIT „SUNEa 40 io“ 6/18	X.1241890	6-018887-0006
Motor SOLAR KIT „SUNEa 40 io“ 10/12	X.1241891	6-018887-0010
Motor SOLAR KIT „SUNEa 40“ 6/18 RTS DC	X.1241478	6-017545-0006
Motor SOLAR KIT „SUNEa 40“ 10/12 RTS DC	X.1241479	6-017545-0010
Adapter cable OXIMO WIREFREE WIRING HARNESS	X.1783002	6-016472-0000
Oximo WireFree batterie	X.9015004	6-016469-0000
Solar panel Oximo 40 WF	X.9019219	6-016467-0000
Batterie holder Oximo WF - pair	X.9020878	6-016476-0000

Oximo WireFree Battery

- Battery Type NiMH
- Size 420mm x Ø 25 mm
- IPx4 protection class
- Charging time max. 3.5 hours

Oximo WireFree solar panel

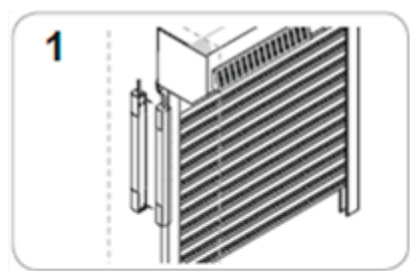
- Material laminated black fiberglass with transparent epoxy resin with photovoltaic technology
- Input power 3.2 W
- Dimensions 470 x 60 x 6 mm
- Protection class X4 (cells sensitive to light: IP67)
- Supplies energy even when the sky is cloudy

Installation:

The battery can be installed in the room, but can also be placed from the outside in a roller box, but provided that it is not exposed to direct sunlight and rain.

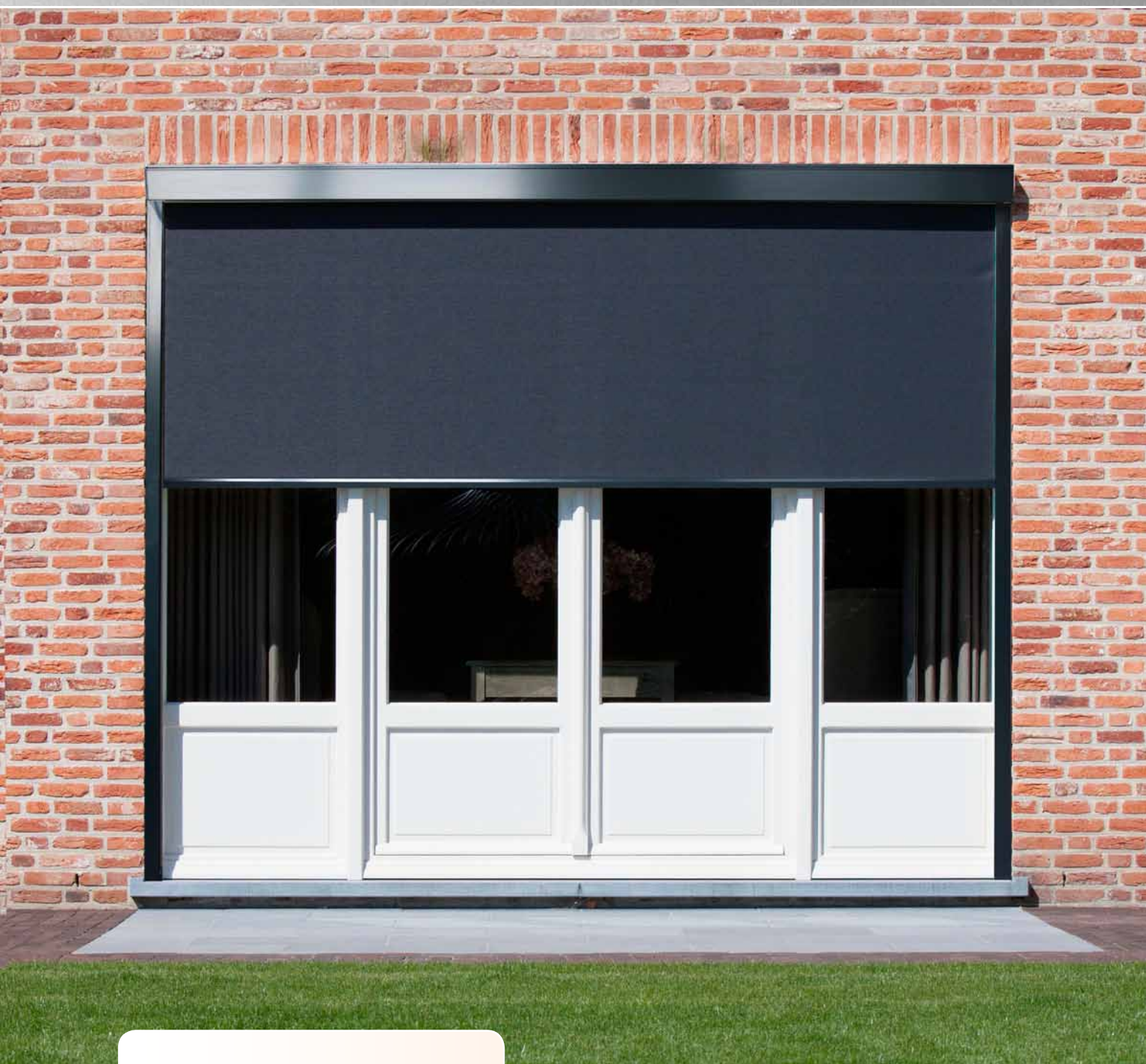
The working temperature is from -20 ° C to + 70 ° C. The IP protection class is X4, which means that the product is splash-proof at all angles.

The Oximo WireFree TM battery must be installed so that it is protected from the weather. For example, it can be mounted behind the guide rail (1), behind the roller box or underneath the box (2), under the window frame or in the corner of the inner wall. Attention! The battery must be accessible in any position of the roller shutter so that the PROG button is always accessible for maintenance and recharging with external charger or for replacement. Do not seal the battery in an airtight case. If the battery is installed in a position other than horizontal, the power cord should always point upwards.



Batteries are always placed outside - not inside the box - for all box sizes.

SCREEN ALFA PLUS-ZIP

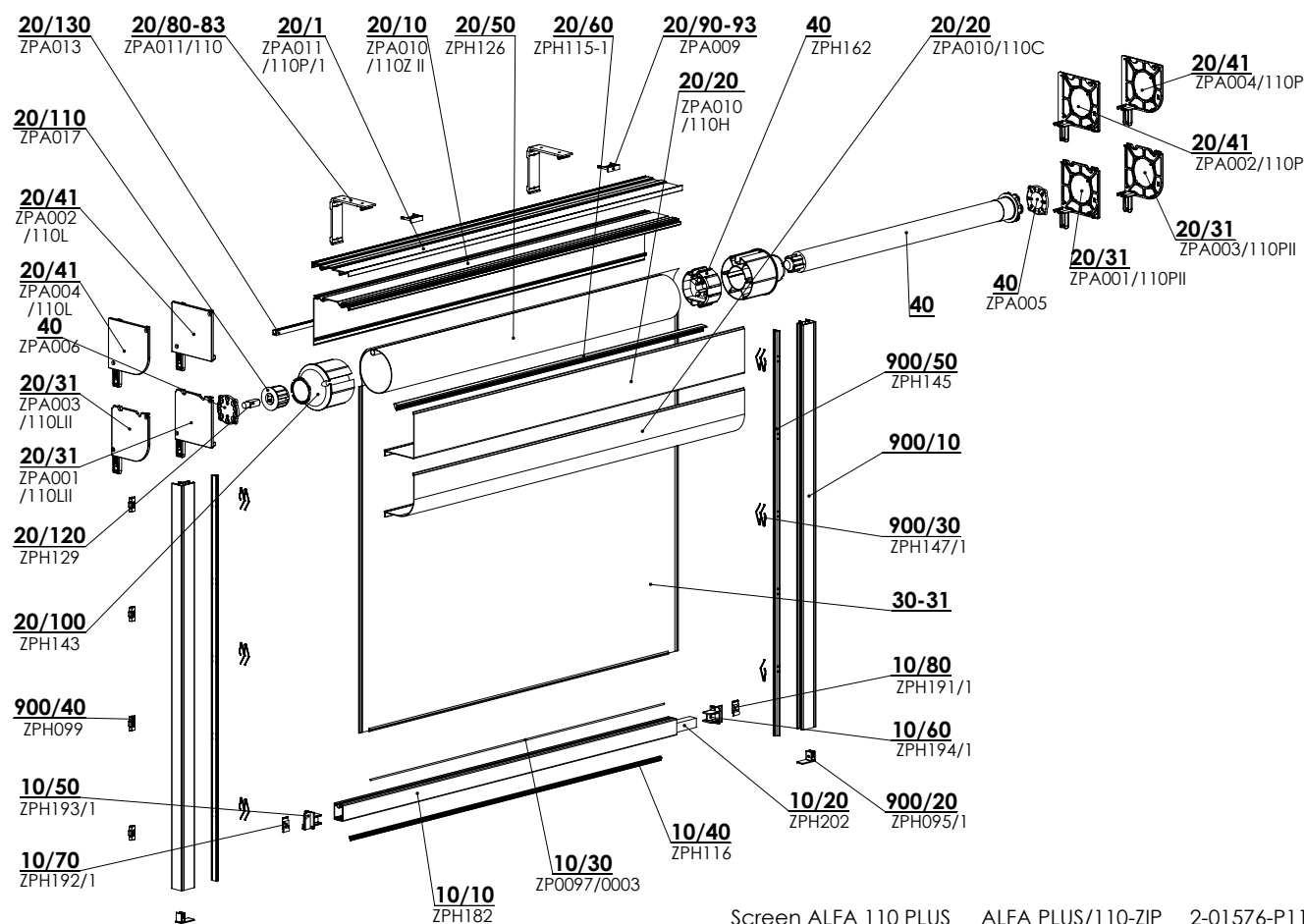


- ▲ 2 types of modern boxes: square box for austere architecture or rounded box for more traditional buildings
- ▲ Weighted bottom slat to guide and tension the fabric
- ▲ the highest wind resistance (wind class 6)
- ▲ Simple and fast assembly
- ▲ Guaranteed area up to 12 m²

ISOTRA *Quality*

SCREEN ALFA PLUS-ZIP

Basic Product Specification

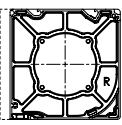
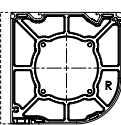
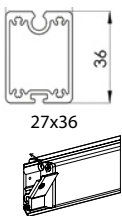
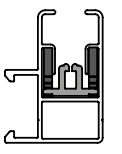
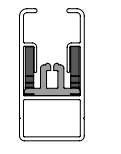
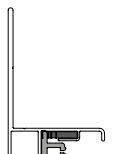
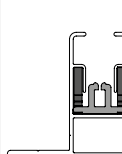
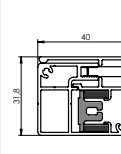
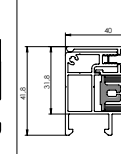


Control

Serves for lifting and lowering the screen blind.

Motor - standard asynchronous tubular motor Maestria Wt, or optional asynchronous tubular motors Maestria iO Geiger.

Specification (for motor)

	Box		Bottom rail	Side guidance					
	square	rounded	high	guide rail					
Abbreviation	BOX for SCREEN ALFA PLUS 110		ZPH182	ZPA016/839	ZPA016/830	ZPH214/837	ZPA016/838	ZPA036/840-1	ZPA037/849
Dimension (mm)	110x110	110x110	27X36	30x40	20x40	40x70	40x40	31,8x40	41,8x40
Material	Al	Al	Al	Al	Al	Al	Al	Al	Al
									
				typ 839	typ 830	typ 837	typ 838	type A840-1	type 849
Colors	Standard: RAL 9006 White aluminium RAL 9007 Grey aluminium RAL 9007S Grey aluminium structure RAL 9010 white RAL 9010M white matt			RAL 9010S White structure RAL 7016 Anthracite grey RAL 7016M Anthracite grey matt RAL 7016S Anthracite grey structure RAL 8014S Brown structure RAL 8014M Brown matt			RAL 7012 Basalt grey RAL 7021 Black grey DB 702 Pearl light grey DB 703 Pearl dark grey		

Other RAL colours upon request*

Standard Dimensions

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	max.
motor iO, WT	795	4800	400	2500	12

Fabrics intended for ALFA 110 PLUS:

SLTZ86 a SLTZ92

Common phenomena of technical fabrics

The waviness of the fabric may occur around the welds or in the middle of the fabric, as different forces act on the fabric during use, and that's why this effect is common. This also includes the so-called tree effect, when the fabric is wavy in the seam area. Visible cylinder pressure marks on the fabric. These disappear at higher temperatures when the fabric straightens out. The bottom slat does not reach the box.

SCREEN ALFA PLUS-ZIP (2-01576-P110)

position	item name	business name	drawing number
10	Split profiles + components - (SCREEN ALFA +)		see Split profiles + components - (SCREEN ALFA +)
20	BOX for SCREEN ALFA + 110 – QUARTER-ROUND		see BOXES for SCREEN ALFA + 110
20	BOX for SCREEN ALFA + 100 - ANGULAR		see BOXES for SCREEN ALFA + 110
30-31	Split fabric (m2) for SCREEN		see SCREEN pattern chart
40	Motors (SOMFY, GEIGER, BECKER) SCREEN SC700 / 800		see Motors (SOMFY, GEIGER, BECKER) SCREEN ALFA
900-910	Guide - rail ALFA + LEFT / RIGHT		see Guide - rail ALFA + LEFT / RIGHT

DIVIDED profiles + components - (SCREEN ALFA +) (3-03711-PU11)

position	item name	business name	drawing number
10/10	Bottom profile - SC1000	ZPH182	6-015158-0000
10/20	Profile of the bottom slat weight 20x12mm - Fe / Zn	ZPH076	6-013971-0000
10/30	Plastic rod 3.0 mm PVC	ZP0097/0003	6-016911-0003
10/40	Bottom slat seal	ZPH116	6-013974-0000
10/50	Profile of bottom slat – ALFA - LEFT BLACK	ZPH093/1	3-03657-9004
10/60	Profile of bottom slat – ALFA – RIGHT BLACK	ZPH094/1	3-03656-9004
10/70	Safety lock of bottom slat end piece ALFA – LEFT BLACK	ZPH092/1	3-03659-9004
10/80	Safety lock of bottom slat end piece ALFA – RIGHT BLACK	ZPH091/1	3-03658-9004

BOX for SCREEN ALFA + 110 (2-01640-PU11 square/ 2-01641-PU11 quarter-round)

position	item name	business name	drawing number
20/1	Profile Holder Alfa 110 Pergola	ZPA011/110P/1	7-303888-0000
20/10	Profile Box Alfa 110 Rear	ZPA010/110Z II	7-303491-0000
20/20	Profile Box Alfa 110 Front Angular	ZPA010/110H	7-303479-0000
20/20	Profile Box Alfa 110 Front Quarter-round	ZPA010/110C	7-303480-0000
20/31	Side panel 110 Alfa H1-1 P N	ZPA001/110P/3	3-04130-0000
20/31	Side panel 110 Alfa H1-1 L N	ZPA001/110L/3	3-04131-0000
20/31	Side panel 110 Alfa K1-1 P N	ZPA003/110P/3	3-04132-0000
20/31	Side panel 110 Alfa K1-1 L N	ZPA003/110L/3	3-04133-0000
20/41	Side panel 110 Alfa H1 L N	ZPA001/110L/1	7-304064-0000
20/41	Side panel 110 Alfa H2 P N	ZPA002/110P/1	7-304065-0000
20/41	Side panel 110 Alfa H2 L N	ZPA002/110L/1	7-304066-0000
20/41	Side panel 110 Alfa K2 P N	ZPA004/110P/1	7-304069-0000
20/41	Side panel 110 Alfa K2 L N	ZPA004/110L/1	7-304070-0000
20/50	Winding roller SC800 Al dia. 95mm - 6m	ZPH126	6-014231-0000
20/60	Profile for ALFA fabric approach	ZPH115-1	7-303663-0000
20/80-83	Holder Alfa 110 Wall-ceiling	ZPA011/110	3-03496-0000
220-223	Wall-ceiling safety lock	ZPA009	3-03483-0000
20/100	Cylinder cover dia. 95mm	ZPH143	6-014237-0000
20/110	Insert for shaft end piece – dia. 50 mm	ZPA017	3-03486-9004
20/120	Cylinder cover pin - 12mm Fe / Zn	ZPH129	6-013985-0000
20/130	Thin-walled Al profile - U, 10x10x1,5	ZPA013	6-011349-0000

Motors (SOMFY) SCREEN ALFA (2-00530-0009)

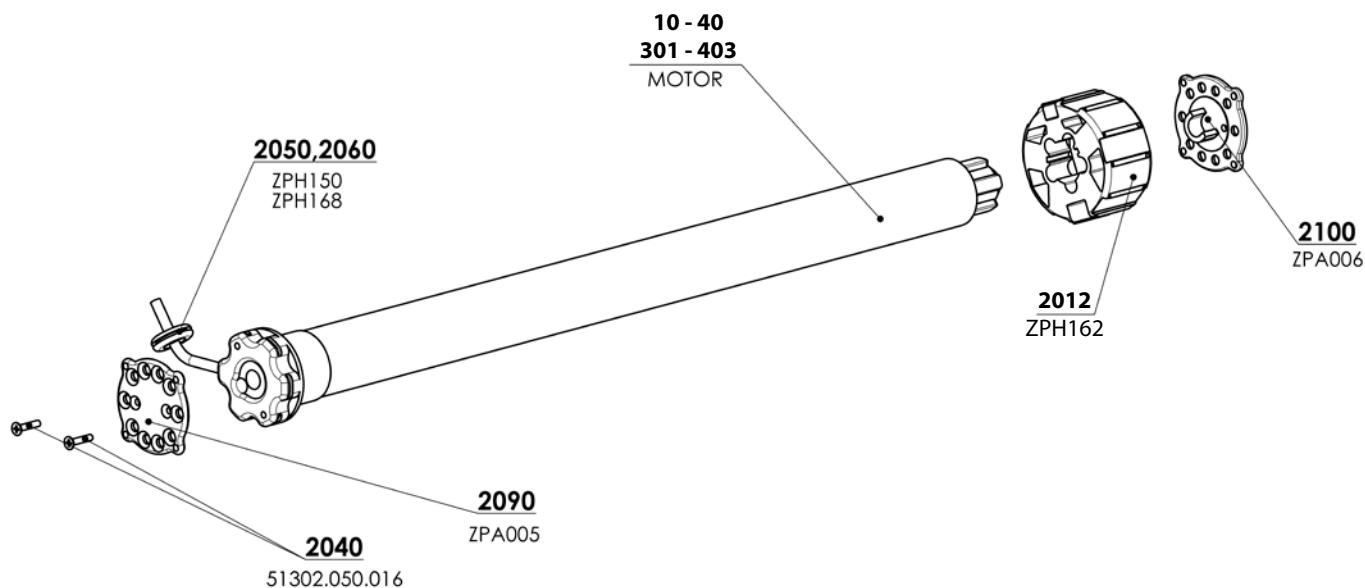
position	item name	business name	drawing number
40	Carrier LT50 HI - dia. 95mm	ZPH162	6-014327-0000
40	Flat bearing plate	ZPA005	3-03484-9004
40	Bearing plate with clip	ZPA006	3-03485-9004

Guide - rail ALFA + LEFT / RIGHT (2-01642-PU11)

position	item name	business name	drawing number
900/20	End piece VL - 40 mm	ZPH095/1	3-03667-9004
900/30	Spring VL ZIP SC800	ZPH147/1	7-303662-0000
900/40	Clip VL ZIP SC800	ZPH099	6-013993-0000
900/50	Guide profile SC800 for zip v3	ZPH145	6-014155-0000

SCREEN ALFA-ZIP

Control motor



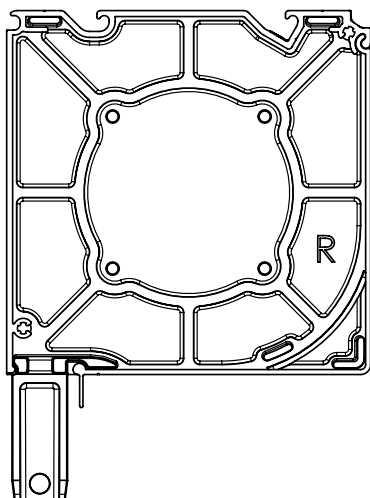
Motors (SOMFY) Screen ALFA (2-00530-0009)

position	item name	business name	drawing number
10	Motor Geiger Solid Line Zip AIR 6/16	PR0790/06	6-015903-0006
11	Motor Geiger Solid Line Zip AIR 10/16	PR0790/10	6-015903-0010
12	Motor Geiger Solid Line Zip AIR 20/16	PR0790/20	6-015903-0020
301-303	Motor MAESTRIA +50 IO	ZP0084/1	6-012538-xxxx
401-403	Maestria +50 WT	ZP0093/06	6-015258-xxxx
2040	Screw 4.8×19 DIN 7982, countersunk, Philips head	51302.050.016	6-013928-0000
2050	Cable grommet RUBBER dia. 7	ZPH150	6-014339-0000
2060	Cable collar 300×4.8 – BLACK	ZPH168	6-014438-0000
2090	Bearing plate – flat	ZPA005	3-03484-9004
2100	Bearing plate with clip	ZPA006	3-03485-9004
2012	Carrier LT50 HI - dia. 95mm	ZPH162	6-014327-0000

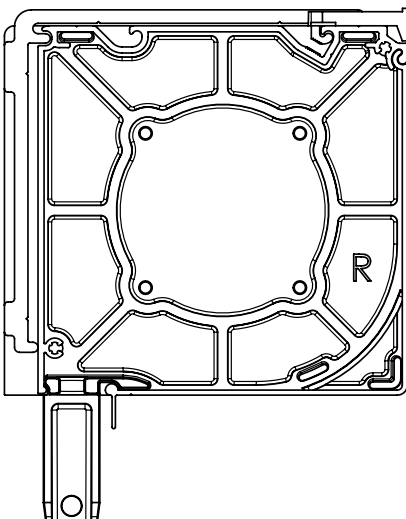
SCREEN ALFA PLUS-ZIP

Technical specification

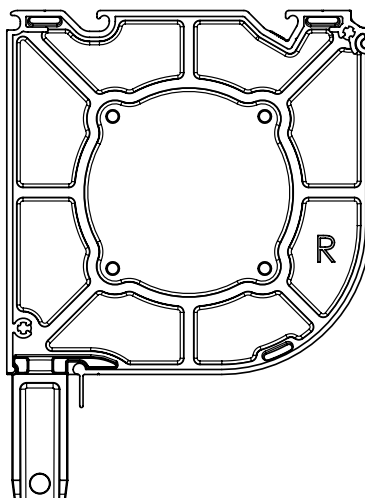
Upper profile – square (2-01578)



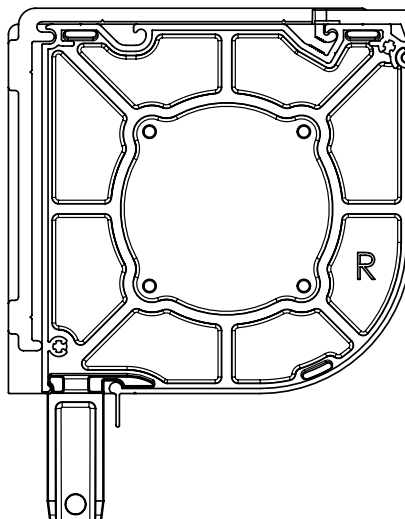
Upper profile – square – with wider side piece



Upper profile – quarter-round (2-01579)



Upper profile – quarter-round – with wider side piece

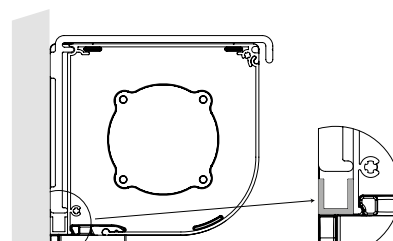


Rear parts of the box

U-section – horizontal

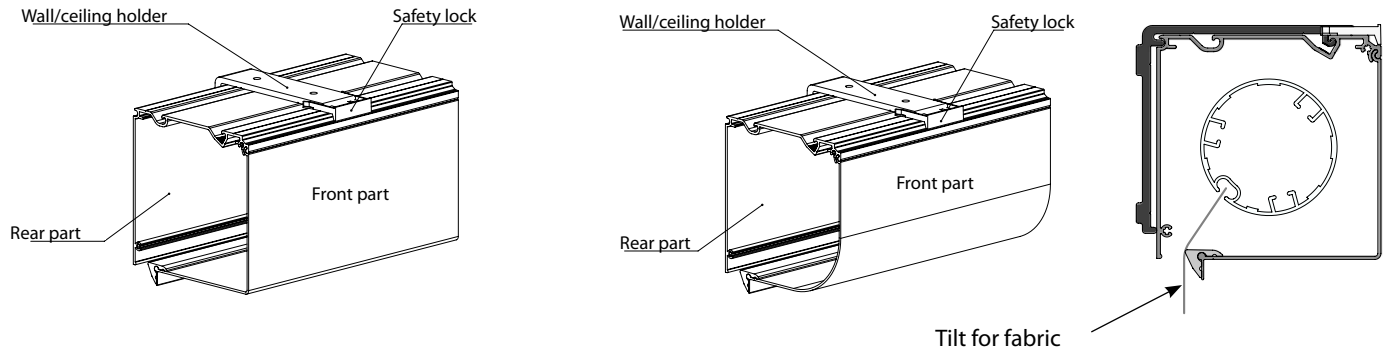
The gap between the box and the wall can be filled horizontally by a U-section having the dimensions of $10 \times 10 \times 10$ mm, where the length is determined by the box width.

Use: for guide rails A839 and A829



U-profile width - horizontal

Wall/ceiling holder



Material: extruded aluminium with powder coating finish

For the installation of all sizes of the upper profile independent of the guide rails:

Standard number of wall/ceiling holders:

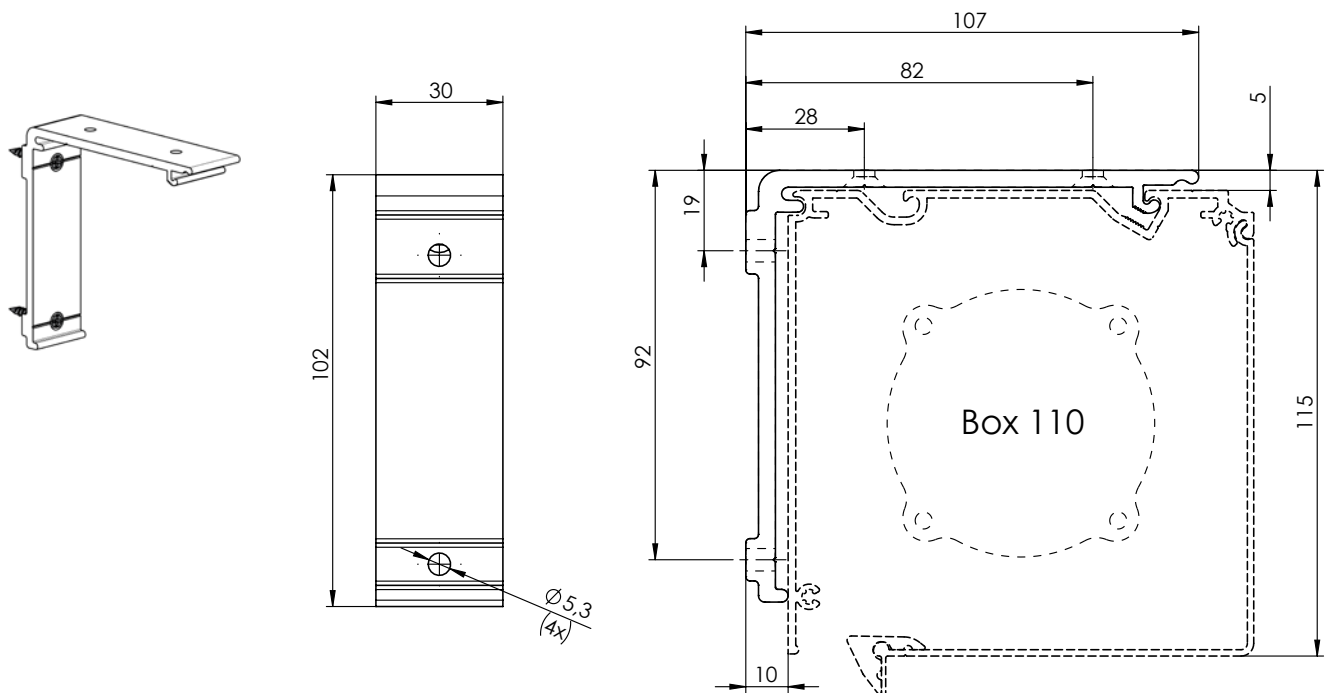
Roller blind width (mm)	Box 110
0-1500	2ks
1501 - 3000	3ks
3001 - 4500	4ks
4501 - 5000	5ks

If a wall/ceiling holder is used, we recommend using guide rail type A839.

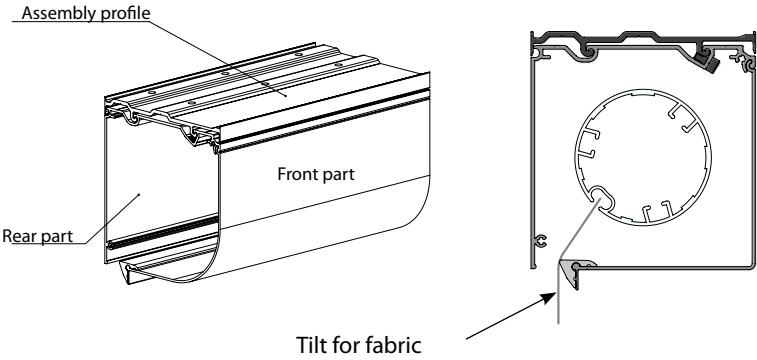
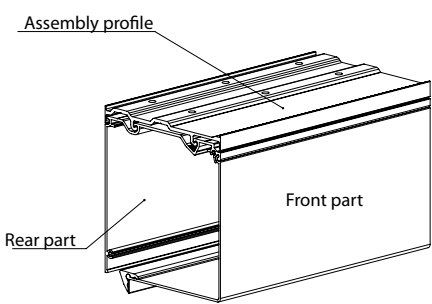
Wall/ceiling holder width: 30 mm

Shifts the rear side of the upper profile as well as guide rail holders by 10 mm to the front.

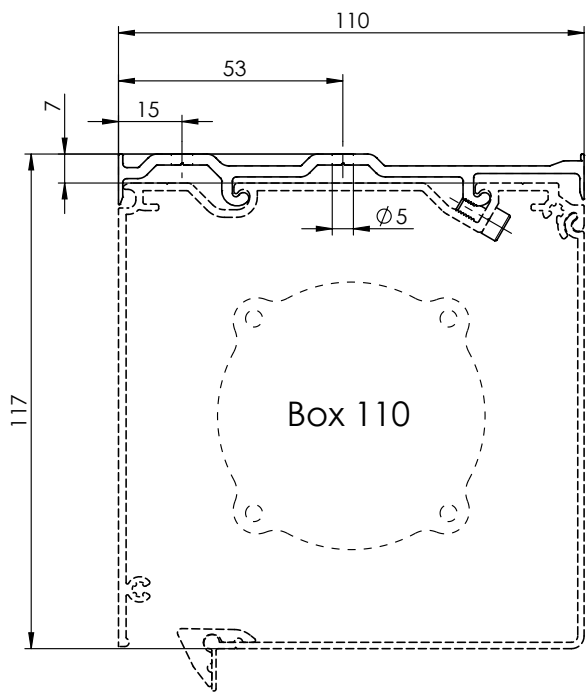
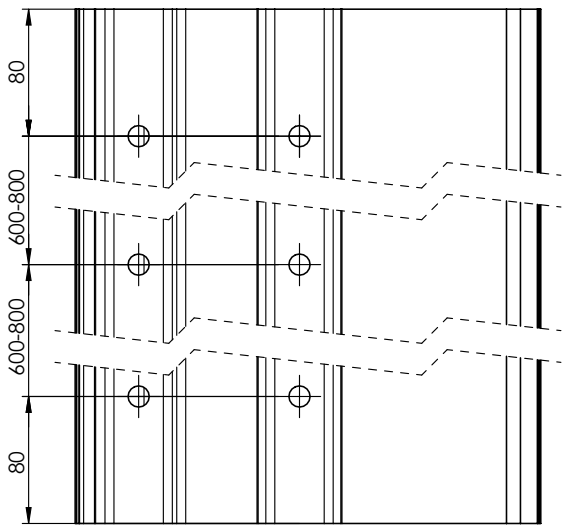
Wall/ceiling holder



Holder for pergola (assembly profile)



Holder for pergola (assembly profile)
Recommended opening distance.



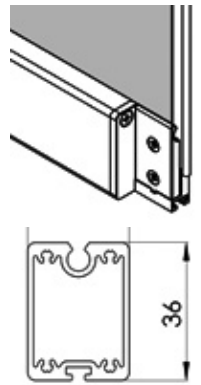
Bottom rail (6-015158-0000)

The bottom rail consists of a two-piece, left and right sliding block and an extruded aluminium profile with a powder-coated finish.

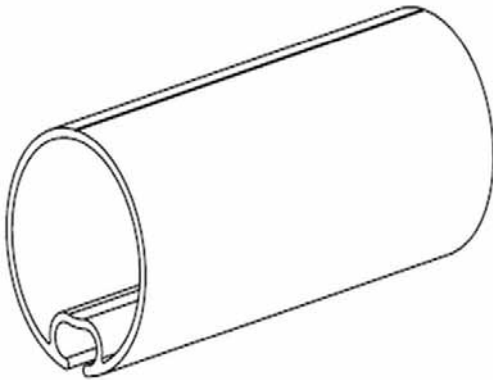
The profile has:

- A groove for screw-free attachment of the fabric using a canvas rod of Ø 3 mm
- A chamber for a strengthening strip
- A slot at the bottom to insert a rubber stopper (there is also the option to select a brush strip)

The two-piece sliding block ensures the fabric is correctly tightened.

**Roller tube, dia. 95 mm**

(6-014231-0000)



Material: galvanised steel for tubes Ø 95 mm.

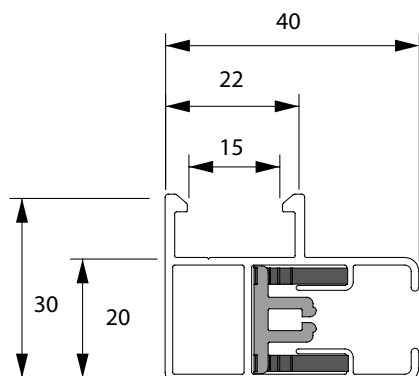
With a fabric groove for attaching the fabric using a plastic rod Ø 6 mm.

Guide rails for motor

Material: extruded aluminium with powder coating finish

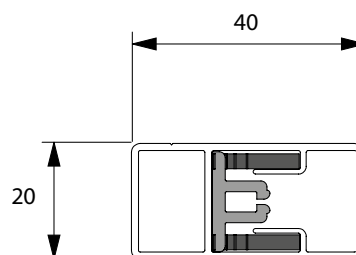
Guide rail A839 (7-303494)

- standard guide for attachment clips or small distances relative to the side (10 mm).



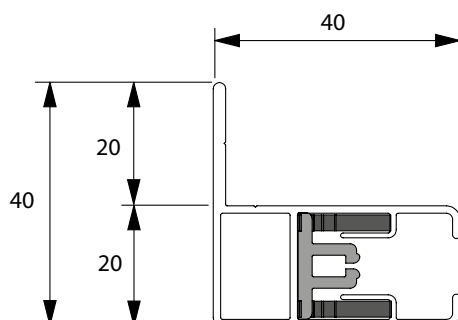
Guide rail A830 (7-303492)

- flat guide rails without attachment clips.



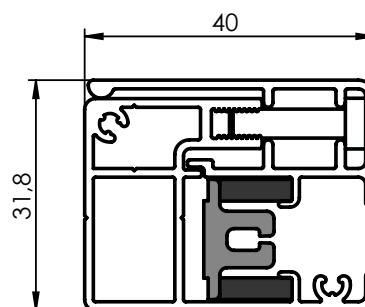
Guide rail A838 (7-303493)

- guide rail with a short mounting flange.



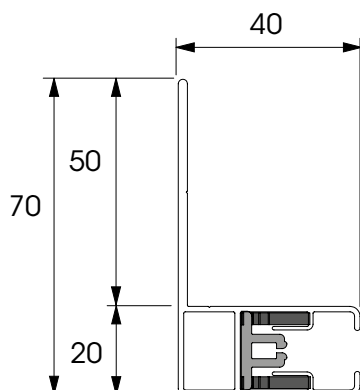
Guide rail A840-1 (7-304469-0000 + 7-304468-0000)

- not suitable for mounting on a frame in combination with a wall/ceiling holder
- folded guide rail, not for crank



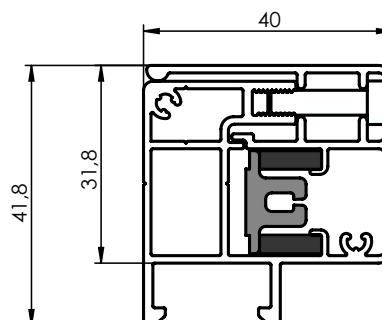
Guide rail A837 (6-018856)

-- guide rail with a long mounting flange.



Guide rail A849 (7-304470-0000+7-304468-0000)

- folded guide rail, not for crank
- eliminates the 10 mm gap when using the wall-ceiling bracket, can be used in combination with mounting blocks



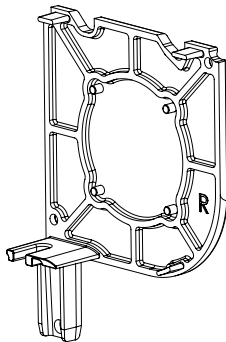
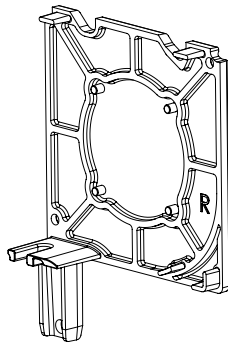
Guide rails - frontway/sideway drilling (200 mm on both sides from the edges)

up to a height of 1500 mm	2 openings (on the edges)
more than 1500 mm up to 3000 mm	3 openings (2 openings on the edges + 1 centre opening)
from 3000 mm up to 4500 mm	4 openings (2 openings on the edges + 2 centre openings)
from 4500 mm	5 openings (2 openings on the edges + 3 centre openings)

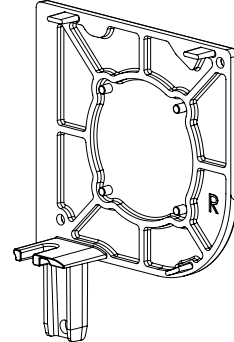
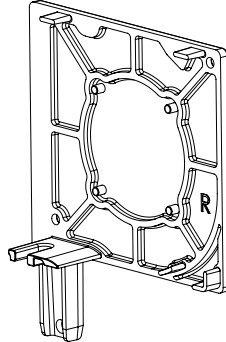
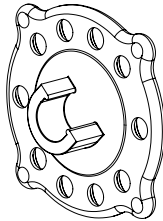
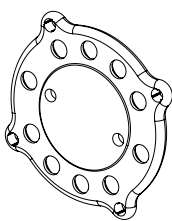
Side pieces:

- Basic side piece:**
- aluminium side piece with pins – die cast,
 - aluminium side piece complete with universal bearing plates made from black synthetic material.

Side panel for mounting profile



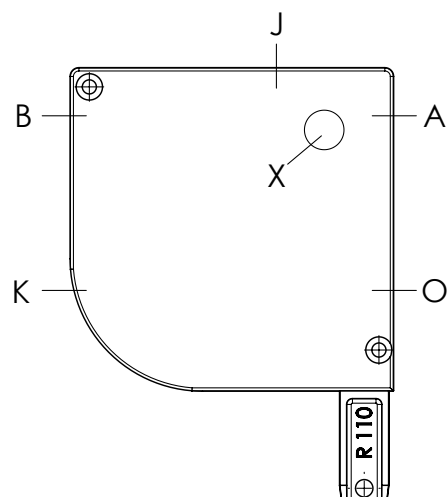
Side panel for wall-ceiling bracket

**Universal bearing plate:****Location of controls – output**

Type of installation	Control	O	A	X	B
		110	110	110	110
A-AE	Motor	x	x	x	
B-BE	Motor			x	x

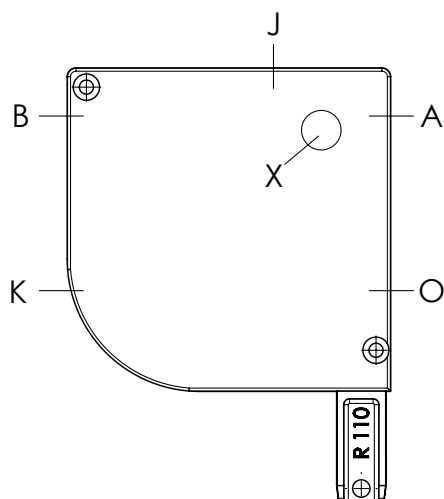
Type of installation	Control	K	J
		110	110
A-AE	Motor		x
B-BE	Motor	x	x

x	Possible
x	Only possible with square boxes
J	To be installed to ceiling/head-sill or inside, because of water penetration
o	Not possible

Operating outlets

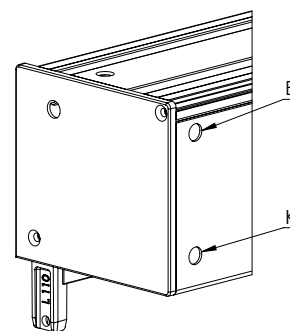
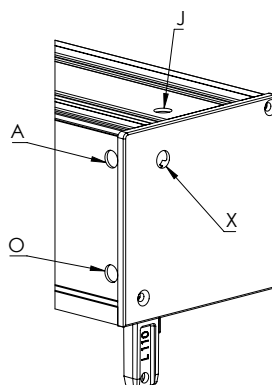
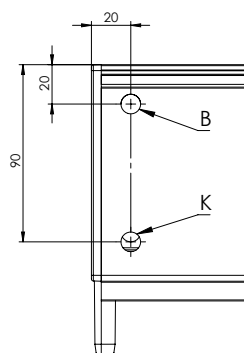
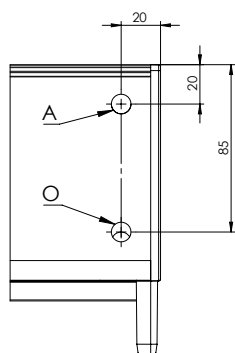
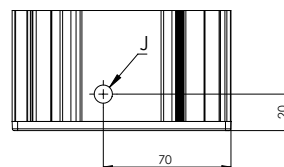
Control – motor

It is possible to choose the cable location



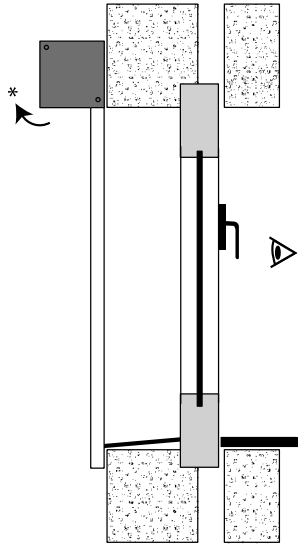
left, terminal X (from side piece) only for box 110

right, terminal X (from side piece) only for box 110



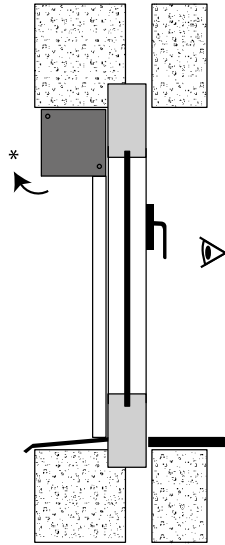
Types of installation

Type A-AE (on the wall)

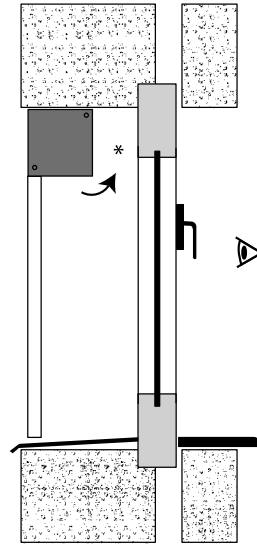


* space for box opening

Type A-AE (into the reveal)

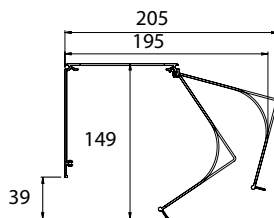


Type B-BE (into the reveal) *



- A – outward winding “A”
(standard)
- AE – outward winding “AE”
(lighter exterior)
- B – inward winding “B”
- BE – inward winding “BE”
(lighter exterior)

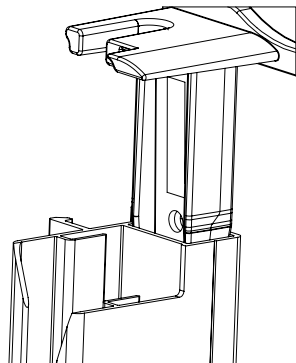
Type 110



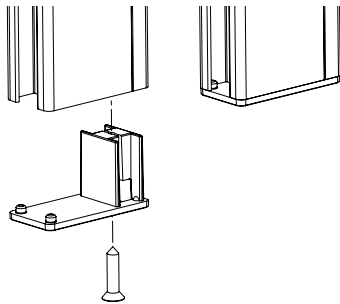
Pin guide assembly

The box is installed in guide rails, and the rails move over the bracket pins.

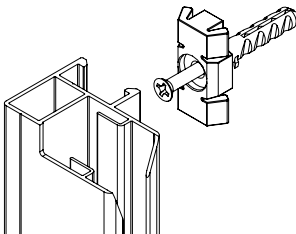
Pin guide assembly



End stop



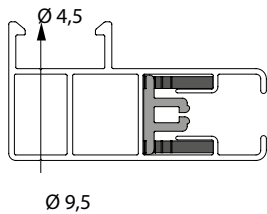
Holders for guide rails A839



With black Al end stop; thickness 2 mm.

Certain guide rails may be supplied with predrilled openings in the sides.

Drilling on the front:



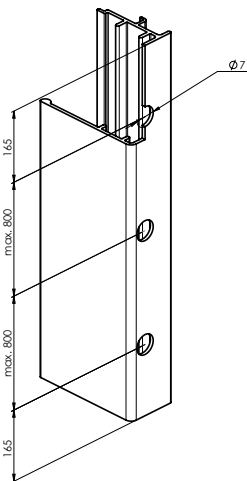
Guide rails for drilled openings on the front side:

Drilling	A839	A830	A838	A837	A865	A866
Side face	x	x	-	-	x	x

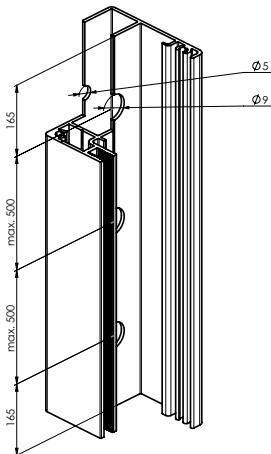
Guide rails for drilled openings on the front side:

A840-1: drilling on the front/sideways

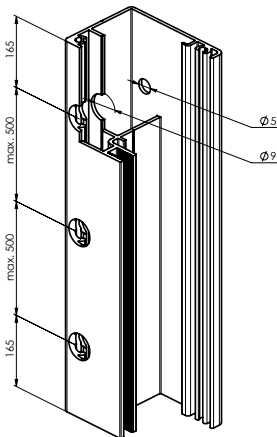
A840-1 drilling of the side guide channel cup



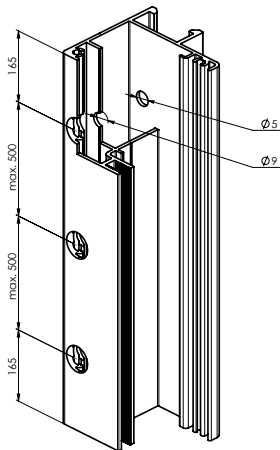
A840-1b sideways drilling

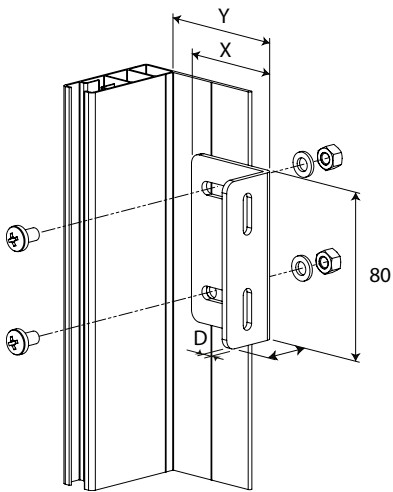


A840-1c front drilling



A849:drilling on the front



Holder for guide rails A838, A837:

X × H × D	X	Y	drawing number
50 × 30 × 3	50	50–65	6-014549-0000
60 × 30 × 3	60	60–75	6-014550-0000
100 × 30 × 3	100	100–115	6-014552-0000
130 × 30 × 3	130	130–145	6-014542-0000

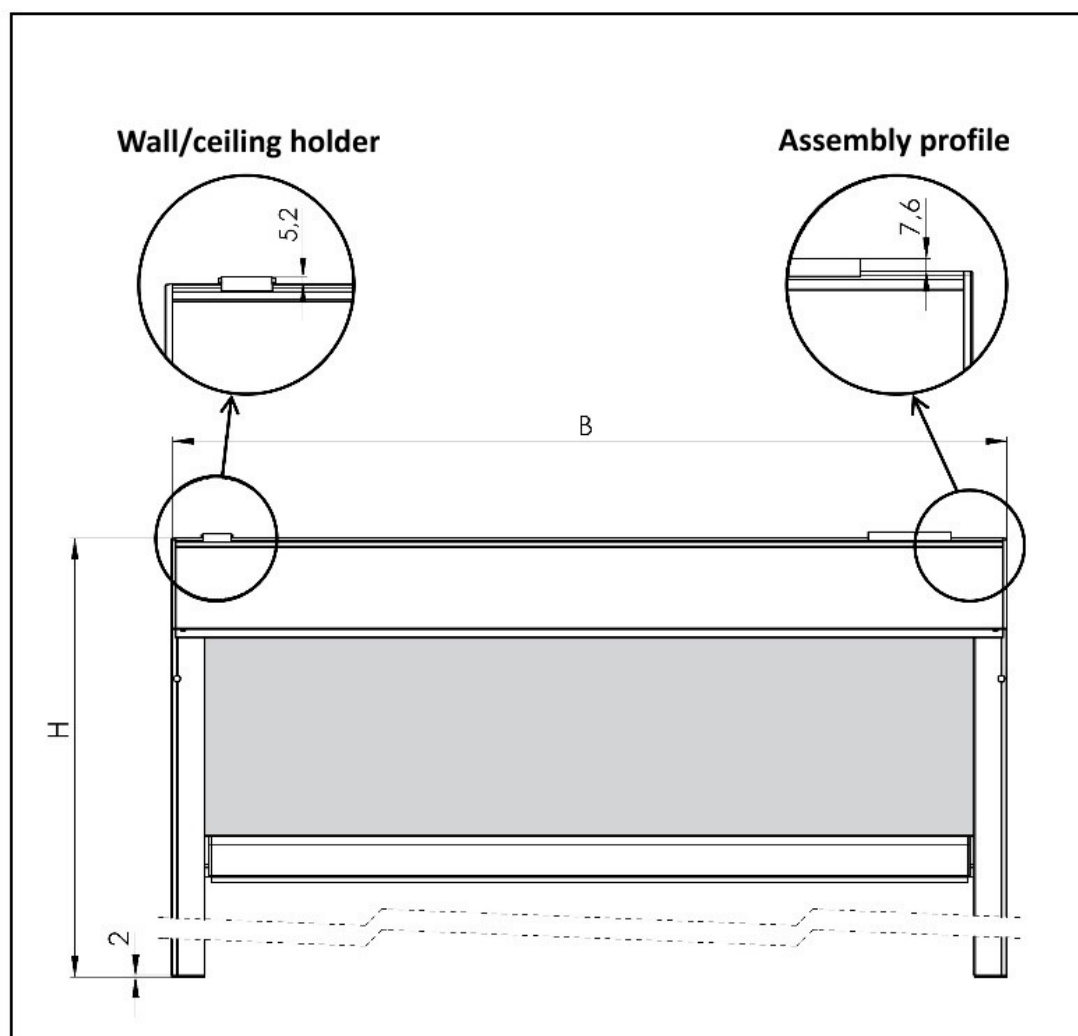
SCREEN ALFA PLUS-ZIP

Taking measurements of the ALFA PLUS-ZIP screen roller shutters

Final width B = distance between side pieces.

Final height H = height of the box and guide rail end pieces (thickness of guide rail end pieces = 3 mm) exclusive of the wall/ceiling holder or exclusive of the assembly profile.

More information in the separate document **Measurement and assembly instructions**.



Assembly of the ALFA PLUS-ZIP screen roller shutters

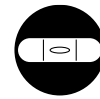
There are several methods of roller blind installation depending on the installation situation.

Note: For the self-supporting version of the screen roller shutter assembly, please refer to Variant A, Method 2.

Variant A: Using the wall/ceiling holders

Method 1. Attaching the box using wall/ceiling holders, sliding the guide rails on the side piece pin, and securing the guide rails by bolts.

Method 2. Placing the complete assembly of the box and guide rails in or above the window opening and securing by bolts (used where there is insufficient space for sliding the guide rails on the side piece pin, for example due to the presence of a window sill, or for the self-supporting version of the screen roller shutter).



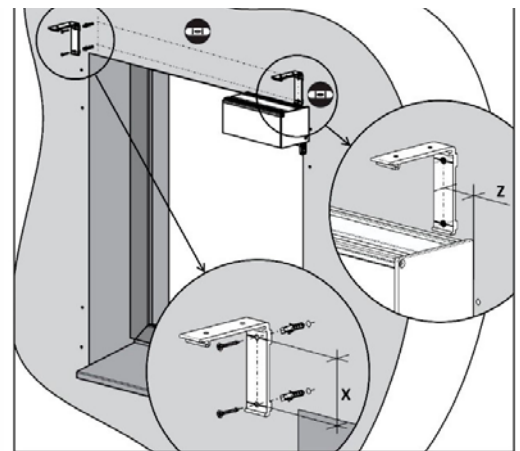
spirit level

METHOD 1. Attaching the box using wall/ceiling holders, sliding the guide rails on the side piece pin, and securing the guide rails by bolts.

Box type	X
90	52 mm
110	73 mm

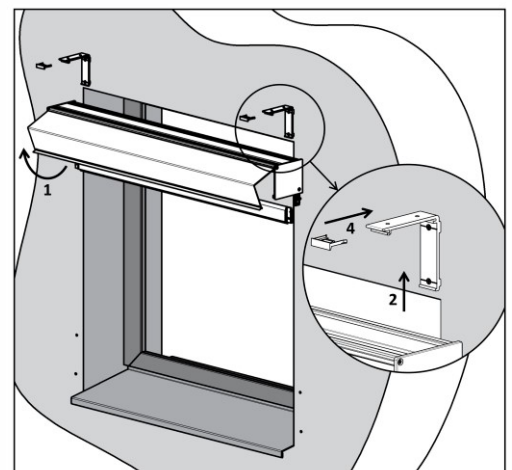
Step 1: Drilling the holes for the wall/ceiling holders

1. Place the wall/ceiling holders to the assembly surface. Use the upper holes for ceiling mounting, and the rear holes for wall mounting.
2. The box must be perfectly horizontal, and therefore make sure whether the wall/ceiling holders are properly aligned. To do this, use a tube spirit level and a plumb line, or another suitable tool.
3. The wall/ceiling holders must be installed 40–100 mm from the box sides. Any additional holders are to be installed evenly distributed along the box width and they are intended to prevent arching of wider boxes.



Step 2: Installing the box to the wall/ceiling holder

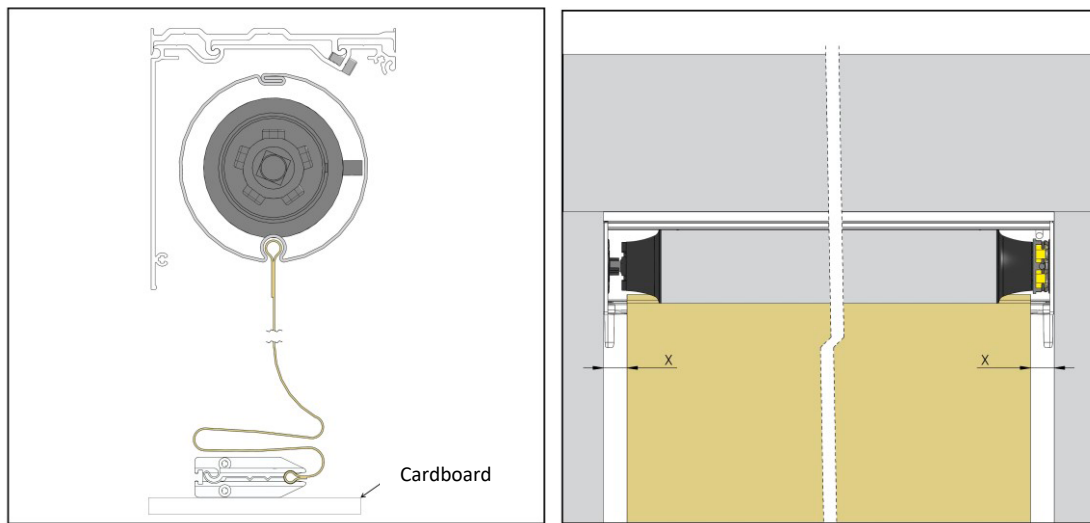
1. Remove the front cover of the box.
2. Fit the box to the wall/ceiling holders.
3. Make sure the box is correctly fitted to all holders.
4. Fit and push the safety locks; they must click to correct position.



Step 3: Centring the fabric in the box

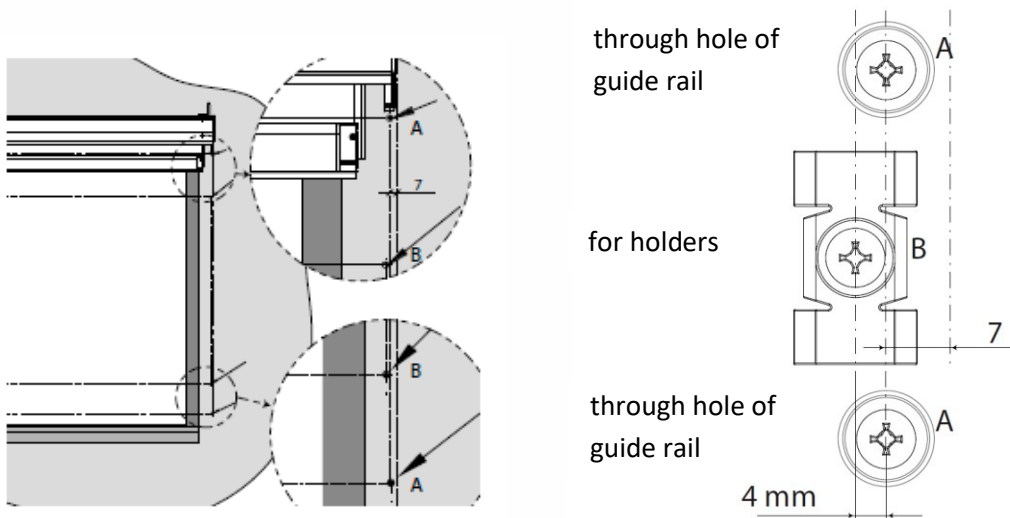
1. Unroll the fabric completely from the roller (the fabric remains slid in the roller groove). Doing this, prevent soiling of the fabric and damage to the lower profile.
2. Centre the fabric in the roller so that it is in the centre of the box (not in the centre of the roller).
3. Check whether the fabric rolls up evenly → perform 2–3 control cycles. (CAUTION! End positions of the motor have not been set yet!)

End the check by moving the lower rail approx. 15 cm under the box.

**Step 4: Drilling holes for the guide rails****Guide rails A839, A829:**

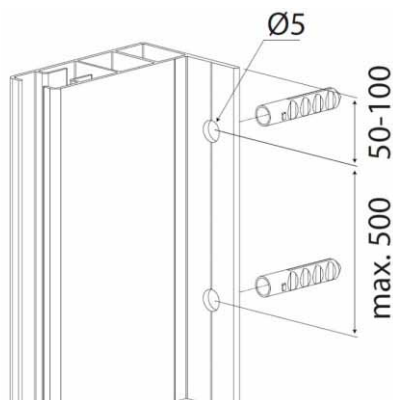
1. Indicate holes to be drilled to the wall or another assembly surface.
2. Use predrilled guide rails to do this.
3. A indicates holes for attaching the guide rails (see Fig. below).
4. B indicates holes for the holders (see Fig. below).

*A840-1 - see assembly instruction



Guide rails A830, A820:

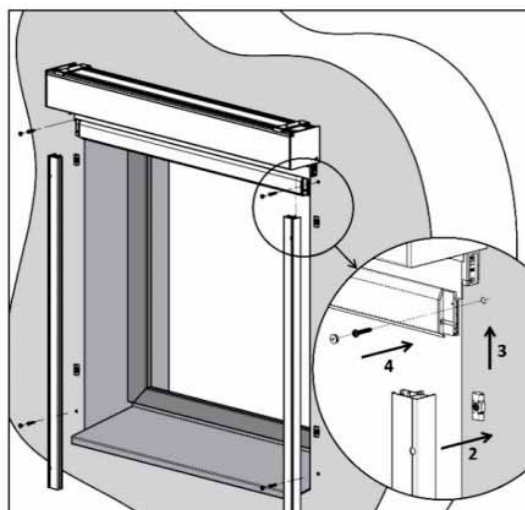
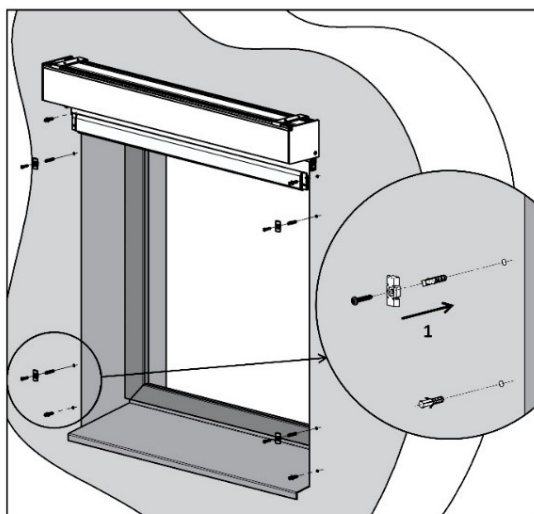
Use predrilled holes in the rails to attach the guide rails A830, A820.

Guide rails A838, A828, A837:

*A840-1 - see assembly instruction

Step 5: Installing the guide rails**Guide rails A839, A829:**

1. Attach the holders to the assembly surface.
2. Click the guide rails to the holders head-on.
3. Slide the guide rails to the side piece pins and make sure whether the bottom slat end pieces fit properly in the guide rail slots and whether the fabric zipper fits in the plastic insert in the bottom slat.
4. Attach the guide rails to the assembly surface through holes A.

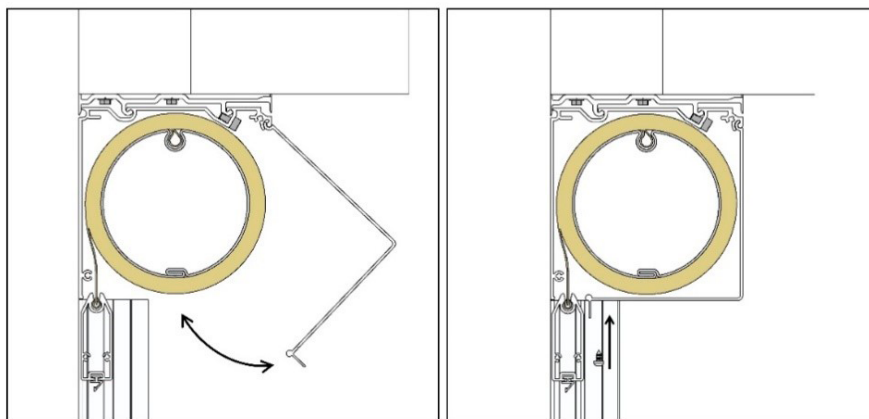
**Guide rails A830, A820, A838, A828, A837:**

Slide the guide rails on the side piece pins and attach them to the assembly surface through holes A.

Step 6: Attaching the front cover

Reinstall the box front cover.

After the installation of the roller shutter it is necessary to remove the sidewall remove the cable clamp.



Step 7: Adjusting the motor

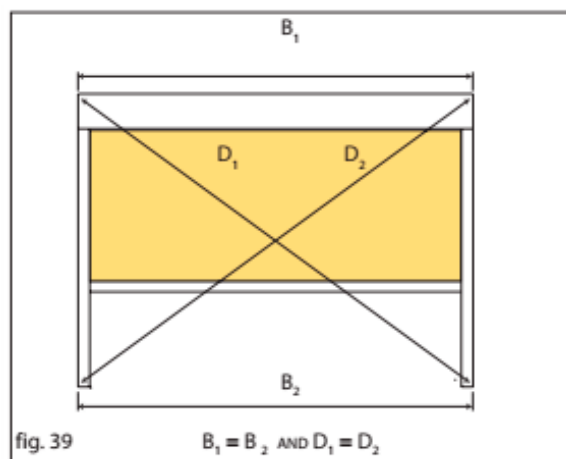
Set the end positions of the motor depending on the motor type (see manuals for motors).

Step 8: Checking the assembly

Always make sure the roller blind is properly installed:

1. First, check **horizontality** of the box.
2. Check whether both guide rails are parallel to one another and, at the same time, perpendicular to the box.
3. Measure and compare the diagonals accurate to the nearest millimetre.

If the box and guide rails are not installed correctly, the bottom slat will wind into the box at an angle, causing the fabric to crinkle or pull out from the plastic insert in the guide rail.



Method 2. Placing the complete assembly of the box and guide rails in or above the window opening and securing by bolts (used where there is insufficient space for sliding the guide rails on the side piece pin, for example due to the presence of a window sill or for the self-supporting version of the screen roller shutter).

Step 1: Drilling the holes for the wall/ceiling holders

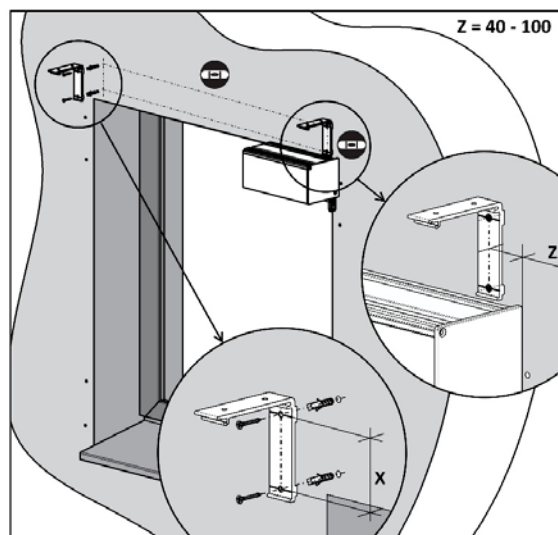
1. Place the wall/ceiling holders to the assembly surface. Use the upper holes for ceiling mounting, and the rear holes for wall mounting.
2. The box must be perfectly horizontal, and therefore make sure whether the wall/ceiling holders are properly aligned. To do this, use a tube spirit level and a plumb line, or another suitable tool.
3. The wall/ceiling holders must be installed 40–100 mm from the box sides. Any additional holders are to be installed evenly distributed along the box width and they are intended to prevent arching of wider boxes.

For the self-supporting version, skip Step 1 and continue to Step 2.



spirit level

Box type	X
90	52 mm
110	73 mm



Step 2: Drilling the holes for the guide rails

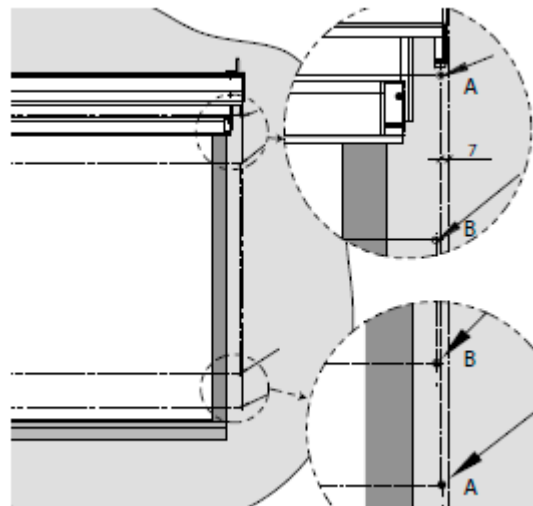
Guide rails A839, A829:

1. Indicate holes to be drilled to the wall or another assembly surface. Use predrilled guide rails to do this.
2. A indicates holes for attaching the guide rails (see Fig. below).
3. B indicates holes for the holders (see Fig. below).

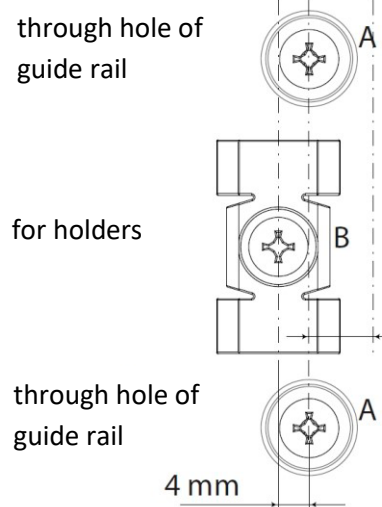
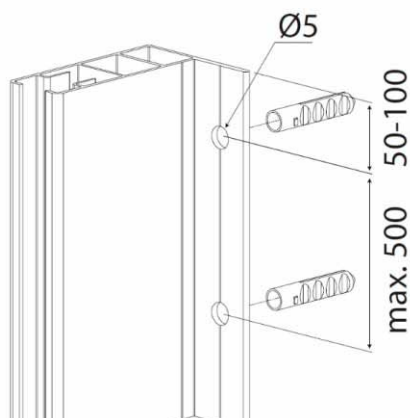
Attach the holders to the assembly surface.

Guide rails A830, A820:

Use predrilled holes in the rails to attach the guide rails A830, 820.



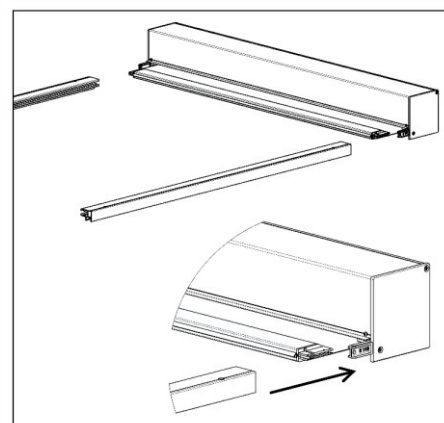
Guide rails A838, 828, A837:



*A840-1 – see assembly instruction

Step 3: Sliding the guide rails on the side piece pins

1. Place the roller blind box on the cardboard packaging (take care not to damage the surface treatment).
2. Then slide the predrilled guide rails to the side piece pins.
3. Make sure whether the bottom slat end pieces fit properly in the guide rail slots and whether the fabric zipper fits in the plastic insert in the guide rail.

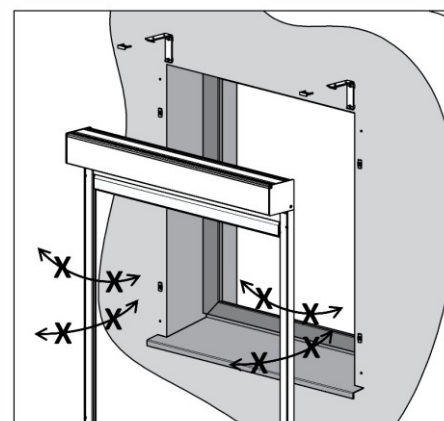


Step 4: Fitting the box and guide rails

Lift the box with the guide rails. Do this in cooperation with at least two other persons depending on the box width. Place the complete assembly to the window opening.



Caution! Make sure not to break off the pins by sliding the guide rails too forward, backward, or sideward.

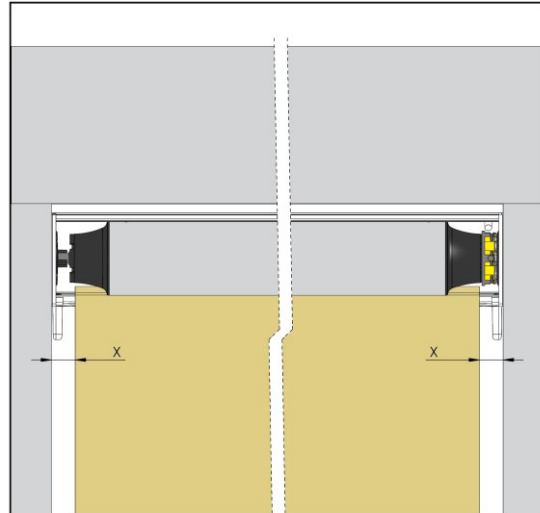
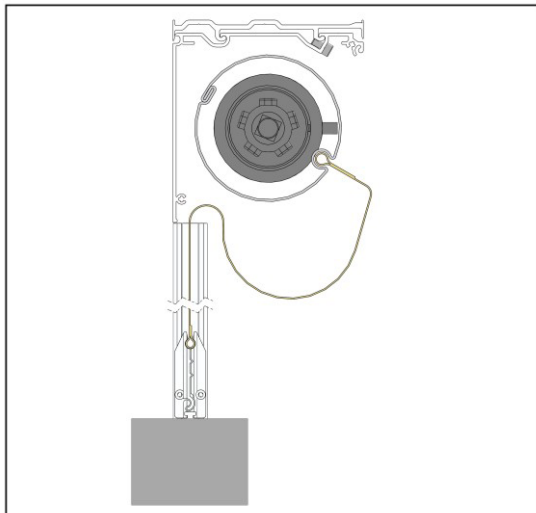


Step 5: Centring the fabric in the box

1. Unroll the fabric completely from the roller (the fabric remains slid in the roller groove). Doing this, prevent soiling of the fabric and damage to the lower profile.
 2. Centre the fabric in the roller so that it is in the centre of the box (not in the centre of the roller).
 3. Check whether the fabric rolls up evenly → perform 2–3 control cycles. (CAUTION! End positions of the motor have not been set yet!)
- End the check by moving the lower rail approx. 15 cm under the box.

Step 6: Attaching the box to the wall/ceiling holders, and attaching the guide rails

1. Fit the box to the wall/ceiling holders.
2. Make sure the box is correctly fitted to all holders.
3. Fit and push the safety locks; they must click to correct position.
4. For guide rails A839, 829: click them to the holders head-on and attach to the assembly surface through holes A.
5. For guide rails A830, 820, A838, A837, A828: attach them to the assembly surface through holes A.



Step 7: Adjusting the motor

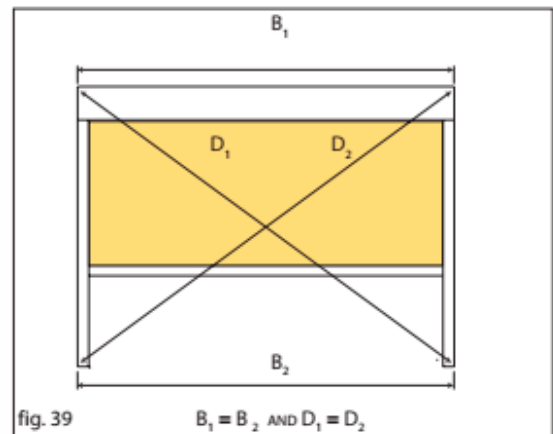
Set the end positions of the motor depending on the motor type (see manuals for motors).

Step 8: Checking the assembly

Always make sure the roller blind is properly installed:

1. First, check **horizontality** of the box.
2. Check whether both guide rails are parallel to one another and, at the same time, perpendicular to the box.
3. Measure and compare the diagonals accurate to the nearest millimetre.

If the box and guide rails are not installed correctly, the bottom slat will wind into the box at an angle, causing the fabric to crinkle or pull out from the plastic insert in the guide rail.



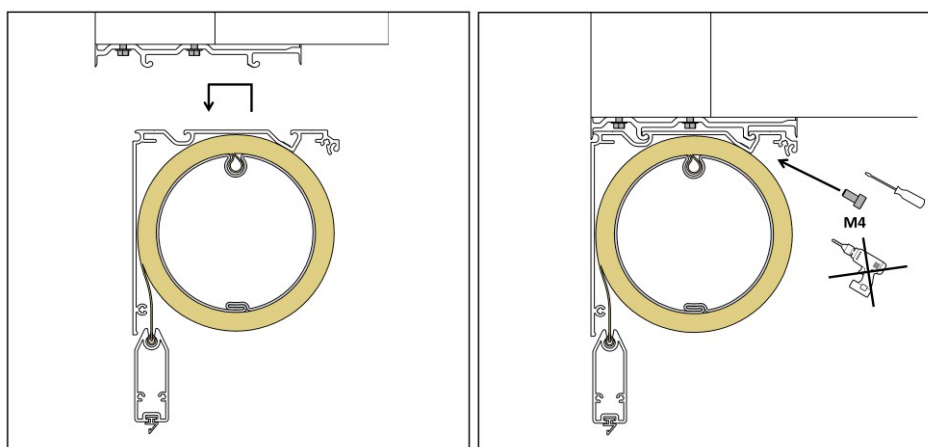
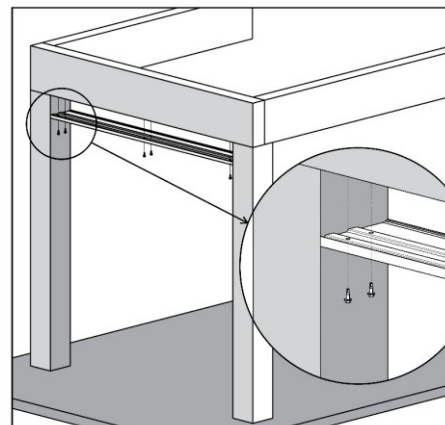
Variant B: Using the assembly profile

Step 1: Attaching the profile

1. Place the profile to the assembly surface and indicate the spots according to the predrilled holes. **The assembly surface must be perfectly horizontal!**
2. Predrill the holes according to the fasteners used and attach the assembly profile.

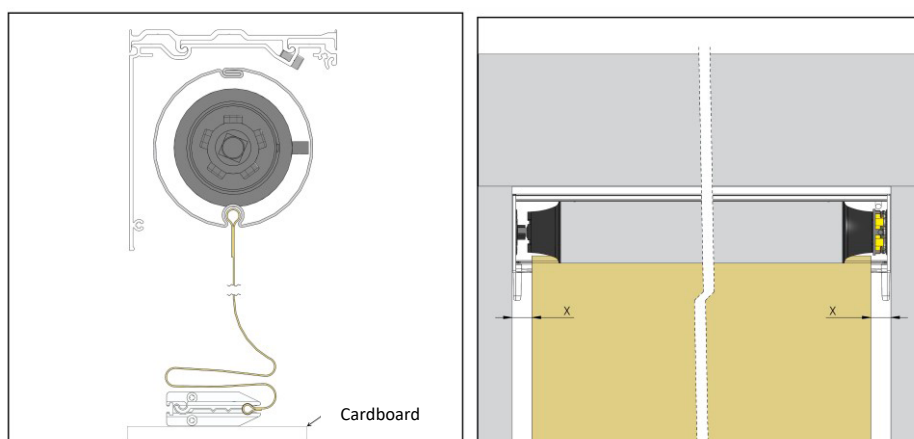
Step 2: Installing the box to the assembly profile

1. Remove the front cover of the box.
2. Fit the box to the assembly profile.
3. Make sure the box is correctly fitted to both locks throughout its length.
4. Drive the provided M4 bolts to predrilled holes in the box.



Step 3: Centring the fabric in the box

1. Unroll the fabric completely from the roller (the fabric remains slid in the roller groove). Doing this, prevent soiling of the fabric and damage to the lower profile.
 2. Centre the fabric in the roller so that it is in the centre of the box (not in the centre of the roller).
 3. Check whether the fabric rolls up evenly → perform 2–3 control cycles. (CAUTION! End positions of the motor have not been set yet!)
- End the check by moving the lower rail approx. 15 cm under the box.



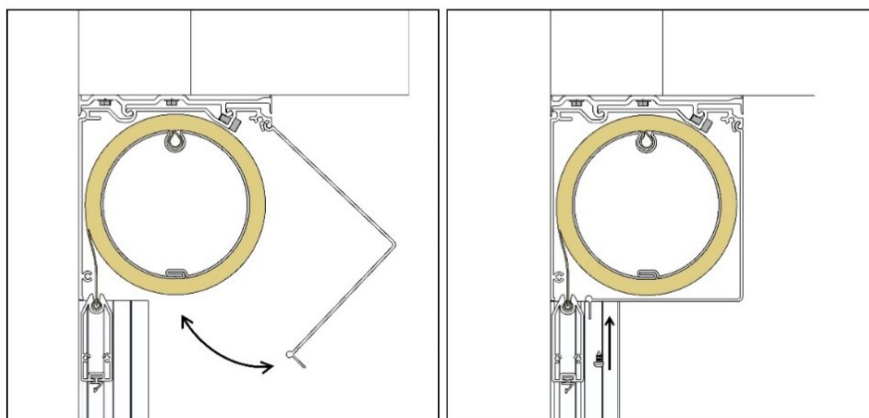
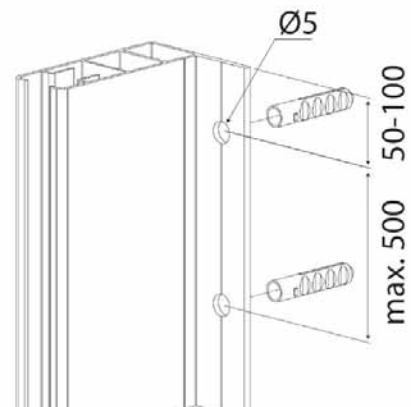
Step 4: Attaching guide rails

1. Slide the guide rails to the side piece pins.
2. Make sure whether the bottom slat end pieces fit properly in the guide rail slots and whether the fabric zipper fits in the plastic insert in the guide rail.
3. Fasten the rails with bolts

Step 5: Attaching the front cover

Reinstall the box front cover.

After the installation of the roller shutter it is necessary to remove the sidewall remove the cable clamp.

**Step 6: Adjusting the motor**

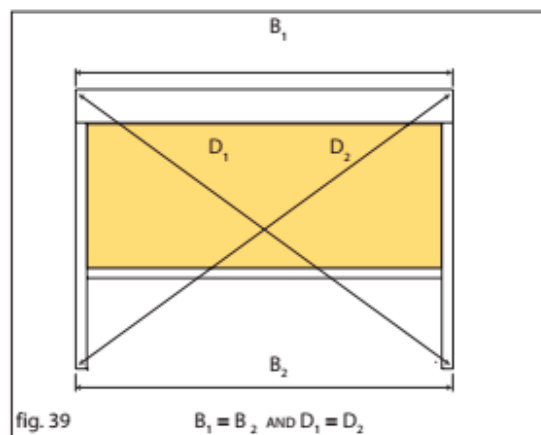
Set the end positions of the motor depending on the motor type (see manuals for motors).

Step 7: Checking the assembly

Always make sure the roller blind is properly installed:

1. First, check **horizontality** of the box.
2. Check whether both guide rails are parallel to one another and, at the same time, perpendicular to the box.
3. Measure and compare the diagonals accurate to the nearest millimetre.
- 4.

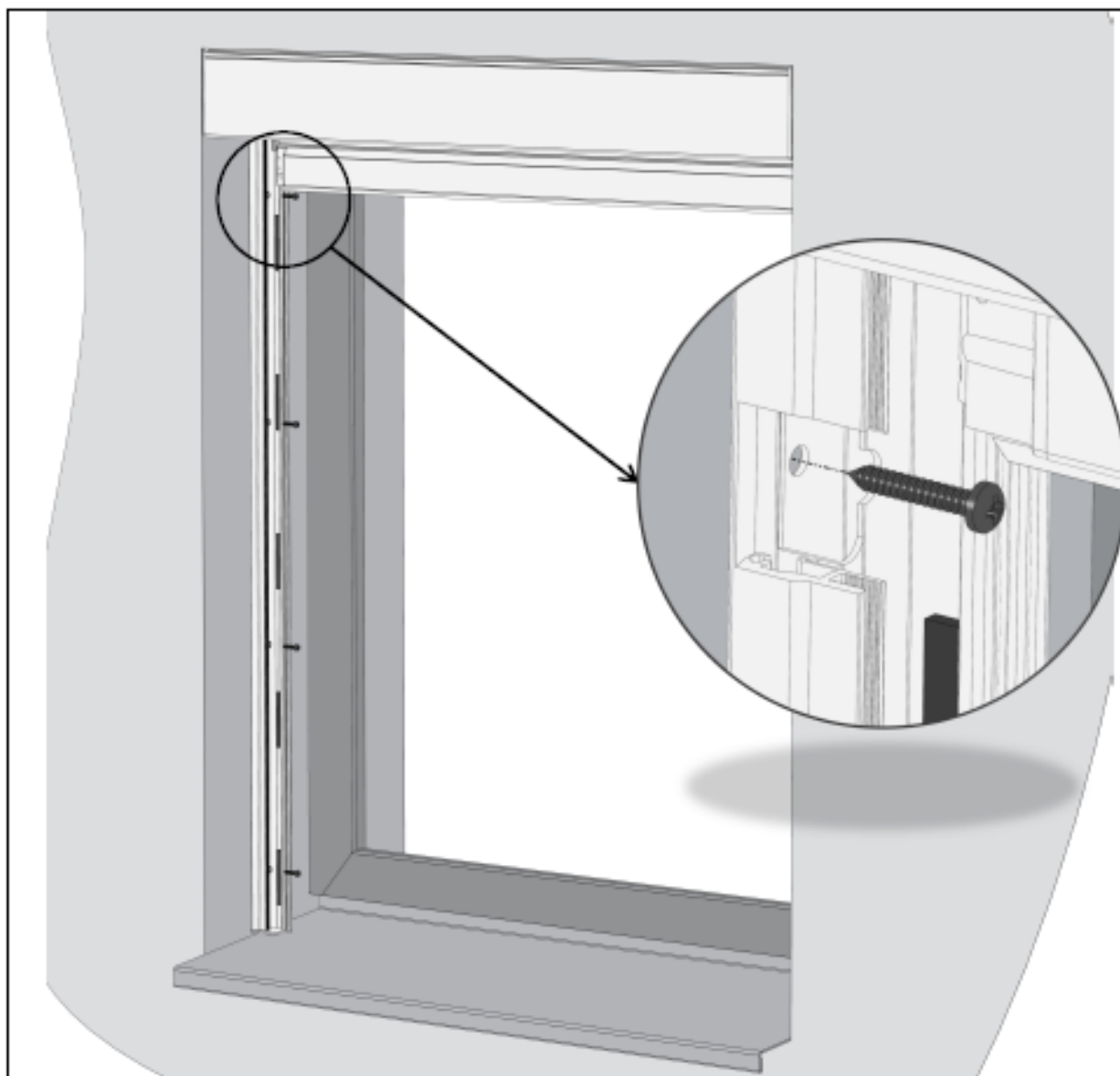
If the box and guide rails are not installed correctly, the bottom slat will wind into the box at an angle, causing the fabric to crinkle or pull out from the plastic insert in the guide rail.



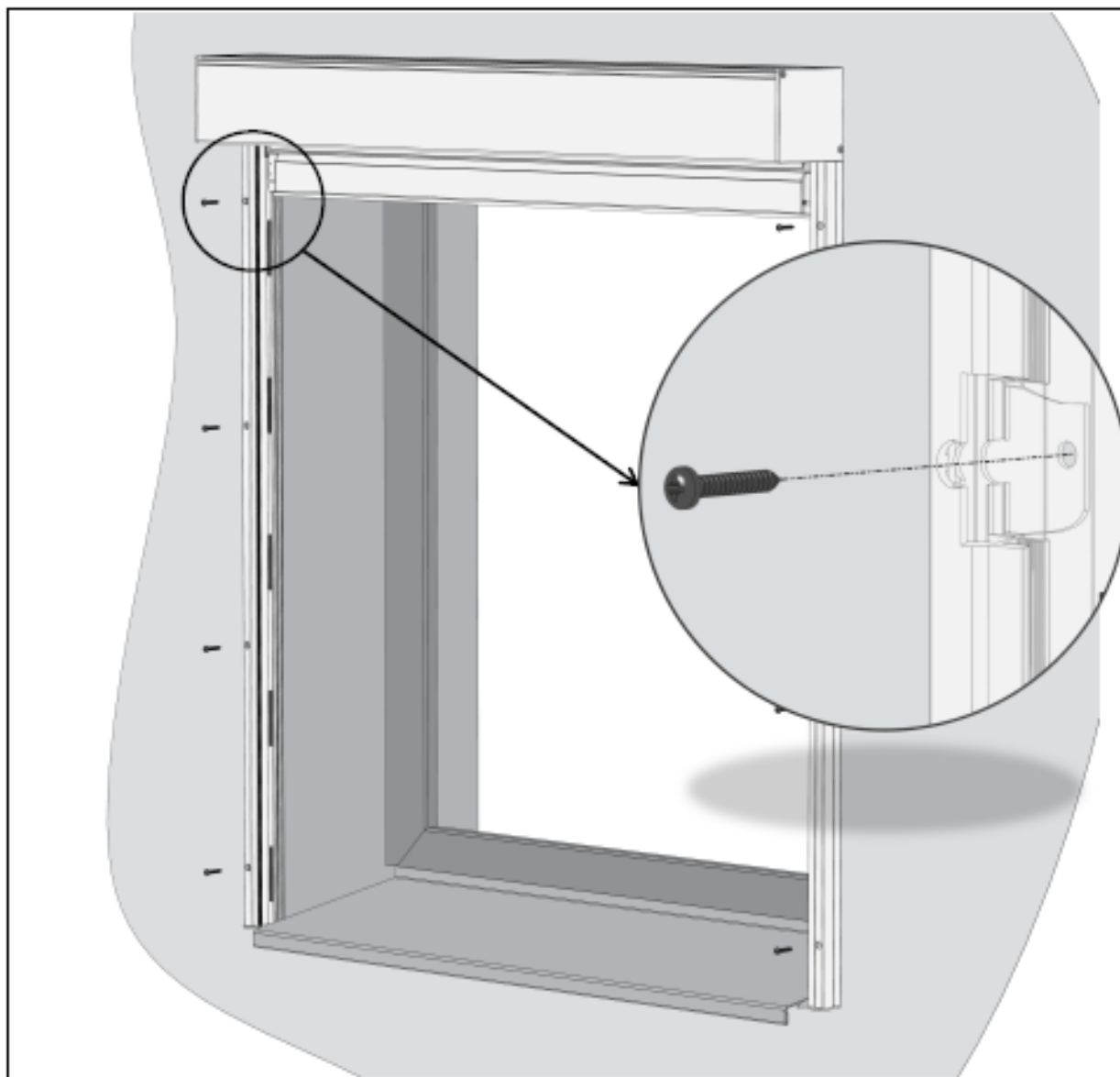
* Assembly – sectional guide rail A840-1

1. Assembling the guide rail

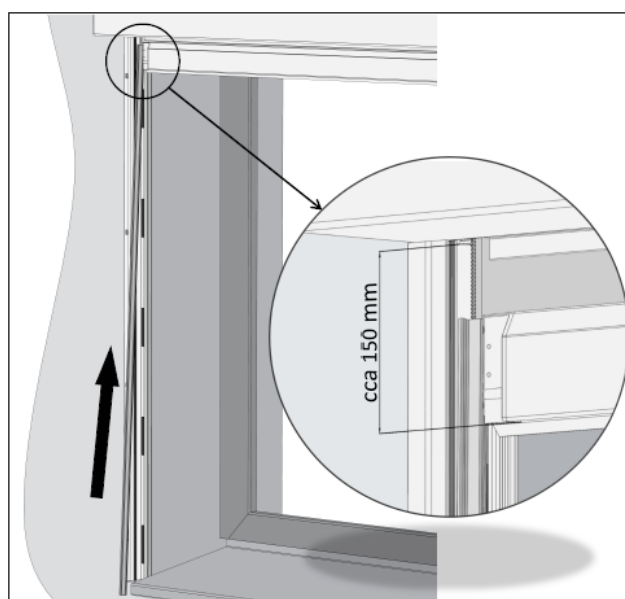
1.a Side assembly of the guide rail



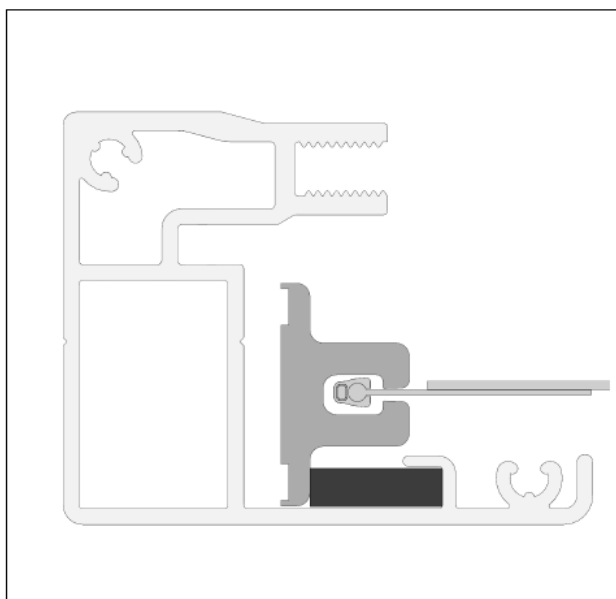
1.b Front assembly of the guide rail



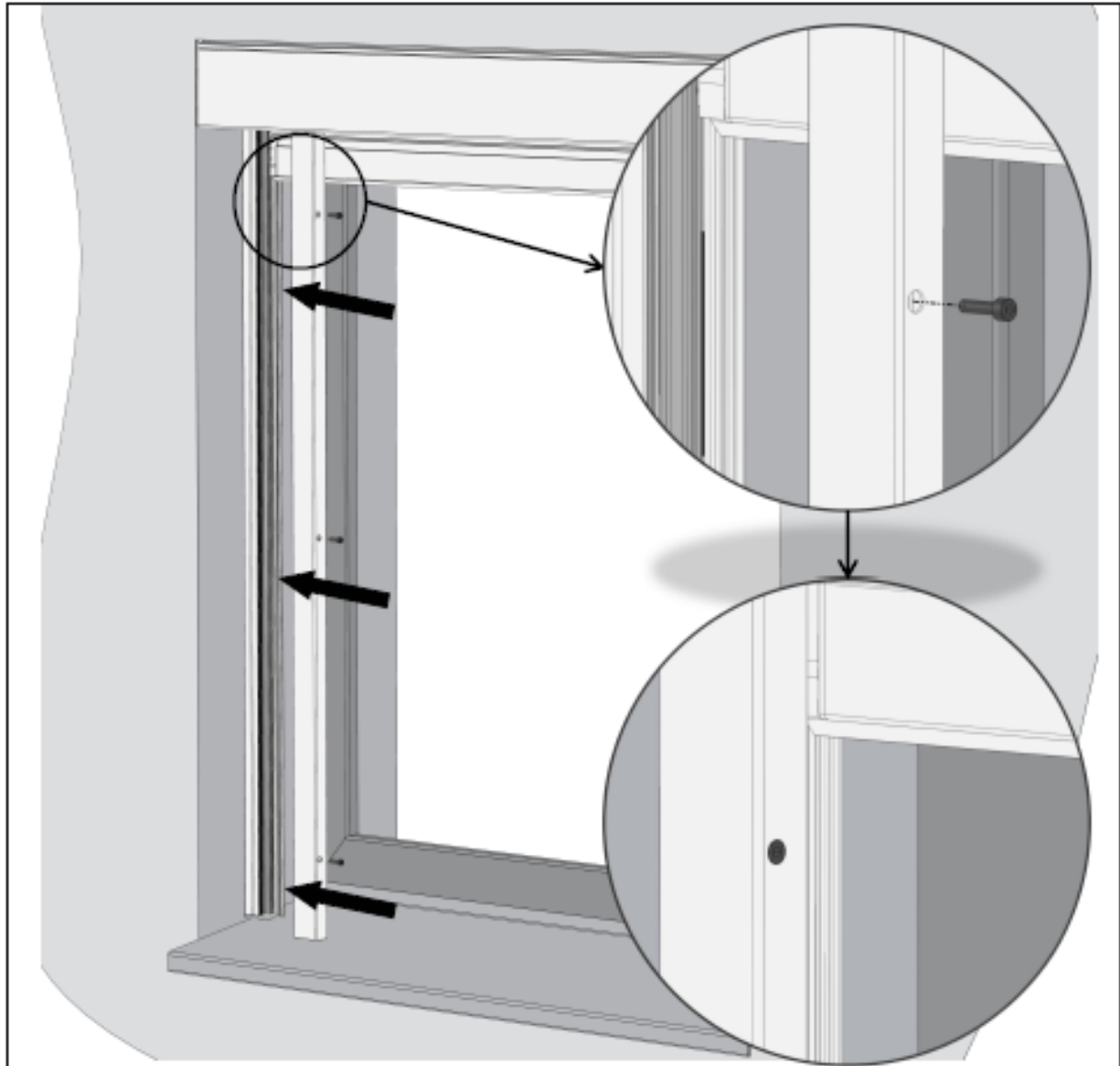
2. Fitting the zipper profile



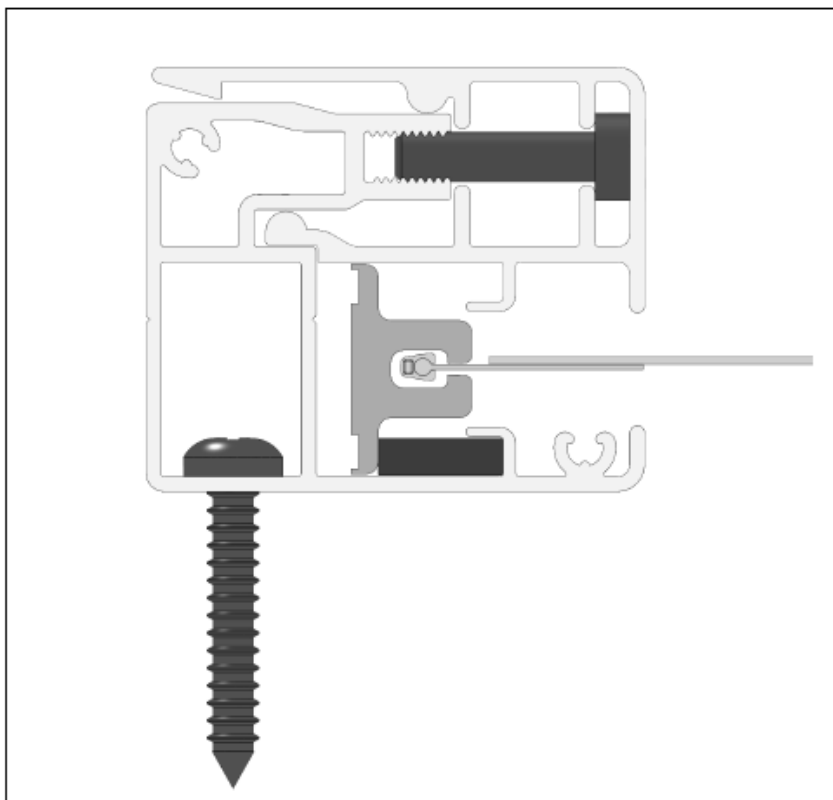
Cross-section of the rail A840-1 after fitting the zipper profile



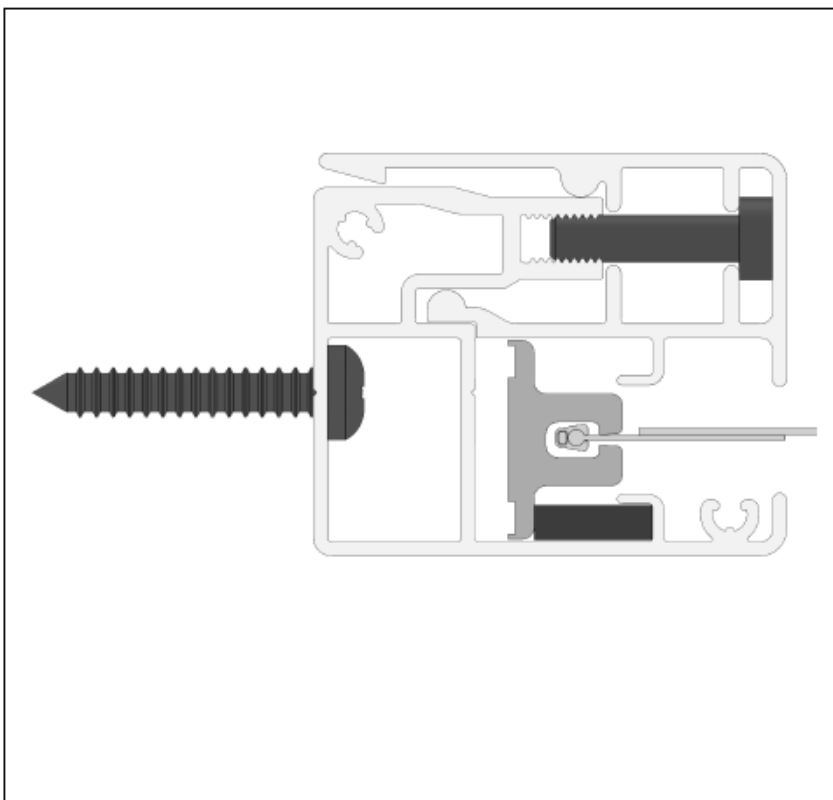
3. Fitting the lock A840-1



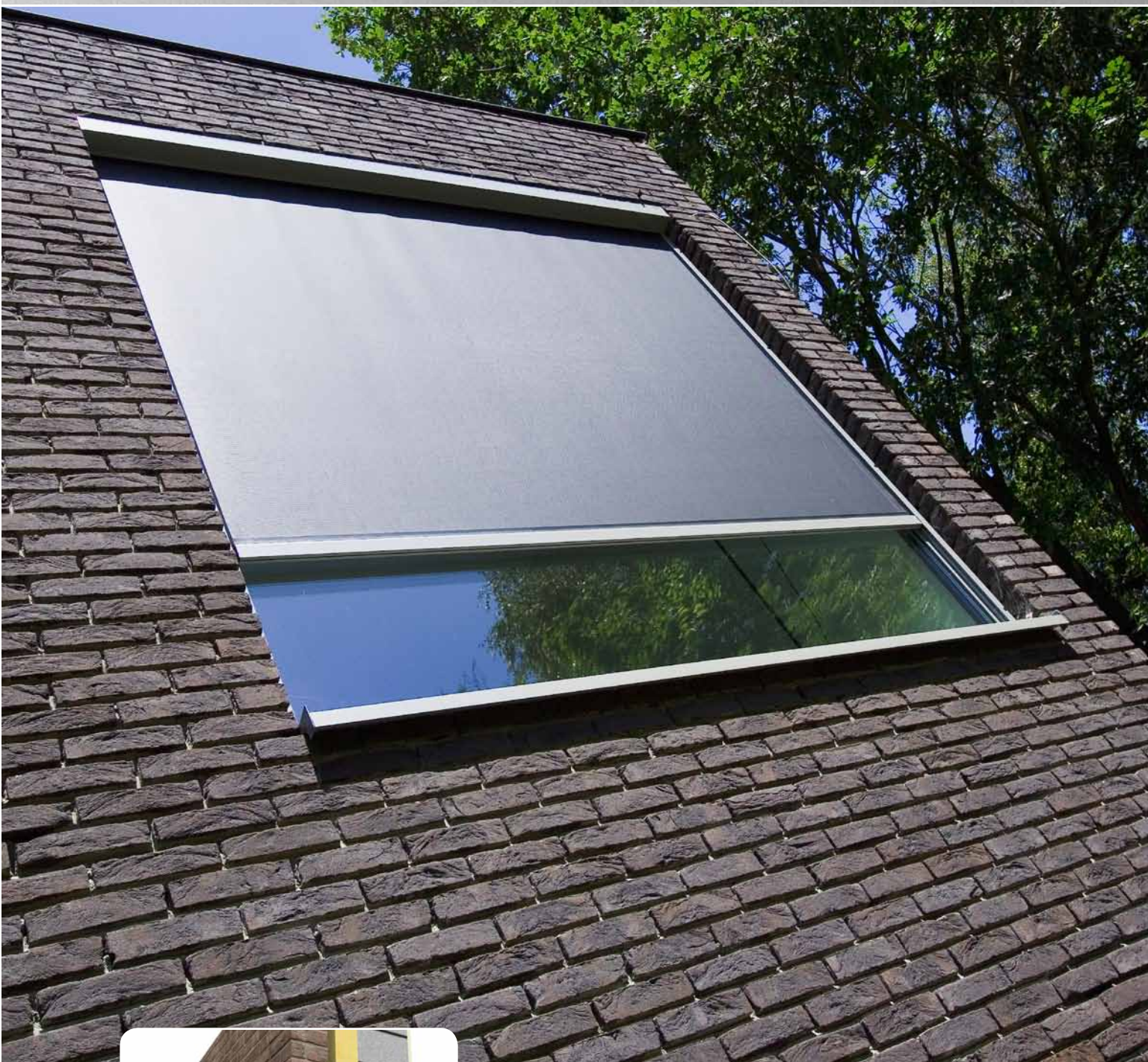
3.a Cross-section of the rail A840-1 after front-mounting



3.a Cross-section of the rail A840-1 after side-mounting



SCREEN HR7

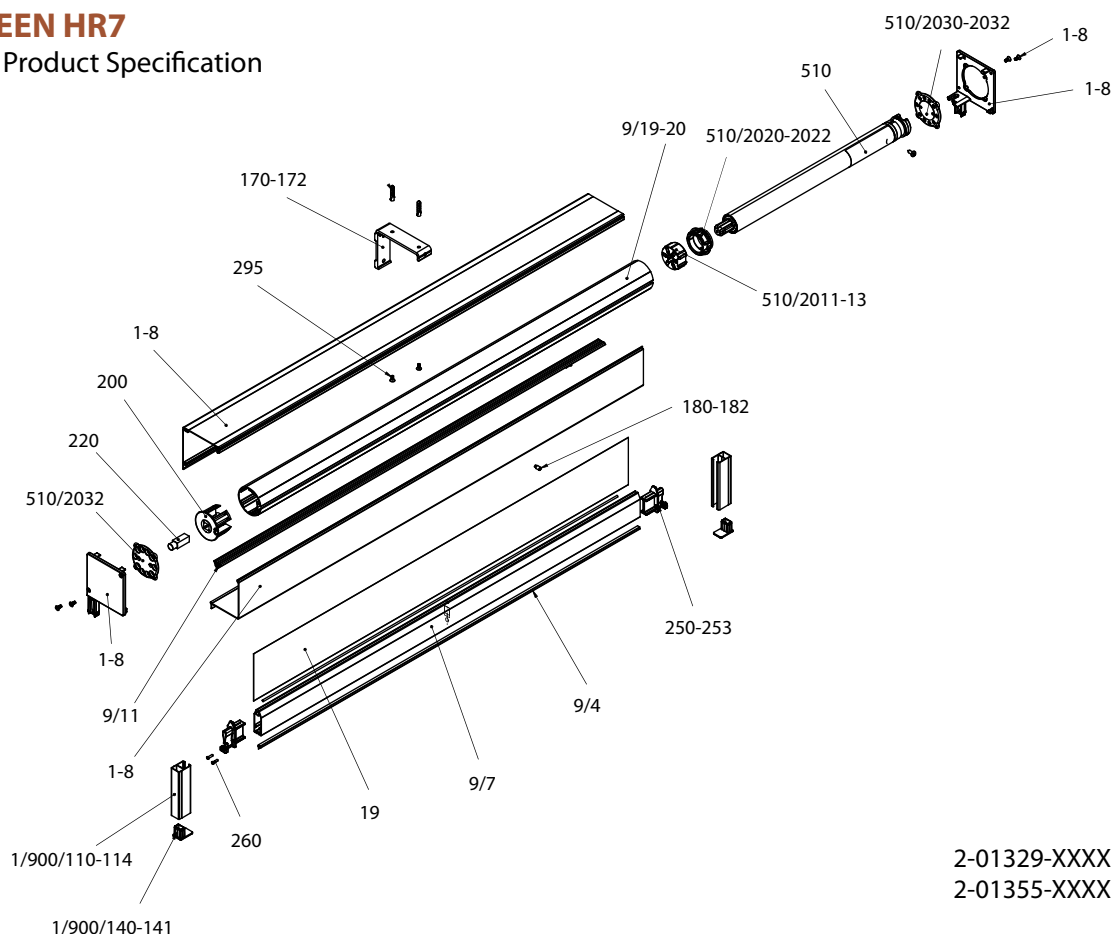


- ▲ Choice of 2 box modern designs: square box for austere architecture or rounded box for more traditional buildings, both types available in 3 sizes,
- ▲ weighted bottom lath to guide and tension the fabric,
- ▲ wind class 2,
- ▲ option of coupled screen up to 3 pcs,
- ▲ choice of 2 fitting options: with guiding wire or guiding channel,
- ▲ easy assembling,
- ▲ area of up to 14 m² in 1 part.

ISOTRA *Quality*

SCREEN HR7

Basic Product Specification



2-01329-XXXX (guide rails)

2-01355-XXXX (wire)

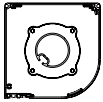
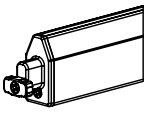
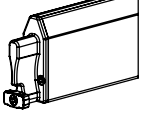
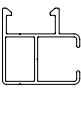
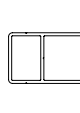
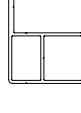
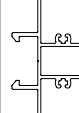
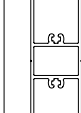
Control

Used for lifting and lowering of screen blinds. There are available 2 types of control for all box sizes:

Motor - Sunea Screen IO, Maestria WT/io, Becker C/E, ALTus RTS (min. width of screen is 685 mm), LS40, Sunea IO 40, Becker 40 C/E can be only used for box with dimensions 70x70.

Handle - self-braking worm-worm wheel mechanism, with a transfer ratio of 1:4, with built-in end stop (prevents wrong rolling up of the fabric).

Specification

	Box		Bottom rail		Side guidance					
	square	rounded	low	high	guide rails					cable
Abbreviation	-	-	ZPH073	ZPH074	ZPH064	ZPH063	ZPH065	ZPH066	ZPH067	
Dimension (mm)	70x70, 90x90, 110x110	70x70, 90x90, 110x110	18x36	18x50	30x30	20x30	40x30	30x60	20x60	Ø 2,5 mm
Material	Al	Al	Al	Al	Al	Al	Al	Al	Al	stainless steel
										
			type 725	type 720	type 728	type 755	type 756	type 770		
Colour	Standard: RAL 9006 light silver RAL 9007 dark silver RAL 9010 white		RAL 7016 anthracite grey RAL 7016S anthracite grey structure RAL 8014 brown		Other RAL colors upon request*					

*except of plastic parts

Standard Dimensions

Standard dimensions for box 70

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	
handle	400	2200	400	2800	6
motor LS40	510	3000	400	1800	5,4
motor 40 iO	565	3000	400	1800	5,4

Max. height with STNZ, STNBZ, SCR4005, SLTZB92, SERGE 3Z fabrics is only 900 mm

Standard dimensions for box 90

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	max.
handle	400	3000	400	3500	9
motor RTS, iO, WT	685	3500	400	3500	9

Max. height with STNZ, STNBZ, SCR4005, SLTZB92, SERGE 3Z fabrics is only 1800 mm

Standard dimensions for box 110

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	max.
handle	400	3500	400	3000	10
motor RTS, iO, WT	685	3500	400	4000	14

Max. height with STNZ, STNBZ, SCR4005, SLTZB92, SERGE 3Z fabrics is only 2600 mm

Note:

The opaque layer is located on the side of the window for each type of installation. In the case of outdoor installation, strong winds can cause a slight lifting of the base slat and fabric.

Common phenomena of technical fabrics

The fabric may curl around the welds or in the middle of the fabric, it is the so-called tree effect. This phenomenon is common because different forces act on the fabric during use. Another phenomenon may be visible bruises on the fabric caused by the roller. These disappear at higher temperatures when the fabric levels.

SCREEN HR7 (2-01355-XXXX, 2-01329-XXXX)

position	item name	business name	drawing number
1-8	Box for screen 070/090/110/150 square or rounded		2-01356-PU11 - 2-01363-PU11
9	Profiles		see Profiles
19	Screen fabric (m2)		see Sampler of Screen fabrics
170-172	Mounting bracket - box 110 mm - SC700/800	ZPH080	6-014342-0000
510	Screen motors (SOMFY, BECKER)		see Screen motors (SOMFY, BECKER)
900-910	Guiding - rail/cable - left - right		see Guiding - rail/cable

Profiles (3-03054-PU11)

position	item name	business name	drawing number
4	Sealing of bottom rail	ZPH116	6-013974-0000
6	Bottom rail low HR7	ZPH073	6-014446-0000
7	bottom rail hight HR7/HR8-ZIP	ZPH074	6-014021-0000
8	Plastic bar 4,0 mm PVC	ZP0097/0004	6-016911-0004
8	Plastic bar 6,0 mm PVC	ZPH169	6-015096-0000
9	Plastic bar 3,0 mm PVC	ZP0097/0003	6-016911-0003
11	Profile for fabric run-on	ZPH115-1	6-013986-0000
19	Roller tube al. Dia 40mm - 6m	ZPH122	6-014229-0000
20	Roller tube AL. dia 55mm - 6m	ZPH123	6-014027-0000
21	Roller tube AL. dia 67mm - 6m	ZPH124	6-013982-0000

Guiding - rail/cable - left - right (2-01634-PU11L/P)

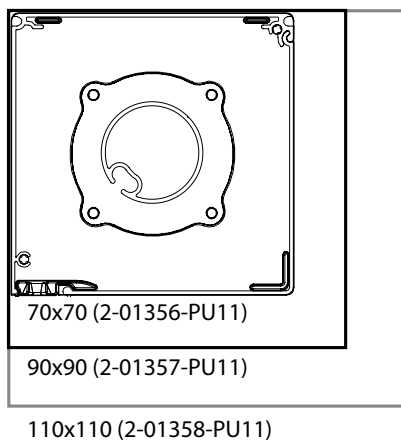
position	item name	business name	drawing number
110	Guide rail 720	ZPH063	6-014023-0000
111	Guide rail 725	ZPH064	6-014415-0000
112	Guide rail 728	ZPH065	6-014403-0000
113	Guide rail 755	ZPH066	6-014416-0000
114	Guide rail 756	ZPH067	6-014404-0000
140	Guide rail end - black	ZPH094	6-014022-9004
141	Double guide rail end	ZPH093	6-014469-0000
200	Guide rail holder 50mm	ZPH082	6-014549-0000
201	Guide rail holder 60mm	ZPH083	6-014550-0000
202	Guide rail holder 100 mm	ZPH084	6-014552-0000
203	Guide rail holder 130mm	ZPH085	6-014542-0000
210	Screw M4x5 stainless	51340.040.005	6-014559-0000
220	Washer M4	51930.040.001	6-014560-0000
230	Nut M4	51080.040.001	6-014561-0000
700	Cable 2,5mm - stainless A2	ZPH100	6-014036-0000
710	Angle fixation box for cable guide 770	ZPH118	6-014029-0000
720	Angle fixation box for cable guide 770 - wall	ZPH119	6-014412-0000
730	Cable holder - type 770	ZPH086	6-014033-0000
740	Screw M4x6	07930.040.006	6-006226-0000
750	Spring for guide 770	ZPH098	6-014034-0000
760	Angle fixation box for cable guide 770 - wall	ZPH121	6-014030-0000
770	Tensioning screw for cable guide	ZPH101	6-014035-0000
780	Nut M6	51090.060.001	6-014158-0000
790	Angle fixation box for cable guide 770 - floor	ZPH120	6-014031-0000
800	Screw M4x6	51300.040.006	6-014445-0000

SCREEN HR7

Technical Specification

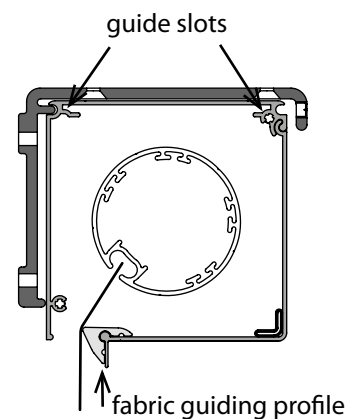
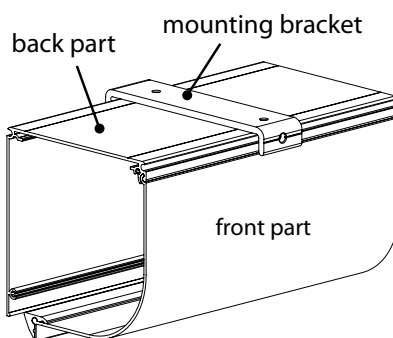
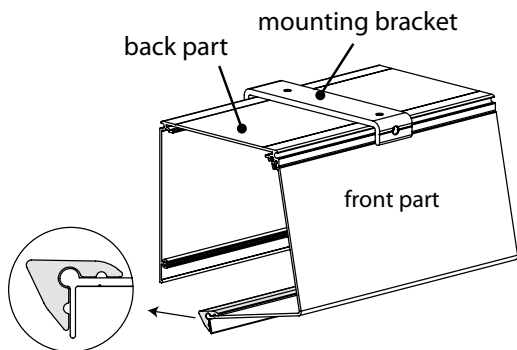
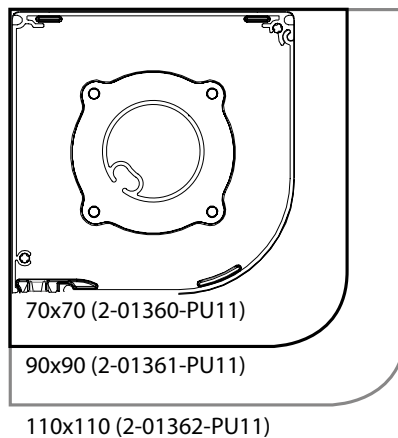
Head rail - square

(2-01356, 2-01357, 2-01358)



Head rail - rounded

(2-01360, 2-01361, 2-01362, 2-01363)

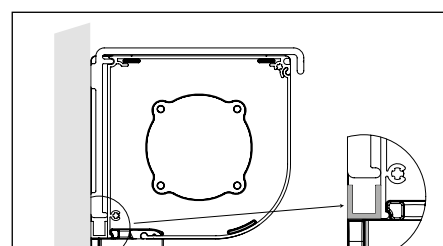


Finishing back side of the screenbox

U-profile width - horizontal

The gap between box and wall can be filled up horizontal with U-profile of 10 x 10 x 10 mm, the length is defined by the box width.

To use with: - mounting bracket

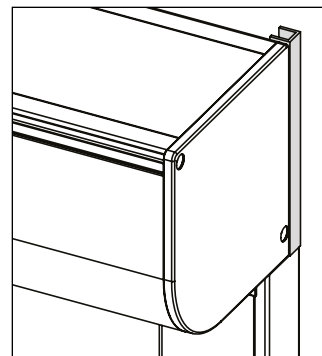


U-profile width - horizontal

U-profile height vertical

The gap between box and wall can be filled up with a U-profile (10x10x10 mm), the length is defined by the box height.

To use with: - mounting brackets



U-profile height - vertical

Mounting bracket - box 70 mm, 90 mm, 110 mm
(6-014340, 6-014341, 6-014342)

Material: extruded aluminium with a powder coating finish

For installation of the box independent from the guides: standard for cable guide

Width: 30 mm

Brings the rear face of the box 10 mm forward for cable guide.

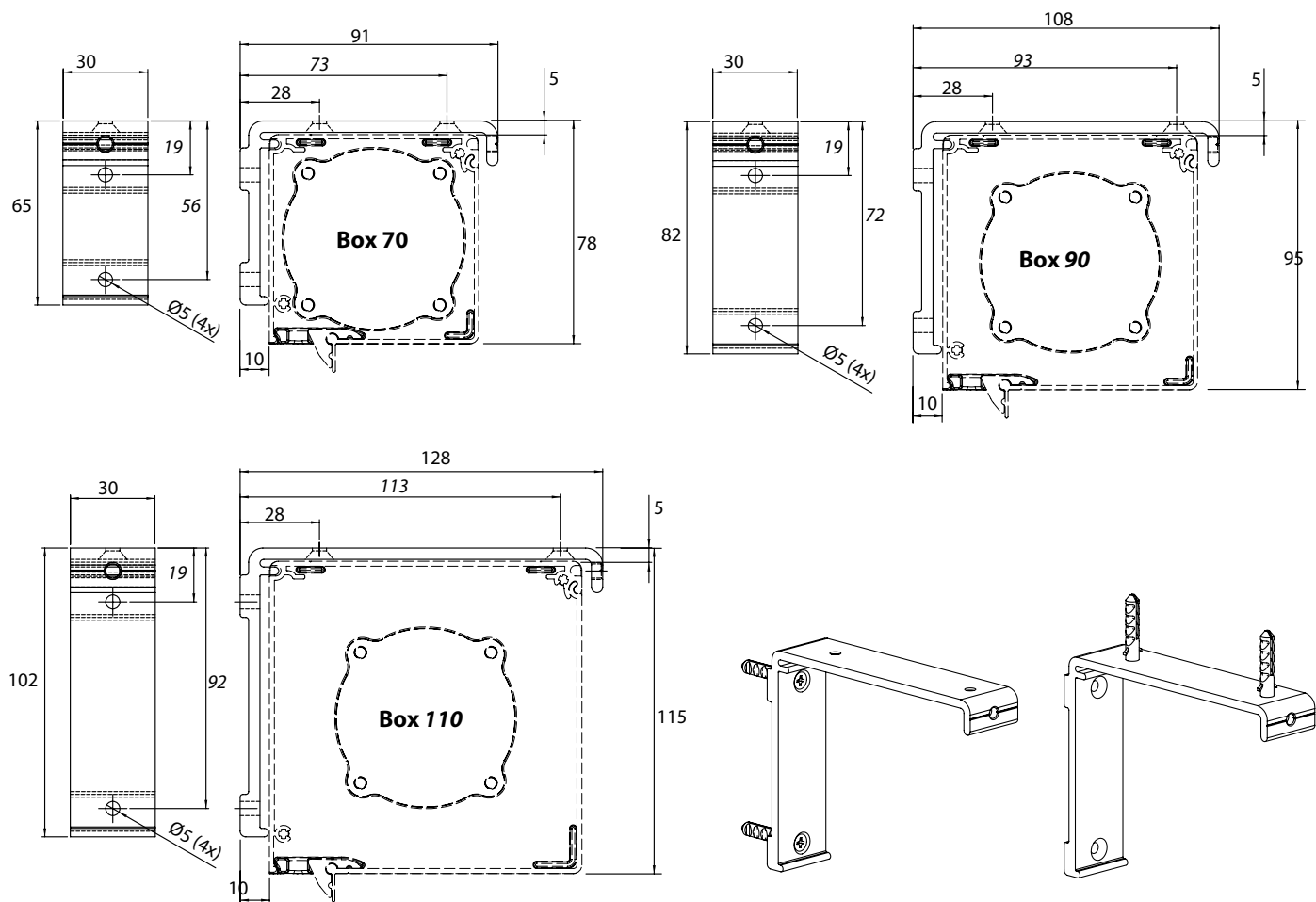
It is necessary to specify the ZS or ZSTR attachment for cable guide or without guidance. It is necessary to specify the attachment = 0 for guide rails (held on guide rails).

Standard number of mounting brackets:

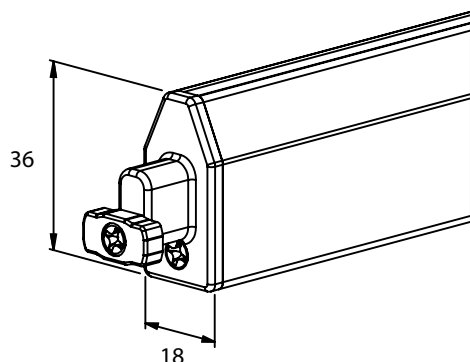
Screen width (mm)	Guidance	
	cable	guide rails
0 – 1500	2 pc	0 (2*) pc
1501 – 3000	3 pc	3 pc
3001 – 4500	4 pc	4 pc
4501 – 5000	5 pc	5 pc

* If specified „the mounting bracket“ in the order form there will be supplied 2 pieces of mounting bracket (up to the width of the roller shutter 1500 mm is the self-supporting roller blind).

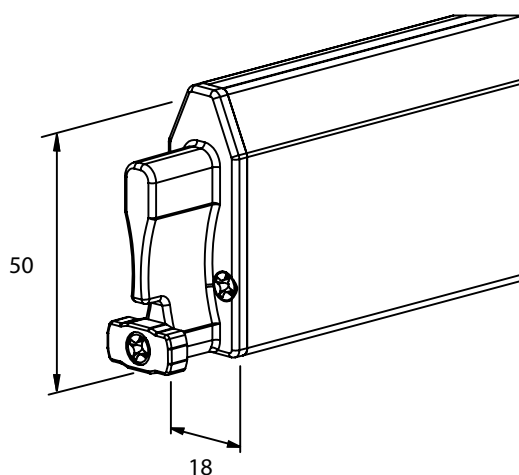
If the mounting bracket is used, we recommend using guide rails of types A725, A728 and A755.



Bottom rail low
(6-014446-0000)



Bottom rail high
(6-014021-0000)



Material: extruded aluminium profile with:

- a powder coated finish
- a room for a weighting strip
- a fabric groove

Fabric is attached to bottom rail, using a plastic tube Ø 3 mm

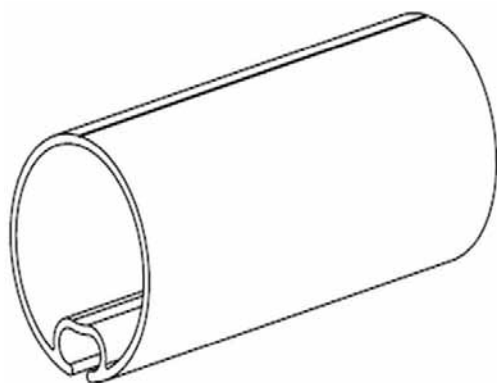
Available in 2 sizes: low bottom rail as standard, high bottom rail (optional).

Optional: rubber strip on the bottom rail

End part of bottom rail:

- Black plastic with a flock coating
- Shape depends on bottom rail
- Removable

Roller tube diameter 40mm - 6m, 55mm - 6m, 67mm-6m
(6-014229-0000, 6-014027-0000, 6-013982-0000)



Material: Extruded aluminium (Ø40, Ø55 or Ø67 mm).

With a fabric groove for attaching the fabric using a plastic tube of Ø4 mm for tube Ø40 mm, Ø55 mm and Ø67 mm.

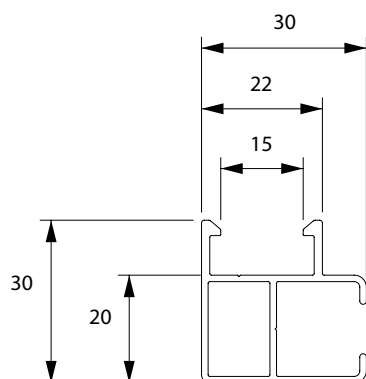
Various types of roller tubes are possible, depending on the type of operation and the box type: tube Ø40 mm (not for electrical operation), tube Ø55 mm and tube Ø67 mm.

Guide rails

Material: extruded aluminium profiles with a powder coated finish

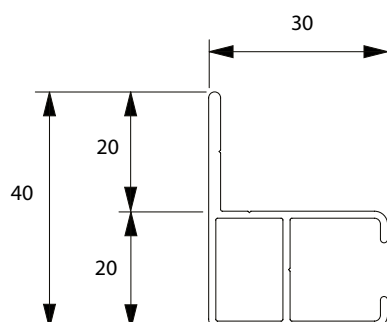
Guide rail T725 (6-014415-0000)

- standard guide for clips attachment or small distance relative to the rear face (10 mm).



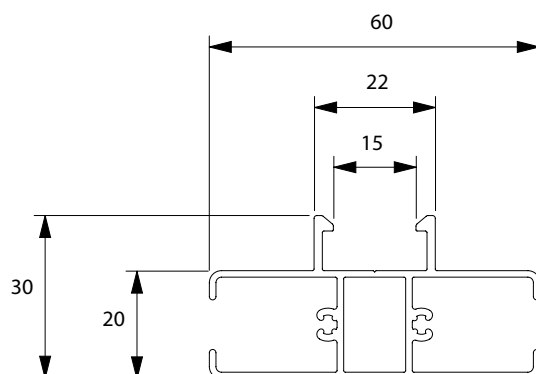
Guide rail T728 (6-014403-0000)

- guide with short assembly flange



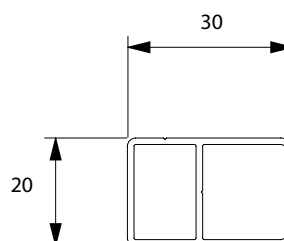
Guide rail T755 (6-014416)

- intermediate guide rail



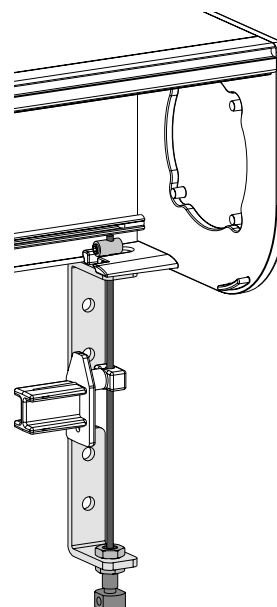
Guide rail T720 (6-014023-0000)

- flate guide without clips attachment



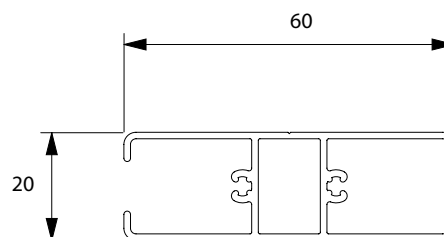
Guide calbe type T770 (6-014036-0000)

- stainless steel cable guide, with stainless steel brackets or in option floorfitting



Guide rail T756 (6-014404)

- intermediate guide rail



Guide rails - frontway/sideway drilling (200 mm on both sides from the edges)

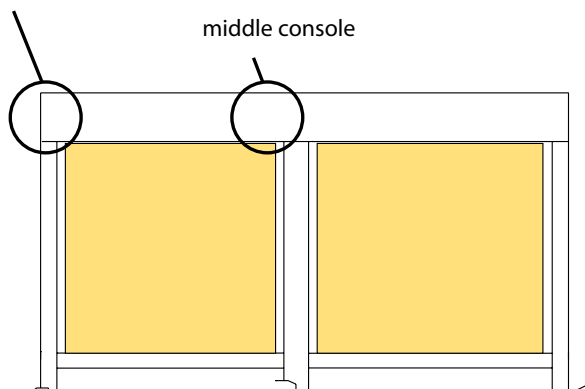
up to a height of 1500 mm	2 openings (on the edges)
more than 1500 mm up to 3000 mm	3 openings (2 openings on the edges + 1 centre opening)
from 3000 mm up to 4500 mm	4 openings (2 openings on the edges + 2 centre openings)
from 4500 mm	5 openings (2 openings on the edges + 3 centre openings)

Consoles

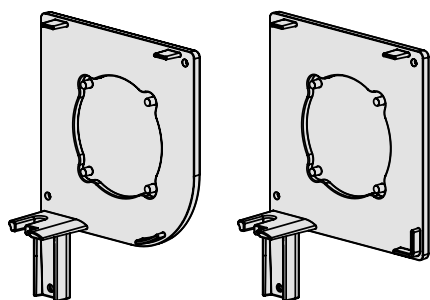
Basic consoles: - aluminium consoles with die-casted guide pin (nto with cable guide) = pin mounting, universal bearing plates in black synthetic material

Middle consoles: - aluminium consoles with diecasted guide pin with support for
- can hold the bearing for the coupled screen or universal bearing plate.

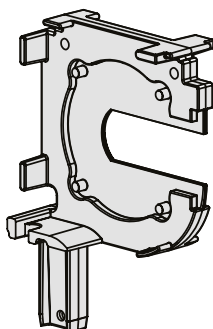
basic console



Pin guide assembly - basic console



Pin guide assembly - middle console



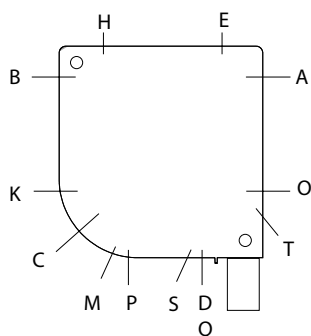
x	Possible
x	Only possible with square boxes
	Usage of small handle with eye
	Usage of big handle with eye
E/H*	To use under overhang or inside because of water penetration.
o	not possible

Operating exit

Type of installation	Control	O			A			E/H*			T			B		
		70	90	110	70	90	110	70	90	110	70	90	110	70	90	110
A-AE	Motor	x	x	x	x	x	x	o	o	x						
	Handle 45°										x	x	x			
	Handle 90°	o	x	x	x	x	x									
	Handle with eye															
B-BE	Motor							o	o	x				x	x	x
	Handle 45°															
	Handle 90°													x	x	x
	Handle with eye															

Type of installation	Control	K			P			Q/D*			C			S		
		70	90	110	70	90	110	70	90	110	70	90	110	70	90	110
A-AE	Motor												x			
	Handle 45°															
	Handle 90°															
	Handle with eye							o	o					o		
B-BE	Motor	x	x	x				o	o	o						
	Handle 45°										x	x	x			
	Handle 90°	x	x	x												
	Handle with eye															

Operating exits



Various exits are possible depending the operation. The exact location of the operation exit can be seen on the drawings. Consult these drawings before the installation.

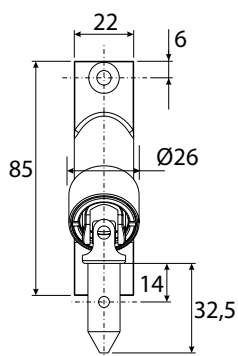
Control - handle

Inside operation:

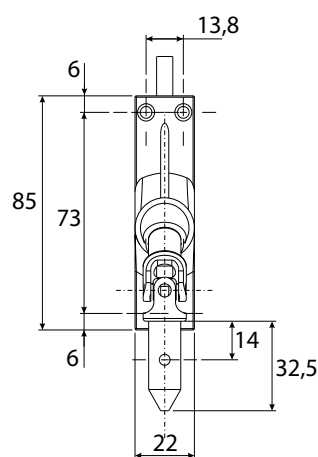
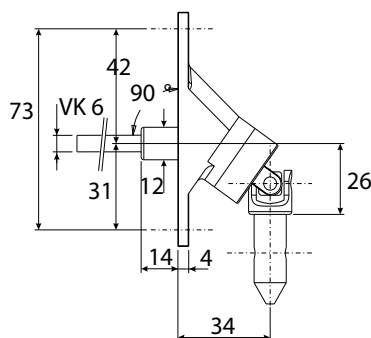
- Standard:
- grey plasticized foldable handle,
 - 90° cardan joint (handle material: 6 mm square, length 320 mm)
 - magnetic bracket for securing the handle to the wall
 - the handle length depends on the screen height: $L = H - 150$ mm (with a 90° joint), $L = H - 350$ mm (with a 45° joint),

- Options:
- 45° cardan joint
 - detachable handle with tulip coupling
 - without detachable handle, with tulip coupling.

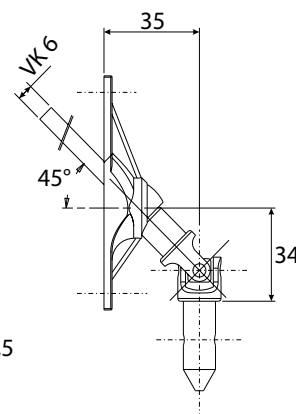
Note: the plate of the hinge set cannot be fixed directly onto the box, a separate box space is therefore required.



cardan joint 90°



cardan joint 45°

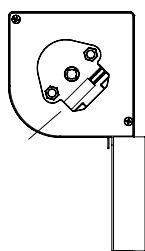


Outside operation

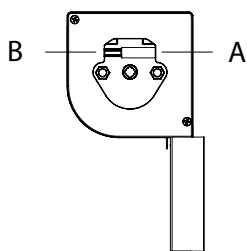
- Standard:
- Handle operation with eye, removable handle with laying hook; length 1500 mm
- Option:
- other handle lengths are possible at extra cost

Attention: ensure sufficient space on the side (± 10 mm) due to hook rotation in the eye.

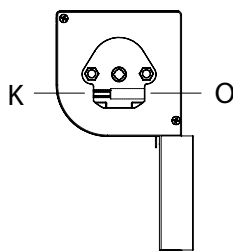
Operating exits for handle



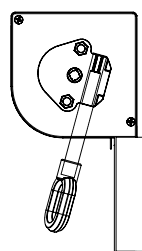
handle 45°
exit C



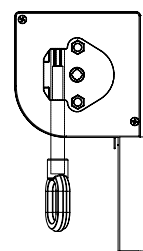
handle 90°
exit A - B



handle 90°
exit O - K

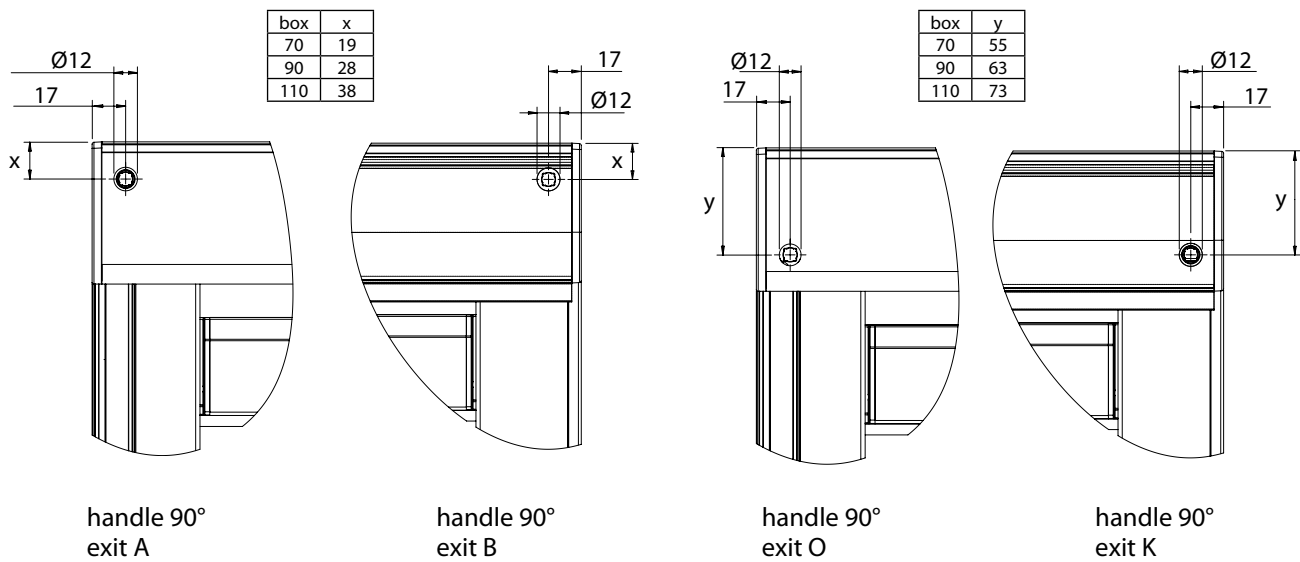


handle + eye
exit S

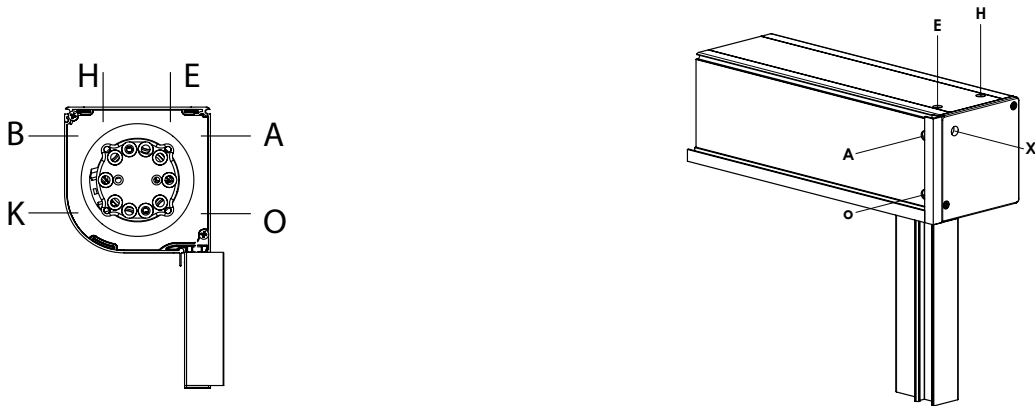


handle + eye
exit P

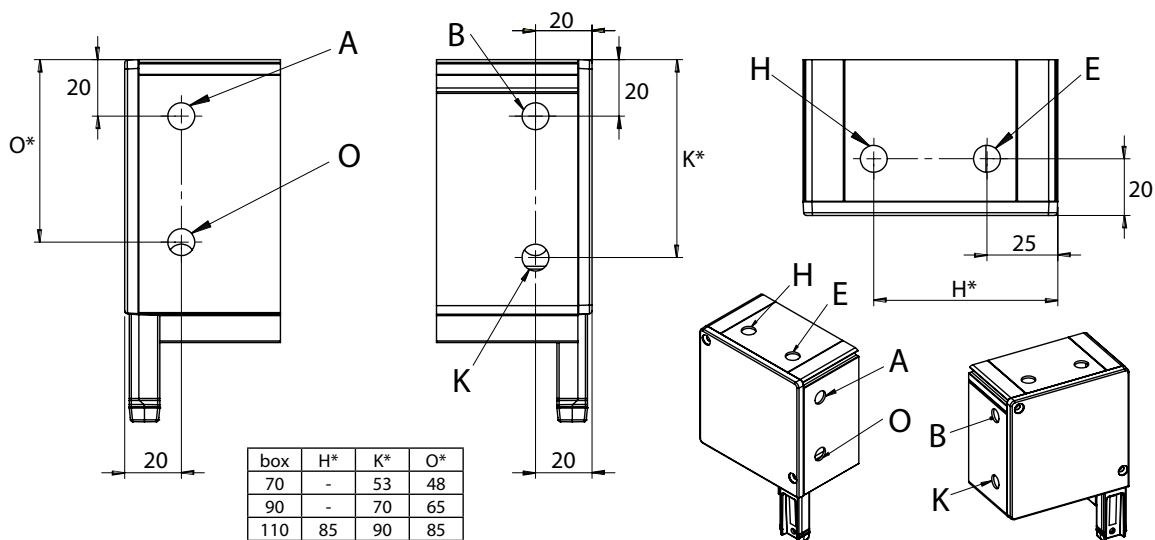
Operating exits for handle through wall



Control – motor
Choice of cable location



left, terminal X (from side part) for box 110 and 150 only
right, terminal X (from side part) for box 110 and 150 only



Coupled screens

It is possible to use 1 box for 2 or 3 screens.

DVC: screens directly next to each other

DVS: Screen with a small gap of:

- Min 25 mm
- Max 500 mm

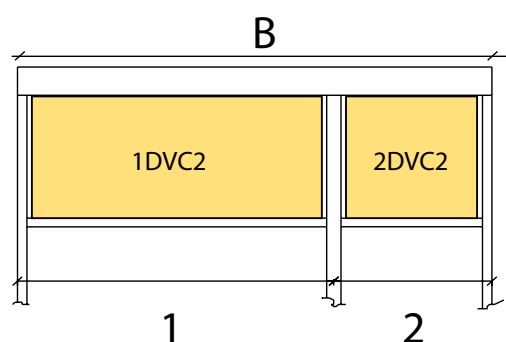
Maximum width of box is 6 m.

Possible with 1, 2 or 3 operation:

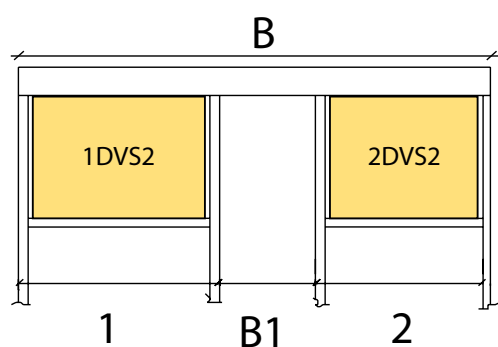
- Minimal width for each part is depending the operation.
- Maximum overall width per operation.

Handle and electrical operation can be coupled up to 6 m.

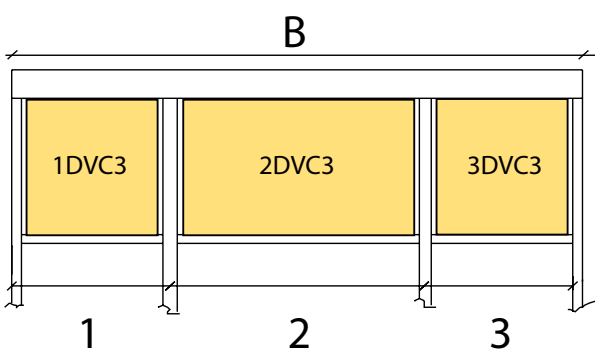
It is recommended to place the operating unit in the largest screen when possible.



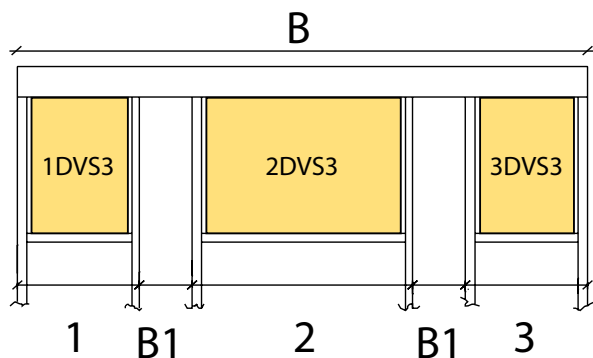
1DVC2 - 1st screen of 2 screens in common box
2DVC2 - 2nd screen of 2 screens in common box



1DVS2 - 1st screen of 2 screens in common box
2DVS2 - 2nd screen of 2 screens in common box



1DVC3 - 1st screen of 3 screens in common box
2DVC3 - 2nd screen of 3 screens in common box
3DVC3 - 3rd screen of 3 screens in common box



1DVS3 - 1st screen of 3 screens in common box
2DVS3 - 2nd screen of 3 screens in common box
3DVS3 - 3rd screen of 3 screens in common box

B = box width

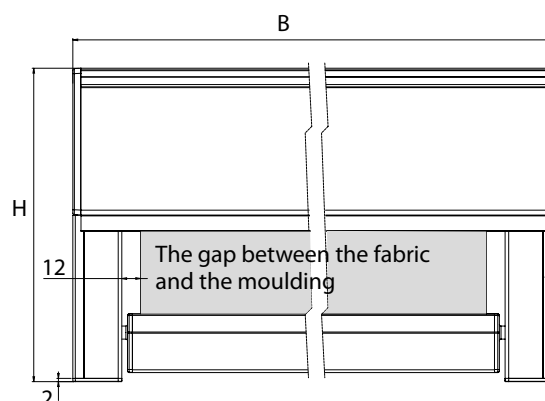
B1 = width between screens

SCREEN HR7

Measurement

Finished width B = size between rear ends of the consoles.
Finished height H = height including the box, including the guide end caps (thickness = 2 mm) excluding mounting brackets.

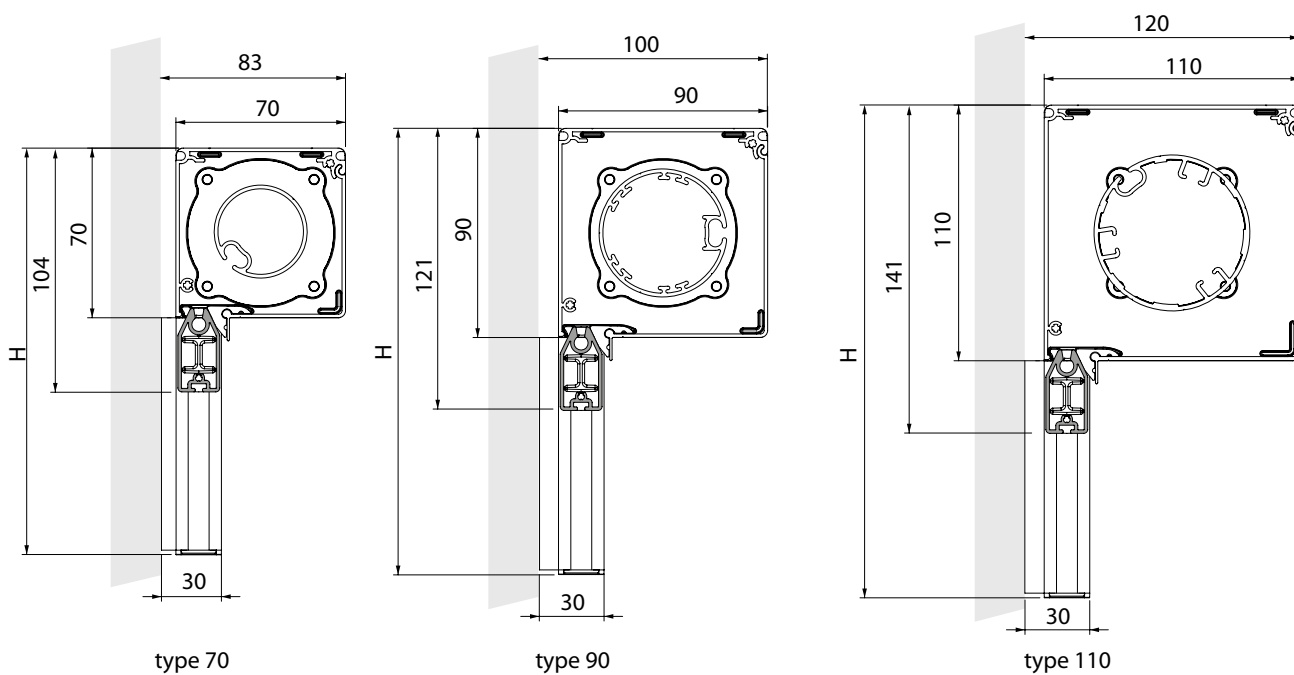
Note: The finished height H with steel calbe guides is the height from the top edge of the box to the lower edge of bottom lath.



SCREEN HR7

Assembly

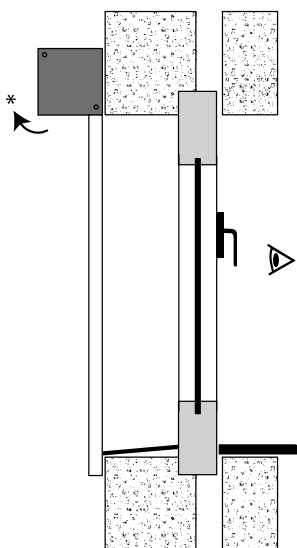
Pin guide assembly with guide rail and low bottom rail



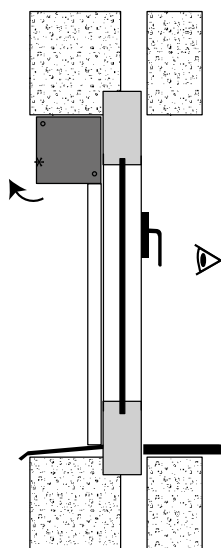
H - see Standard dimensions, page 56-57

Assembly types

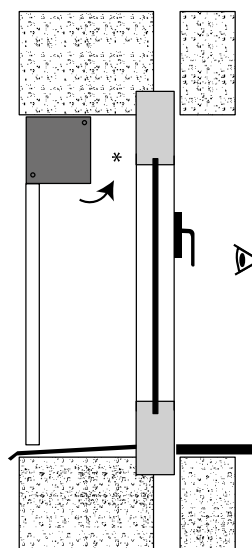
Type A-AE (on the wall)



Type A-AE (into reveal)

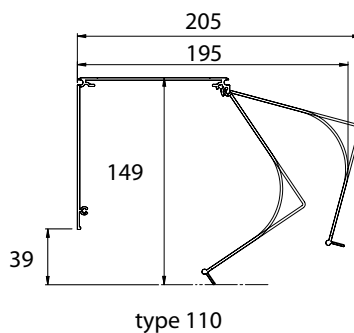
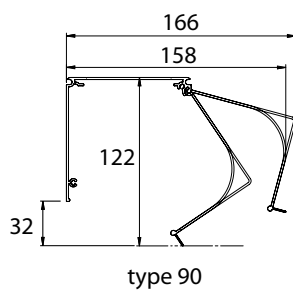
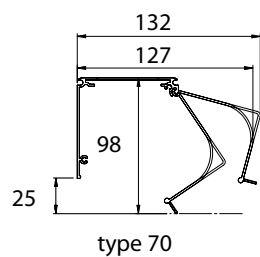


Type B-BE (into reveal)



- A - coiling outwards „A“ (standard)
- AE - coiling outwards „AE“ (exterior is lighter)
- B - coiling inwards „B“
- BE - coiling inwards „BE“ (exterior is lighter)

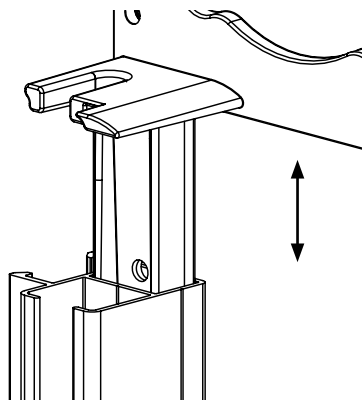
*space to open the box



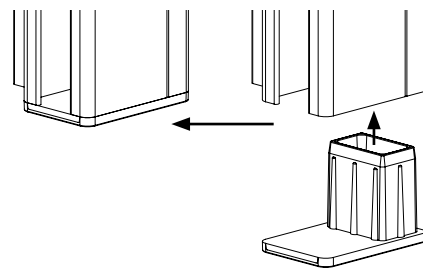
Ping guide assembly

The screenbox is assembled onto the guides. The guides mover over the pin of the consoles.

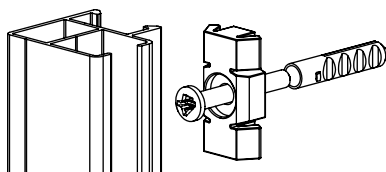
Pin guide assembly



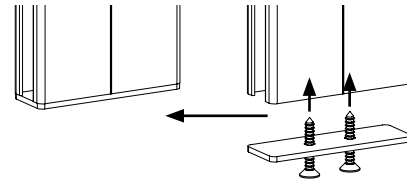
End stop pin guide assembly



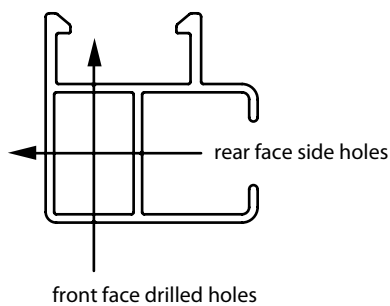
Clips for guide 725 or 755



End stop pin guide assembly intermediate guide



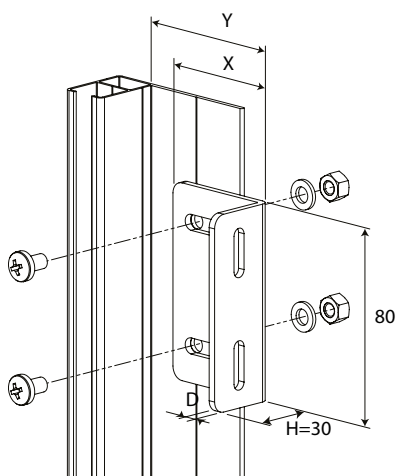
Fitted with an end stop in black plastic or end plate in aluminium at the bottom end to stop the bottom lath; thickness 2 mm.



Guide rails for side and/or rear face drilled holes:

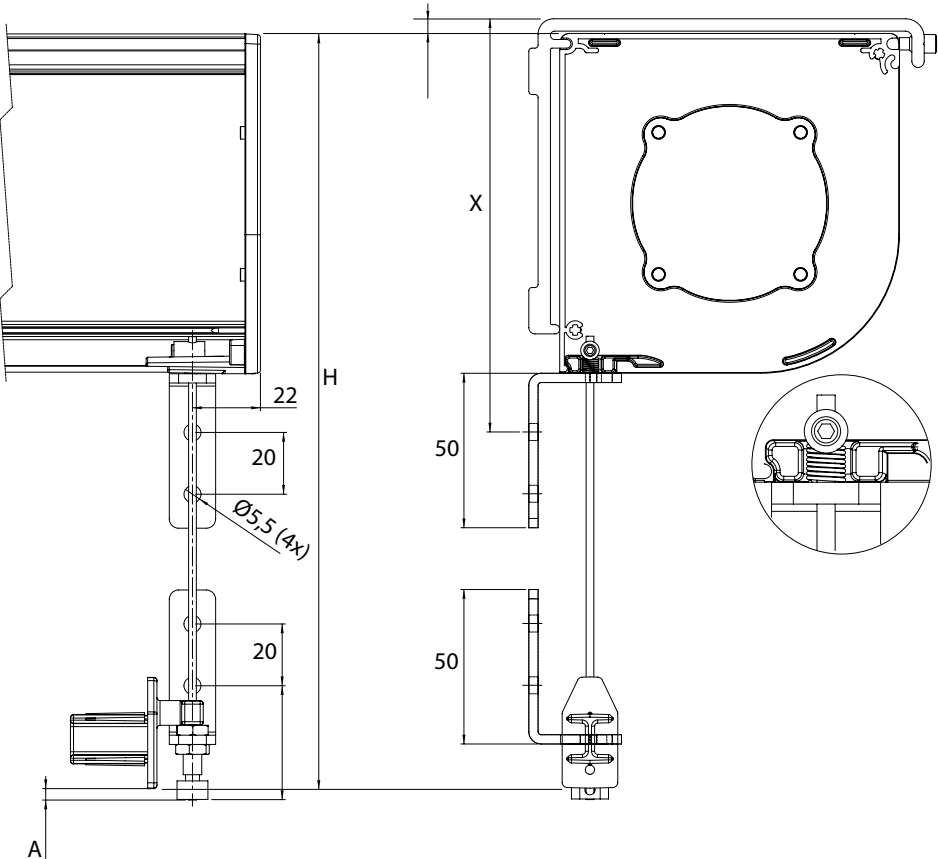
Drilling	725	720	728	755	756	740
front face	x	x	-	x	x	-
side face	x	x	x	-	-	-

Distance support for guide rail 728

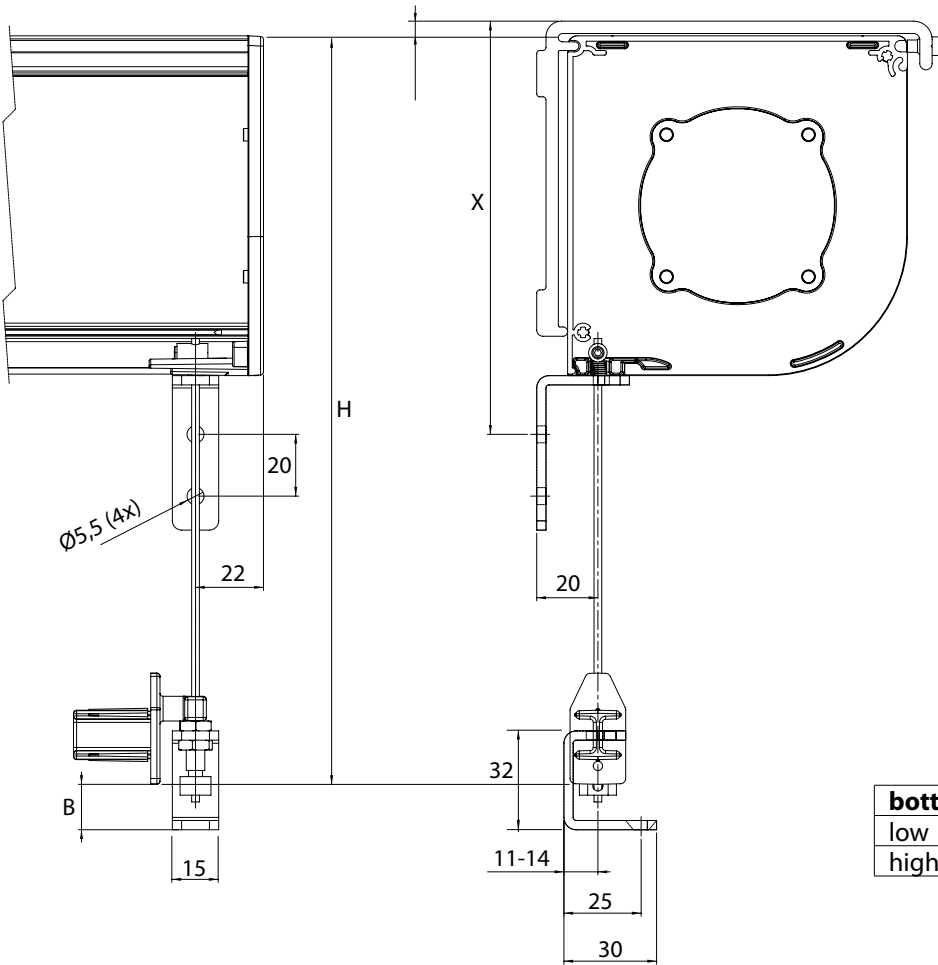


X × H × D	X	Y	drawing number
50 × 30 × 3	50	50-65	6-014549-0000
60 × 30 × 3	60	60-75	6-014550-0000
100 × 30 × 3	100	100-115	6-014552-0000
130 × 30 × 3	130	130-145	6-014542-0000

Guide cable 770 - pin guide assembly on the wall



box size	X
70	98
90	115
110	135



bottom rail	A	B
low	4	15
high	-10	1

SCREEN HR8-ZIP

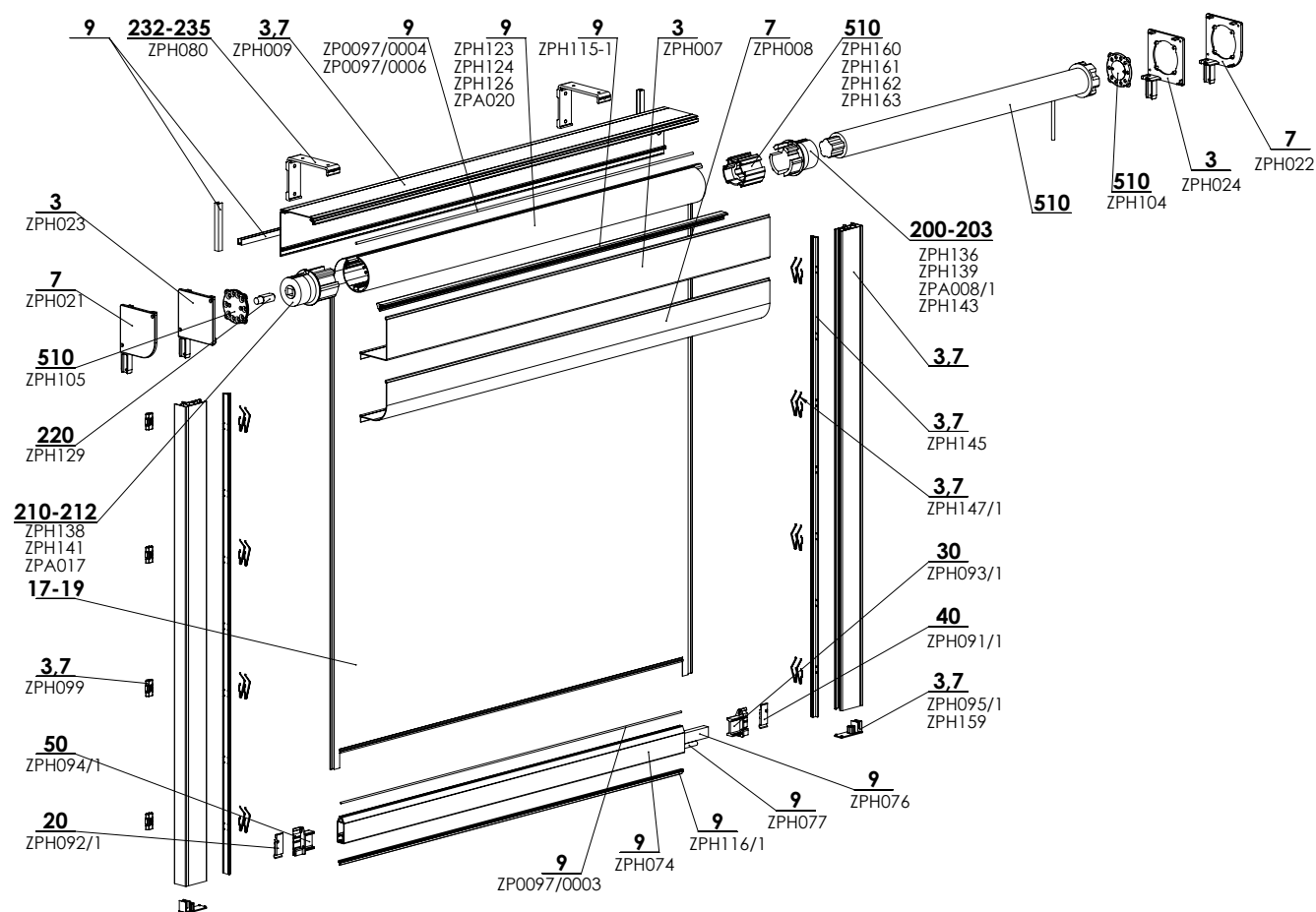


- ▲ Choice of 2 box modern designs: square box for austere architecture or rounded box for more traditional buildings, both types available in 4 sizes,
- ▲ the weighted bottom rail for guiding and tightening the fabric,
- ▲ high wind resistance (wind class 3),
- ▲ possibility of coupling up to 3 pcs of screen roller blinds,
- ▲ easy assembling,
- ▲ guaranteed area 18 m².

ISOTRA *Quality*

SCREEN HR8-ZIP

Basic Product Specification



2-01330-0090

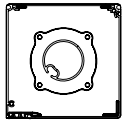
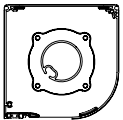
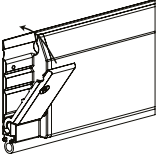
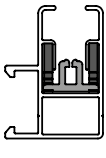
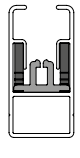
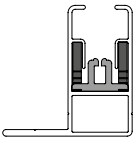
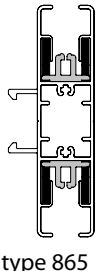
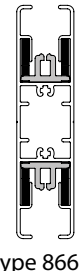
Control

Used for lifting and lowering of screen blinds. There are available 2 types of control for all box sizes:

Motor - Maestria WT/io, Altus RTS, Becker C/E, Geiger AIR, Sunea Screen IO, ALTus RTS (min. width of screen is 795 mm), LS40, Sunea IO 40 can be only used for box with dimensions 70x70 Isotra Basic.

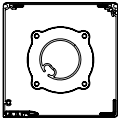
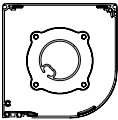
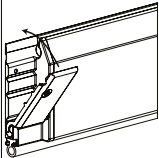
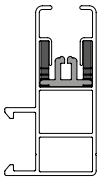
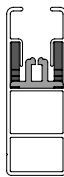
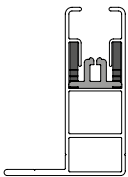
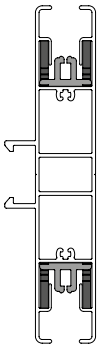
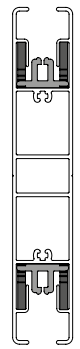
Handle - self-braking worm-worm wheel mechanism, with a transfer ratio of 1:4, with built-in end stop (prevents wrong rolling up of the fabric).

Specification (for motor)

	Box		Bottom rail	Side guidance				
	square	rounded	high	guide rail				
Abbreviation	SCREEN HR8-ZIP box 110		ZPH074	ZPH070	ZPH068	ZPH069	ZPH071	ZPH072
Dimension (mm)	70x70, 90x90, 110x110, 150x150	70x70, 90x90, 110x110, 150x150	18x50	30x40	20x40	40x40	30x80	20x80
Material	Al	Al	Al	Al	Al	Al	Al	Al
								
				type 839	type 830	type 838	type 865	type 866
Colour	Standard: RAL 9006 light silver RAL 9006S light silver structure RAL 9007 dark silver RAL 9007S dark silver structure RAL 9010 white		RAL 9010S white structure RAL 9010M white matt RAL 7016 anthracite grey RAL 7016M anthracite grey matt RAL 7016S anthracite grey structure RAL 8014S brown structure			RAL 8014M brown matt DB 702 Pearl light grey DB 703 Pearl dark grey Other RAL colours upon request*		

*except of plastic parts

Specification (for handle)

	Box		Bottom rail	Side guidance				
	square	rounded		guide rail				
Abbreviation	SCREEN HR8-ZIP box 110			ZPH152	ZPH153	ZPH154	ZPH156	ZPH155
Dimension (mm)	70x70, 90x90, 110x110, 150x150	70x70, 90x90, 110x110, 150x150	18x50	30x55	20x55	40x55	30x110	20x110
Material	Al	Al	Al	Al	Al	Al	Al	Al
								
				type 829	type 820	type 828	type 855	type 856
Colour	Standard: RAL 9006 light silver RAL 9007 dark silver RAL 9010 white		RAL 7016 anthracite grey RAL 7016S anthracite grey structure RAL 8014 brown	Other RAL colors upon request*				

*except of plastic parts

Fabrics of the Blackout type:

The opaque layer is located on the side of the window for each type of installation. In the case of outdoor installation, strong winds can cause a slight lifting of the base slat and fabric and therefore 100% blackout cannot always be guaranteed. In the case of Blackout fabrics, the zippers are fastened on the face side and not on the opaque layer, so it is possible that under strong wind or oblique view of the guide rail a piece of cloth from the zipper tape can be seen, but this is of little importance compared to tightness of the fabric (reducing the waves).

Common phenomena of technical fabrics

The fabric may curl around the welds or in the middle of the fabric, it is the so-called tree effect. This phenomenon is common because different forces act on the fabric during use. Another phenomenon may be visible bruises on the fabric caused by the roller. These disappear at higher temperatures when the fabric levels.

Standard Dimensions

Standard dimensions for box 70

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	max.
handle	400	2500	400	1200	3
motor LS40	580	2500	400	1200	3
motor 40 iO	635	2500	400	1200	3

Max. height with STNZ, STNBZ, SCR4005, SLTZB92, SERGE 3Z fabrics is only 900 mm

Standard dimensions for box 90

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	max.
handle	400	2800	400	2500	7
motor RTS, iO, WT	795	2800	400	2500	7
solar system*	595	2500	400	3000	7

Max. height with STNZ, STNBZ, SCR4005, SLTZB92, SERGE 3Z fabrics is only 1800 mm

Standard dimensions for Box 110

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	max.
handle	400	3500	400	3500	10
motor RTS, iO, WT	795	3800	400	3500	13
solar system*	595	2500	400	3000	7,5

Max. height with STNZ, STNBZ, SCR4005, SLTZB92, SERGE 3Z fabrics is only 2600 mm

Standard dimensions for box 150

Control	Width (mm)		Height (mm)		Guaranteed area (m ²)
	min.	max.	min.	max.	max.
handle	400	3000	400	5000	12
motor RTS, iO, WT	795	6000	400	5000	18
solar system*	595	2500	400	3000**	7,5

Max. height with STNZ, STNBZ, SCR4005, SLTZB92, SERGE 3Z fabrics is only 4500 mm

* box design angular only

** Max. height with STNZ, STNBZ, SCR4005, SLTZB92, SERGE 3Z fabrics is only 2600 mm

SCREEN HR8-ZIP (2-01330-XXXX)

position	item name	business name	drawing number
1-8	Screenbox		see page 77
9	Profiles		see Profiles
19	Screenfabric (m²)		see Sampler of Screen fabrics
20	Safety lock of bottom slat end piece – LEFT BLACK	ZPH092/1	3-03659-9004
30	Profile of bottom slat - LEFT BLACK	ZPH093/1	3-03657-9004
40	Safety lock of bottom slat end piece – RIGHT BLACK	ZPH091/1	3-03658-9004
50	Profile of bottom slat – RIGHT BLACK	ZPH094/1	3-03656-9004
90	Screw 2,9x9,5	ZPH173	6-014233-0000
100	Screw 2,9x13	51680.029.013	6-014234-0000
110	Screw 3,5x9,5	A 67/18	6-012359-0000
200	Gudgeon conical 55mm	ZPH136	6-014238-0000
200	Gudgeon conical 67mm	ZPH139	6-013984-0000
200	End piece of shaft dia. 85 mm – through	ZPA008/1	3-04003-9004
200	Gudgeon conical 95mm	ZPH143	6-014237-0000
210	Gudgeon conical 55mm with square hole 12mm	ZPH138	6-014243-0000
210	Gudgeon conical 67mm with square hole 12mm	ZPH141	6-013983-0000
221	Axle square 12mm - round 12mm	ZPH127	6-014271-0000
510	Screenmotors (SOMFY)		see page 84
520	Manual control		see page 83
900-910	Guidance - rail/cable - left - right		see Guidance - rail/cable - left - right

Profiles (3-03054-PU11)

position	item name	business name	drawing number
5	Profile reinforcement dia. 8mm	ZPH077	6-013966-0000
6	Profile reinforcement 20x12	ZPH076	6-013971-0000
7	High bottom rail	ZPH074	6-014021-0000
8	Plastic bar 3,0 mm PVC	ZP0097/0003	6-016911-0003
11	Rubber for bottom rail ALFA	ZPH116/1	7-303664-0000
19	Roll for fabric dia. 40mm - 6m	ZPH122	6-014229-0000
20	Roll for fabric dia. 55mm - 6m	ZPH123	6-014027-0000
21	Roll for fabric dia. 67mm - 6m	ZPH124	6-013982-0000
22	Roll for fabric dia. 85mm - 7m	ZPA020	6-016860-0000
23	Roll for fabric dia. 95mm - 6m	ZPH126	6-014231-0000
24	Profile for fabric run-on	ZPH115-1	6-013986-0000
25	Plastic bar 4,0 mm PVC	ZP0097/0004	6-016911-0004

Guidance - rail/cable - left - right (2-01634-PU11L/P)

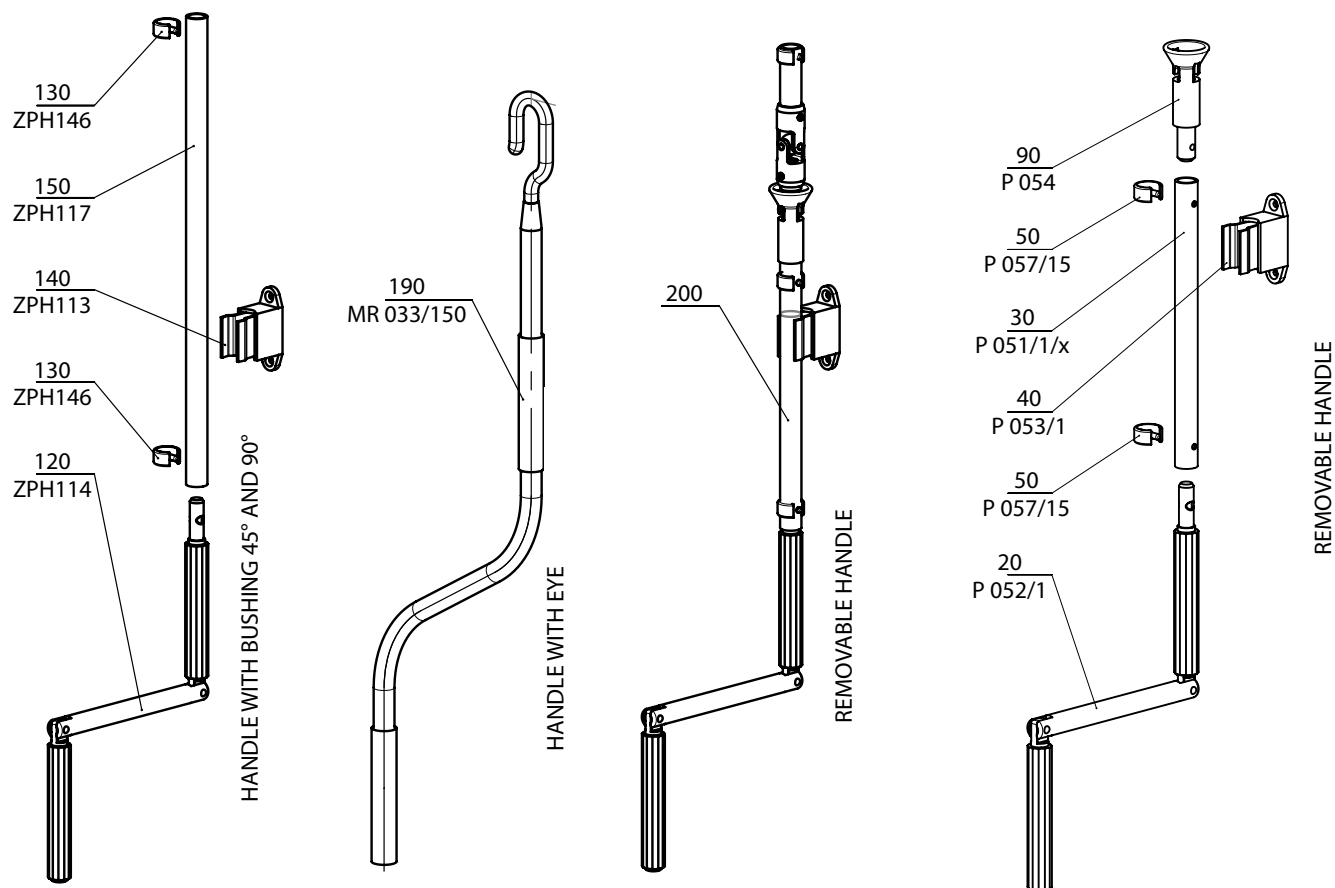
position	item name	business name	drawing number
10	Guide rail 830		6-014418-0000
11	Guide rail 838		6-014419-0000
12	Guide rail 839		6-014417-0000
13	Guide rail 865		6-014420-0000
14	Guide rail 866		6-014421-0000
15	Guide profile for zip v3	ZPH145	6-014155-0000
20	Spring for guiding profile for zip	ZPH147/1	7-303662-0000
30	Synthetic clips for guide rail - black	ZPH099	6-013993-0000
40	Screw 4,2x25 DIN 7981	51660.042.025	6-014157-0000
80	End piece VL - 40 mm	ZPH095/1	3-03667-9004
81	ALU endstop double guide	ZPH127	6-014442-0000
200	Guide rail holder 50mm	ZPH082	6-014549-0000
201	Guide rail holder 60mm	ZPH083	6-014550-0000
202	Guide rail holder 100 mm	ZPH084	6-014552-0000
203	Guide rail holder 130mm	ZPH085	6-014542-0000
210	Screw m4x5 stainless	51340.040.005	6-014559-0000
220	Washer M4	51930.040.001	6-014560-0000
230	Nut M4	51080.040.001	6-014561-0000

SCREEN HR8-ZIP box 110 (2-01330-0110)

position	item name	business name	drawing number
3	Profile BOX 110mm - front part square	ZPH007	6-013978-0000
3	Sidewall 110mm square - RIGHT	ZPH024	6-013977-0000
3	Sidewall 110mm square - LEFT	ZPH023	6-013975-0000
3,7	Profile BOX 110mm - rear part	ZPH009	6-013976-0000
3,7	Clip VL ZIP	ZPH099	6-013993-0000
3,7	Guide profile for zip v3	ZPH145	6-014155-0000
3,7	Spring of zip guide rail	ZPH147/1	7-303662-0000
3,7	End piece VL - 40 mm	ZPH095/1	3-03667-9004
3,7	End cap of guide rail - 55 mm	ZPH159	6-014830-9005
7	Sidewall 110mm rounded - LEFT	ZPH021	6-014147-0000
7	Profile BOX 110mm - front part rounded	ZPH008	6-014146-0000
7	Sidewall 110mm rounded - RIGHT	ZPH022	6-014148-0000
9	Profile reinforcement dia. 8mm - Fe/Zn	ZPH077	6-013966-0000
9	Profile reinforcement 20x12mm - Fe/Zn	ZPH076	6-013971-0000
9	Bottom rail high - 6,05m	ZPH074	6-014021-0000
9	Plastic bar 3,0 mm PVC	ZP0097/0003	6-016911-0003
9	Rubber for bottom rail ALFA	ZPH116/1	7-303664-0000
9	Roller tube Al diameter 55mm - 6m	ZPH123	6-014027-0000
9	Roller tube Al diameter 67mm - 6m	ZPH124	6-013982-0000
9	Roller tube Al diameter 95mm - 6m	ZPH126	6-014231-0000
9	Roller tube dia. 85x1, 20 mm – 6 m	ZPA020	6-016860-0000
9	Plastic bar 4,0 mm PVC	ZP0097/0004	6-016911-0004
9	Plastic bar 6,0 mm PVC	ZP0097/0006	6-016911-0006
9	Profile for fabric run-on	ZPH115-1	6-013986-0000
20	Safety lock of bottom slat end piece – LEFT BLACK	ZPH092/1	3-03659-9004
30	Profile of bottom slat - LEFT BLACK	ZPH093/1	3-03657-9004
40	Safety lock of bottom slat end piece – RIGHT BLACK	ZPH091/1	3-03658-9004
50	Profile of bottom slat – RIGHT BLACK	ZPH094/1	3-03656-9004
200	Cap of roller tube dia. 55mm	ZPH136	6-014238-0000
201	Cap of roller tube dia. 67mm	ZPH139	6-013984-0000
202	End piece of shaft dia. 85 mm – through	ZPA008/1	3-04003-9004
203	Cap of roller tube dia. 95mm	ZPH143	6-014237-0000
210	Cap of roller tube dia. 55mm with square hole 12	ZPH138	6-014243-0000
211	Cap of roller tube dia. 67mm with square hole 12	ZPH141	6-013983-0000
212	Insert for shaft end piece – dia. 50 mm	ZPA017	3-03486-9004
220	Pin of roller tube cap - 12mm Fe/Zn	ZPH129	6-013985-0000
232-235	Mounting bracket - box 110mm	ZPH080	6-014342-0000
510	Motors (SOMFY, BECKER) SCREEN HR7/HR8-ZIP		see page 84
510	Driver LT50 HI - dia. 65mm	ZPH160	6-013980-0000
510	Driver LT50 HI - dia. 85mm	ZPH161	6-014326-0000
510	Driver LT50 HI - dia. 95mm	ZPH162	6-014327-0000
510	Driver LS40 - dia. 50mm	ZPH163	6-014328-0000
510	Flat bearing plate - BLACK	ZPH104	6-014333-9004
510	Bearing plate with clip - BLACK	ZPH105	6-014334-9004

SCREEN HR7 a HR8-ZIP

Control - handle



2-01372-XXXX-0

2-01436-XXXX-A

Control handle – SCREEN HR (2-01372-XXXX-0)

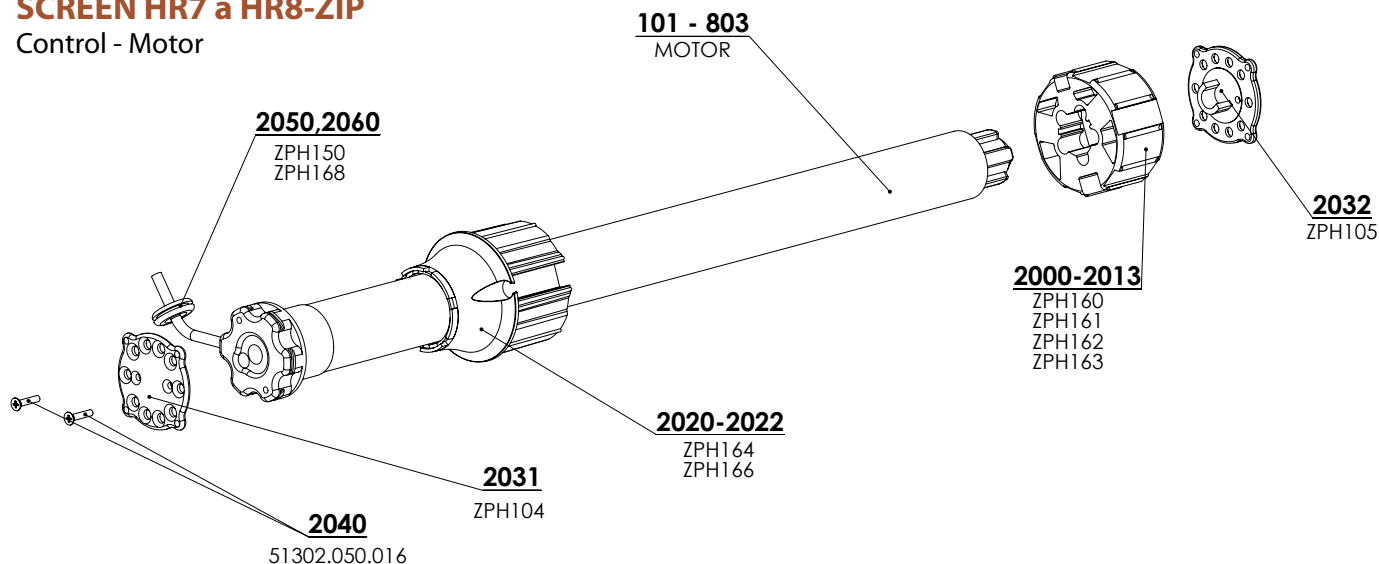
position	item name	business name	drawing number
120	Cranked handle	ZPH114	6-014323-0000
130	Locking ring with pin	ZPH146	6-014451-0000
140	Handle holder	ZPH113	6-014319-0000
150	Connecting tube PVC – dia 12 mm	ZPH117	6-014324-0000
190	Handle for awnings 1500 mm	MR 033/150	6-011095-1500
200	Handle removable for SCREEN		2-01436-0000

Handle removable for SCREEN (2-01436-XXXX-0)

position	item name	business name	drawing number
20	Cranked handle Al – dia 12 mm grey	P 052/1	6-006682-0000
30	Connecting tube Al – dia 15 mm elox	P 051/1/X	7-301797-PU52
40	Handle holder– universal grey	P 053/1	6-006683-7045
50	Locking ring with pin 15 mm grey	P 057/15	6-006467-7035
90	Handle funnel square	P 054	6-001190-0000

SCREEN HR7 a HR8-ZIP

Control - Motor

**Screen motors (SOMFY) (2-00530-0002)**

Position	item name	business name	drawing number
101-103	Motor altus 50 rts 06/17	MR 091/06	6-011170-xxxx
201-203	Motor sunea 50 screen io 06/17	ZP0084	6-012559-xxxx
301-303	Motor maestria +50 io 06/17 vvf5m	ZP0084/1	6-012538-xxxx
2000	Driver lt50 hi - dia. 65Mm	ZPH160	6-013980-0000
2011	Driver lt50 hi - dia. 85Mm	ZPH161	6-014326-0000
2012	Driver lt50 hi - dia. 95Mm	ZPH162	6-014327-0000
2013	Driver ls40 - dia. 50Mm	ZPH163	6-014328-0000
2020	Adaptor s40 - dia. 50Mm	ZPH164	6-014330-0000
2022	Adaptor ls/lt50 - dia. 65 Mm	ZPH166	6-014332-0000
2031	Bearing plate - flat - black	ZPH104	6-014333-9004
2032	Bearing plate - with clip - black	ZPH105	6-014334-9004
2040	Screw m5x16	51302.050.016	6-014338-0000
2050	Cable grommer - rubber - dia. 7 Mm	ZPH150	6-014339-0000
2060	Cable clip 600x4,8 - black	ZPH168	6-014438-0000

Screen motors (SOMFY) HR7/HR8-ZIP – BOX 70 (2-00530-0004)

Position	item name	business name	drawing number
20	Motor LS 40	PR0125	6-002624-0009
30	Motor Sunea 40 Screen IO	ZP0091/16	6-014483-0009
40	Motor holder LS 40	ZPH167	6-014336-0000
50	Adapter LS 40	ZPH164	6-014331-0000
60	Driver LS 40	ZPH163	6-014328-0000
70	Flat bearing plate	ZPH104	6-014333-9004
80	Bearing plate with clip	ZPH105	6-014334-9004
90	Rubber cable grommet diameter 7	ZPH150	6-014339-0000
100	Cable clip 300x4,8	ZPH168	6-014438-0000
110	Screw 3,5x16 DIN 7982	VRH 130	6-014674-0000

Motors (Becker) Screen HR7/HR8-ZIP (6-015258 / 6-012538 / 6-002624 / 6-014483)

Position	item name	business name	drawing number
510	Motor BECKER 50 E 08/17	X.2010/1301590	6-017861-0008
510	Motor BECKER 50 E 12/17	X.2010/1301600	6-017861-0012
510	Motor BECKER 50 E 20/17	X.2010/1301450	6-017861-0020
500	Motor BECKER 50 Screen C 08/17 PLUS	X.2010/1302170	6-018761-0008
500	Motor BECKER 50 Screen C 12/17 PLUS	X.2010/1302180	6-018761-0012
500	Motor BECKER 50 Screen C 20/17 PLUS	X.2020/1301860	6-018761-0020

*Note: E=electronic motor / C=radio motor

Motors (ISOTRA BASIC) Screen HR8 ZIP - BOX 110

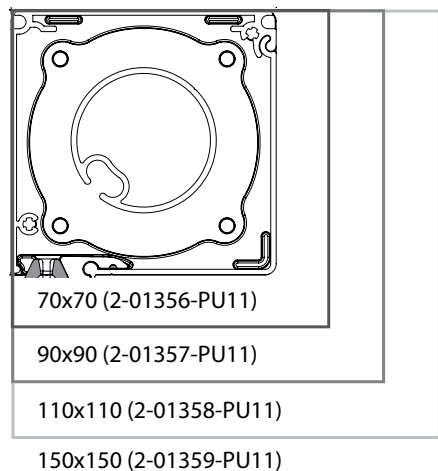
position	item name	business name	drawing number
600	Motor ISOTRA BASIC, 10Nm/17,with integrated receiver, SC zip	X.AM45 10/17S	6-019173-0010
600	Motor ISOTRA BASIC, 15Nm/17,with integrated receiver, SC zip	X.AM45 15/17S	6-019173-0015
600	Motor ISOTRA BASIC, 20Nm/17, with integrated receiver, SC zip	X.AM45 20/17S	6-019173-0020

SCREEN HR8-ZIP

Technical Specification

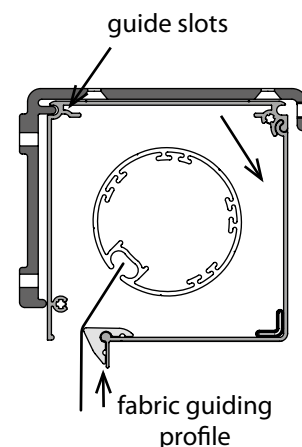
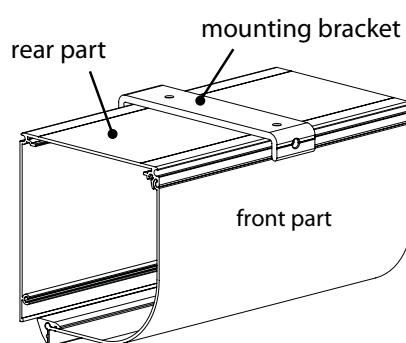
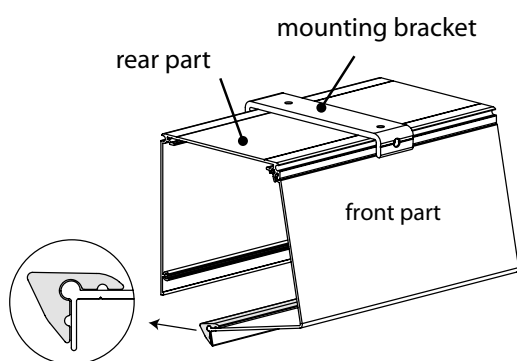
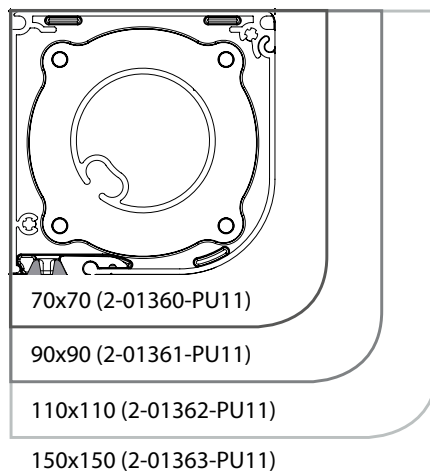
Head rail - square

(2-01356, 2-01357, 2-01358, 2-01359)



Head rail - rounded

(2-01360, 2-01361, 2-01362, 2-01363)

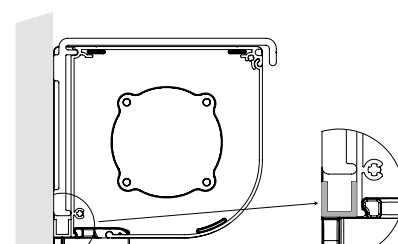


Finishing back side of the screenbox

U-profile width - horizontal

The gap between box and wall can be filled up horizontal with U-profile of 10 x 10 x 10 mm, the length is defined by the box width.

To use with: - mounting bracket

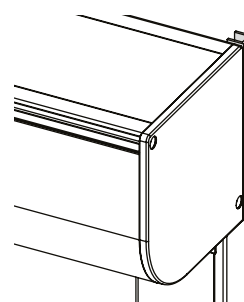


U-profile width - horizontal

U-profile height vertical

The gap between box and wall can be filled up with a U-profile (10x10x10 mm), the length is defined by the box height.

To use with: - mounting brackets



U-profile height - vertical

Mounting bracket - box 70 mm, 90 mm, 110 mm, 150 mm
(6-014340, 6-014341, 6-014342)

Material: extruded aluminium with a powder coating finish
For installation of the box independent from the guides: standard for cable guide

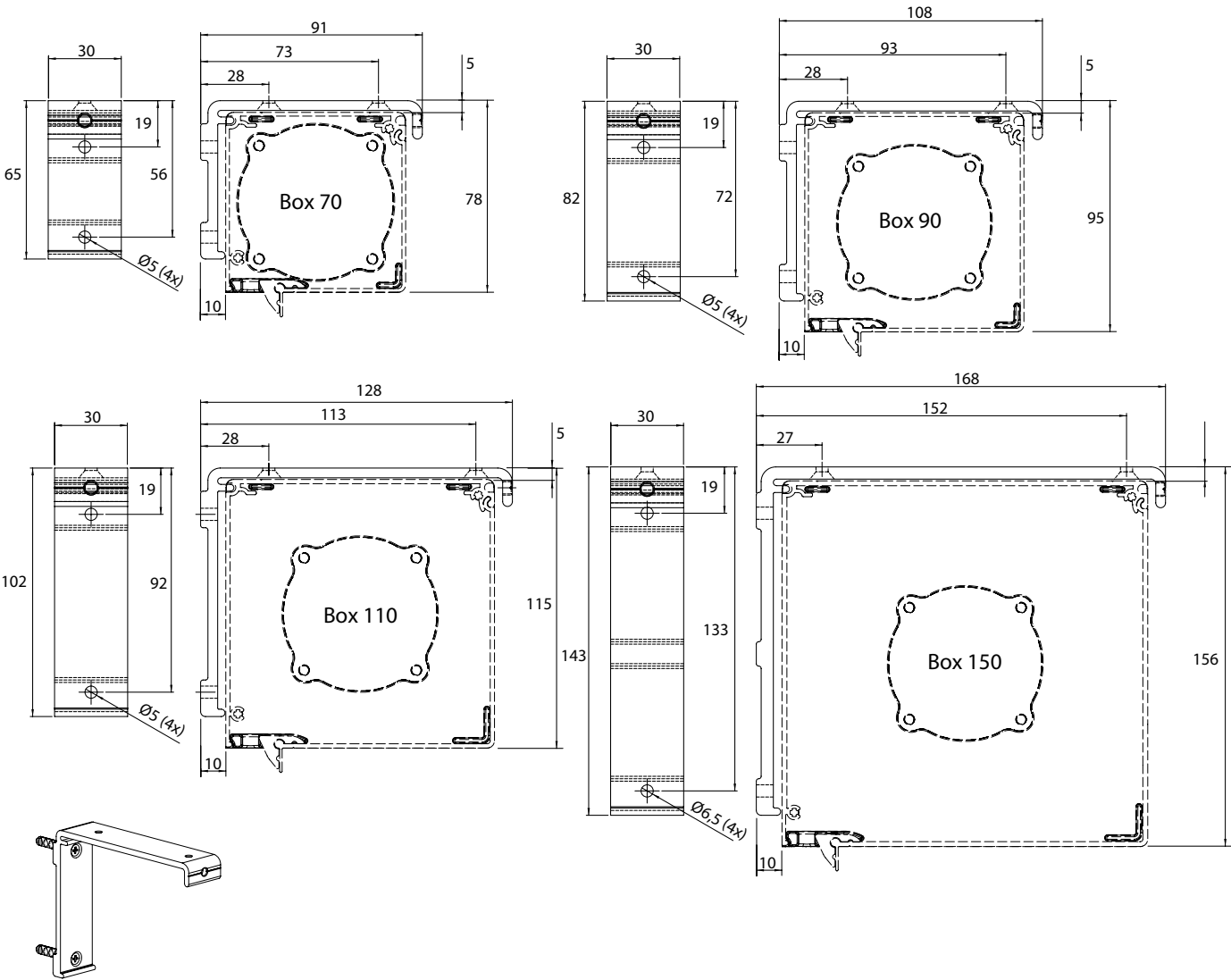
Standard number of mounting brackets:

Screen width (mm)	Box	
	70 - 90	110 - 150
0 – 1500	0 (2*) pc	2 pc
1501 – 3000	3 pc	3 pc
3001 – 4500	4 pc	4 pc
4501 - 6000	5 pc	5 pc

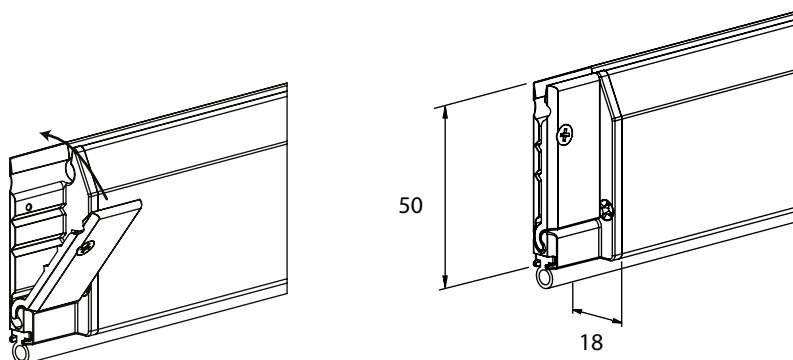
* If specified the mounting bracket in the order form there will be supplied 2 pieces of mounting bracket (up to the width of the roller shutter 1500 mm is the self-supporting roller blind).

If the mounting bracket is used, we recommend using guide rails of types A829, A839, A828, A838, A837, A865 and A855.

Width: 30 mm
Brings the rear face of the box 10 mm forward for cable guide.



Bottom rail high (6-014021-0000)



Material: extruded aluminium profile with:

- a powder coated finish
- a room for a weighting strip.
- a fabric groove.
- a groove for sealing rubber

Fabric is attached to bottom rail without screws, using a plastic tube $\varnothing$ 3 mm.

Partially concealed in the screen box when fabric is rolled up

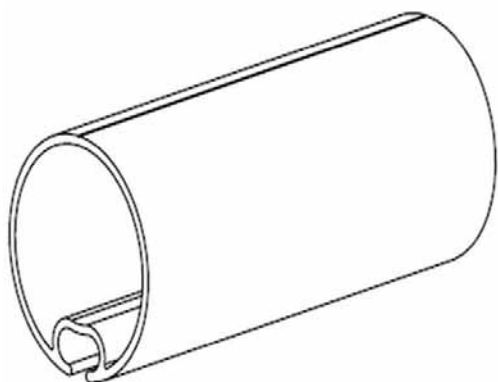
Optional: rubber strip on the bottom rail

Sliding blocks

in 2 parts for a good clamping of the fabric.

Roller tube diameter 40mm – 6m, 55mm – 6m, 67mm – 6m, 85mm – 6m, 95mm – 6m

(6-014229-0000, 6-014027-0000, 6-013982-0000, 6-016860-0000, 6-014231-0000)



Material: Extruded aluminium for tubes ($\varnothing$ 40, $\varnothing$ 55 or $\varnothing$ 67 mm) or zinc steel for tube $\varnothing$ 85 mm and $\varnothing$ 95 mm.

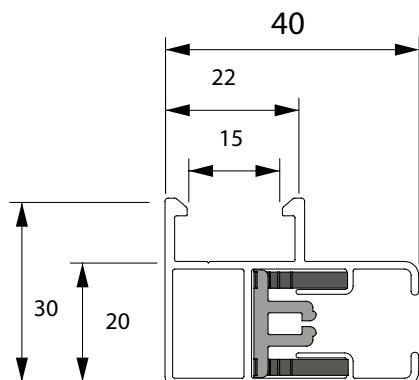
With a fabric groove for attaching the fabric using a plastic tube of $\varnothing$ 4 mm for tube $\varnothing$ 40 mm, $\varnothing$ 55 mm, $\varnothing$ 67 mm and $\varnothing$ 6 mm for tube $\varnothing$ 85 mm.

Guide rails (for motor)

Material: Material: extruded aluminium profiles with a powder coated finish

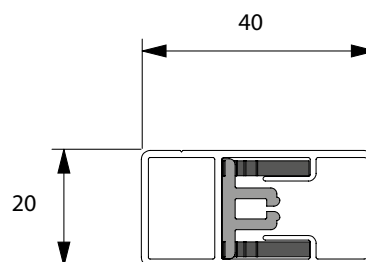
Guide rail T839 (6-014417)

- standard guide for clips attachment or small distance relative to the rear side (10 mm).



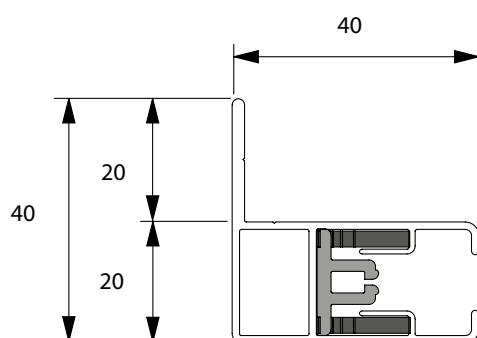
Guide rail T830 (6-014418)

- flat guide without attachment clips.



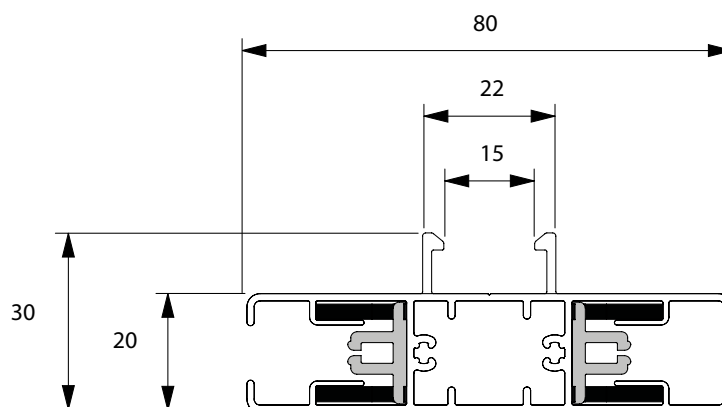
Guide rail T838 (6-014419)

- guide rail with short assembly flange.
- used for pergola mounting

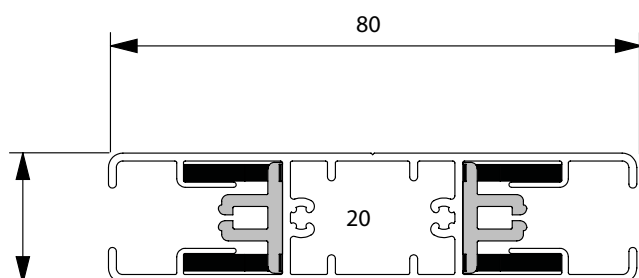


Guide rail T865 (6-014420)

- intermediate guide



Guide rail T866 (6-014421) - intermediate guide

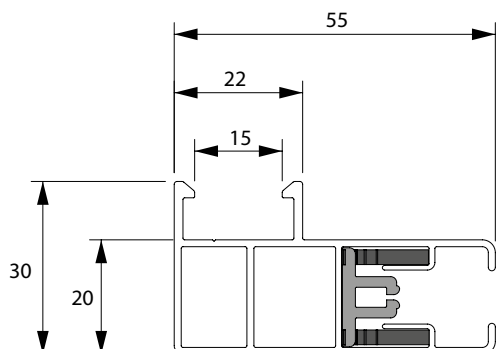


Guide rails for handle

Material: extruded aluminium profiles with a powder coated finish

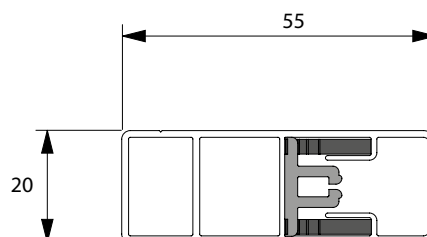
Guide rail T829 (6-013989)

- standard guide for clips attachment or small distance relative to the rear side (10 mm).



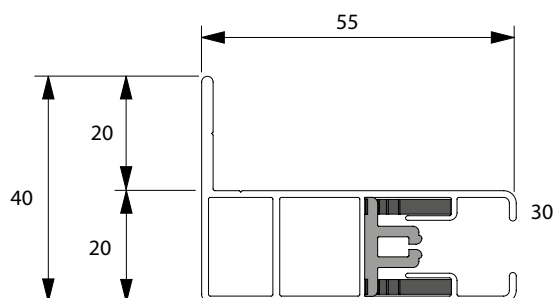
Guide rail T820 (6-014152)

- fl at guide without attachment clips.



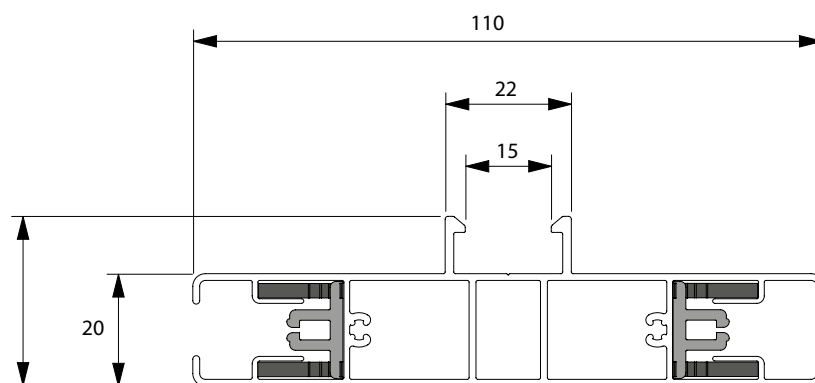
Guide rail T828 (6-014153)

- guide rail with short assembly flange.



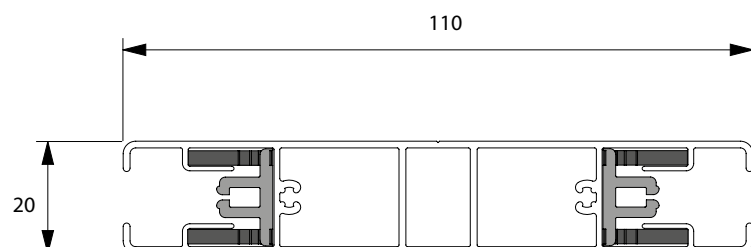
Guide rail T855 (6-014827)

- intermediate guide



Guide rail T856 (6-014154)

- intermediate guide



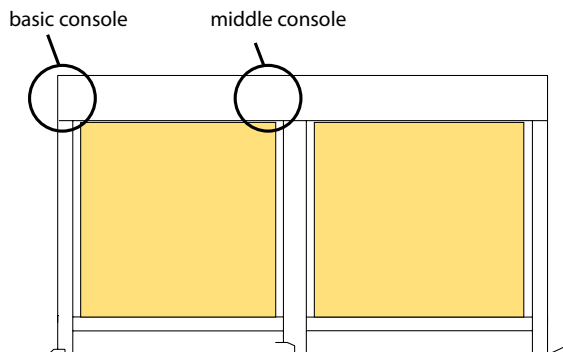
Guide rails - frontway/sideway drilling (200 mm on both sides from the edges)

up to a height of 1500 mm	2 openings (on the edges)
more than 1500 mm up to 3000 mm	3 openings (2 openings on the edges + 1 centre opening)
from 3000 mm up to 4500 mm	4 openings (2 openings on the edges + 2 centre openings)
from 4500 mm	5 openings (2 openings on the edges + 3 centre openings)

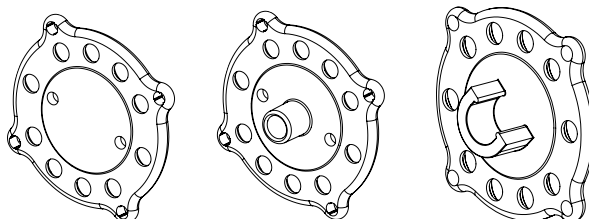
Consoles

Basic consoles: - aluminium consoles with die-casted guide pin (= pin mounting) or
 - die-casted fastening hook (= flange mounting).
 - complete with universal bearing plates in black synthetic material.

Middle consoles: - aluminium console with die casted guide pin:
 - can hold the bearing for the coupled screen or universal bearing plate.



Universal bearing plate



Operating exit

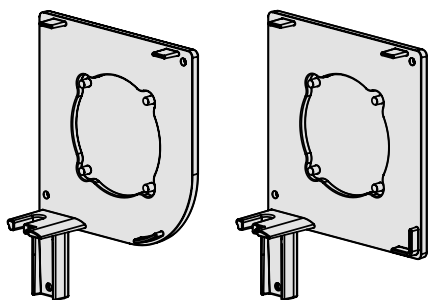
Type of installation	Control	O				A				E/H*				T				B			
		70	90	110	150	70	90	110	150	70	90	110	150	70	90	110	150	70	90	110	150
A-AE	Motor	x	x	x	x	x	x	x	x	o	o	x	x								
	Handle 45°													x	x	x	x				
	Handle 90°	o	x	x	x	x	x	x	x												
	Handle																				
B-BE	Handle with eye																				
	Motor									o	o	x	x					x	x	x	x
	Handle 45°																				
	Handle 90°																	x	x	x	x
	Handle																				
	Handle with eye																				

Type of installation	Control	K				P				Q/D*				C				S			
		70	90	110	150	70	90	110	150	70	90	110	150	70	90	110	150	70	90	110	150
A-AE	Motor															x	x				
	Handle 45°																				
	Handle 90°																				
	Handle									o	o	o	x								
B-BE	Handle with eye									o	o							o	o		
	Motor	x	x	x	x					o	o	o	x								
	Handle 45°													x	x	x	o				
	Handle 90°	x	x	x	x																
	Handle									o	o	o	x								
	Handle with eye																				

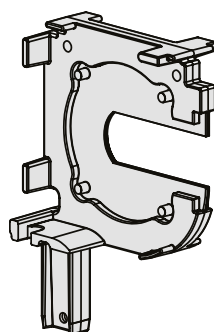
x	Possible
x	Only possible with square boxes
	Usage of small handle with eye
	Usage of big handle with eye
E/H*	To use under overhang or inside because of water penetration.
o	not possible

Ping guide assembly

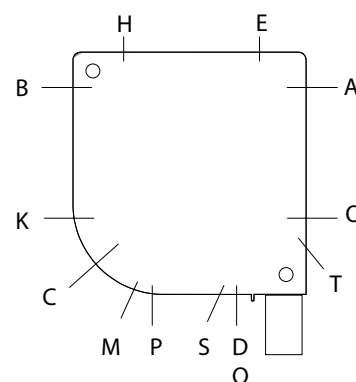
basic console



middle console



Operating exits for motor



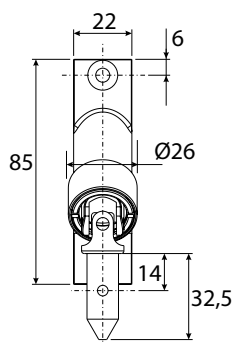
Control - handle

Inside operation

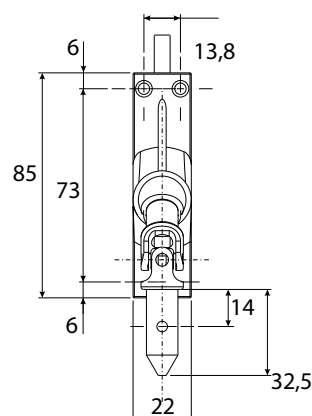
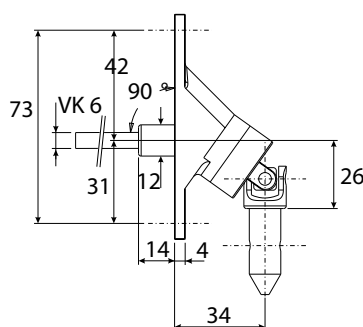
- Standard:
- grey plasticized foldable handle,
 - 90° or 45° or 0° cardan joint (handle material: 6 mm square, length 320 mm),
 - magnetic bracket for securing the handle to the wall,
 - the handle length depends on the screen height:
 $L = H - 150 \text{ mm}$ (with 90° joint), $L = H - 350 \text{ mm}$ (with 45° and 0° joint).

- Options:
- detachable handle with tulip coupling,
 - without detachable handle, with tulip coupling

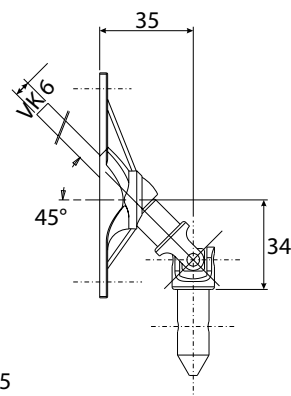
Note: The plate of the hinge set cannot be fixed directly onto the box, a separate box space is therefore required.



cardan joint 90°



cardan joint 45°

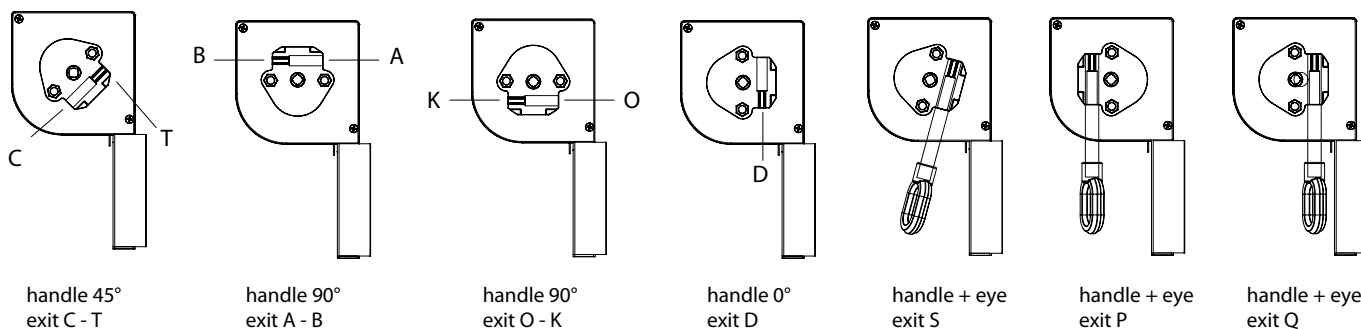


Outside operation

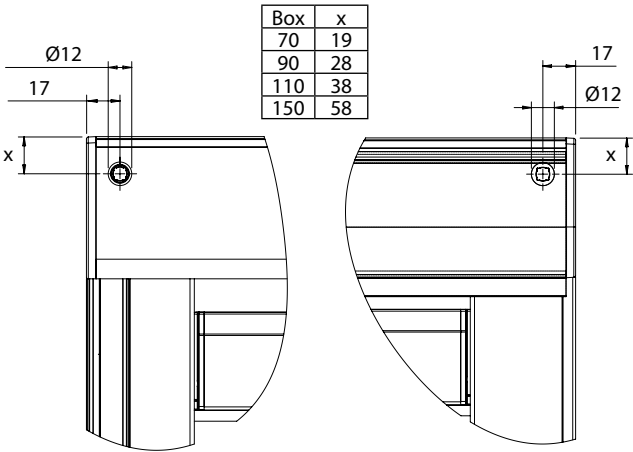
- Standard:
- Handle operation with eye, removable handle with laying hook; length 1500 mm
- Option:
- other handle lengths are possible at extra cost

Attention: foresee enough side space ($\pm 10 \text{ mm}$) to turn the hook of the handle with eye

Operating exit for handle

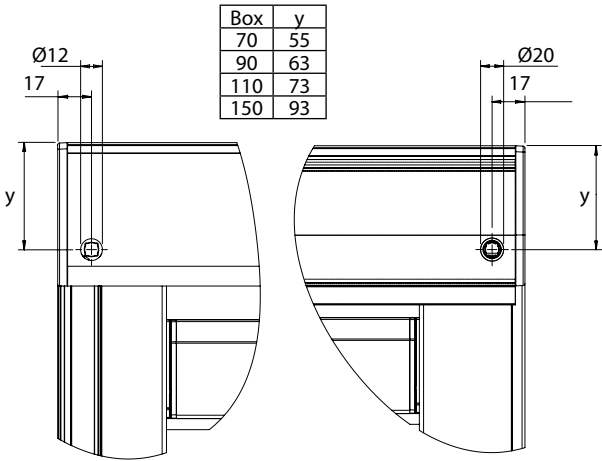


Operating exits for handle through wall



handle 90°
exit A

handle 90°
exit B

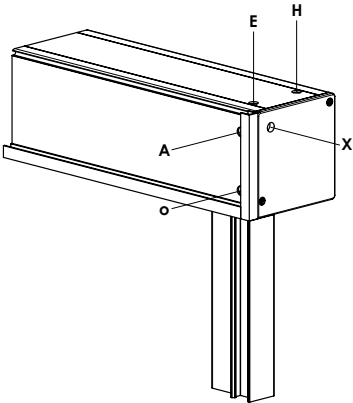
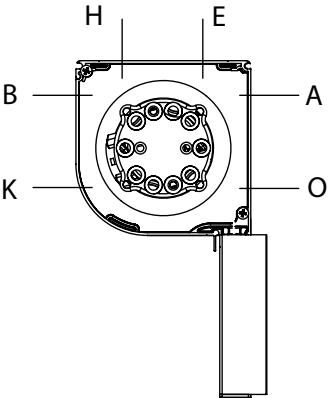


handle 90°
exit O

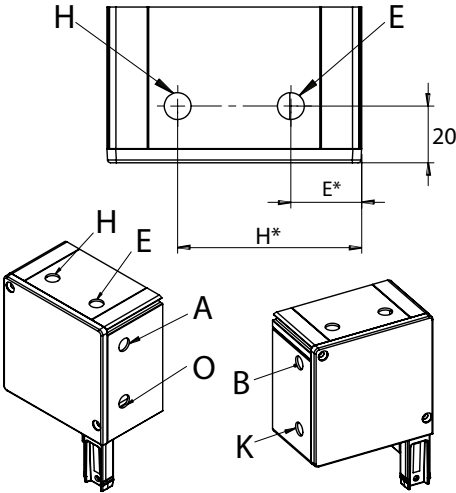
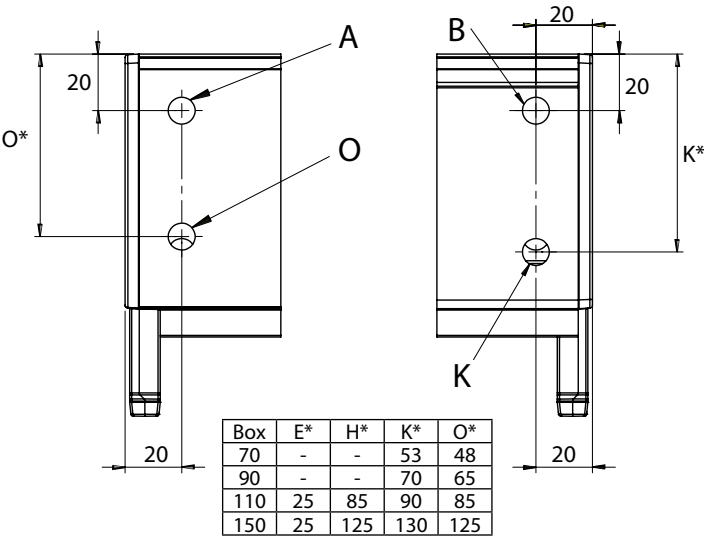
handle 90°
exit K

Control – motor

Choice of cable location



left, terminal X (from side part) for box 110 and 150 only
right, terminal X (from side part) for box 110 and 150 only



Coupled screens

It is possible to use 1 box for 2 or 3 fabric parts

DVC: screens directly next to each other;

- with small guides 865/866

DVS: Screens with at least 1 gap;

- with small guides 839,830, 838,865 or 866

Maximum 6 m box width.

Possible with 1, 2 or 3 operations.

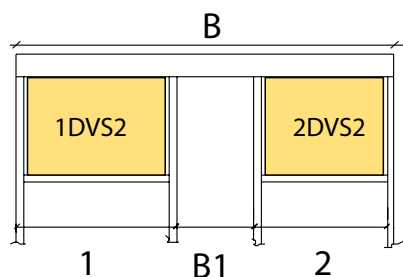
- Minimum width per part is depending the operation.

- Maximum overall width per operation.

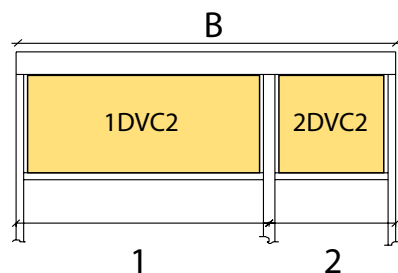
- Handle and electrical operation can be coupled up to 6 m.

- It is recommended to place the operating unit in the largest screen when possible.

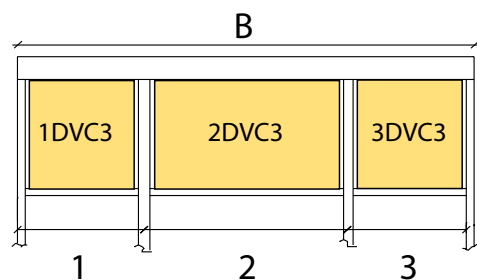
Not possible with box type 150.



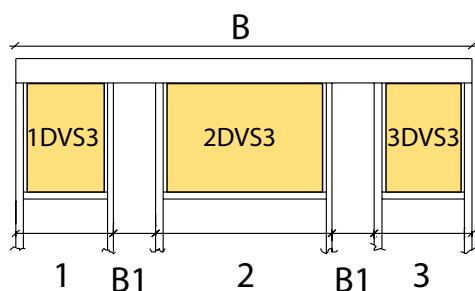
1DVC2 - 1st screen of 2 screens in common box
2DVC2 - 2nd screen of 2 screens in common box



1DVC2 - 1st screen of 2 screens in common box
2DVC2 - 2nd screen of 2 screens in common box



1DVC3 - 1st screen of 3 screens in common box
2DVC3 - 2nd screen of 3 screens in common box
3DVC3 - 3rd screen of 3 screens in common box



1DVS3 - 1st screen of 3 screens in common box
2DVS3 - 2nd screen of 3 screens in common box
3DVS3 - 3rd screen of 3 screens in common box

B = box width

B1 = width between screens

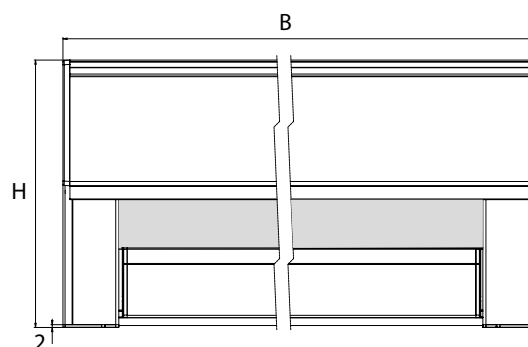
SCREEN HR8-ZIP

Measurement

Finished width B = size between rear ends of the consoles.

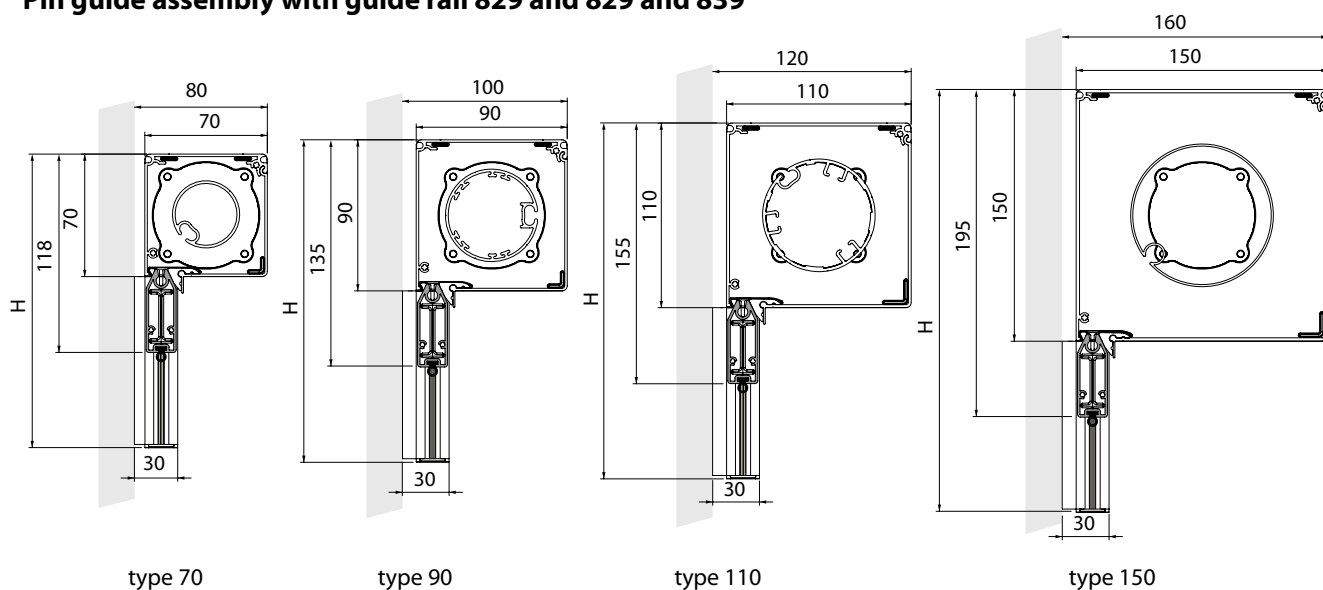
Finished height H = height including the box, including the guide end caps (thickness = 2 mm) excluding mounting brackets

More information in the separate document **Measurement and assembly instructions**.



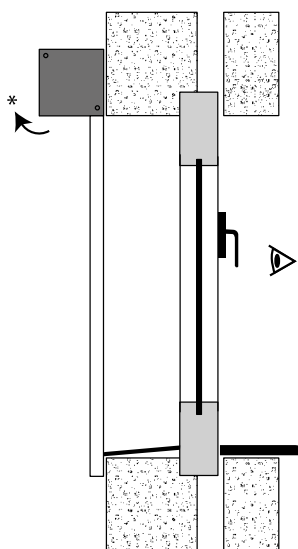
Assembly

Pin guide assembly with guide rail 829 and 829 and 839

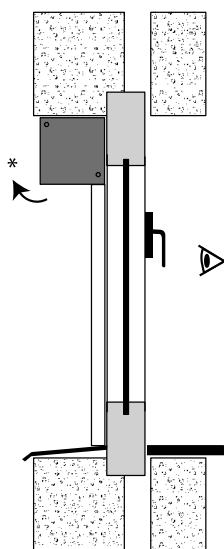


Assembly types

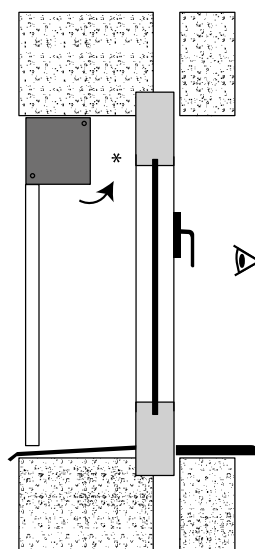
Type A-AE (on the wall)



Type A-AE (into reveal)

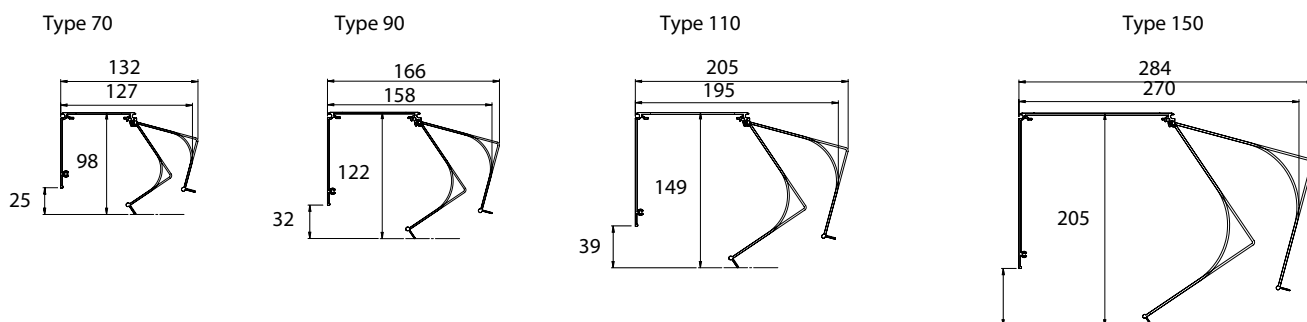


Type B-BE (into reveal)



- A - coiling outwards „A“ (standard)
- AE - coiling outwards „AE“ (exterior is lighter)
- B - coiling inwards „B“
- BE - coiling inwards „BE“ (exterior is lighter)

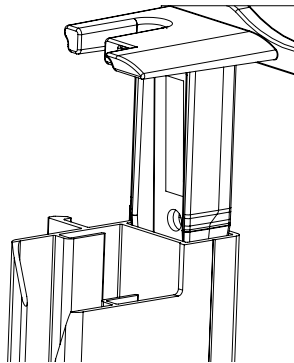
*space to open the box



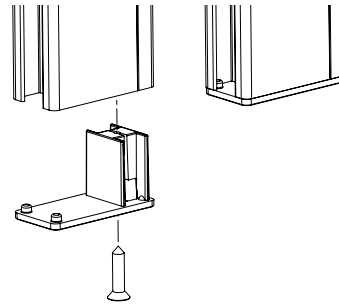
Ping guide assembly

The screenbox is assembled onto the guides. The guides mover over the pin of the consoles.

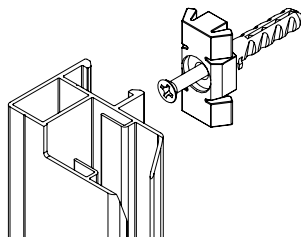
Pin guide assembly



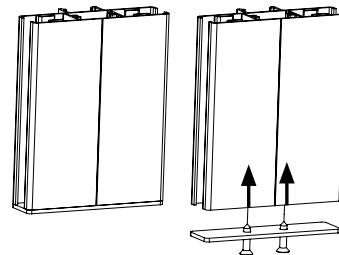
End stop pin guide assembly



Clips for guide 839 or 865



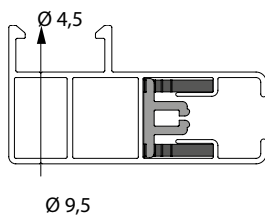
End stop pin guide assembly intermediate guide



With AI end stops on the bottom part for the end stop of bottom rail; thickness 2 mm.

Some guides can be supplied with pre-drilled holes in the rear or side faces.

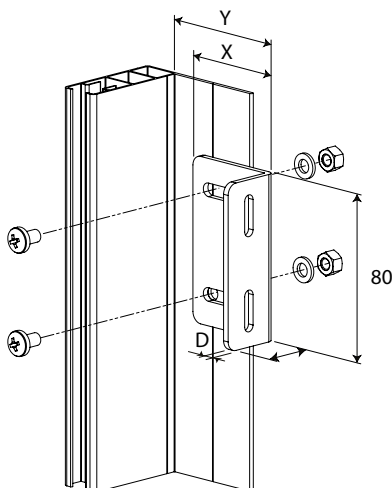
Drilling on the front:



Guide rails for drilled openings on the front side:

Drilling	829/839	820/830	828/838	855/865	856/866
Side face	x	x	-	x	x

Distance support for guide rail 828 and 828 and 838:



X × H × D	X	Y	drawing number
50 × 30 × 3	50	50–65	6-014549-0000
60 × 30 × 3	60	60–75	6-014550-0000
100 × 30 × 3	100	100–115	6-014552-0000
130 × 30 × 3	130	130–145	6-014542-0000

SCREEN HR7 and HR8-ZIP

Assembly

Based on the installation situation, there are several ways the screen can be installed:

Method 1. Affix the box using the mounting brackets, then slide the guide rails onto the console pivot and secure the guide rails with screws.

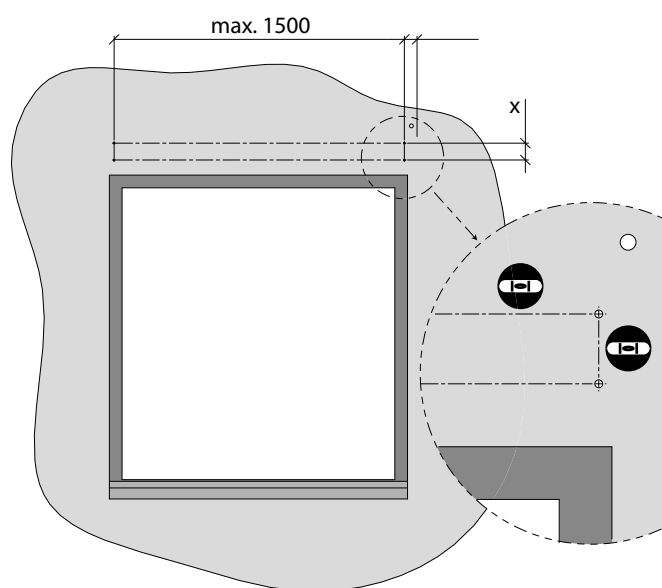
Method 2. Place the complete box / guide rail assembly in or against the window opening and screw them in place.

Method 3. Screw the guide rails in place. Then push the box onto the guide rails and secure it in place.

METHOD 1

Affix the box using the mounting brackets, then slide the guide rails onto the console pivot and secure the guide rails with screws

Step 1: Drilling holes for the mounting brackets



Box type	X
70	37
90	53
110	73
150	114



spirit level

Place the mounting brackets against the mounting surface. Use the upper holes for mounting against a ceiling and the rear holes for mounting against a wall.

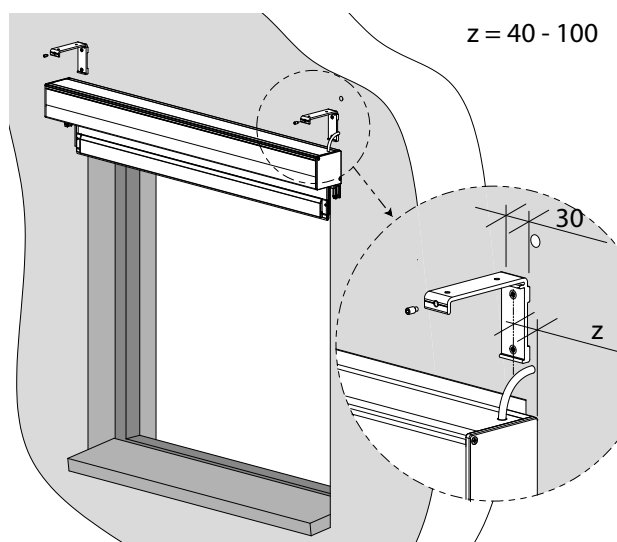
The box must be perfectly level, so make sure the brackets are aligned properly. Use a hose level and a plumb line or another suitable tool for this task.

Step 2: Installing the box on the mounting brackets

One mounting bracket per console, as close as possible to the console.

Any additional brackets are mounted in the middle of the box, evenly spaced across its width, and are intended to prevent wider boxes from sagging.

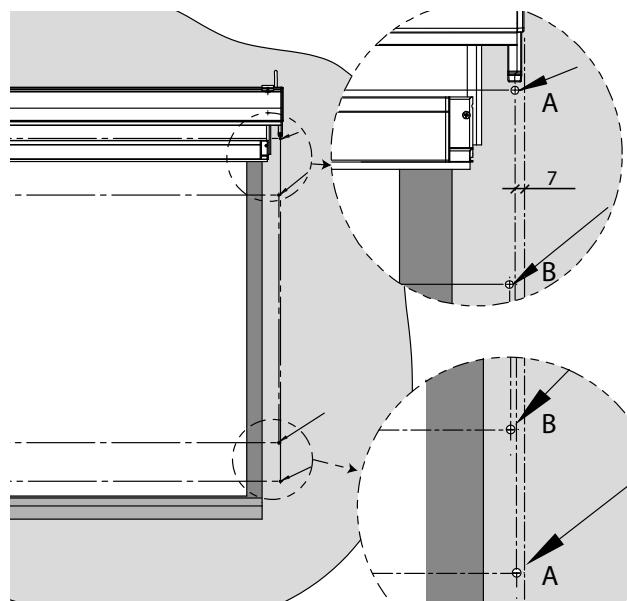
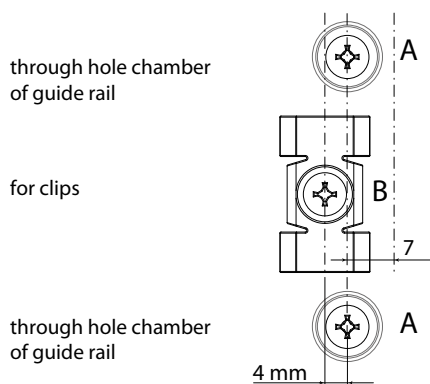
- (1) Push the box upwards into the mounting brackets.
- (2) Feed the motor cable through to the inside. Then push the box into the brackets so the slots in the back of the box engage with the L-profilings.
- (3) Next tighten the Allen screws of each bracket. The screws should grip in the slots at the top of the front of the box.



Step 3: Drilling the mounting holes for the guide rails

Mark the holes to be drilled on the wall or on the mounting surface. Use the pre-drilled lateral guide rails for this procedure. Drill the holes in the wall ($\varnothing 6$ mm) or in the window frame ($\varnothing 3.2$ mm).

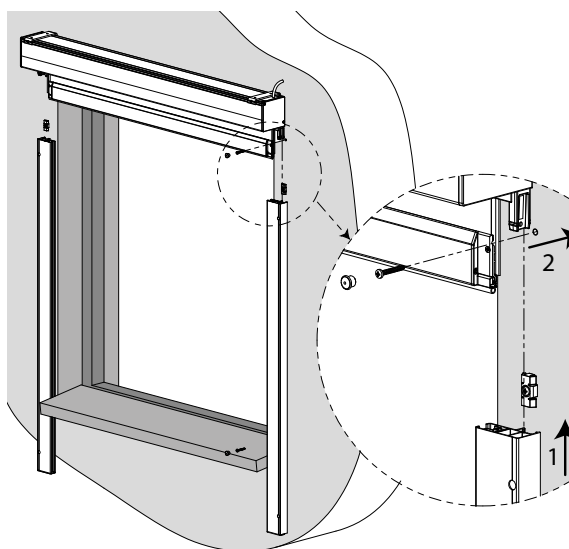
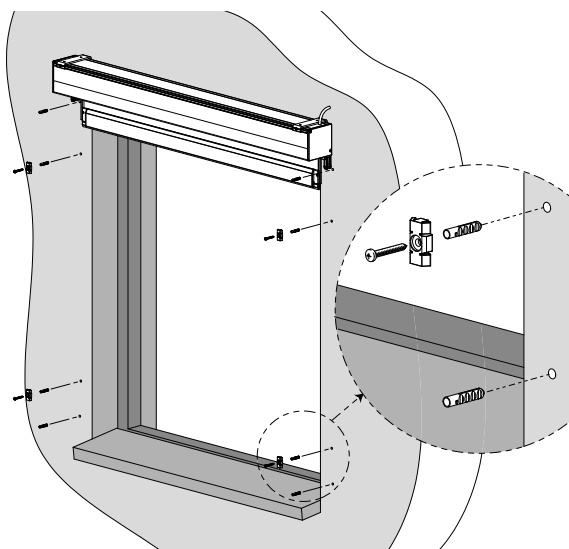
For installation to the wall, insert S6 plugs into the holes.



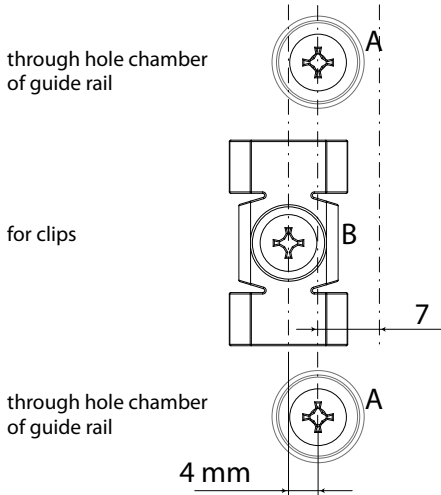
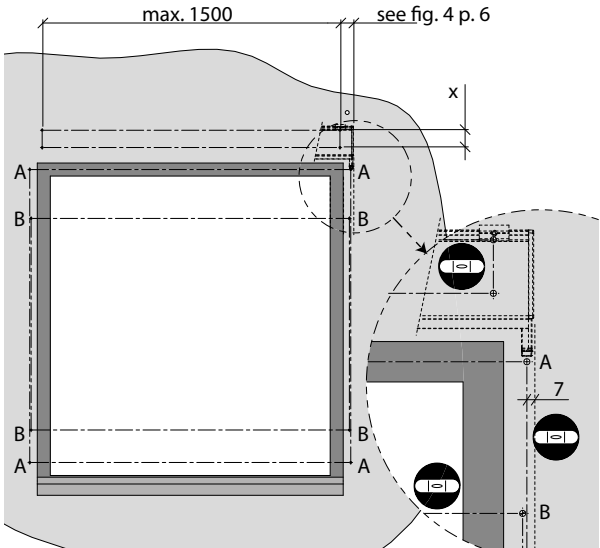
Step 4: Installing the guide rails

(1) Affix the clips to the mounting surface. Next slide the guide rails onto the guide rail pivots of the side consoles. Make sure the sliding blocks of the bottom slat enter the guide rail slots correctly and the zipper on the fabric slides into the U-shaped part of the plastic guide profile.

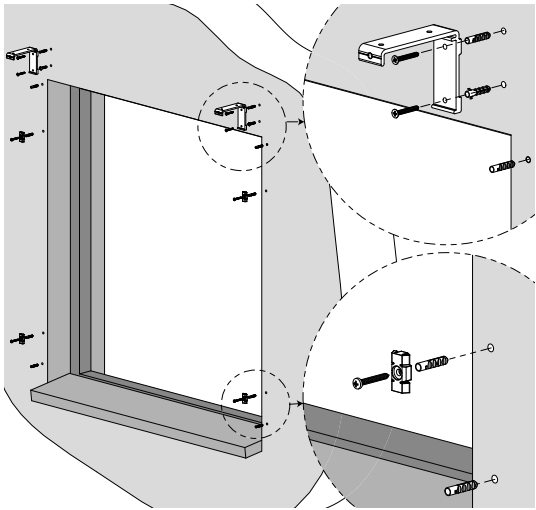
(2) Screw the guide rails to the mounting surface.



METHOD 2:
Place the complete box / guide rail assembly in or against the window opening and screw them in place.



Box type	X
70	37
90	53
110	73
150	114



Step 1: Drilling holes for the mounting brackets and guide rails

Mark the holes to be drilled on the wall or on the mounting surface (use the pre-drilled lateral guide rails for this purpose).

(If supplied, affix the box mounting bracket(s) first.)

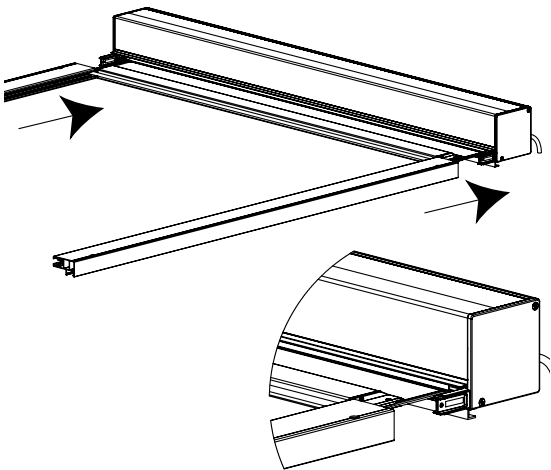
Drill the holes in the wall (Ø6 mm) or in the window frame (Ø3.2 mm).

For installation to the wall, insert S6 plugs into the holes.

Affix the clips to the mounting surface.



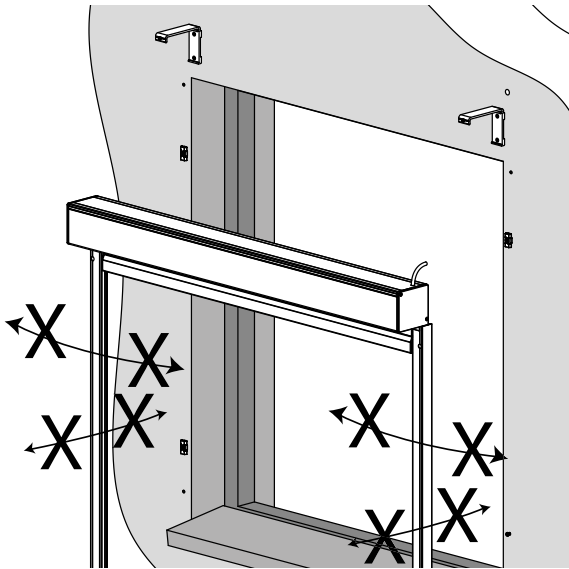
spirit level



Step 2: Sliding the guide rails over the console pivots on the bottom of the box

Place the screen box on the cardboard packaging (take care not to damage the paint finish).

Next slide the pre-drilled guide rails onto the console pivots on each of the side consoles.



Make sure the sliding blocks of the bottom slat enter the guide rail slots correctly and the zipper on the fabric slides into the U-shaped part of the plastic guide profile.

Step 3: Positioning the box and the guide rails

Now lift the screen box with the guide rails. Do this with at least two persons. Support the box and the guide rails at the same time.

Place the complete screen assembly in or against the window opening.

For motorised operation, feed the motor cable inside through the previously drilled lead-through.

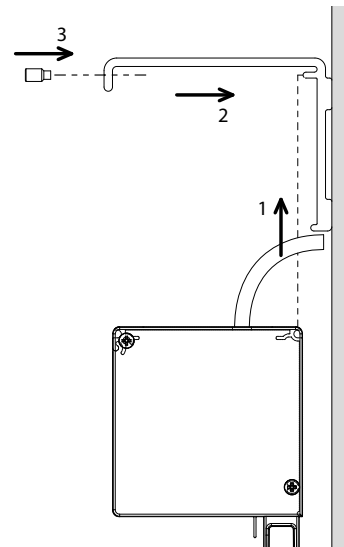


Attention! Be careful not to break off the pivots of the box by moving the guide rails too much forwards, backwards or sideways.

Step 4: Attaching the box to the mounting brackets and screwing the guide rails in place

- (1) Push the box upwards into the mounting brackets.
- (2) Feed the motor cable through to the inside. Then push the box into the brackets so the slots in the back of the box engage with the L-profilings.
- (3) Next tighten the Allen screws of each bracket. The screws should grip in the slots at the top of the front of the box.

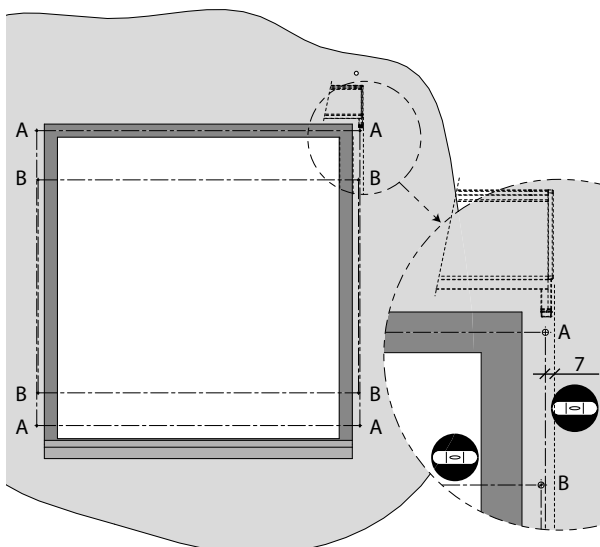
Screw the guide rails to the mounting surface.



Make sure the box is always securely mounted.

METHOD 3:

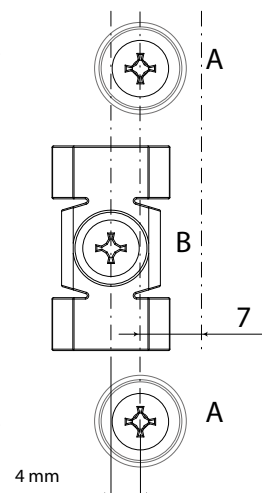
Screwing the guide rails in place and then pushing the box onto the guide rails (only for screens without mounting brackets)

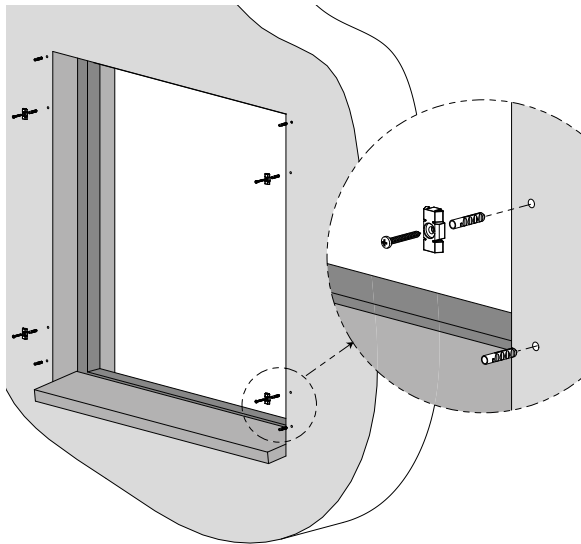


through hole chamber of guide rail

for clips

through hole chamber of guide rail





Step 1: Drilling mounting holes and affixing the clips

Mark the holes to be drilled on the wall or on the mounting surface (use the pre-drilled lateral guide rails for this purpose).

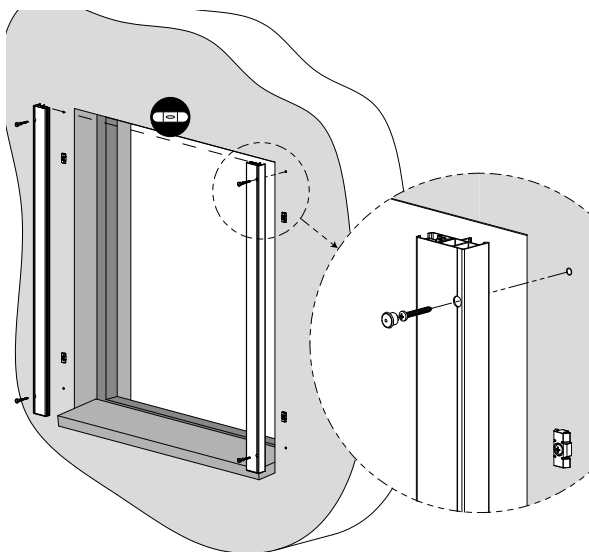
Drill the holes in the wall (Ø6 mm) or in the window frame (Ø3.2 mm), no more than 500 mm apart.

For installation to the wall, insert S6 plugs into the holes.

Affix the clips to the mounting surface.

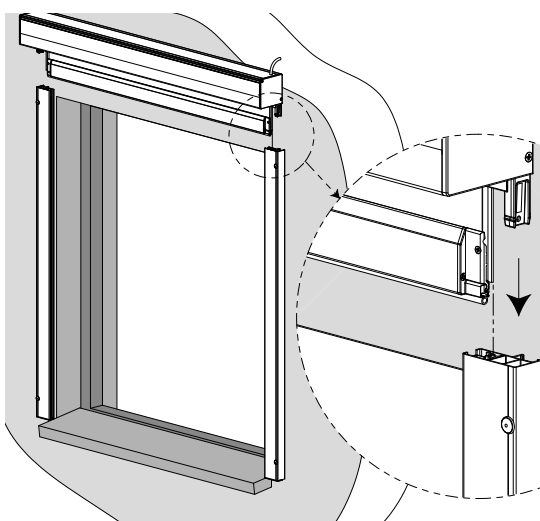


spirit level



Step 2: Mounting the guide rails.

Screw the guide rails to the mounting surface. Make sure the top of the guide rails are positioned at exactly the same height and are level.



Step 3: Sliding the screen box onto the guide rails

Lift the box and feed the motor cable to the inside.

Slide the screen box so the console pivots fit into the corresponding hole chambers of the lateral guide rails.

Make sure the sliding blocks of the bottom slat enter the guide rail slots correctly and the zipper on the fabric slides into U-shaped part of the plastic guide profile.

After the installation of the roller shutter it is necessary to remove the side-wall remove the cable clamp.



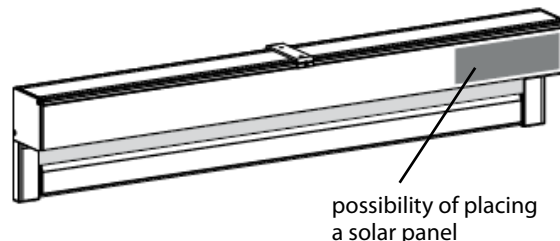
Make sure the box is always securely mounted.

SCREEN HR8-ZIP SOLAR

Screen blind with exterior solar power supply is a unique and fully automated blind that is wirelessly controlled and has zero power consumption. This blind works on the principle of the so-called photovoltaic phenomenon – i.e. the conversion of solar radiation into electricity. This is the most environmentally friendly and energy-saving roller shutter solution. The drive is powered by a long-life battery recharged by a solar panel that works in all weather conditions. Maximum area 7.5 m². One solar unit is adapted for only one screen roller blind.

Parameters of this product:

- Box design angular only
- Pipe ø 55 mm
- Dimensions of the solar panel: see page 72
- Standard - internal battery for box 150 only
- Optional – use of external battery for box 90 and 110
- The solar panel is always on the motor side
- Installation of the B-BE type (in the block) is not possible
- Possibility of multiple blinds in a common box, provided that each roller shutter will have its own motor and external battery.



Parts of the solar set:

- *Motor
- Solar panel Oximo WireFree resin 3.2 W Solar panel
- Oximo WireFree batteries, NiMH 12V, 2.2 Ah
- Oximo WireFree Wiring Harness Adapter Cable

* Motor

itemname	business name	drawingnumber
SOLAR KIT „SUNEA 40 io“ 6/18	X.1241890	6-018887-0006
SOLAR KIT „SUNEA 40 io“ 10/12	X.1241891	6-018887-0010
SOLAR KIT „SUNEA 40“ 6/18 RTS DC	X.1241478	6-017545-0006
SOLAR KIT „SUNEA 40“ 10/12 RTS DC	X.1241479	6-017545-0010

Oximo WireFree Battery

- Battery Type NiMH
- Size 420mm x ø 25 mm
- IPx4 protection class
- Charging time max. 3.5 hours

Oximo WireFree solar panel

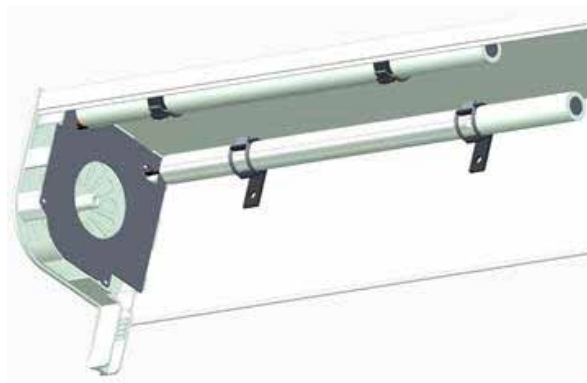
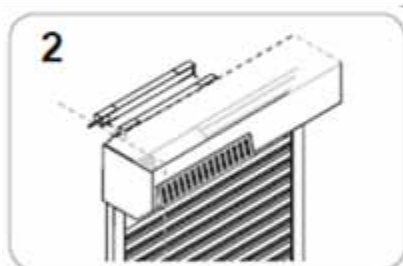
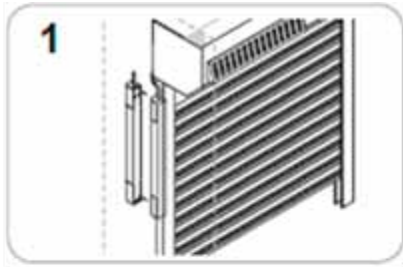
- Material laminated black fiberglass with transparent epoxy resin with photovoltaic technology
- Input power 3.2 W
- Dimensions 470 x 60 x 6 mm
- Protection class X4 (cells sensitive to light: IP67)
- Supplies energy even when the sky is cloudy

Installation:

The battery can be installed in the room, but can also be placed from the outside in a roller box, but provided that it is not exposed to direct sunlight and rain.

The working temperature is from -20°C to $+70^{\circ}\text{C}$. The IP protection class is X4, which means that the product is splash-proof at all angles.

The Oximo WireFree™ battery must be installed so that it is protected from the weather. For example, it can be mounted behind the guide rail (1), behind the roller box or underneath the box (2), inside the roller box (3), under the window frame or in the corner of the inner wall. Attention! The battery must be accessible in any position of the roller shutter so that the PROG button is always accessible for maintenance and recharging with external charger or for replacement. Do not seal the battery in an airtight case. If the battery is installed in a position other than horizontal, the power cord should always point upwards.



Example of placing the battery inside the box.

The battery located inside the box is only valid for size 150. For other boxes, the battery is located outside the box.

SCREEN HR10-ZIP



- ▲ The box integrated in the cavity wall in the front of the window,
- ▲ no perforation of the building shell,
- ▲ fully integrated bottom lath in retracted position,
- ▲ ideal for passive construction and energy-neutral living,
- ▲ high wind resistance (wind class 3).

ISOTRA *Quality*

SCREEN HR10-ZIP (2-01450-0000)

Position	item name	business name	drawing number
1	Lower Profile - HR10-ZIP	ZPH182	6-015158-0000
1	Winding Roller HR10-ZIP Al Ø 78x1,25mm - 4,5m	ZPH184	6-015160-0000
1	Winding Roller HR10-ZIP Al Ø 55mm - 6m	ZPH123	6-014027-0000
1	Winding Roller HR7/HR8-ZIP Al Ø 67mm - 6m	ZPH124	6-013982-0000
1	Roller tube dia. 85x1, 20 mm - 6 m	ZPA020	6-016860-0000
1	Plastic Bar 6,0 mm PVC	ZP0097/0006	6-016911-0006
1	Lower Slat Sealing	ZPH116	6-013974-0000
1	Lower Slat Weight Profile 20x20mm - Fe/Zn	ZPH202	6-015193-0000
1	Plastic Bar 3,0 mm	ZP0097/0003	6-016911-0003
10	Side Piece - left	ZPH175	6-015131-0000
10	Side Piece - right	ZPH174	6-015130-0000
10	BOX	ZPH176	6-015152-0000
10	BOX Profile - lower	ZPH177	6-015153-0000
10	Sliding Module for Side Piece - left - black	ZPH185	6-015161-9004
10	Angular Profile Al - 20 x 20 x 2 mm*	ZPH195	6-015179-0000
10	Sliding Module for Side Piece - right - black	ZPH186	6-015162-9004
10	Mounting Base Plate	ZPH187	6-015163-0000
10	Self-adhesive Profile 1800 mm	ZPH197	6-015184-0000
10	Cable Holder - self-adhesive	ZPH196	6-015183-0000
20 - 22	Fabric Segmented for Screen		see Sampler of Screen fabrics
220	Lower Slat Ending Safety Lock - RIGHT - BLACK	ZPH191	6-015175-9004
230	Lower Slat Ending Safety Lock - LEFT - BLACK	ZPH192	6-015176-9004
240	Lower Slat Ending - LEFT - BLACK	ZPH193	6-015177-9004
250	Lower Slat Ending - RIGHT - BLACK	ZPH194	6-015178-9004
320	Roller Cover Ø 78mm	ZPH199	6-015188-0000
320	Roller Cover Ø 67mm	ZPH139	6-013984-0000
320	Roller Cover Ø 55mm	ZPH136	6-014238-0000
320	Roller Cover Ø 67mm with 4-sided opening 12	ZPH141	6-013983-0000
320	End piece of shaft dia. 85 mm - through	ZPA008/1	3-04003-9004
320	Roller Cover Ø 55mm with 4-sided opening 12	ZPH138	6-014243-0000
331	Insert for shaft end piece - dia. 50 mm	ZPA017	3-03486-9004
331	Roller Cover Attachment diameter 78mm	ZPH200	6-015189-0000
340	Roller Cover Peg - 12mm Fe/Zn	ZPH129	6-013985-0000
350	Motors (SOMFY, BECKER) SCREEN		see Motors, page 105
350	Carrier LT60 HI - PRO Ø 78mm	MRH 119	6-013868-0000
350	Carrier LT50 HI - Ø 65mm	ZPH160	6-013980-0000
350	Carrier LT50 HI - Ø 85mm	ZPH161	6-014326-0000
350	Carrier LS40 - Ø 50mm	ZPH163	6-014328-0000
360	Guiding Line- Slat HR10-ZIP - left		2-01452-PU11L
360	Click-profile for VL - HR10-ZIP**	ZPH180	6-015156-0000
360	Ending Piece for Click Profile HR10-ZIP	ZPH201	6-015190-0000
360	Guiding Slat Ending 1120 - HR10-ZIP - LEFT	ZPH188	6-015171-0000
360	Guiding Slat Profile 1040 for HR10-ZIP	ZPH206	6-015203-0000
360	Guiding Slat Profile 1040 front part	ZPH207	6-015204-0000
360	Ending Piece VL 1040 - HR10-ZIP - LEFT/ RIGHT	ZPH208	6-015205-0000
370	Guiding Line - Slat HR10-ZIP - right		2-01452-PU11P
370	Guiding Slat Profile 1120 Cap	ZPH178	6-015154-0000
370	Box Cover Clamp - black	ZPH179	6-015155-9004
370	Guiding Slat Profile 1120 Cap	ZPH181	6-015157-0000
370	Guiding Slat Spring Zip	ZPH147/1	7-303662-0000
370	Guiding Slat for Zip	ZPH145	6-014155-0000
370	Ending Piece VL 1120 - right	ZPH189	6-015172-0000
370	Profile - VL for Zip Holder - black	ZPH198	6-015185-0000

*For guide rails type 1120 and 1040, the BOX is supplied with no square.

**For guide rails type 1120 with clip-profile, and 1040 with clip-profile, the BOX is supplied with square.

MOTORS SCREEN HR10-ZIP (2-01450-0000)

Position	item name	business name	drawing number
101	Motor ALTUS 50 RTS 10/17	MR 091/10	6-011170-0010
102	Motor ALTUS 50 RTS 15/17	MR 091/15	6-011170-0015
103	Motor ALTUS 50 RTS 20/17	MR 091/20	6-011170-0020
201	Motor Sunea 50 Screen io 10/17	ZP0085	6-012559-1017
202	Motor Sunea 50 Screen io 15/17	ZP0086	6-012559-1517
203	Motor Sunea 50 Screen io 20/17	ZP0092/20	6-012559-2017
301	Motor MAESTRIA +50 IO 10/17 VVF5M	ZP0085/1	6-012538-1017
302	Motor MAESTRIA +50 IO 15/17 VVF5M	ZP0086/1	6-012538-1517
303	Motor MAESTRIA +50 IO 25/17 VVF5M	ZP0087/1	6-012538-2517
401	Motor MAESTRIA +50 WT 10/17 VVF3M	ZP0093/10	6-015258-1017
402	Motor MAESTRIA +50 WT 15/17 VVF3M	ZP0093/15	6-015258-1517
403	Motor MAESTRIA +50 WT 25/17 VVF3M	ZP0093/25	6-015258-2517
501	Motor LS 40 9/16	PR0125	6-002624-0009
601	Motor Sunea 40 Screen io 09/16 5m	ZP0091/16	6-014483-0009

Motors (Becker) Screen HR10-ZIP (6-015258 / 6-012538 / 6-002624 / 6-014483)

Position	item name	business name	drawing number
510	Motor BECKER 50 E 08/17	X.2010/1301590	6-017861-0008
510	Motor BECKER 50 E 12/17	X.2010/1301600	6-017861-0012
510	Motor BECKER 50 E 20/17	X.2010/1301450	6-017861-0020
500	Motor BECKER 50 Screen C 08/17 PLUS	X.2010/1302170	6-018761-0008
500	Motor BECKER 50 Screen C 12/17 PLUS	X.2010/1302180	6-018761-0012
500	Motor BECKER 50 Screen C 20/17 PLUS	X.2020/1301860	6-018761-0020

*Note: E=electronic motor / C=radio motor

Screen HR10-ZIP

position	item name	business name	drawing number
600	Motor ISOTRA BASIC, 10Nm/17,with integrated receiver, SC zip	X.AM45 10/17S	6-019173-0010
600	Motor ISOTRA BASIC, 15Nm/17,with integrated receiver, SC zip	X.AM45 15/17S	6-019173-0015
600	Motor ISOTRA BASIC, 20Nm/17, with integrated receiver, SC zip	X.AM45 20/17S	6-019173-0020

Motors (Geiger) Screen HR10-ZIP (2-00530-0002)

position	item name	business name	drawing number
10	Motor Geiger Solid Line ZIP AIR 6/16	PR0790/06	6-015903-0006
11	Motor Geiger Solid Line ZIP AIR 10/16	PR0790/10	6-015903-0010
12	Motor Geiger Solid Line ZIP AIR 20/16	PR0790/20	6-015903-0020
70	Carrier SOLID LINE AIR - dia. 95	ZPA015/95	6-015904-0095
70	Carrier SOLID LINE AIR - dia. 78	ZPA015/78	6-015904-0078
70	Carrier SOLID LINE AIR - dia. 85	ZPA015/85	6-015904-0085
200	Cable gromment RUBBER dia.7	ZPH150	6-014339-0000
320	Screw 4,8x19 DIN 7982 C-H A2 countersunk, Philips head		6-013928-0000
330	Cable collar 300x4,8- BLACK	ZPH168	6-014438-0000
340	Screw 4,8x19 DIN 7982 C-H A2 countersunk, Philips head		6-014439-0000
350	Bolt M6x10 DIN 965-H, A2, countersunk, Philips head		6-014497-0000
400	Bearing plate - flat	ZPA005	3-03484-9004
410	Bearing plate with clip	ZPA006	3-03485-9004

Weight

For an integral screen with a width of 3.0 metres and an height of 1.5 metres, the total weight is approx. 34.5 kg.

The weight of the box base on Ø 78 mm aluminium fabric roll, motor and Satiné fabric:

BOX	
LENGTH	WEIGHT
1,0 m	±13 kg
1,5 m	±16 kg
2,0 m	±20 kg
2,5 m	±23 kg
3,0 m	±27 kg
3,5 m	±30 kg
4,0 m	±34 kg
4,5 m	±37 kg

The weight of two standard 1120 lateral guides:

2 GUIDE RAILS	
LENGTH	WEIGHT
0,5 m	±2,5 kg
1,0 m	±5 kg
1,5 m	±7,5 kg
2,0 m	±10 kg
2,5 m	±12,5 kg
3,0 m	±15 kg
3,5 m	±17,5 kg
4,0 m	±20 kg
4,5 m	±22,5 kg

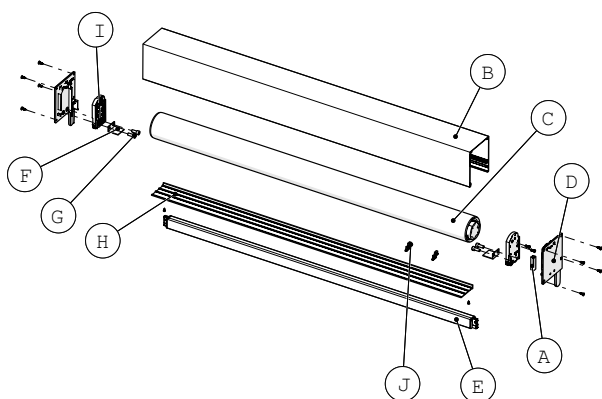
Technical Specification

SCREEN BOX (2-01451-PU11)

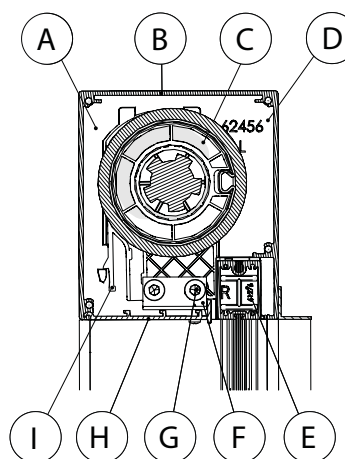
The outside frame of the screen box is made up of 2 parts of extruded aluminium: the U-shaped box profile (B) and the hinged base plate (H). The sides are sealed with side consoles (D), in which a removable fabric roll (C) can be placed using the insert modules (I). The base plate touchers (F), together with the insert modules, are secured to the side consoles using bolts (G). Then the sides of the base plate can be bolted to these touchers.

There is a cable duct (A) on the side console and a cable clamp (J) on the base plate to keep the motor cable in place.

There is one type of box available for the HR10-ZIP integral screen. The dimensions of the box cross-section are 122 mm x 140 mm.



- (A) Cable duct
- (B) Box profile
- (C) Fabric roll
- (D) Side console
- (E) Bottom lath
- (F) Base plate toucher



- (G) Bolt M8 x 18
- (H) Base plate
- (I) Insert module
- (J) Cable clamp



Make sure that the base plate of the screen box and the hinged section of the guide rail (see page 8 under 8. guide rails) can always be opened, so that the mechanical parts inside are accessible at all times. If this rule is not respected, ISOTRA cannot be held responsible for the cost of demolition work or any paint work or wallpapering!

Note: If the box is installed the other way round, it should be possible to open the window inwards. In the event of a technical fault when the shutter is down, you must access the box along the inside.

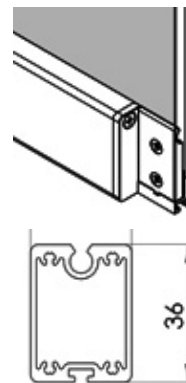
Bottom rail (6-015158-0000)

The bottom rail consists of a two-piece, left and right sliding block and an extruded aluminium profile with a powder-coated finish.

The profile has:

- A groove for screw-free attachment of the fabric using a canvas rod of Ø 3 mm
- A chamber for a strengthening strip
- A slot at the bottom to insert a rubber stopper (there is also the option to select a brush strip)

The two-piece sliding block ensures the fabric is correctly tightened.

**Fabric roll**

Depending on the width and the type of fabric, either the Ø 55 mm extruded aluminium roll or the Ø 78 mm roll made of galvanised steel (see table).

The fabric rolls have a groove for attaching the fabric, using a canvas rod of Ø 4 mm for the Ø 55 mm roll and a canvas rod of Ø 6 mm for the Ø 78 mm roll.

The fabric rolls have a groove for attaching the fabric, using a canvas rod of Ø 4 mm for the Ø 55 mm roll and a canvas rod of Ø 6 mm for the Ø 78 mm roll.

Fabric roll	Ø55 mm*	Ø78 mm
	6-014027-0000	6-015160-0000
Material	aluminium	galvanized steel
Rod	Ø4 mm	Ø6 mm grooved
Total width of screen Soltis 92	655–815 mm	815–4500 mm
Satiné	655–815 mm	815–4500 mm
Blackout	655–815 mm	815–4500 mm

*As standard there is delivered the motor LS40, Sunea 40 io or Becker ø 40. For RTS control it is necessary to order IS40 motor with shutter in the wall.

Side caps (6-015130-0000, 6-015131-0000)

The side caps consist of two separate parts:

- A fixed side console (left, right)
- An insert module (left, right)

Side cap left/right (6-015130-0000/6-015131-0000)

Dimension: 122 x 140 mm

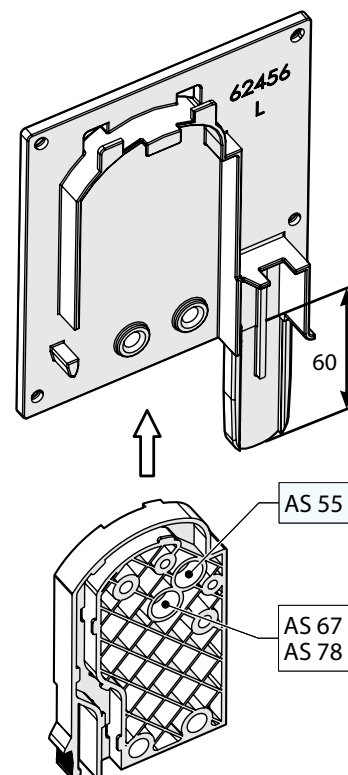
The aluminium side consoles have an integral pivot that fits in the base section of the guide rail. On the inside there are vertical ridges, one of which the bottom lath fits into and one for sliding the insert module into. The insert module can click securely into the lip.

Insert module for side cap left/right (6-015161-9004/6-015162-9004)

Dimension: 66,5 x 115 mm

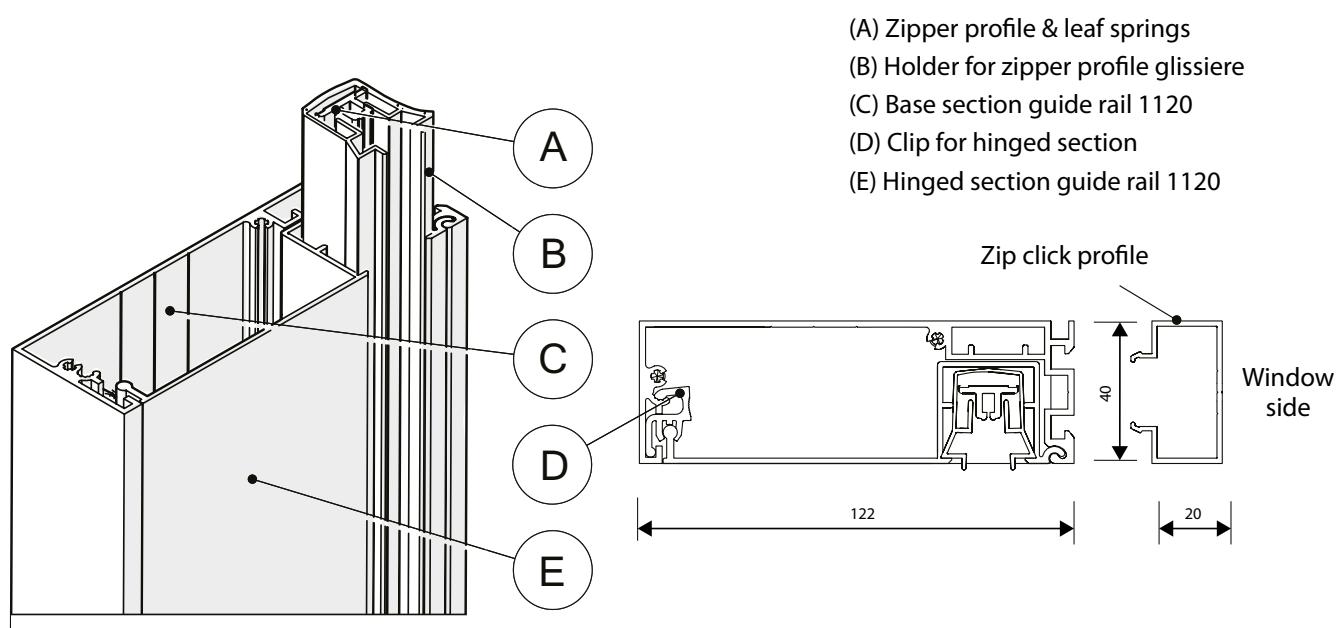
The insert modules are made of polyamide reinforced with glass fibre. They have a number of holes for securing the motor on the motor side, or a hole for a fabric roll on the opposite side. The corresponding holes must be used for each fabric roll diameter. By pressing the click stub inwards, the insert module is released from the side console.

There are two holes in the bottom to secure the base plate toucher to the side consoles.



Guide rails

Guide rail (6-015157)



The complete wide 1120 guide rails are made up of a base section (C), a hinged section (E) and a holder (B) with zipper profile (A), and at the bottom of the base section of each guide rail an aluminium end cap. On the window-side, the hinged section hinges into the base section of the guide rail and on the outside the hinged section clicks into the plastic clamps (D) that can be found on the base section (see figure). The holder and the zipper profile can only be inserted when the hinged section is closed. This is because the holder and the zipper profile are 35 mm longer than the guide rail and are first placed in the box and then further in the recess of the hinged section.

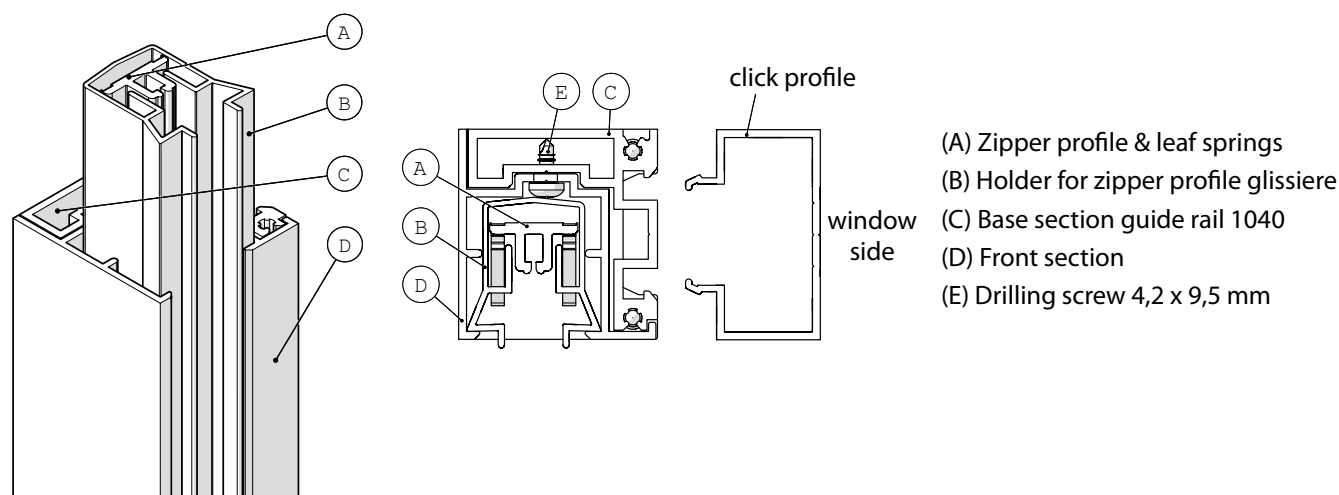
The base and hinged section are extruded aluminium profiles, both of which have a layer of powder coating. The holder and the zipper profile are both made of plastic.

If you want to fit an insect screen between the screen and the window, then adjustment click profiles need to be placed on the box and the guide rail.

If you want to fit an insect screen between the screen and the window, then adjustment click profiles need to be placed on the box and the guide rail.

If selecting option of click profile, then the clip profiles are secured to the bottom with an end cap, using these screws. The basic elements can then be clipped onto it.

The screen box is then placed on the guide rails, with the pivots in the guide rails.

Guide rail 1040 (6-015203)

The complete wide 1040 guide rails are made up of a base section (C), a front section (D) and a holder (B) with zipper profile (A), and at the bottom of the base section of each guide rail an aluminium end cap. The front section is fixed into the base section of the guide rail by the drilling screw (see figure). The holder and the zipper profile can only be inserted when the front section is fixed. This is because the holder and the zipper profile are 35 mm longer than the guide rail.

The base and front section are extruded aluminium profiles, both of which have a layer of powder coating. The holder and the zipper profile are both made of plastic.

If you want to fit an insect screen between the screen and the window, then adjustment click profiles need to be placed on the box and the guide rail.

To attach the HR10-ZIP, first the basic elements must be secured to the window frame with the necessary accuracy (see installation instructions!). A number of screws are supplied with each guide rail.

If selecting option of click profile, then the clip profiles are secured to the bottom with an end cap, using these screws. The basic elements can then be clipped onto it.

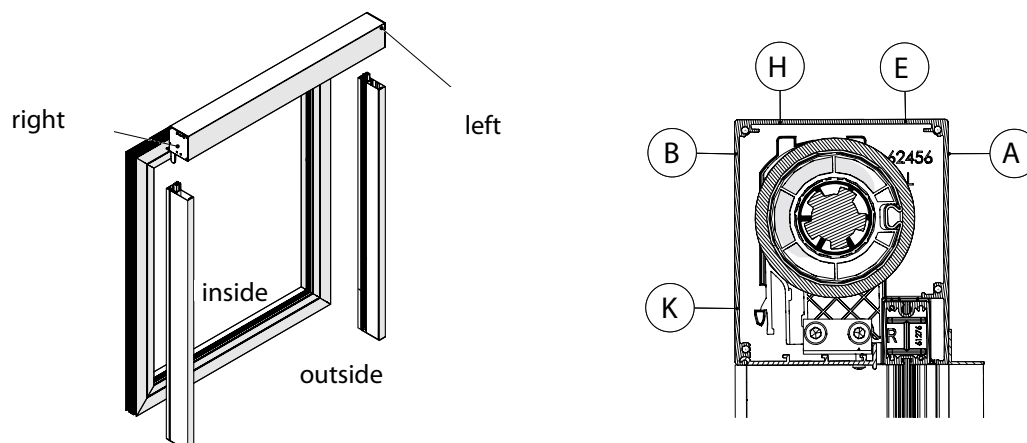
The screen box is then placed on the guide rails, with the pivots in the guide rails.

Control

The HR10-ZIP integral screen is always viewed along the INSIDE (see figure).

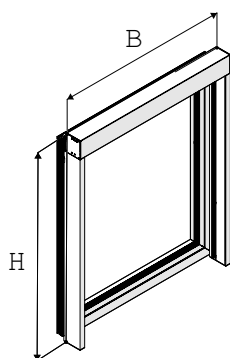
The HR10-ZIP screen is always electrically operated. The operating side can be either on the left or on the rights. On the selected operating side there is the choice to have the cable run along the lateral guide or through a hole to be drilled in the top or back of the box profile (see figure).

The motors have an execution time of approx. 4 minutes, after that they go into thermal security mode (see motor manual).



SCREEN HR10-ZIP

Measuring



The dimensions to be specified are the width B and the height H. The finished width B is equal to the width of the box, which also corresponds to the distance between the outer sides of the left and right guide rails. This width is not always the width of the window, but depends on the window finish (see figure).

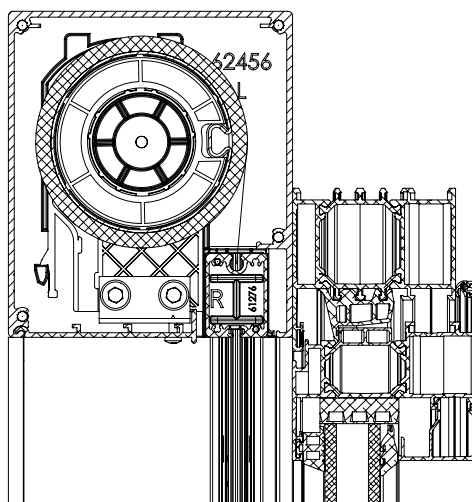
The finished height H is equal to the height including the box height and the end caps of the guide rails.

Both dimensions are expressed in mm.

More information in the separate document **Measurement and assembly instructions**.

Assembly

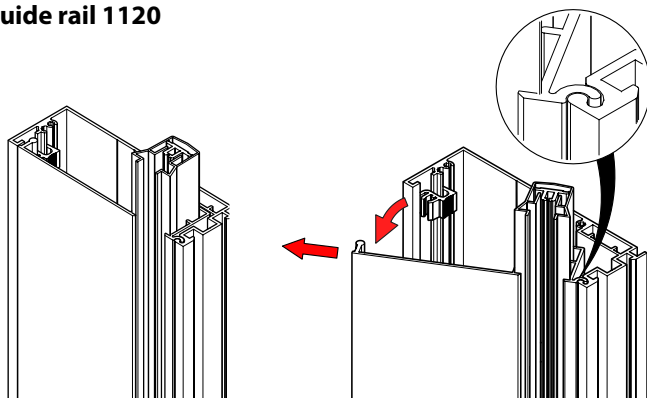
The actual assembly is in 4 steps.



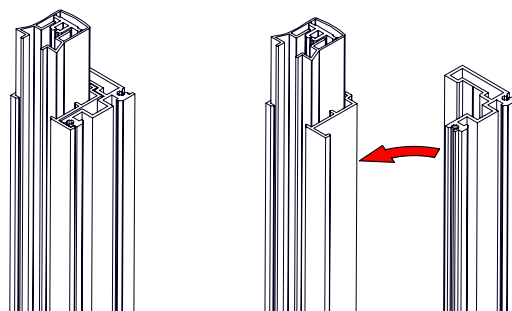
1. step

The guide rails are supplied already assembled. The cover must be removed from the base section before it is fitted on to the window. Zipper guide and sleeve can remain in the cover.

Guide rail 1120

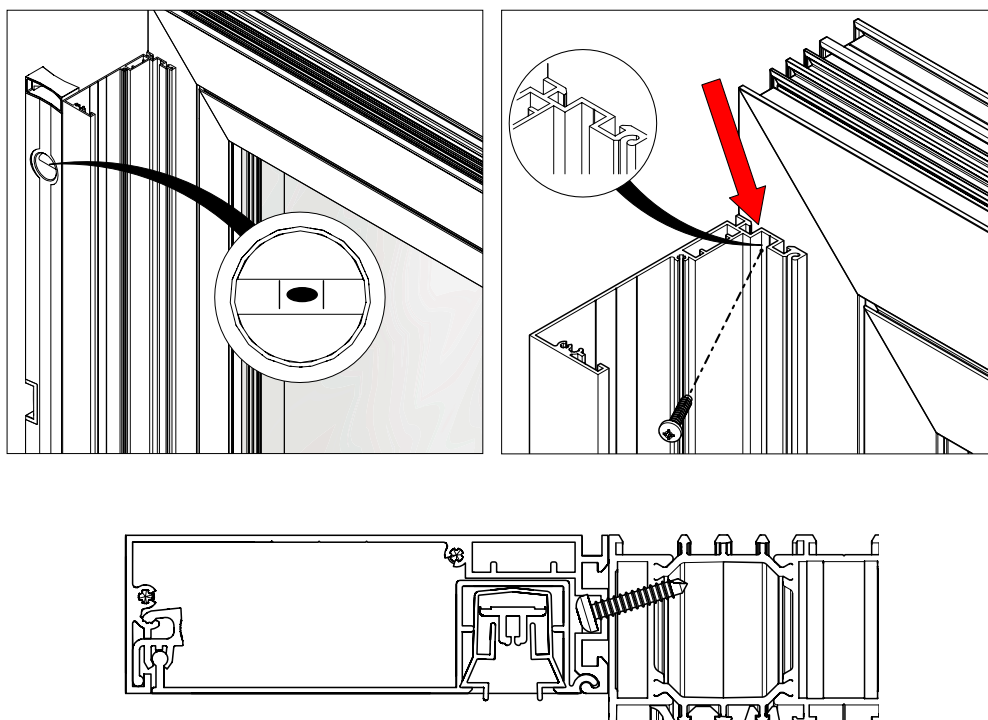
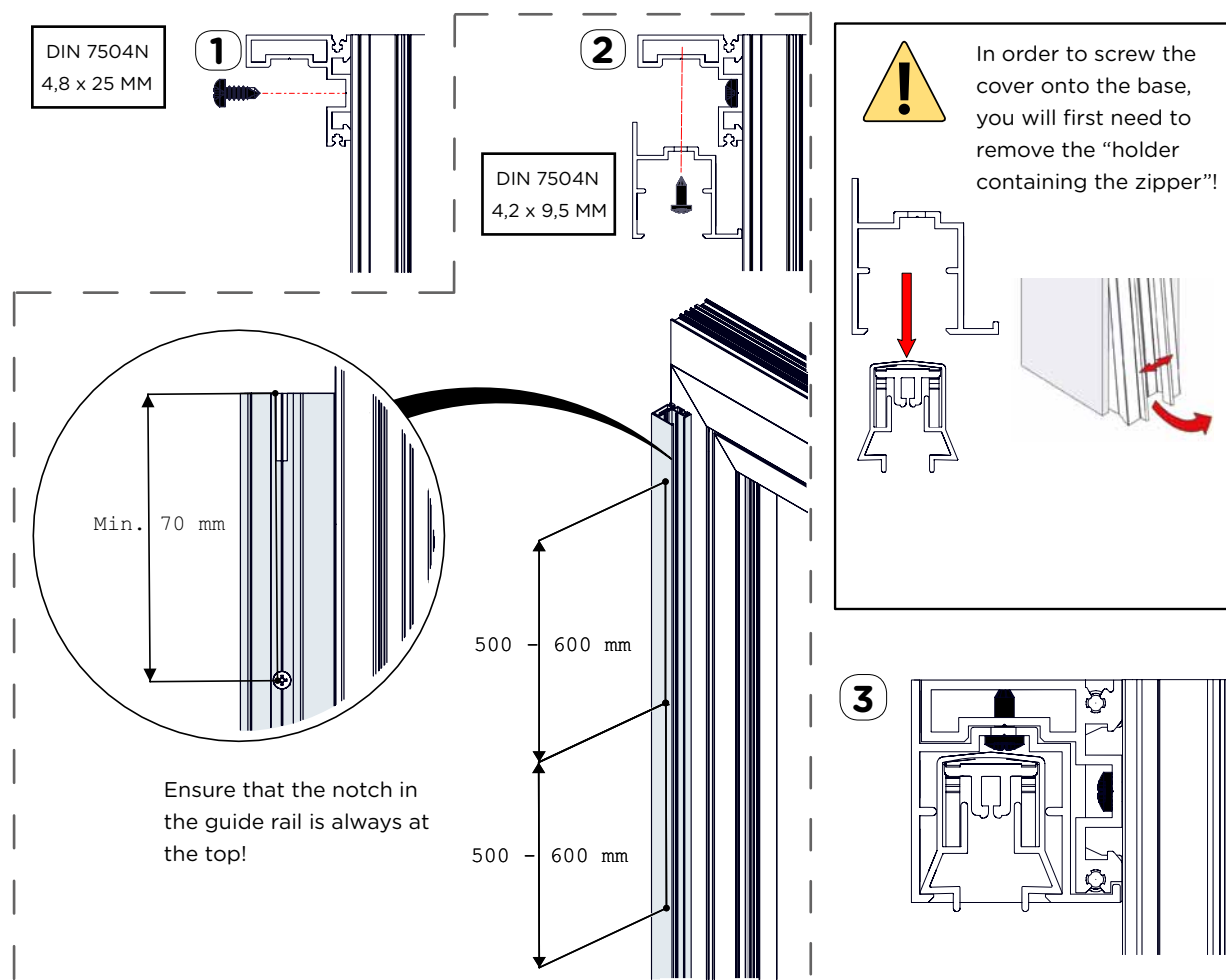


Guide rail 1040

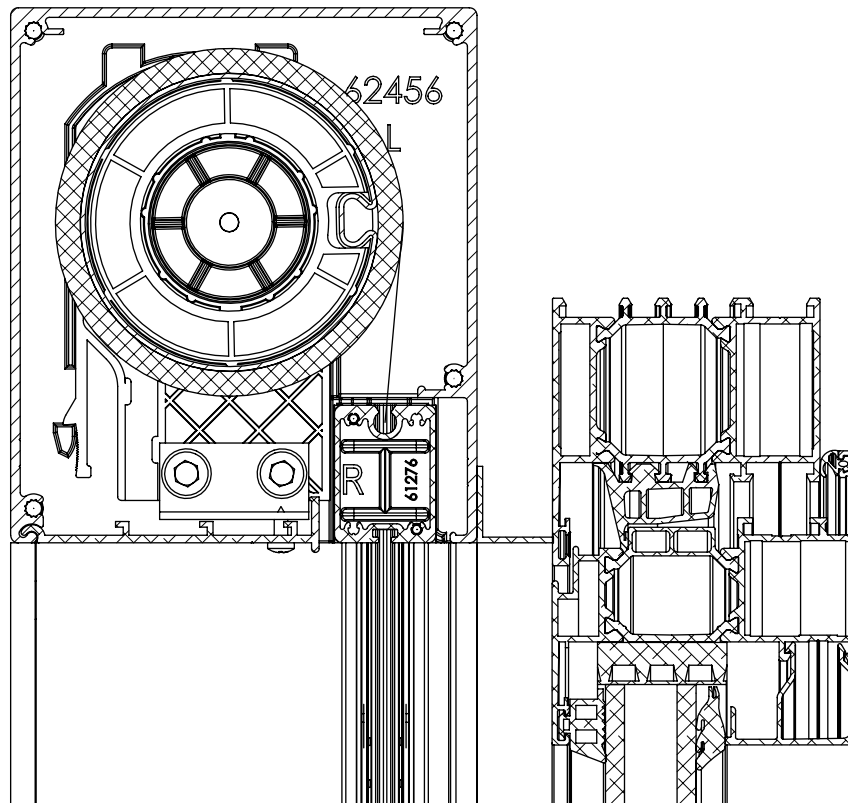


2. step

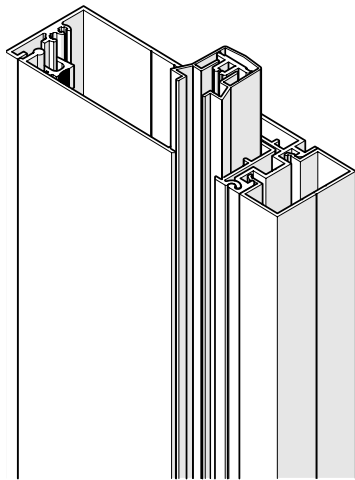
Mount the base of the guide rail against the window with the screws supplied.

Guide rail 1120**Guide rail 1040 = surface mounted guide rail 1120**

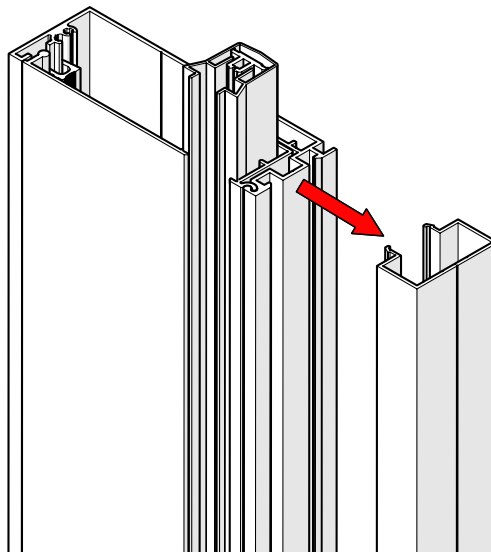
Guide rail 1120 - click profile



- The guide rails are supplied already assembled. The click profile must be removed from the base section.

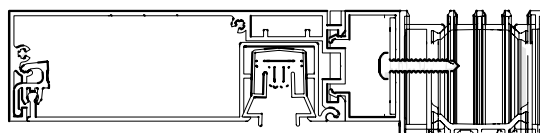
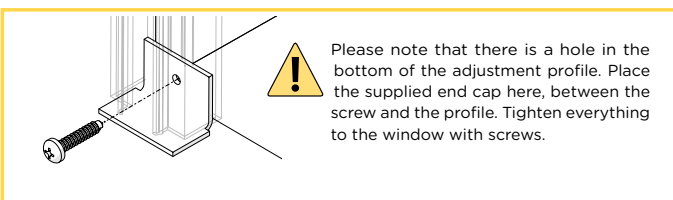
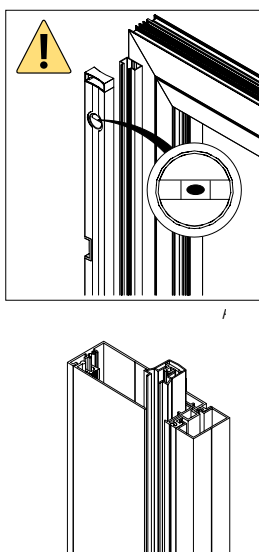
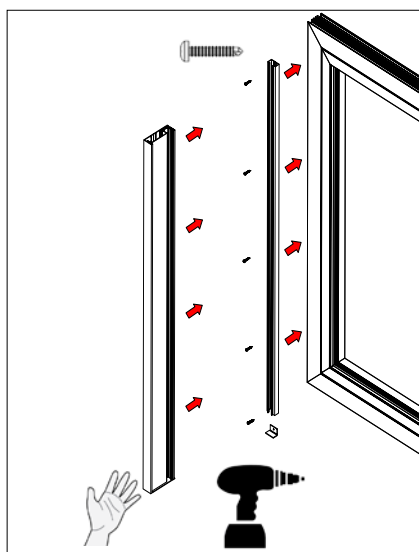


With this option (adjustment profile) the click/adjustment profile of the base must be detached before fitting it to the window.



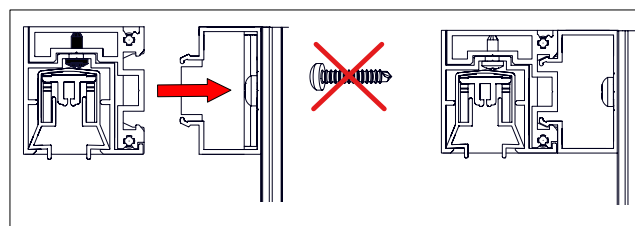
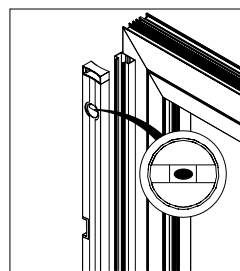
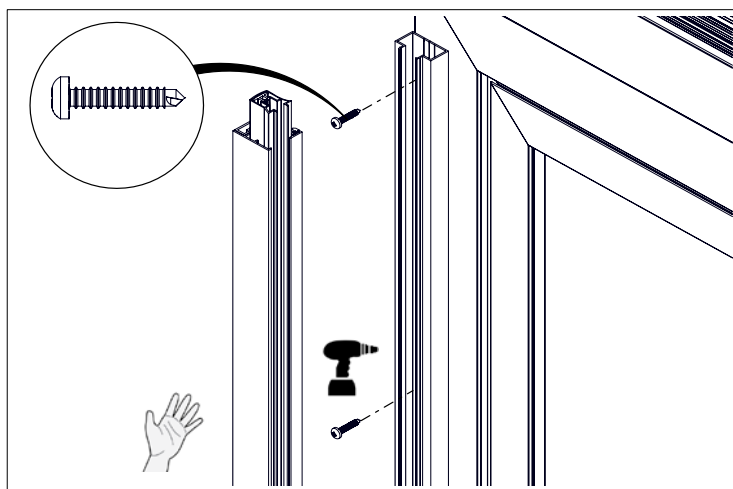


Please note that only the click profile should be screwed on to the window. The base is then fitted to the adjustment profile using a click connection.

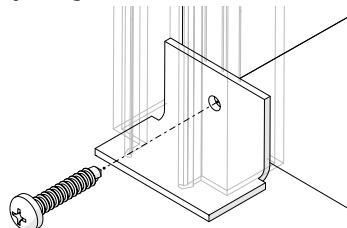


Guide rail 1040 – click profile

Use the same surface mounting of the guide rail on the window as for guide rail 1120. This guide rail is supplied with pre-assembled mounting. Clip the guide rail onto the adjustment profile (after it has been fixed to the window)!

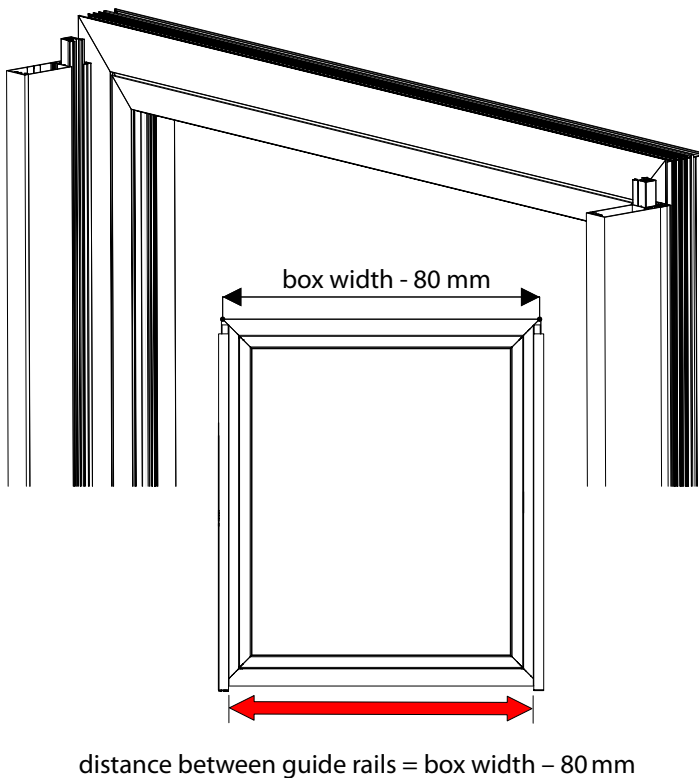


Please note that a small hole has been applied to the underside of the adjustment profile. Position the supplied end cap here, between the screw and the profile. Tighten everything to the window with screws.



3. step

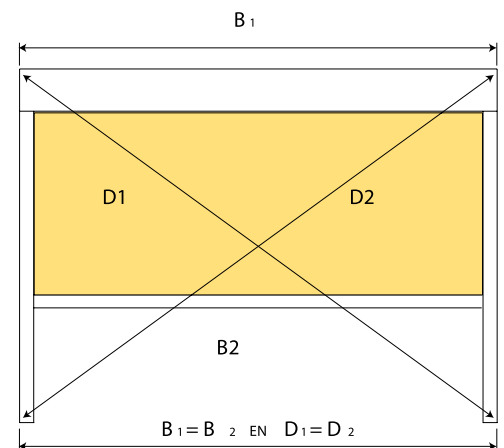
Follow the same procedure to install the other guide rail.



Make sure that the screens are always dead level and installed perfectly square. This can be checked and corrected in one way only.

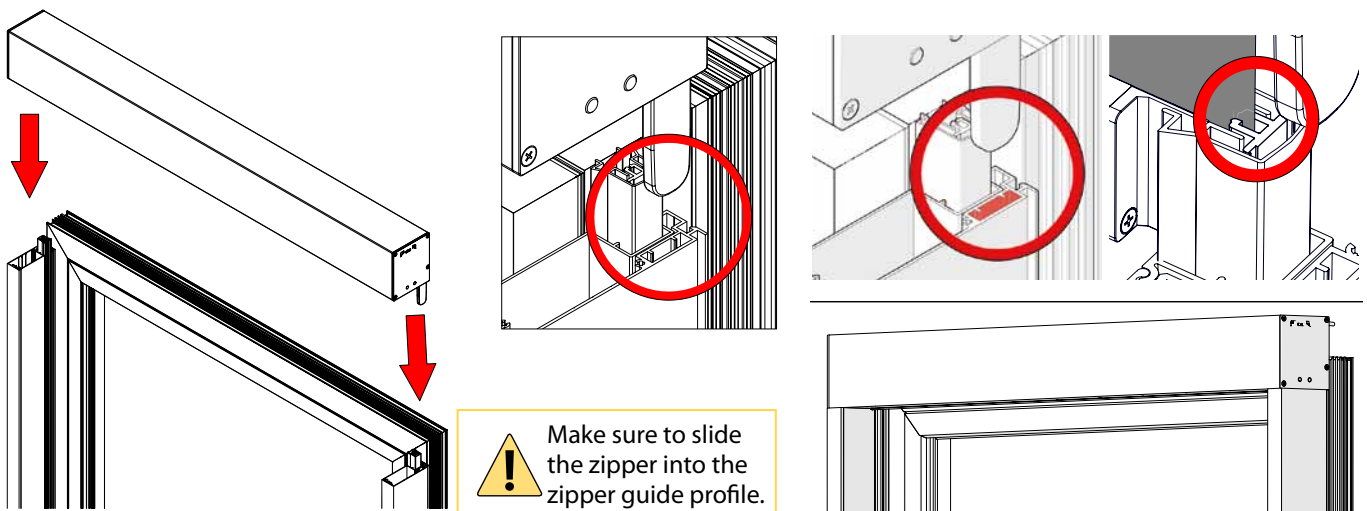
1. Check first whether the whole assembly is mounted dead level.
2. Check whether the guide rails run parallel and perpendicular to the box. Measure the distance between the guide rails exactly and to the millimetre. Begin directly under the box. Deviations of more than 2 mm can lead to hitches with the screen and/or bottom lath and the fabric may not hang sufficiently taut.
3. Next measure accurately across the diagonals, down to the exact millimetre.

If the box and the guide rails are not correctly fitted, then the bottom lath may roll up askew into the box and the screen cloth will have diagonal or crosswise creases.



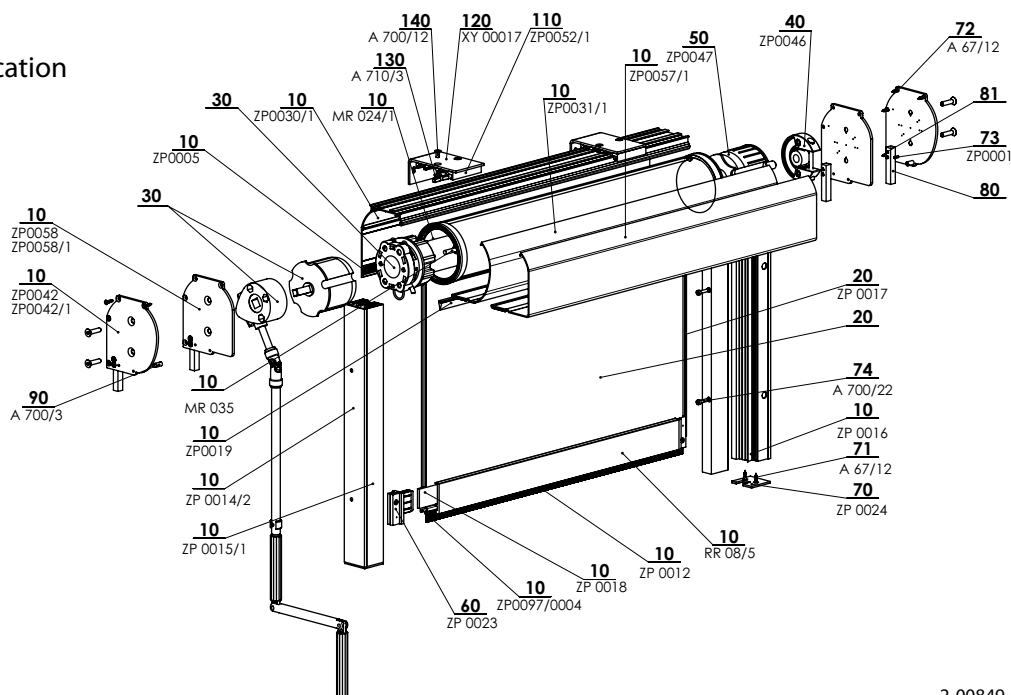
4. step

After both guide rails have been mounted on the window, lower the entire box on to the guide rails. Make sure the pins of the side console fit into the guide rail and that the zipper is positioned in the zipper guide.





- ▲ Decorative and modern building exterior element
- ▲ Minimal penetration of light thanks to absolute fabric tension
- ▲ high wind resistance (wind class 3),
- ▲ heat regulating effect
- ▲ insect protection in closed position
- ▲ frame colour as per the RAL chart (except of plastic parts)



2-00849-0010-C

Handle - the control rod mechanism is led into the interior at an angle from 45 ° to 90 ° using a wall bushing and a hexagonal rod. (Color: gray / eloxal coating)

	Head Rail			Bottom Rail	Side Guidance Guide Rail	Installation
	Box	Box	Winding roller			
Commercial Name	C 105	CT 105	MR 024/1	FZ 47	GS40	into the ceiling (into the window opening on the wall (in front of the window opening)
Dimension (mm)	103x116,5	104,5x116,5	Ø 78 mm	20x47,4	40x42,2	
Material	Al	Al	Fe	Al	Al	
Colour	Standard: RAL 9006 light silver RAL 9007 dark silver RAL 9010 white			RAL 7016 anthracite grey RAL 7016S anthracite grey structure RAL 8014 brown Other RAL colors upon request*		

We do not make atypical designs.

Version	Width (mm)		Height (mm)		Guaranteed area (m²)
	min	max	min	max	
motor	800	4500	500	3000	13,5
handle	500	4500	500	3000	13,5

The opaque layer is located on the side of the window for each type of installation. In the case of outdoor installation, strong winds can cause a slight lifting of the base slat and fabric and therefore 100% blackout cannot always be guaranteed. In the case of Blackout fabrics, the zippers are fastened on the face side and not on the opaque layer, so it is possible that under strong wind or oblique view of the guide rail a piece of cloth from the zipper tape can be seen, but this is of little importance compared to tightness of the fabric (reducing the waves).

The fabric may curl around the welds or in the middle of the fabric, it is the so-called tree effect. This phenomenon is common because different forces act on the fabric during use. Another phenomenon may be visible bruises on the fabric caused by the roller. These disappear at higher temperatures when the fabric levels.

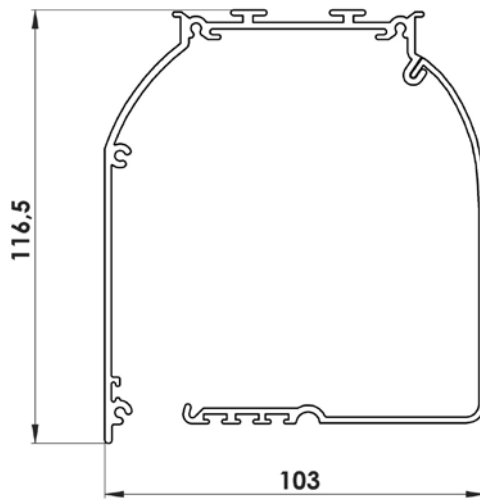
SCREEN ZIP (2-00849-0010)

position	item name	business name	drawing number
10	Bottom rail Al - FZ 472	RR 08/5	7-302966-0000
10	Weight steel 4x30 mm FeZn	ZP0018	3-01381-PU27
10	Black brush w.4.8 x h. 7mm	ZP0005	6-009219-0000
10	Plastic rod 4,0 mm PVC	ZP0097/0004	6-016911-0004
10	Al cover CT105 upper	ZP0030/1	7-302968-0000
10	Al cover CT105 bottom	ZP0031/1	7-302969-0000
10	Al cover CT105 square raw	ZP0057/1	7-302971-0000
10	Side cover CT105 - round, elox	ZP0042	6-009194-0002
10	Side cover round - couple	ZP0042/1	2-01007-0000
10	Side cover square, elox	ZP0058	6-011456-0000
10	Side cove square - couple	ZP0058/1	2-01008-0000
10	Black brush w.4.8 x h. 12mm	ZP0012	6-009148-0000
10	PVC sealing 5,5 x 12 mm	ZP0019	6-008716-0000
10	Winding roller for awnings dia. 78 mm - 6 m	MR 024/1	6-011084-0078
10	Plastic bar PVC 6,0 mm	ZP0097/0006	6-016911-0006
10	Black insertion ZIP for GS 40	ZP0016	6-008707-0001
10	Guiding channel Al - GS 40	ZP0014/2	7-303770-0000
10	Guiding channel - cap Al - GS 40	ZP0015/1	7-302972-0000
20	Screen fabric		see Sampler of Screen fabrics
20	ZIPPER (double-edged)	ZP0017	6-008709-0000
30	Motor (SOMFY, BECKER) screen		see Control
30	Transmission + handle for screen		see Control
40	Set for motor: AL holder with case	ZP0046	6-009209-0000
50	Roller cover dia. 78 PVC - teleskopic	ZP0047	6-009210-0078
60	Bottom rail end cup FZ 47 - set	ZP0023	6-008949-0503
70	Guide channel end cup	ZP0024/1	7-303027-0000
71,72	Screw 3,5x16 DIN 7997	A 67/12	6-009093-0000
73	Spring pin 3x12 DIN 7346	ZP0001	6-009807-0000
74	Allen screw M4x16 DIN 912	A 700/22	6-012632-0000
80	Guide channel holder - brass		7-303793-0000
81	Stainless screw M4x16 DIN 965-H		6-014750-0000
90	Cover locking screw M4	A 700/3	7-303030-0000
110	Profile - Fixed holder for Screen	ZP0052/1	3-03058-PU11
120	Bent angle Fe 100/40	XY 00017	3-02233-PU22
130	Nut M5 DIN 6923	A 710/3	6-011882-0000
140	Screw M5x10 Zn DIN 965-H	A 700/12	6-003186-0000

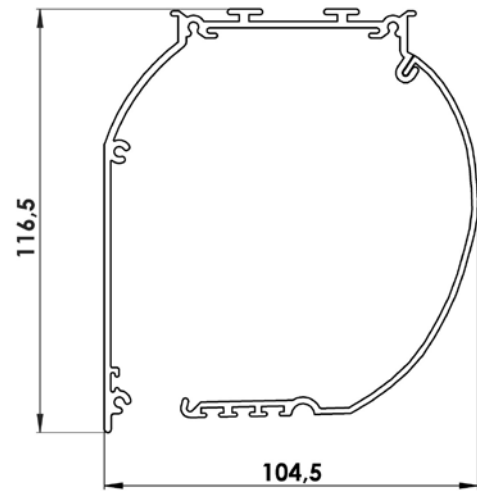
SCREEN ZIP

Technical Specification

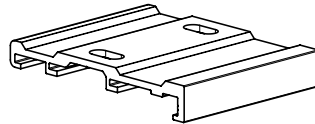
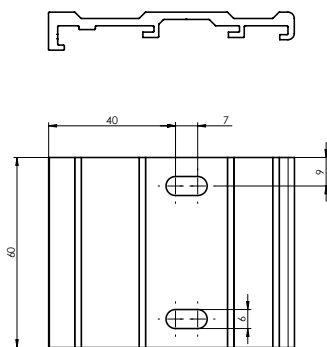
Head rail C 105



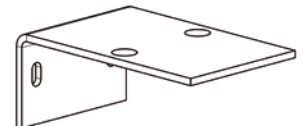
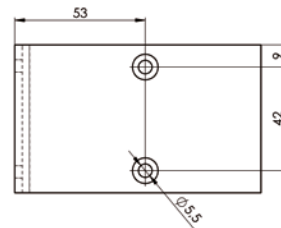
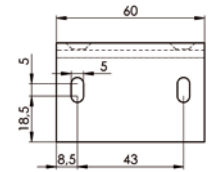
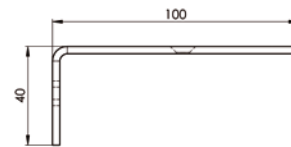
Head rail CT 105



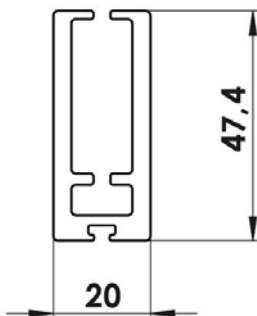
Head rail hanger
(3-03058-PU11)



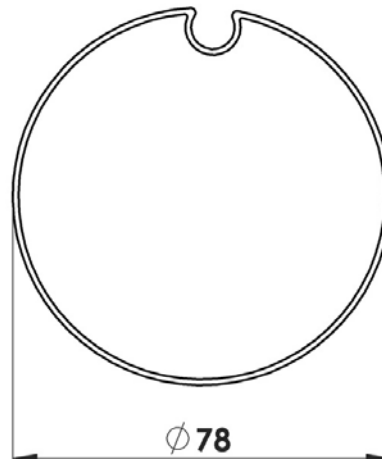
Square L
(RO-018, 7-302233)



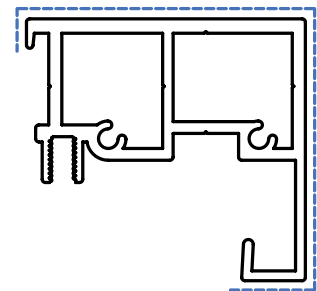
Bottom rail FZ 47
(RR 08/5, 6-008623)



Winding roller
(6-011084)

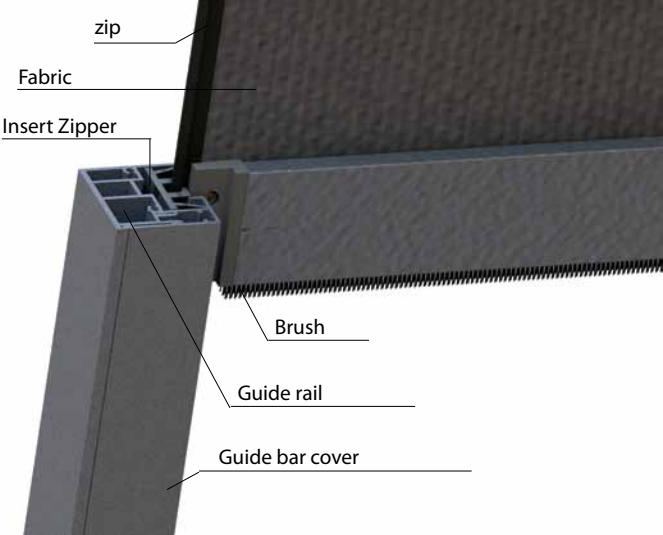


Guide rail
(7-303770-0000)



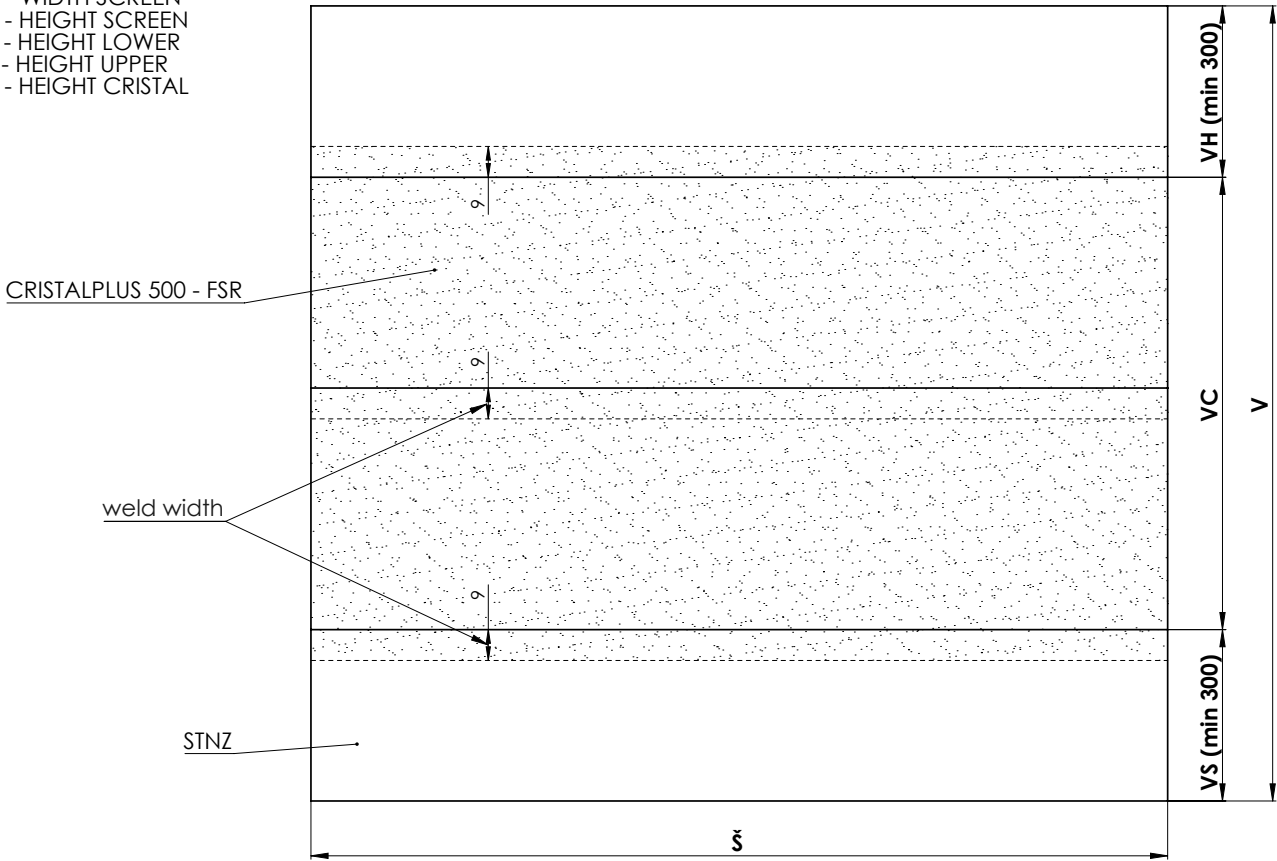
GS40 non-drilled guide rail
GS40c front drilled
GS40b drilled sideways

ZIP system



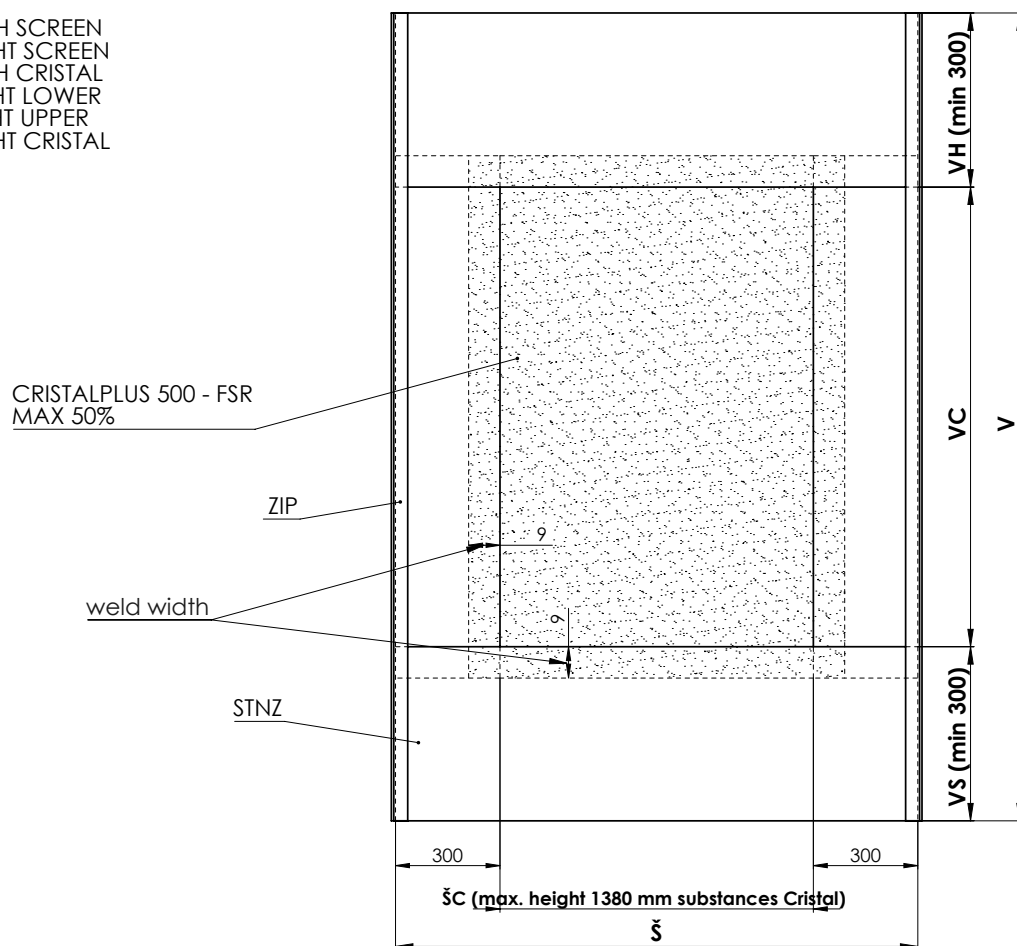
Cristal fabric is fringed by strip of STNZ fabric

- Š - WIDTH SCREEN
- V - HEIGHT SCREEN
- VS - HEIGHT LOWER
- VH - HEIGHT UPPER
- VC - HEIGHT CRISTAL



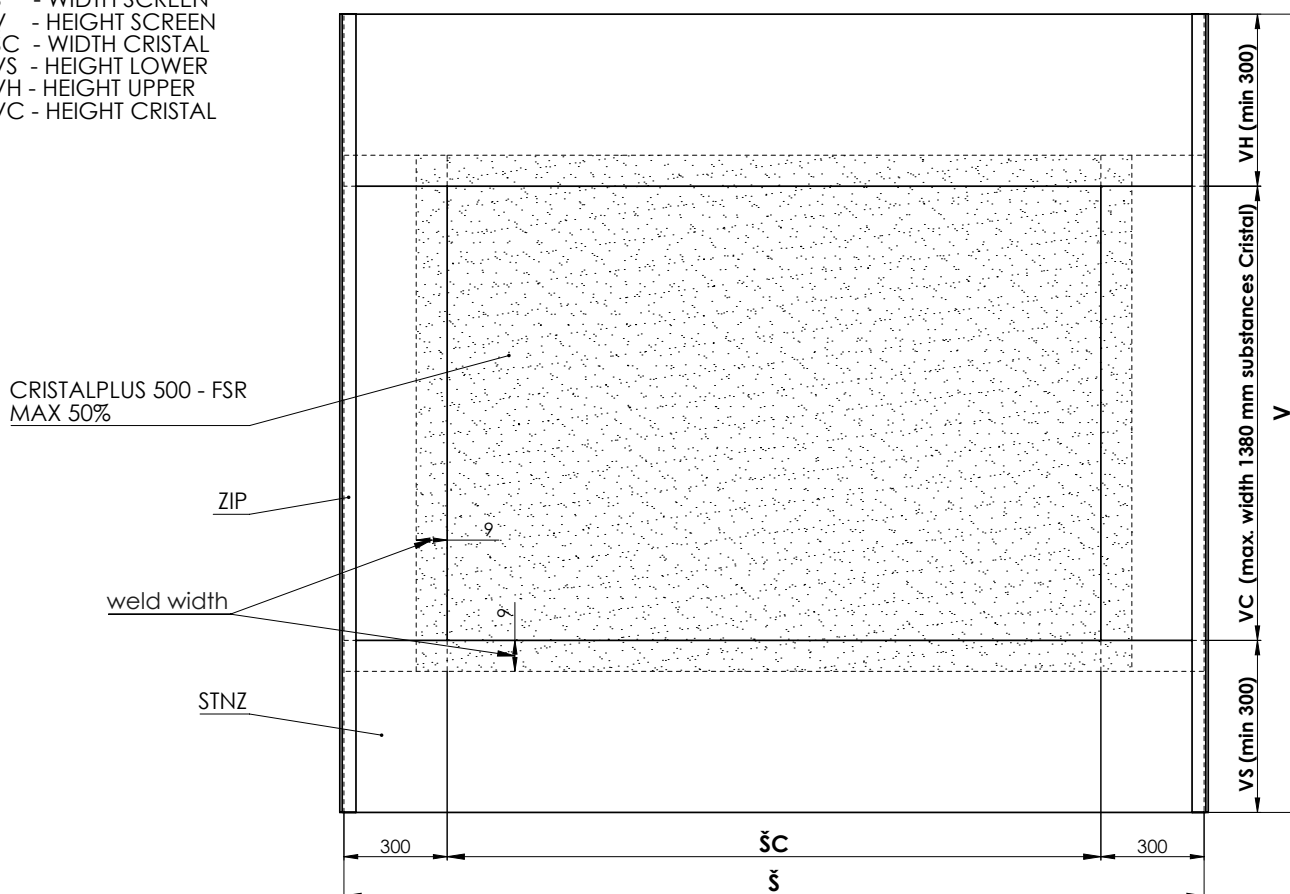
OPTION OF THE FABRIC CRISTAL FOR PRODUCTS GW AND LITE

$\check{S}$ - WIDTH SCREEN
 V - HEIGHT SCREEN
 $\check{S}C$ - WIDTH CRISTAL
 VS - HEIGHT LOWER
 VH - HEIGHT UPPER
 VC - HEIGHT CRISTAL



OPTION OF THE VERTICAL FABRIC CRISTAL FOR PRODUCTS SCREEN ZIP AND SCREEN ZIP ECONOMY

$\check{S}$ - WIDTH SCREEN
 V - HEIGHT SCREEN
 $\check{S}C$ - WIDTH CRISTAL
 VS - HEIGHT LOWER
 VH - HEIGHT UPPER
 VC - HEIGHT CRISTAL



OPTION OF THE HORIZONTAL FABRIC CRISTAL FOR PRODUCT SCREEN ZIP AND SCREEN ZIP ECONOMY

SCREEN ZIP

Measurement Manual

Measurement Manual

The SCREEN ZIP roller blinds can be placed into an opening or in front of it, and attached to the ceiling or wall.

The screen roller blind width and height shall be measured as follows:

w ... width (mm)

a) attachment into an opening:

Measure the actual opening width in three points, indicate the lowest dimension measured in the order form.

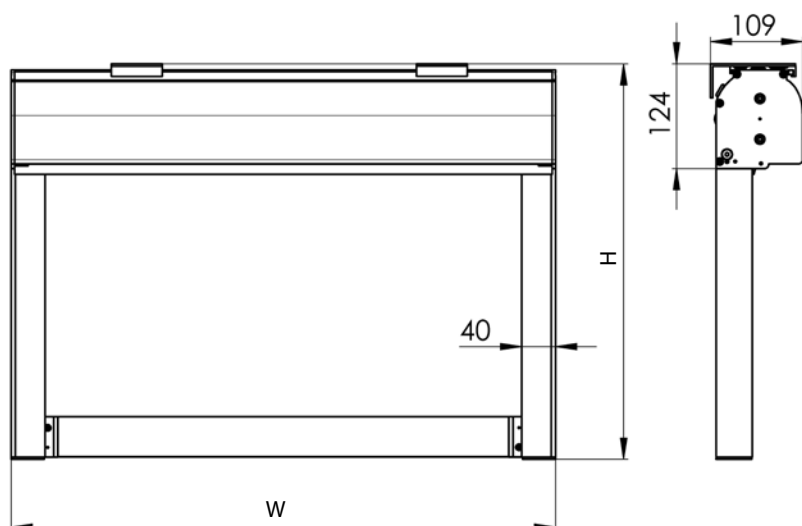
b) attachment in front of an opening:

As a rule, indicate the width of the opening which is to be shaded in the order form „+ 2 x 40 mm“.

Dimensions outside the stipulated limits must be consulted with the manufacturer.

h ... height (mm)

Measure the overall height including the roller blind upper section and holder.



Dimensions outside the stipulated limits must also be consulted with the manufacturer.

More information in the separate document **Measurement and assembly instructions**.

SCREEN ZIP

Assembly

Assembly

Assembly works must be carried out solely by qualified personnel capable of adhering to all instructions stated below with full consideration of their safety and that of all other persons.

The main activities include:

- 1) preparation of walls, ceilings, windows or other structures for the assembly of roller blinds while using portable drills and screwdrivers;
- 2) roller blind assembly to a wall or ceiling;
- 3) connection to power mains;
- 4) adjustment (of end stops / end switches, etc.) and testing of the roller blind.

Preparation of roller blind assembly

Prior to installing the roller blind, check whether the surface of the assembly place is not damaged and if it is suitable for assembly. Select suitable attachment screws (type and dimensions) corresponding to the type of structure onto which the roller blind is to be installed (wood, cement, brick).

NOTE: Faulty assembly can lead to accidents. Observe instructions for the proper roller blind assembly to prevent the risk of separation of the roller blind from a wall or window. ISOTRA a. s. shall not be held responsible for defects caused by faulty assembly.

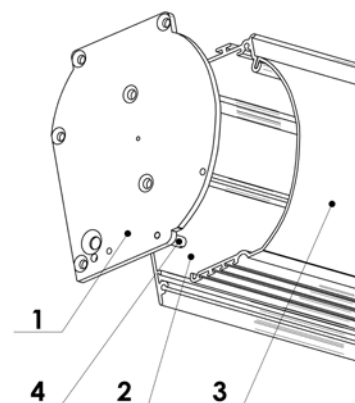
Roller blind assembly

The roller blind can be installed using two different methods:

1. direct assembly to guide bars, attached to a ceiling or wall;
2. assembly to a ceiling or frontal assembly using special attachment brackets.

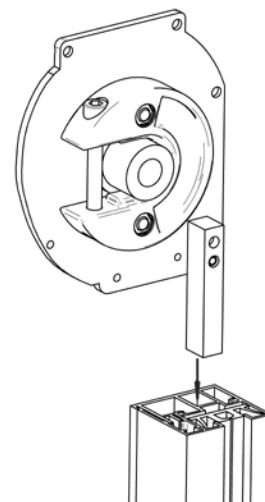
Upper box assembly

The upper box consists of three parts: side board (1), fixed part (2) and removable part (3). If it is necessary to remove the winding drum, the access to the upper box is possible after removing two screws (4) – one on each side – and removing the removable part of the box.



Direct assembly to guide bar

Insert the rectangular brass pin, projecting from the lower part of the side board, into the guide bar, as shown in the picture. No screws are necessary.



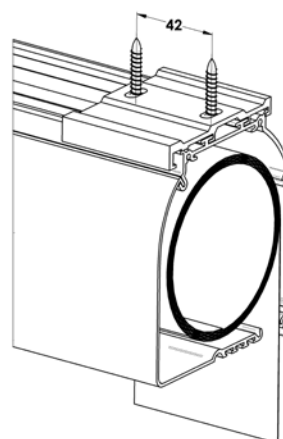
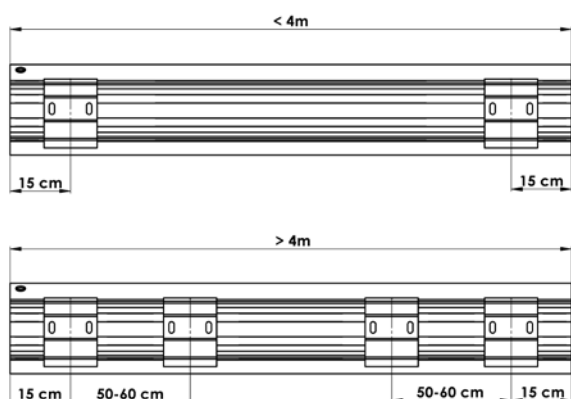
SCREEN ZIP

Assembly to ceiling

Assembly to ceiling

Mark the position of holes to be drilled, considering the following factors:

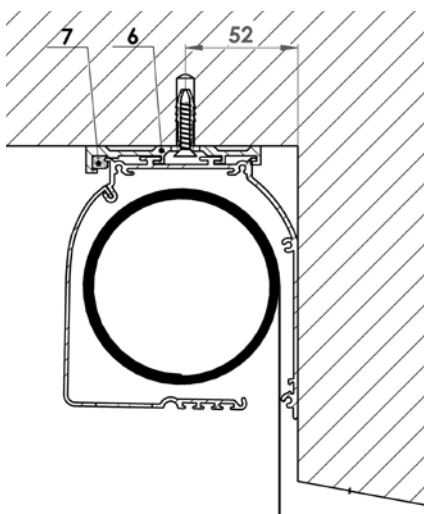
- for upper boxes having the width of max. 4.0 m, two brackets are sufficient which must be installed in a distance of approximately 15–20 cm from each end;
- for wider roller blinds, four brackets (two pairs) are necessary, one in a distance of 15–20 cm from each end and the second in a distance of 50–60 cm from the first one;



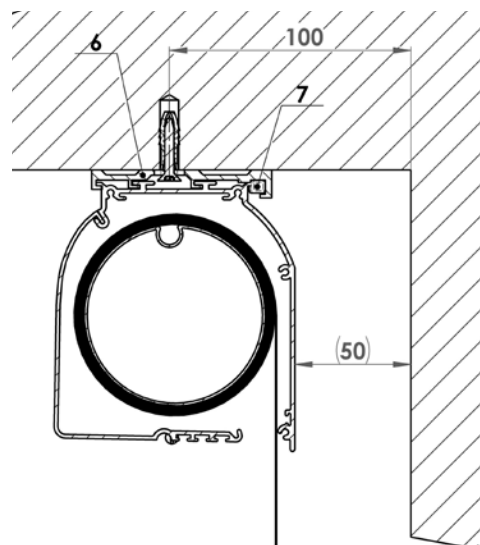
- if possible, the distance from the wall depends on the bracket attachment method, i.e. the position of wedges:
 - front wedge: **52 mm**
 - rear wedge: **100 mm**

The following facts must be kept in mind:

- assembly of a bracket with wedges pointing toward the room minimises the distance between the upper box and the rear wall, but the bracket is visible and not visually attractive;
- assembly of a bracket with wedges in the back is more aesthetically desirable, but requires at least 5 cm of space between the back wall and the upper box.



Attach brackets (6) using screws and components suitable for the type of structure onto which they are to be attached (metallic structure, window frame, wall, other material). If three or more brackets are used, ensure that the brackets are perfectly aligned ± 1 mm; this can be checked by sliding the box along the cut-outs before tightening the attachment screws.



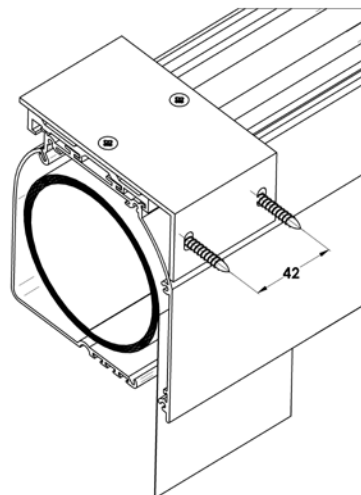
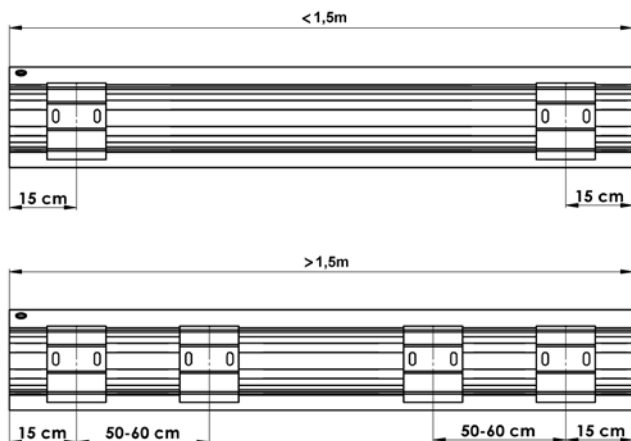
Insert the upper box to the brackets and slide it lengthwise until it is centred within the window wing, and secure with wedges (7).

SCREEN ZIP

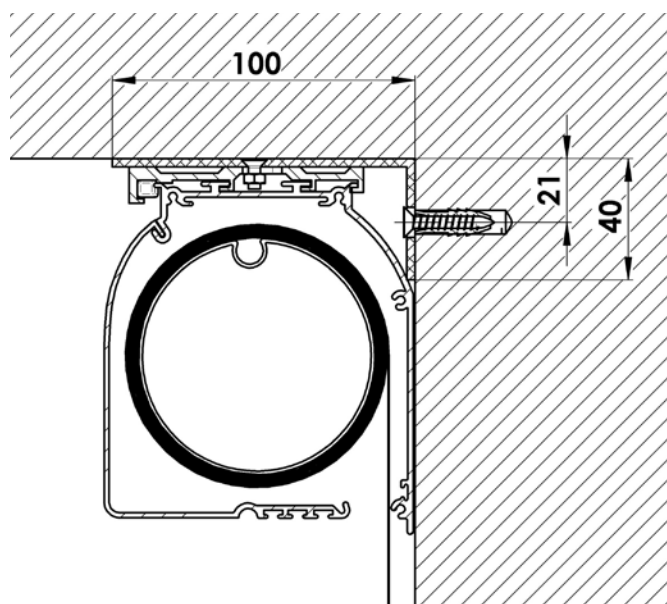
Assembly to wall

Assembly to wall

Mark the position of angle-section brackets and holes to be drilled. For upper boxes having the width of max. 1.5 m, two brackets are sufficient, which must be installed in a distance of approximately 15–20 cm from each end. For wider roller blinds, four brackets (two pairs) are necessary, one in a distance of 15–20 cm from each end and the second in a distance of 50–60 cm from the first one.



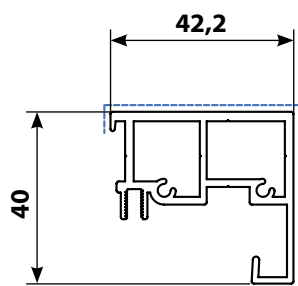
Assembly holes must be placed at least 25 and 50 mm from the ceiling or any obstacle exceeding the box. Attach brackets using screws and components suitable for the type of structure onto which they are to be attached (metallic structure, window frame, wall, other material). If four brackets are used, ensure that the brackets are perfectly aligned ± 1 mm; this can be checked by sliding the box along the cut-outs before tightening the attachment screws. Install the box to brackets and slide it lengthwise until it is centred within the window wing.



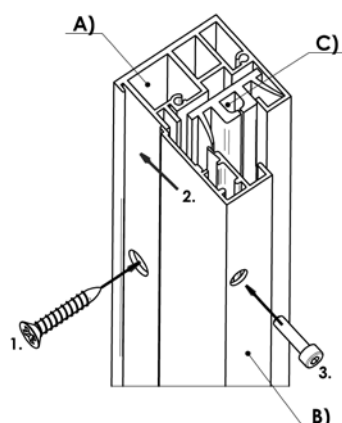
SCREEN ZIP

Assembly of guide bars

Assembly of guide bars



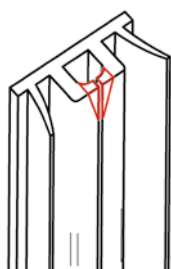
Proper method of assembly of guide rail to the box depends on the box model used, and whether the box is attached to the ceiling, wall or directly to the guide bars. Only one type of guide bars is available – GC20.



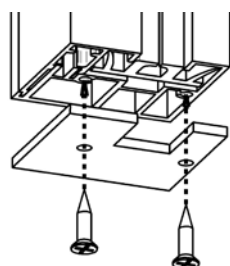
The ZIP guide bars consist of three parts: two aluminium rails and a plastic inner rail, in which the ZIP runs.

- A - aluminium guide rail;
- B - aluminium rail cover;
- C - plastic guide rail.

1. First, attach aluminium guide bar A) to the wall.
2. Insert plastic guide rail C) and close the unit with aluminium rail cover B).
3. Use the supplied socket head screws to attach the cover to the guide rail.

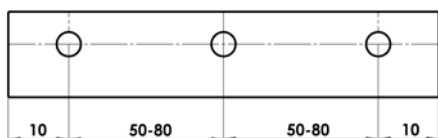


Cut the guide bar to length so that the edge is perfectly rectangular. After cutting the inner plastic rail, both upper edges of the section should be bevelled, as shown in the picture, which prevents wear of the fabric caused by sharp edges during operation.



If the guide bars do not lean against the window sill or floor, end covers must be used. Before further installation steps, attach the cover by supplied screws.

Assembly of GS40 guide rail

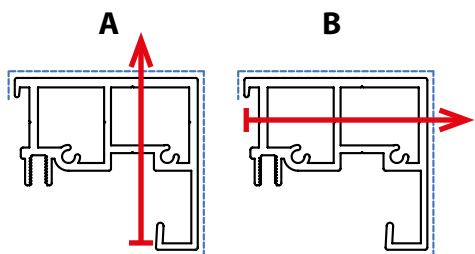


For model ZIP, only one type of guide rail is available – GC20.

The rail is supplied with pre-drilled holes, as per order, from the front or from the side.

Placement of holes:

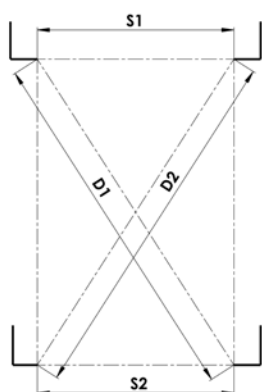
- outer holes are placed approx. 10 cm from the bar edge;
- intermediate holes are placed at approx. each 50–80 cm evenly along the guide bar.



The red line indicates the vertical axis for attachment screws. Use the drilled guide bars as a template for transferring the hole positions to the window wing wall. Attach the guide bars to the wall using screws and components suitable for the type of structure onto which they are to be attached (metallic structure, cement, brick, etc.).

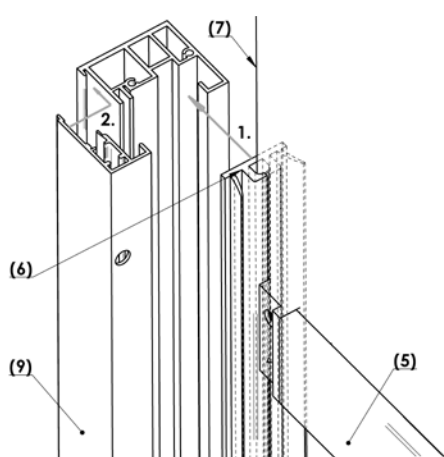
A - standard version

B - put a note in the order form for B assembly



Once the assembly is finished, check parallelism and rectangularity of the guide bars. This can be done by measuring two distances "S1" and "S2" or diagonals "D1" and "D2". The dimensions must be the same ± 2 mm. Proper guide bar placement is vital, otherwise the function of the roller blind can be impaired. For front guide bar installation, self-adhesive covers are supplied to cover the attachment screw holes.

Assembly of plastic parts



Handle the roller blind carefully and pull the fabric down by 20 cm.

Slide lower section (5) to the side so that the fabric leaves the lateral slot on one side. Then insert inner rail (6) to the fabric and squeeze in ZIP (7).

1. Squeeze the inner rail directly to the guide rail lateral slot where it will straighten spontaneously. The inner rail lies on the ground or on the end piece and there is no need to fix it.

2. Slide guide rail cover (9) aslant, fixing guide rail (6) in the guide rail. Use gentle pressure to click it to right position and fix with screws. Start from the top and slowly move down the guide rail.

SCREEN ZIP

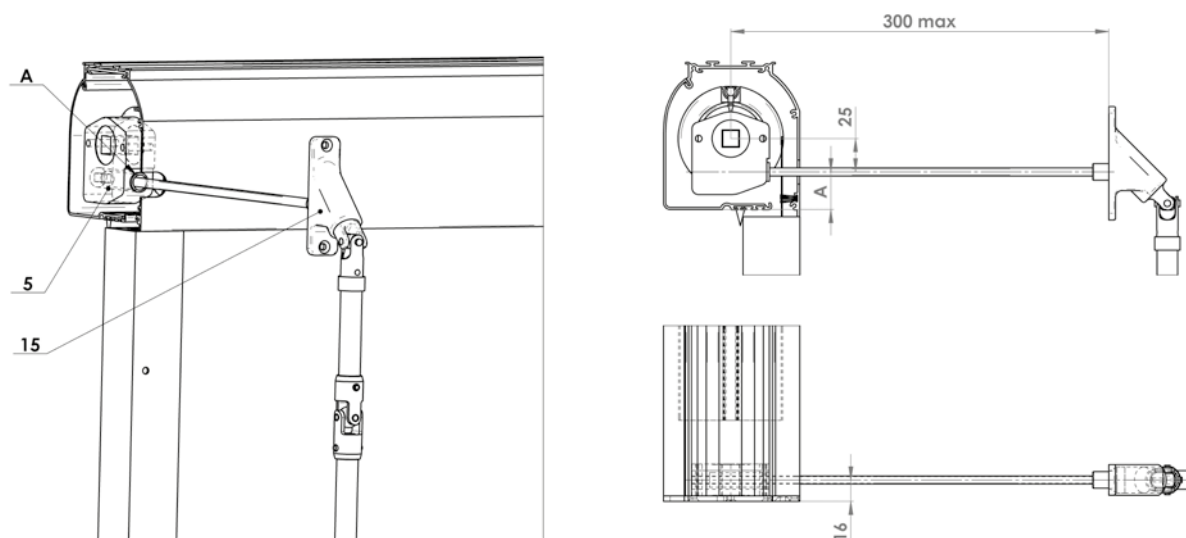
Assembly of handle

Assembly of exterior handle with sleeve passing through wall

Handle – option with bushing (Ks)

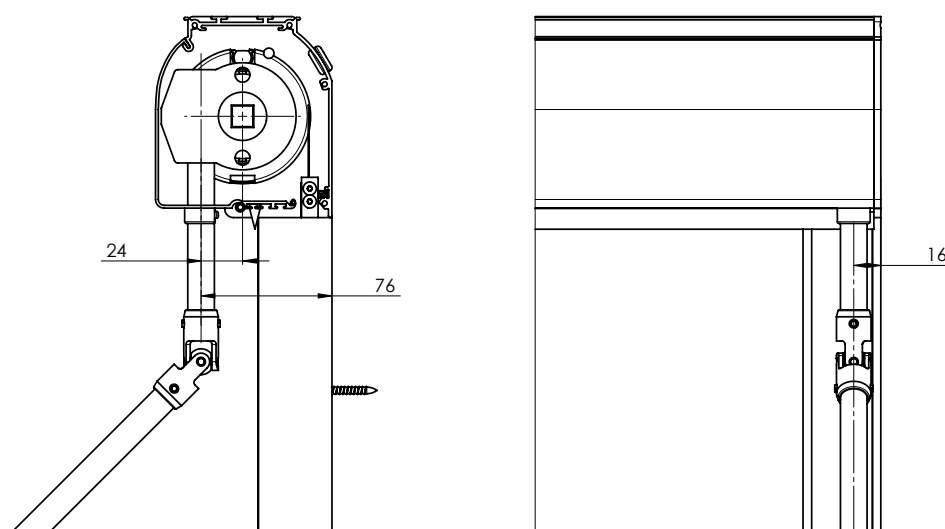
For exterior roller blinds installed with a sleeve passing through a wall and with a handle rod in the interior, it is necessary to calculate the exact position of the hole for a 30-cm angular rod (15).

- Attach the brackets to a wall or ceiling and install the roller blind in its place. Use a pencil to mark the position of the box lower corner on the wall or window frame. Remove the roller blind from the brackets and measure the distance from the box lower corner to the centre of the hole (A) in the rear part of the box (which serves for inserting the angular rod to control the transmission system). Mark the same distance on the wall, thus marking the centre of the hole to be drilled.
- Carefully drill a hole through the wall using an 8-mm drill bit. The hole must be as level as possible.
- Install the roller blind back and insert a sleeve from the interior to check accuracy of the hole position. Then cut the angular rod to size using a hack-saw. The rod size depends on the wall thickness.



Handle – straight option (K)

Handle with roller blind by delivery connected



SCREEN ZIP ECONOMY

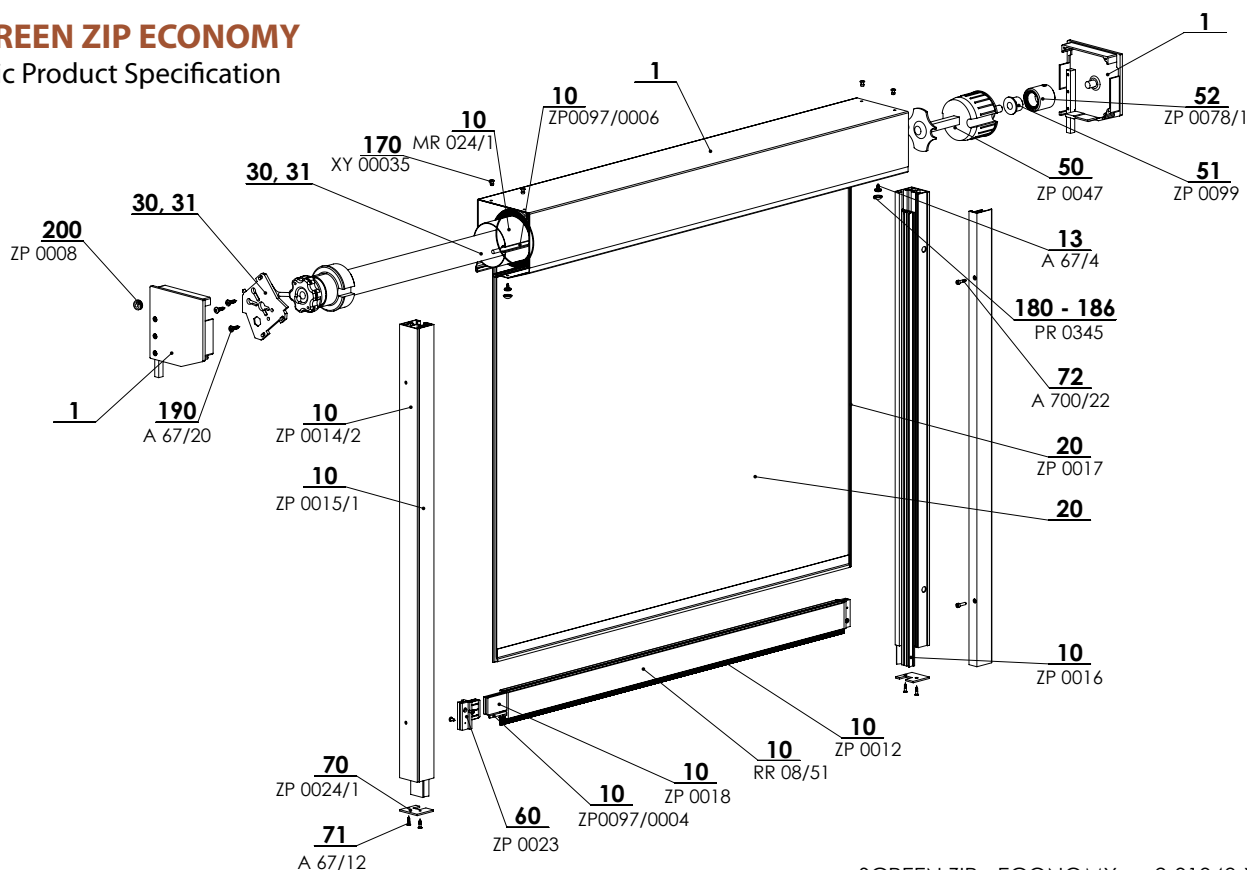


- ▲ Modern and stylish element of both the exterior and the interior of buildings,
- ▲ minimum light transmission thanks to the absolute fabric tension,
- ▲ high wind resistance (wind class 3),
- ▲ thermal regulation effect,
- ▲ insect protection when closed,
- ▲ cost-effective variant of the SCREEN ZIP model,
- ▲ motor controls.

ISOTRA *Quality*

SCREEN ZIP ECONOMY

Basic Product Specification



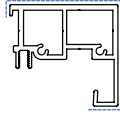
Control

Used for lifting and lowering of screen blinds.

Motor - Optional control using the sun / wind sensor or by a remote control or switch.

SCREEN ZIP - ECONOMY 2-01048-XXXX-C

Specification

	Head Rail		Bottom Rail	Side Guidance Guide Rail	Installation
	Box	Winding Drum			
Commercial Name	PR0001	MR 024/1	FZ 47	GS40	on the wall (in front of window opening)
Dimension (mm)	128x129	Ø 78 mm	20x47,4	40x42,2	
Material	Al	Fe	Al	Al	
					
Colour	Standard: RAL 9006 light silver RAL 9007 dark silver RAL 9010 white		RAL 7016 anthracite grey RAL 7016S anthracite grey structure RAL 8014 brown Other RAL colors upon request*		

*except of plastic parts.

We do not make atypical designs.

Standard Dimensions

Version	Width (mm)		Height (mm)		Guaranteed area (m²)
	min	max	min	max	
motor	800	4000	500	3000	12

Fabrics of the Blackout type:

The opaque layer is located on the side of the window for each type of installation. In the case of outdoor installation, strong winds can cause a slight lifting of the base slat and fabric and therefore 100% blackout cannot always be guaranteed. In the case of Blackout fabrics, the zippers are fastened on the face side and not on the opaque layer, so it is possible that under strong wind or oblique view of the guide rail a piece of cloth from the zipper tape can be seen, but this is of little importance compared to tightness of the fabric (reducing the waves).

Common phenomena of technical fabrics

The fabric may curl around the welds or in the middle of the fabric, it is the so-called tree effect. This phenomenon is common because different forces act on the fabric during use. Another phenomenon may be visible bruises on the fabric caused by the roller. These disappear at higher temperatures when the fabric levels.

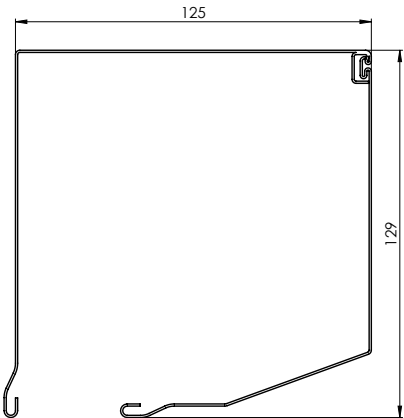
Screen ZIP Economy (2-01048-0000)

position	item name	business name	drawing number
1	Rolled box, GOT 125	PR0025	6-001699-0000
1	Rolled box, bevel 20°, GUTS 125	PR0001	6-001701-0000
1	Side cap, 20° BKS 125 - pair	PR0059	6-001755-0000
1	Under-plastering rail PS-V 20°	PR0077	6-001852-0000
1	Extruded box, bevel 20°, RK 125	PR0049	6-001684-0000
1	Box, upper part, 125 mm, 20°	PR0054	7-302262-0000
1	Pin	PR0647	3-02956-0000
1	Screw	A700/26	6-003184-0000
10	Winding roller for awning 78mm	MR 024/1	6-011084-0078
10	Plastic bar PVC 6,0 mm	ZP0097/0006	6-016911-0006
10	Bottom rail Al - FZ47, raw	RR 08/51	7-302966-0000
10	Weight steel 4x30mm FeZn	ZP0018	6-008715-0000
10	Plastic rod 4,0mm	ZP0097/0004	6-016911-0004
10	Brush w=4,8mm x h=12mm	ZP0012	6-009148-0000
10	Insertion ZIP for GS40	ZP0016	6-008707-0001
10	Guiding channel Al - GS 40	ZP0014/2	7-303770-0000
10	Guiding channel - cap Al - GS 40	ZP0015/1	7-302972-0000
13	Screw 3,5x9,5mm	A 67/4	6-003096-0000
20	Fabric screen		see Sampler of Screen fabrics
20	ZIP	ZP0017	6-008709-0000
30	Motor (SOMFY, BECKER) SCREEN		see Control
50	Roller cover 78	ZP0047	6-009210-0078
51	Ball-bearing for ZipTex 28x12	ZP0080	6-012325-0001
52	Adaptor	ZP0078/1	2-01315-0000
60	Bottom rail end cup FZ 47 SET	ZP0023	6-008949-0503
70	Ending - chuding channel - R/L	ZP0024/1	7-303027-0000
71	Screw 3,5x16 DIN 7997	A 67/12	6-009093-0000
80	Socket head M4x16, DIN 912, 8.8,	A 700/22	6-002280-0000
170	Pin Al 4x8 DIN 7337 A	XY 00035	6-011342-0000
180	Screw cover - double - PVC	PR0345	6-002073-0001
190	Screw 5x20 Zn with half-round cross head	A 67/20	6-003060-0001
200	Rubber bushing for cable 11/7	ZP0008	6-009196-0000

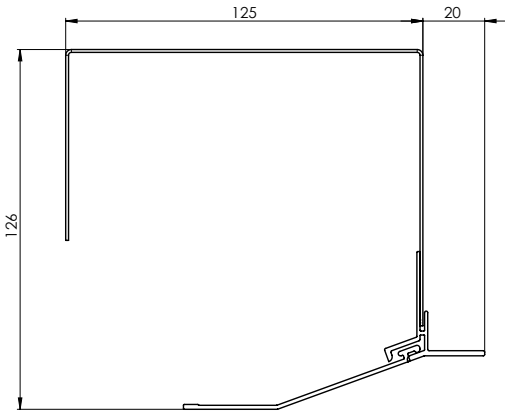
SCREEN ZIP ECONOMY

Basic Product Specification

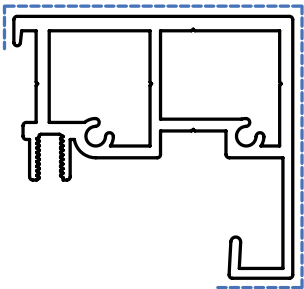
Box visible option
(PR0025 + PR0001)



Under-plaster box
(PR0054 + PR0077 + PR0647)



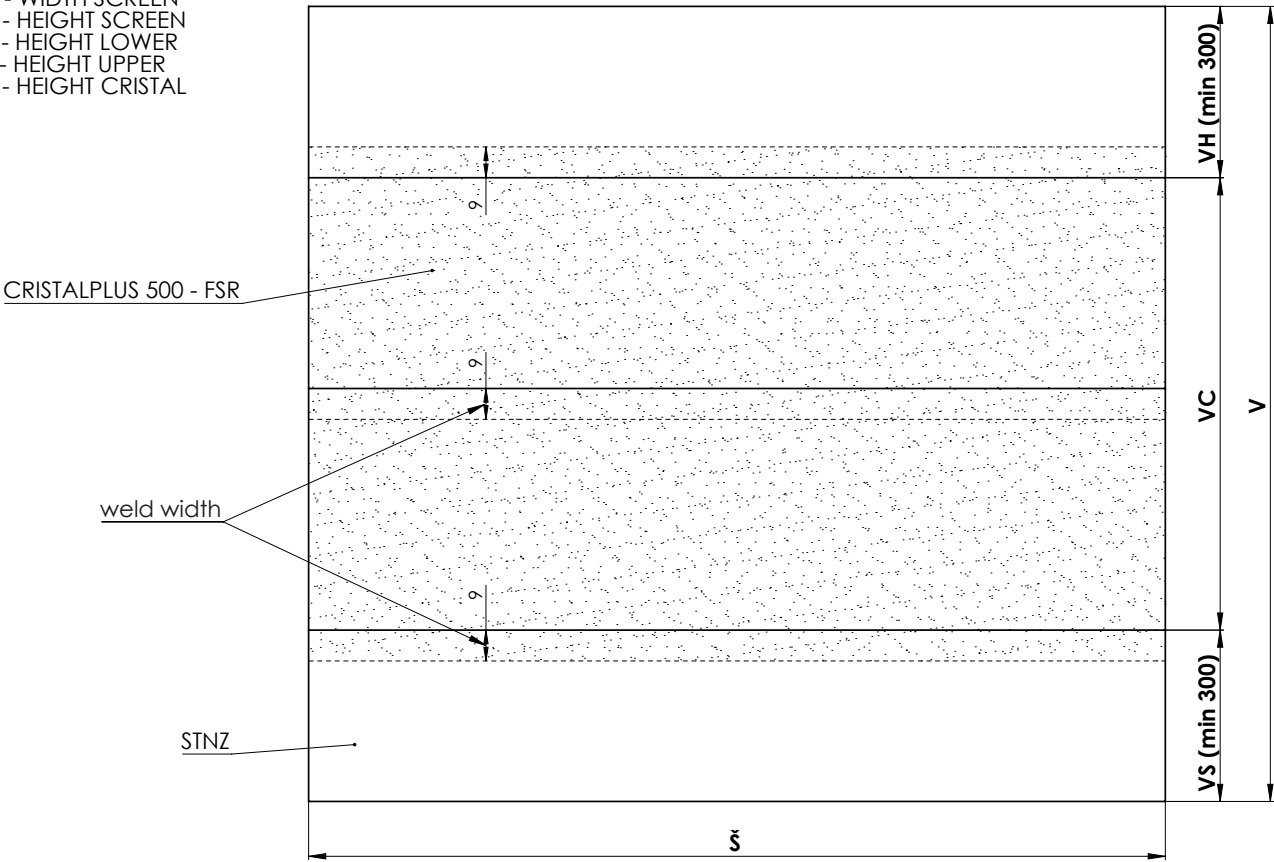
Guide rail
(7-303770-0000)



- GS40 non-drilled guide rail
- GS40c front drilled
- GS40b drilled sideways

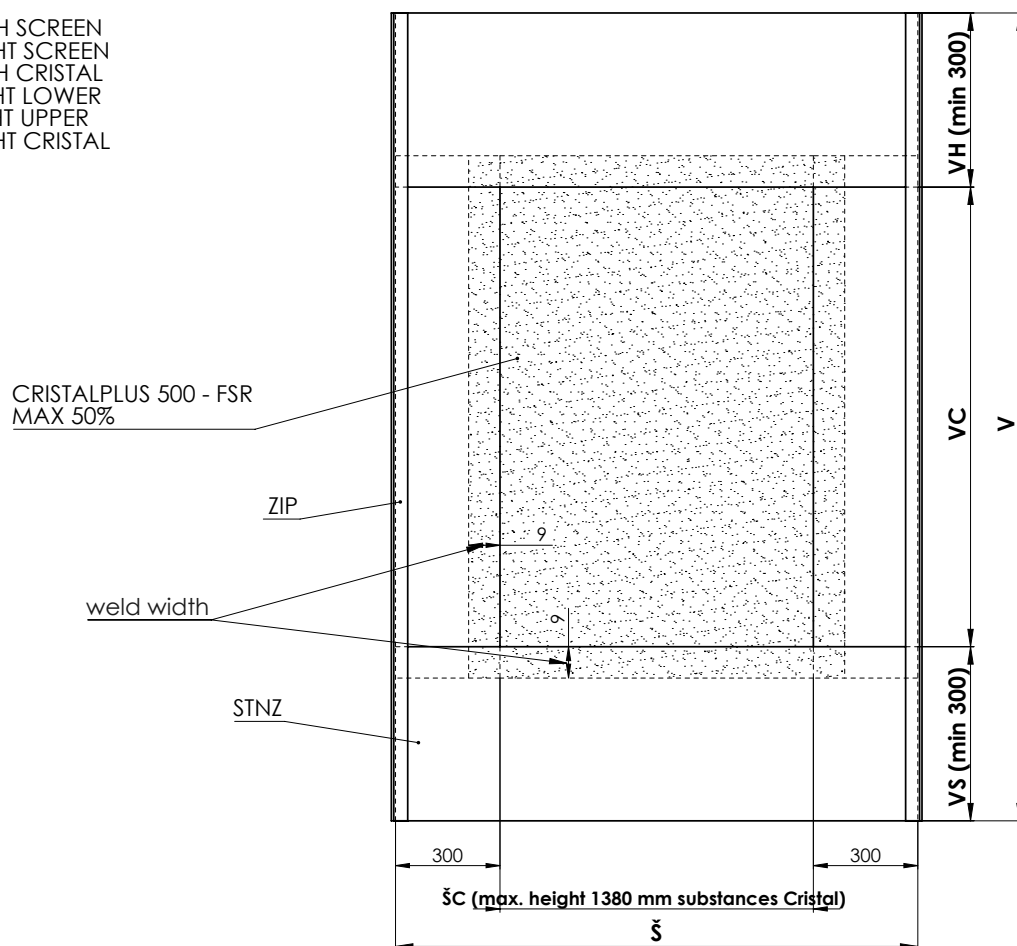
Cristal fabric is fringed by strip of STNZ fabric

- Š - WIDTH SCREEN
- V - HEIGHT SCREEN
- VS - HEIGHT LOWER
- VH - HEIGHT UPPER
- VC - HEIGHT CRISTAL



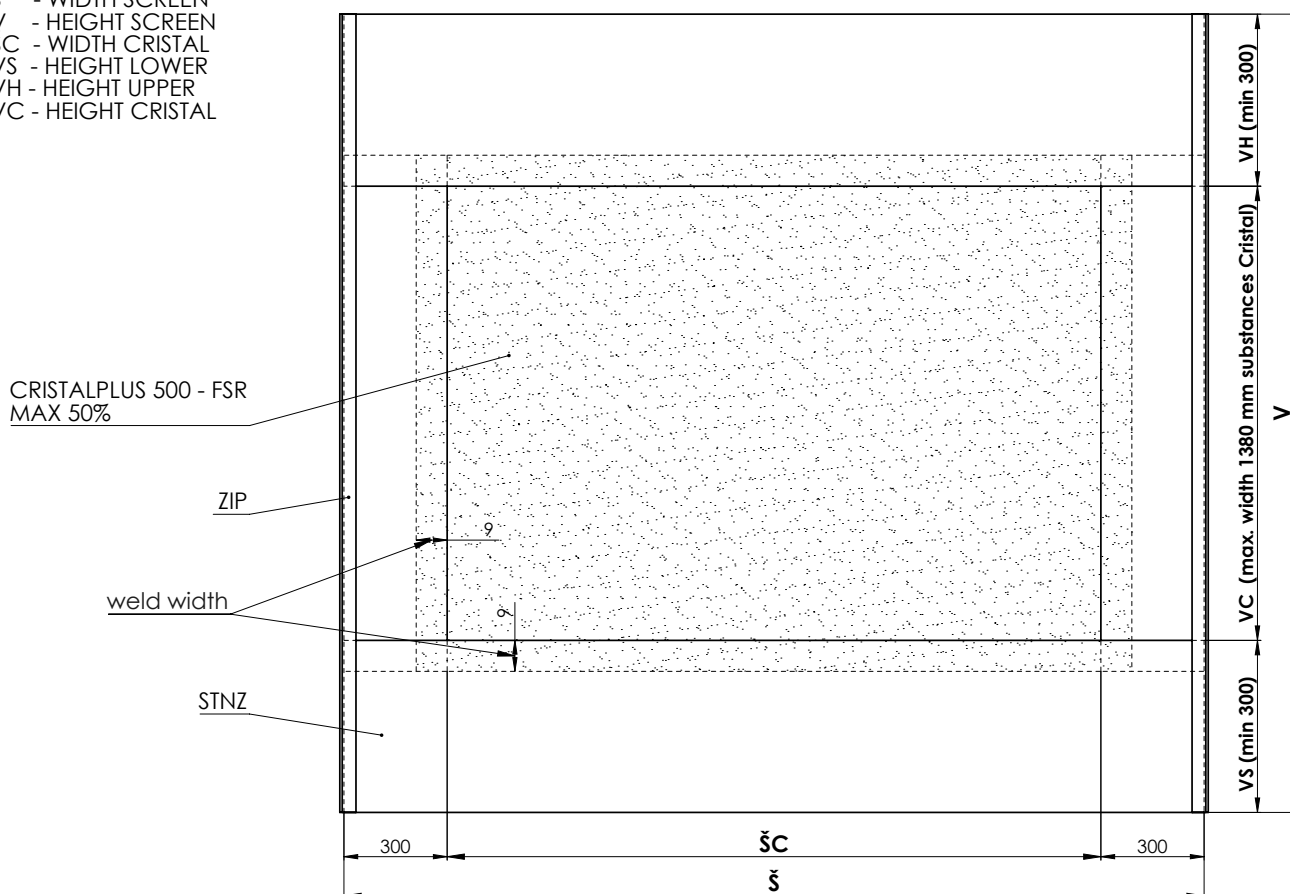
OPTION OF THE FABRIC CRISTAL FOR PRODUCTS GW AND LITE

$\check{S}$ - WIDTH SCREEN
 V - HEIGHT SCREEN
 $\check{S}C$ - WIDTH CRISTAL
 VS - HEIGHT LOWER
 VH - HEIGHT UPPER
 VC - HEIGHT CRISTAL



OPTION OF THE VERTICAL FABRIC CRISTAL FOR PRODUCTS SCREEN ZIP AND SCREEN ZIP ECONOMY

$\check{S}$ - WIDTH SCREEN
 V - HEIGHT SCREEN
 $\check{S}C$ - WIDTH CRISTAL
 VS - HEIGHT LOWER
 VH - HEIGHT UPPER
 VC - HEIGHT CRISTAL



OPTION OF THE HORIZONTAL FABRIC CRISTAL FOR PRODUCT SCREEN ZIP AND SCREEN ZIP ECONOMY

SCREEN ZIP ECO

Assembly

1. Measuring

The SCREEN ZIP ECO blinds can be installed into an opening as well as in front of it, and attached to the wall.

The screen roller blind width and height shall be measured as follows:

W (width)

a) assembly into an opening

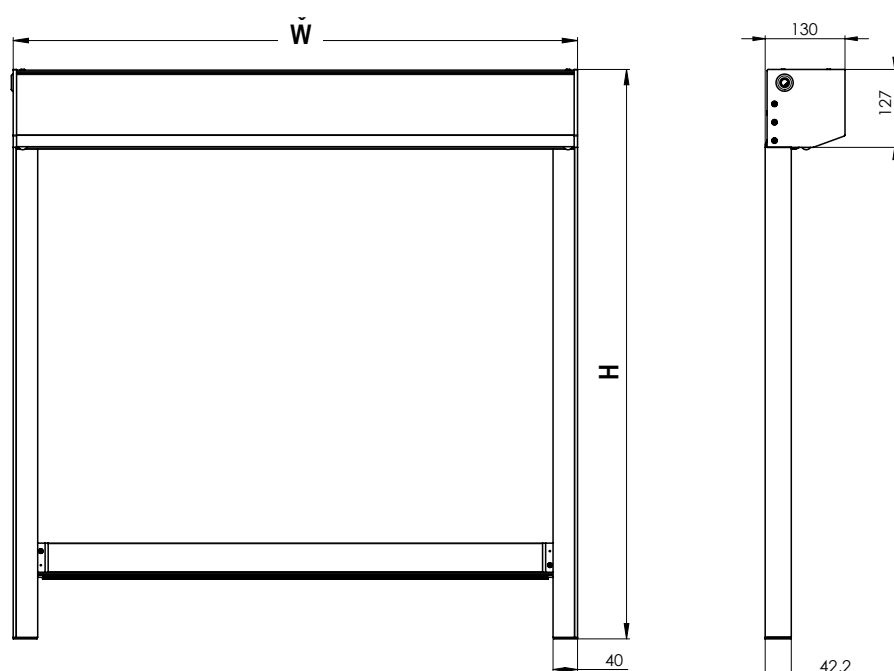
Measure the actual opening width in three points; indicate the lowest dimension measured in the order form „+ 2 x 40 mm“.

b) assembly in front of an opening Indicate the width of the opening to be shaded in the order form.

Dimensions outside the stipulated limits must be consulted with the manufacturer.

H (height)

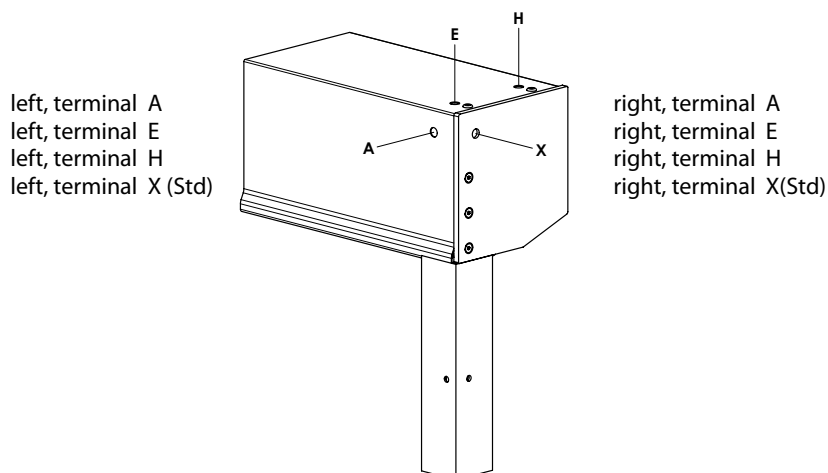
Measure the overall height including the roller blind upper section and holder.



Dimensions outside the specified limits must be consulted with the manufacturer.

More information in the separate document **Measurement and assembly instructions**.

Choice of cable location



SCREEN ZIP ECONOMY

Assembly

The main activities include:

- 1) preparation of walls, ceilings, windows or other structures for the assembly of roller blinds while using portable drills and screwdrivers;
- 2) roller blind assembly to a wall;
- 3) connection to power mains;
- 4) adjustment (of end stops / motor end switches, etc.) and testing of the roller blind.

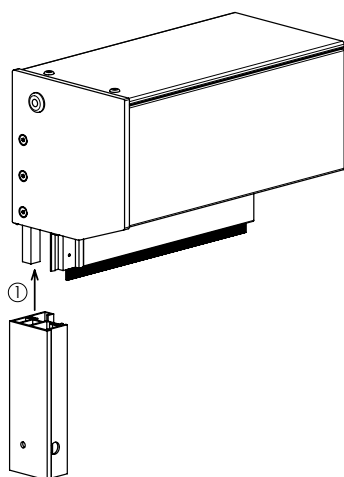
ROLLER BLIND ASSEMBLY

Direct guide bar installation of to a wall.

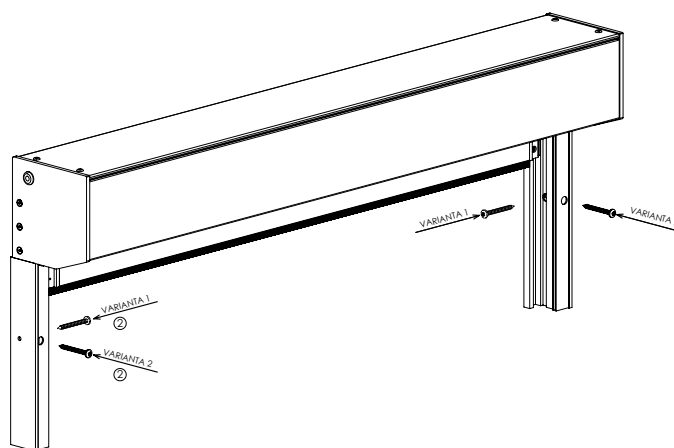
ASSEMBLY OF BOX AND GUIDE BARS

Insert the guide bar to the side board pin. No screws are necessary. When inserting, slide the ZIP to the guide socket.

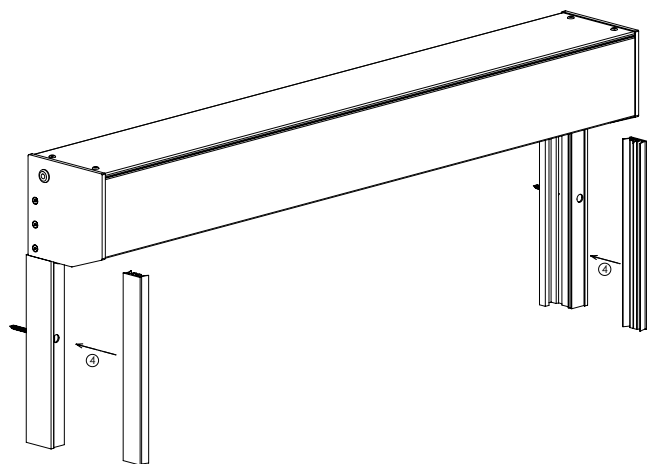
Connect guiding channels with box.



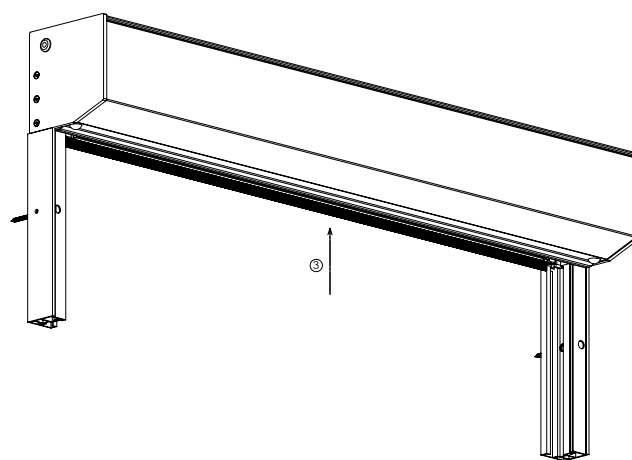
Place and screw the roller blind.



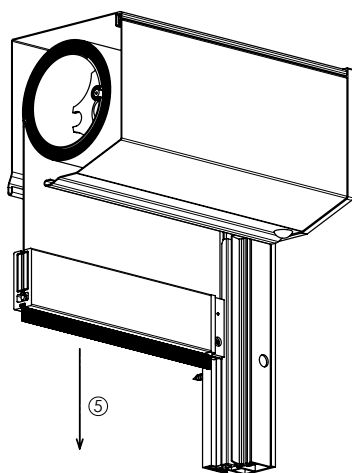
Wind up the fabric as highest as possible.



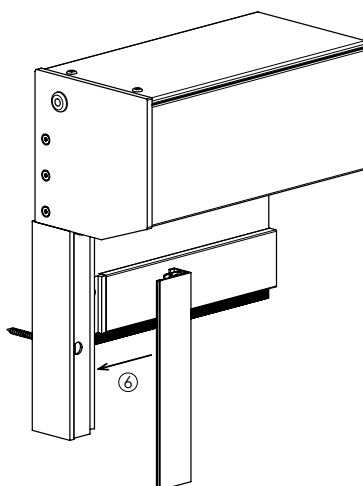
Mount the plastic guiding channels.



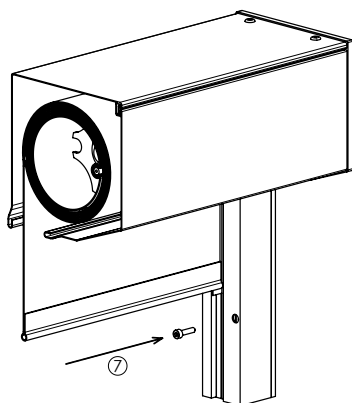
Insert the fabric into the guiding channels.



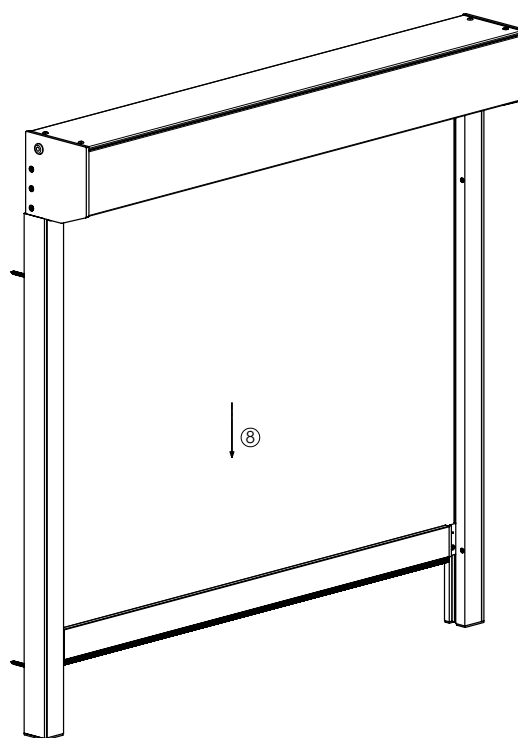
Put on the guiding channel cover.



Fix the cover channel with screw.



Check the functionality.



SCREEN GW



- ▲ Simple, modern and stylish appearance,
- ▲ screening of both the interior and the exterior areas,
- ▲ side guidance by a cable or by a guide rail,
- ▲ possibility of electric control,
- ▲ frame colour as per the RAL chart (except of plastic parts).
- ▲ high wind resistance (wind class 3),

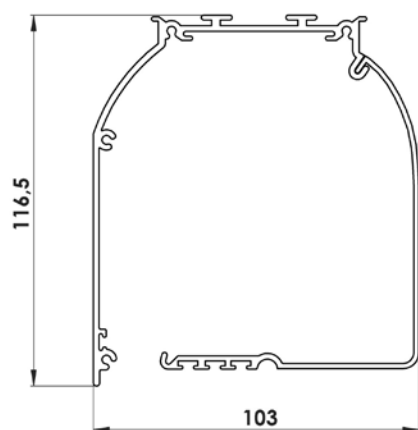
ISOTRA *Quality*

SCREEN GW (2-01396-0000)

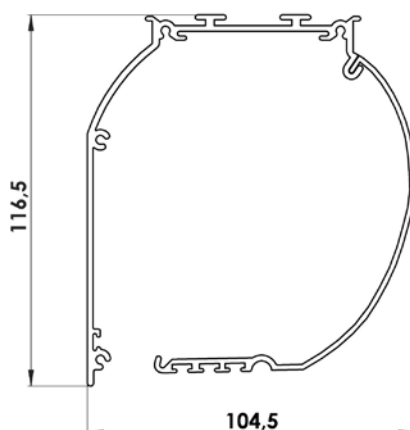
position	item name	business name	drawing number
10	Bottom rail Al - FD 42 raw	RR 08/6	6-009147-0000
10	Rounded weight steel	ZP0018/1	3-02880-PU27
10	Black brush w.4.8 x h. 7mm	ZP0005	6-009219-0000
10	Plastic rod 4,0 mm PVC	ZP0097/0004	6-016911-0004
10	Al cover CT105 upper	ZP0030	6-009138-0001
10	Al cover CT105 bottom	ZP0031	6-009139-0001
10	Al cover CT105 square raw	ZP0057	6-011455-0000
10	Side cover CT105 - round, elox	ZP0042	6-009194-0002
10	Side cover round - couple	ZP0042/1	2-01007-0000
10	Side cover square, elox	ZP0058	6-011456-0000
10	Side cove square - couple	ZP0058/1	2-01008-0000
10	PVC sealing 5,5 x 12 mm	ZP0019	6-008716-0000
10	Winding roller for awnings dia. 78 mm - 6 m	MR 024/1	6-011084-0078
10	Plastic bar PVC 6,0 mm	ZP0097/0006	6-016911-0006
10	Steel wire 4mm	ZP0062	6-011492-0000
10	Guide channel GC20 raw	ZP0020	6-008727-0000
20	Screen fabric		see Sampler of Screen fabrics
30	Motor (SOMFY, BECKER) screen		see Control
31,32	Motors (SOMFY, BECKER) screen < 800 + samplers		see Control
40	Set for motor: AL holder with case	ZP0046	6-009209-0000
50	Roller cover dia. 78mm with pin	MR 026/1	6-011086-0078
60	Bottom rail end cup FD 42	ZP0022	6-008736-0030
60	Black end cup screen	ZP0049	3-02208-9004
60	Guide channel cover dia. 40	P 019/1	3-01849-9006
70	Tensioning wire angle - stainless steel, unpainted	ZP0056/1	3-02431-0000
71	Tensioning screw	ZP0027/1	3-02430-0000
72	Screw 3,5x16 DIN 7997	A 67/12	6-009093-0000
73	Spring pin 3x12 DIN 7346	ZP0001	6-009807-0000
74	Low nut M8 stainless DIN 439B A2	A 710/1	6-010705-0000
75	Pad M8, DIN 125-A1, A2	ZP0090	6-009997-0002
76	Self-adhesive cover 606-172-13 silver RAL9006	ZP0065	6-011520-0000
77	Mounting pad - guide channel GC20	ZP0082	7-302422-0000
80	Wire tensioner - Z105 for upper cover	ZP0026	6-009056-0000
90	Cover locking screw M4	A 700/3	7-303030-0000
110	Profile - Fixed holder for Screen	ZP0052/1	3-03058-PU11
120	Bent angle Fe 100/40	XY 00017	3-02233-PU22
130	Nut M5 DIN 6923	A 710/3	6-011882-0000
140	Screw M5x10 Zn DIN 965-H	A 700/12	6-003186-0000

SCREEN GW

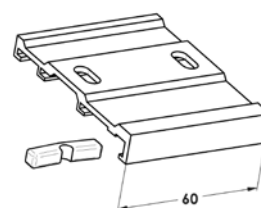
Head Rail C 105



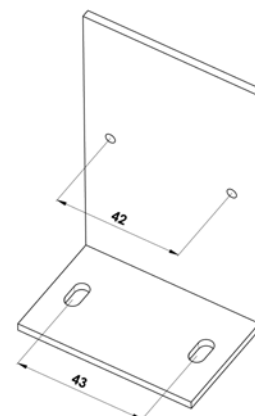
Head Rail CT 105



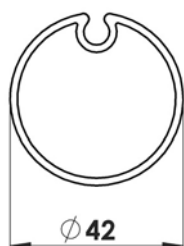
Head rail hanger
(6-009232)



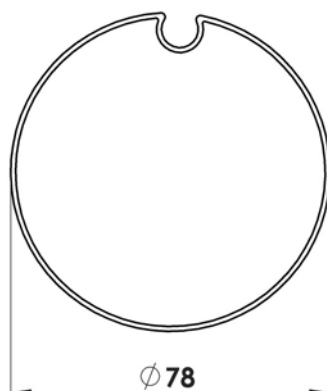
Square L
(7-302233)



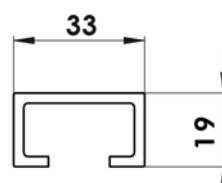
Bottom rail FZ 47
(RR 08/6, 6-009147)



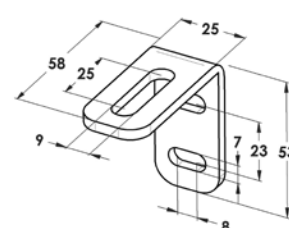
Winding roller
(6-011084)



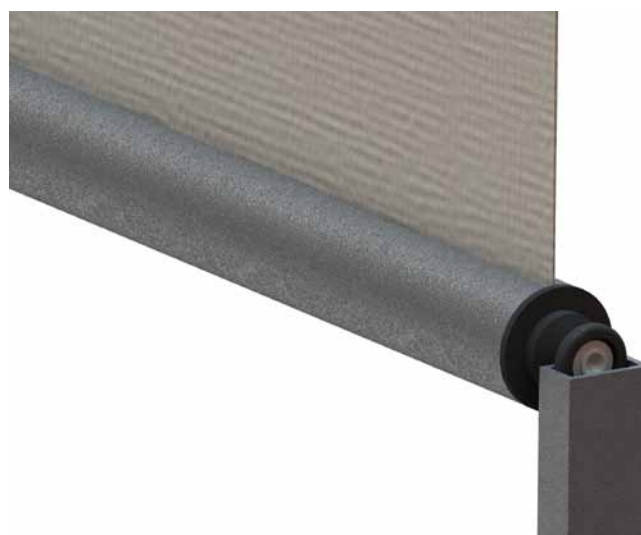
Guide rail
(6-008727)



Bracket for steel wire
(302431)



Design variants



SCREEN GW

Measurement Manual

Measurement Manual

The SCREEN GW roller blinds can be placed into an opening or in front of it, and attached to the ceiling or wall.

The screen roller blind width and height shall be measured as follows:

W width (mm)

a) attachment into an opening:

Measure the actual opening width in three points, indicate the lowest dimension measured in the order form.

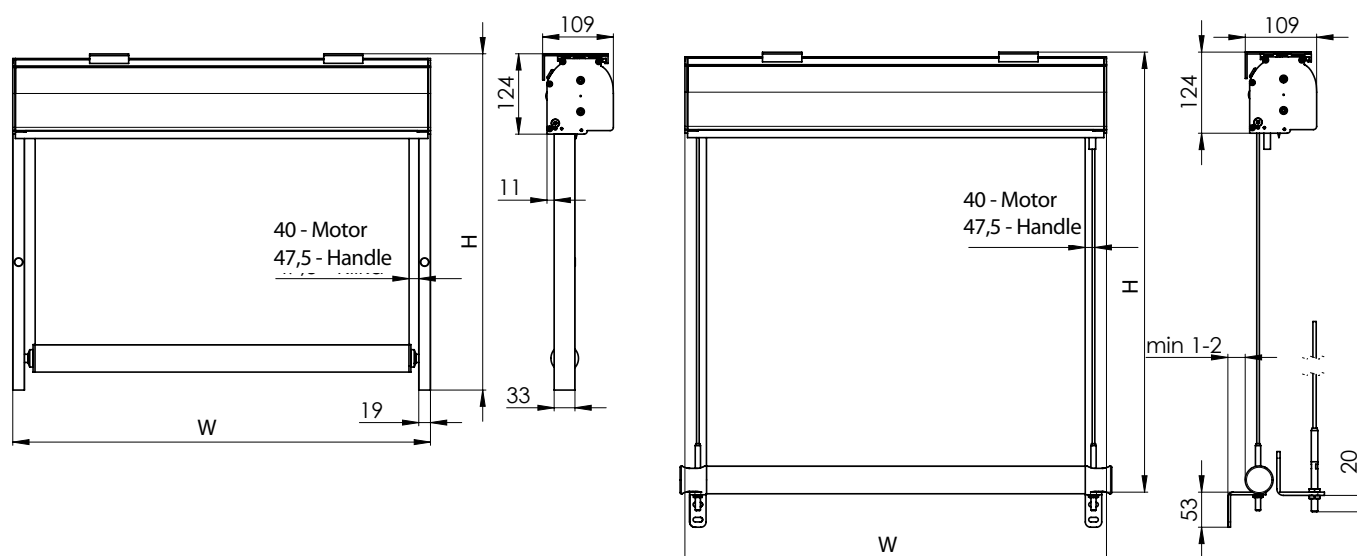
b) attachment in front of an opening:

As a rule, indicate the width of the opening which is to be shaded in the order form.

Dimensions outside the stipulated limits must be consulted with the manufacturer.

H height (mm)

Measure the overall height including the roller blind upper section and holder.



Dimensions outside the stipulated limits must also be consulted with the manufacturer.

More information in the separate document **Measurement and assembly instructions**.

SCREEN GW

Assembly

Assembly

Assembly works must be carried out solely by qualified personnel capable of adhering to all instructions stated below with full consideration of their safety and that of all other persons.

The main activities include:

- 1) preparation of walls, ceilings, windows or other structures for the assembly of roller blinds while using portable drills and screwdrivers;
- 2) roller blind assembly to a wall or ceiling;
- 3) connection to power mains;
- 4) adjustment (of end stops / end switches, etc.) and testing of the roller blind

Preparation of roller blind assembly

Prior to installing the roller blind, check whether the surface of the installation place is not damaged and if it is suitable for assembly. Select suitable attachment screws (type and dimensions) corresponding to the type of structure onto which the roller blind is to be installed (wood, cement, brick).

NOTE: Faulty assembly can lead to accidents. Observe instructions for the proper roller blind installation to prevent the risk of separation of the roller blind from a wall or window. ISOTRA a. s. shall not be held responsible for defects caused by faulty assembly.

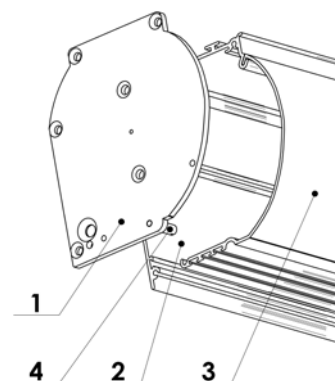
Roller blind assembly

The method of assembly depends on the type of the roller blind:

- a) Solid box with cords: first attach the box to a wall or ceiling, then tighten and fix the cords.
 - b) Solid box with the GC20 guide bar: first attach the box to a wall or ceiling, then attach the guide bars.
- Boxes with roller blinds can be installed to a ceiling or front surfaces using special attachment brackets.

Upper box assembly

The upper box consists of three parts: side board (1), fixed part (2) and removable part (3). If it is necessary to remove the winding drum, the access to the upper box is possible after removing two screws (4) – one on each side – and removing the removable part of the box.



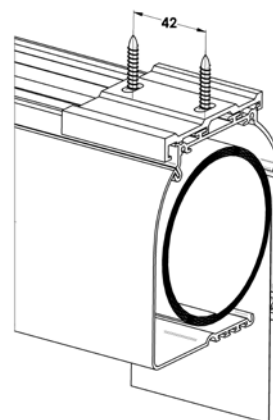
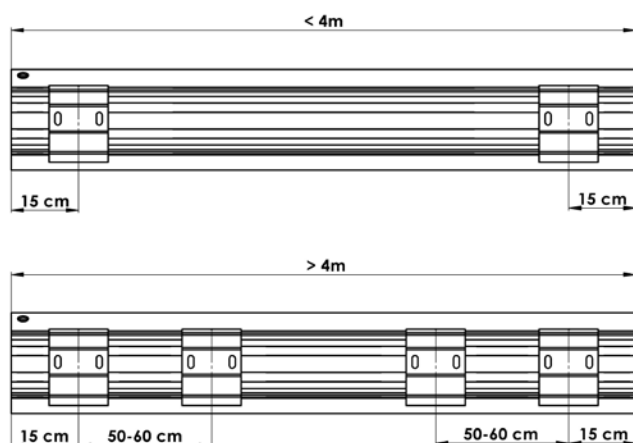
SCREEN GW

Assembly

Assembly to ceiling

Mark the position of holes to be drilled, considering the following factors:

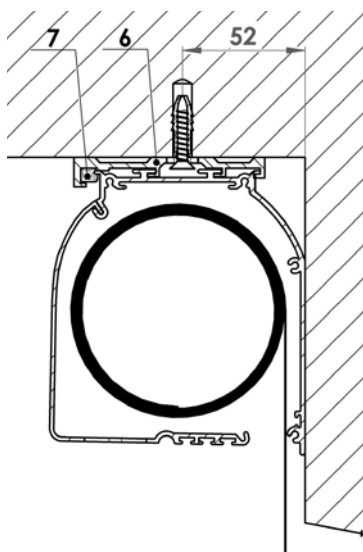
- for upper boxes having the width of max. 4.0 m, two brackets (6) are sufficient which must be installed in a distance of approximately 15–20 cm from each end;
- for wider roller blinds, four brackets (two pairs) are necessary, one in a distance of 15–20 cm from each end and the second in a distance of 20–60 cm from the first one;



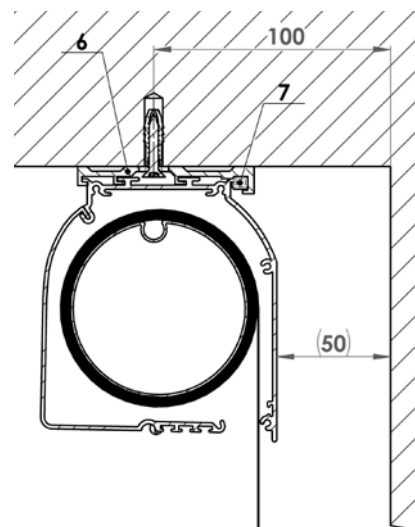
- if possible, the distance from the wall depends on the bracket attachment method, i.e. the position of wedges (7):
 - front wedge: **52 mm**
 - rear wedge: **100 mm**

The following facts must be kept in mind:

- assembly of a bracket with attachment screws / wedges pointing toward the room minimises the distance between the upper box and the rear wall, but the bracket is visible and not visually attractive;
- assembly of a bracket with attachment screws / wedges in the back is more aesthetically desirable, but requires at least 5 cm of space between the back wall and the upper box.



Attach brackets (6) using screws and components suitable for the type of structure onto which they are to be attached (metallic structure, window frame, wall, other material). If four brackets are used, ensure that the brackets are perfectly aligned ± 1 mm; this can be checked by sliding the box along the cut-outs before tightening the attachment screws.



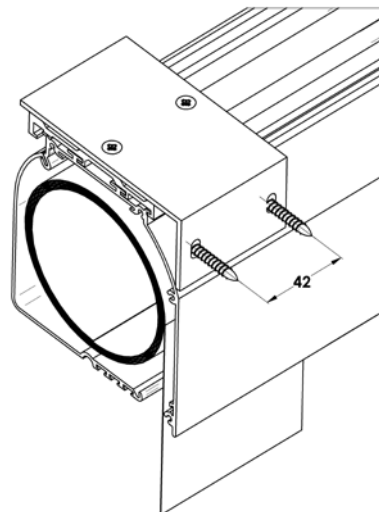
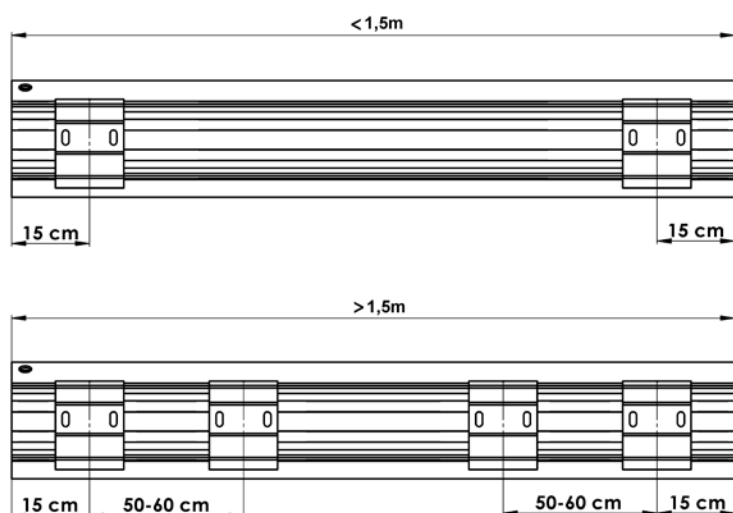
Insert the upper box to brackets (6) and slide it lengthwise until it is centred within the window wing, and secure with wedges (7).

SCREEN GW

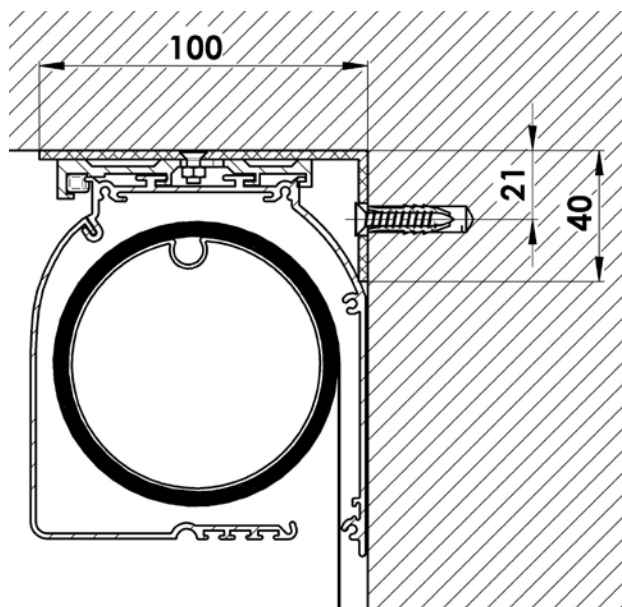
Assembly

Assembly to wall

Mark the position of angle-section brackets and holes to be drilled. For upper boxes having the width of max. 1.5 m, two brackets are sufficient, which must be installed in a distance of approximately 15–20 cm from each end. For wider roller blinds, four brackets (two pairs) are necessary, one in a distance of 15–20 cm from each end and the second in a distance of 20–60 cm from the first one.



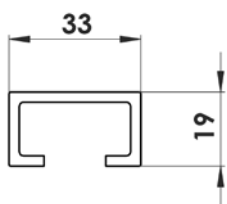
Attach brackets using screws and components suitable for the type of structure onto which they are to be attached (metallic structure, window frame, wall, other material). If four brackets are used, ensure that the brackets are perfectly aligned $\pm 1\text{ mm}$; this can be checked by sliding the box along the cut-outs before tightening the attachment screws. Insert the box to brackets and slide it lengthwise until it is centred within the window wing, and secure with wedges.



SCREEN GW

Assembly

Assembly of guide rails

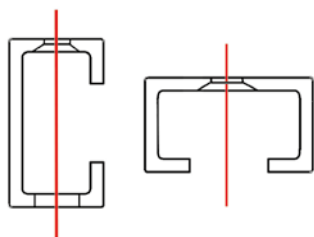


First, attach the box to the ceiling/wall, then install the guide rails.
For model GW, only one type of guide rails is available – GC20.

The bar is supplied with pre-drilled holes, as per order, from the front or from the side.

Placement of holes:

- outer holes are placed approx. 10 cm from the rail edge;
- intermediate holes are placed at approx. each 50–80 cm evenly along the guide rail.

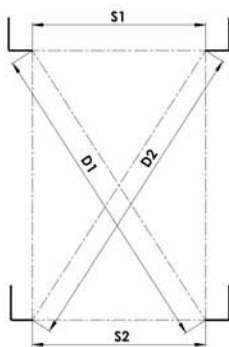


The red line indicates the vertical axis for attachment screws. Use the drilled guide rails as a template for transferring the hole positions to the window wing wall.

Attach the guide bars to the wall using screws and components suitable for the type of structure onto which they are to be attached (metallic structure, cement, brick, etc.).

Once the assembly is finished, check parallelism and rectangularity of the guide bars. This can be done by measuring two distances "S1" and "S2" or diagonals "D1" and "D2". The dimensions must be the same ± 2 mm. Proper guide bar placement is vital, otherwise the function of the roller blind can be impaired.

For front guide rail assembly, self-adhesive covers are supplied to cover the attachment screw holes.

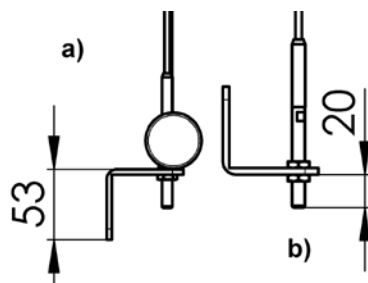


SCREEN GW

Assembly

Assembly of cords in roller blinds with boxes

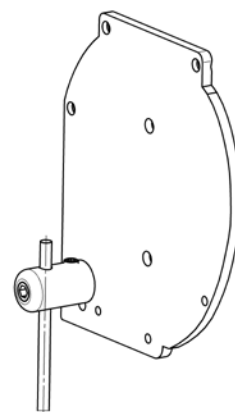
Steel cords $\varnothing 4$ mm are supplied cut to length with a pre-pressed threaded end piece. The exact cord configuration may vary per specific projects. After attaching the upper box, pass the cord through the attachment roller on the side board and secure with a bolt.



Lower brackets can be installed on the side or front, while the angle section aims down (a) or up (b).

Note: The places for the assembly of the brackets must be selected before ordering the roller blinds, as this position determines the cord length.

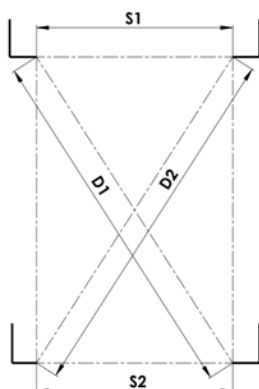
If brackets are installed upwards (b), leave at least 20 mm of space between the bracket and the floor or window sill.



Attach the brackets to the wall using screws and components suitable for the type of structure onto which they are to be attached (metallic structure, cement, brick, etc.). If necessary, increase the bracket distance from the wall by washers. Always tighten the cord and hold it to prevent twisting.

NOTE

Check parallelism and rectangularity of the four attachment points. This can be done by measuring two distances "S1" and "S2" or diagonals "D1" and "D2". The dimensions must be the same ± 1 mm.



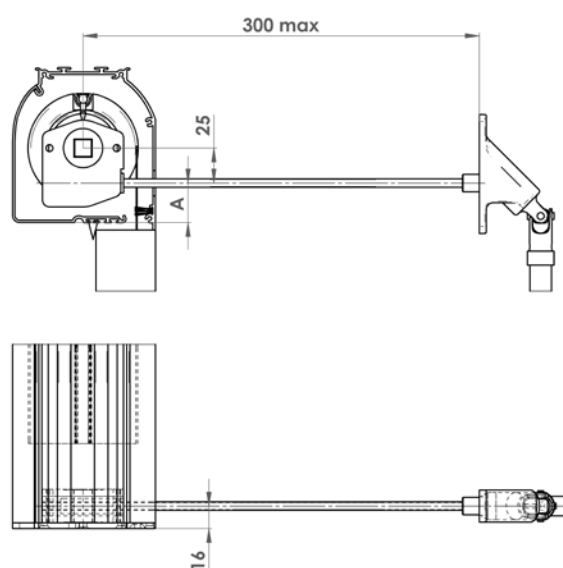
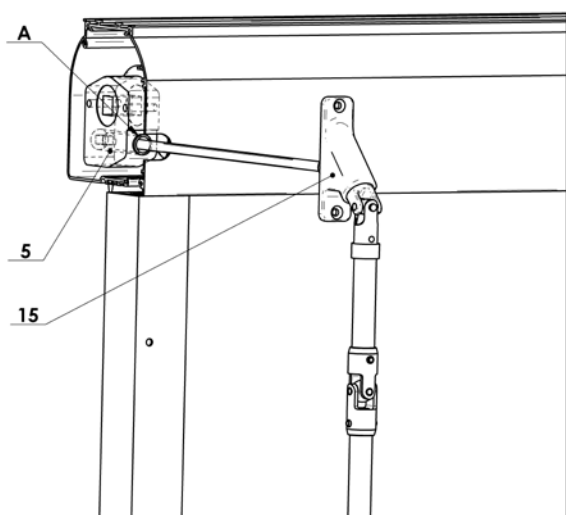
SCREEN GW

Assembly

Exterior assembly with sleeve passing through wall

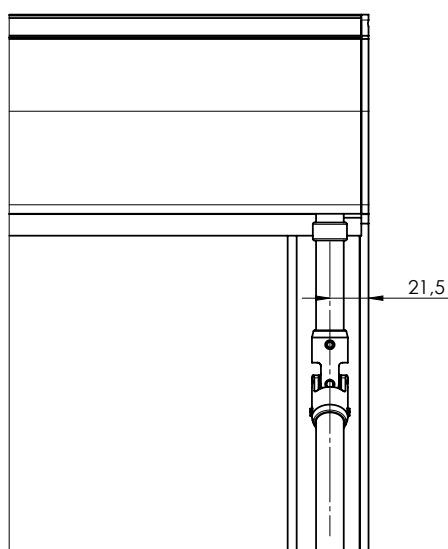
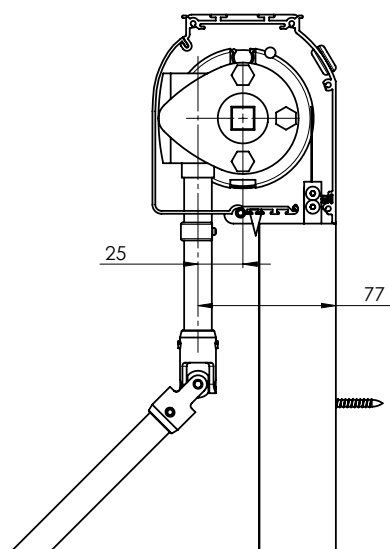
For exterior roller blinds installed with a sleeve passing through a wall and with a crank rod in the interior, it is necessary to calculate the exact position of the hole for a 30-cm angular rod (15).

- Attach the brackets to a wall or ceiling and install the roller blind in its place. Use a pencil to mark the position of the box lower corner on the wall or window frame. Remove the roller blind from the brackets and measure the distance from the box lower corner to the centre of the hole (A) in the rear part of the box (which serves for inserting the angular rod to control the transmission system). Mark the same distance on the wall, thus marking the centre of the hole to be drilled.
- Carefully drill a hole through the wall using an 8-mm drill bit. The hole must be as level as possible.
- Install the roller blind back and insert a sleeve from the interior to check accuracy of the hole position. Then cut the angular rod to size using a hack-saw. The rod size depends on the wall thickness.



Handle – straight option (K)

Handle with roller blind by delivery connected



SCREEN LITE

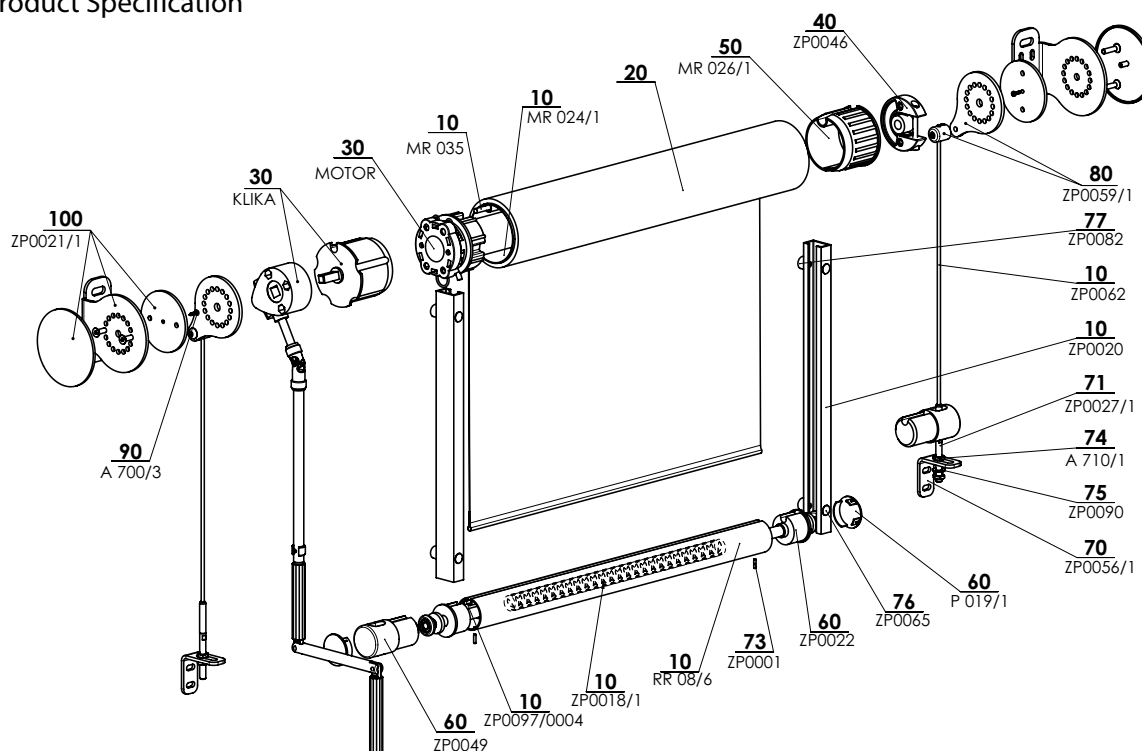


- ▲ Light-weight variant without the cover moulding
- ▲ cost-effective alternative to the SCREEN ZIP and SCREEN GW models
- ▲ screening of both the interior and the exterior areas
- ▲ side guidance by a cable or by a guide rail
- ▲ possibility of electric control,
- ▲ high wind resistance (wind class 3).

ISOTRA *Quality*

SCREEN LITE

Basic Product Specification



2-01395-0000-A

Control

Used for lifting and lowering of screen blinds.

Handle - the control rod mechanism is led into the interior at an angle from 45 ° to 90 ° using a wall bushing and a hexagonal rod. (Color: grey / eloxal coating)

Motor - Optional control using the sun / wind sensor or by a remote control or switch.

Specification

	Winding Roller	Bottom Rail	Side Guidance		Assembly
			Guide Rail	Cable	
Commercial Name		FD 42	GC20	ZP0062	into the ceiling (into the window opening) on the wall (in front of the window opening)
Dimension (mm)	Ø 78 mm	Ø 42 mm	33x19 mm	Ø 4 mm	
Material	Fe	Al	Al	Fe	
					
Colour	grey	Standard: RAL 9006 light silver RAL 9007 dark silver RAL 7016 anthracite grey Other RAL colors upon request*		grey	

*except of plastic parts, maximum width 4000 mm

We do not make atypical designs.

Standard Dimensions

Version	Width (mm)		Height (mm)		Guaranteed area (m²)
	min	max	min	max	
handle	500	4000	500	3800	15,2
motor	800	4500	500	4000	18

SCREEN LITE (2-01395-0000)

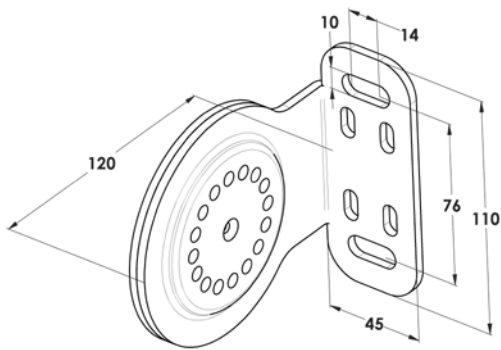
position	item name	business name	drawing number
10	Bottom rail Al - FD 42 raw	RR 08/6	6-009147-0000
10	Rounded weight steel	ZP0018/1	3-02880-PU27
10	Plastic rod 4,0 mm PVC	ZP0097/0004	6-016911-0004
10	Winding roller for awnings dia. 78 mm - 6 m	MR 024/1	6-011084-0078
10	Plastic bar PVC 6,0 mm	ZP0097/0006	6-016911-0006
10	Steel wire 4mm	ZP0062	6-011492-0000
10	Guide channel GC20 raw	ZP0020	6-008727-0000
20	Screen fabric		see Sampler of Screen fabrics
30	Motor (SOMFY, BECKER) screen		see Control
30	Transmission + handle for screen		see Control
40	Set for motor: AL holder with case	ZP0046	6-009209-0000
50	Roller cover dia. 78mm with pin	MR 026/1	6-011086-0078
60	Bottom rail end cup FD 42	ZP0022	6-008736-0030
60	Black end cup screen	ZP0049	3-02208-9004
60	Guide channel cover dia. 40	P 019/1	3-01849-9006
70	Tensioning wire angle - stainless steel, unpainted	ZP0056/1	3-02431-0000
71	Tensioning screw	ZP0027/1	3-02430-0000
73	Spring pin 3x12 DIN 7346	ZP0001	6-009807-0000
74	Low nut M8 stainless DIN 439B A2	A 710/1	6-010705-0000
75	Pad M8, DIN 125-A1, A2	ZP0090	6-009997-0002
76	Self-adhesive cover 606-172-13 silver RAL9006	ZP0065	6-011520-0000
77	Mounting pad - guide channel GC20	ZP0082	7-302422-0000
80	Wire holder for round console - set + couple RAL	ZP0059/1	2-01009-PU11
90	Cover locking screw M4	A 700/3	7-303030-0000
100	Round console - set + couple RAL	ZP0021/1	2-01002-PU11

SCREEN LITE

Technical Specification

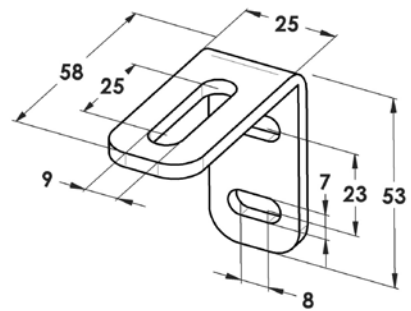
Rail

(2-01002)



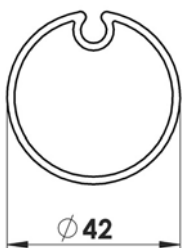
Bracket for steel wire

(3-02431) - stainless steel, unpainted



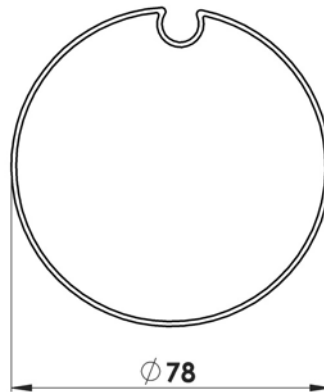
Bottom Rail FD 42

(RR 08/6, 6-009147)



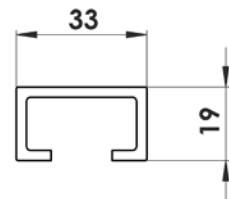
Winding roller

(6-011084)

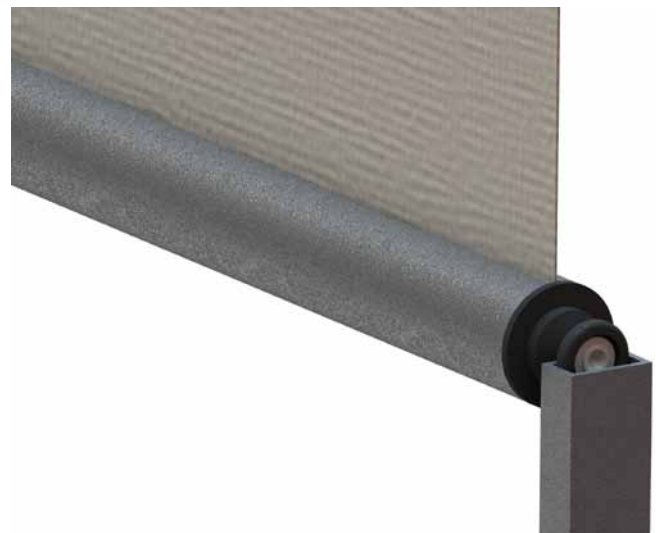
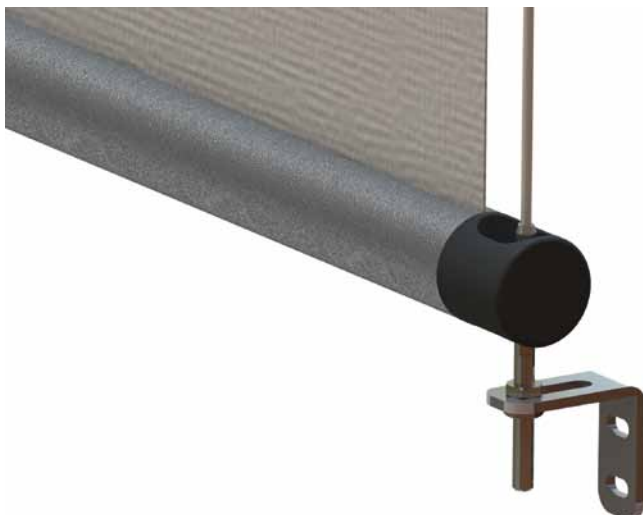


Guide rail GC 20

(6-008727)



Design variants



SCREEN LITE

Measurement Manual

Measurement Manual

The SCREEN LITE roller blinds can be placed into an opening or in front of it, and attached to the ceiling or wall.

The screen roller blind width and height shall be measured as follows:

W width (mm)

a) attachment into an opening:

Measure the actual opening width in three points, indicate the lowest dimension measured in the order form.

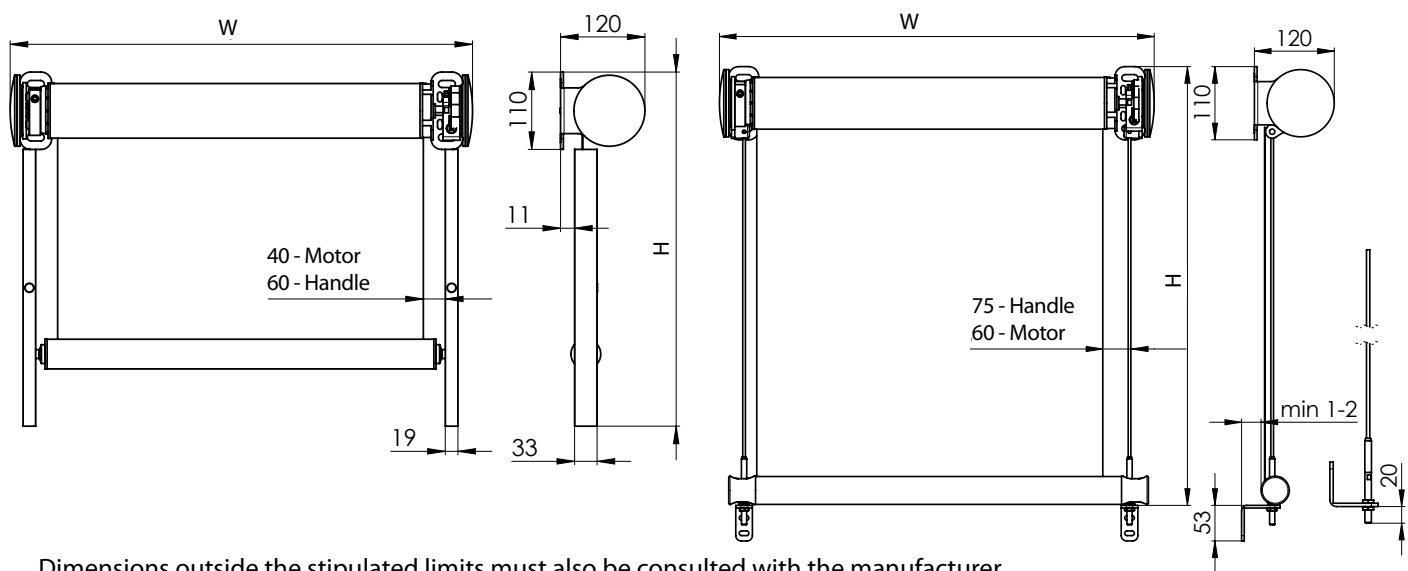
b) attachment in front of an opening:

As a rule, indicate the width of the opening which is to be shaded in the order form.

Dimensions outside the stipulated limits must be consulted with the manufacturer.

H height (mm)

Measure the overall height including the roller blind upper section and holder.



Dimensions outside the stipulated limits must also be consulted with the manufacturer.

More information in the separate document **Measurement and assembly instructions**.

Assembly

Assembly works must be carried out solely by qualified personnel capable of adhering to all instructions stated below with full consideration of their safety and that of all other persons.

The main activities include:

- 1) preparation of walls, ceilings, windows or other structures for the installation of roller blinds while using portable drills and screwdrivers;
- 2) roller blind assembly to a wall or ceiling;
- 3) connection to power mains;
- 4) adjustment (of end stops / end switches, etc.) and testing of the roller blind.

Preparation of roller blind assembly

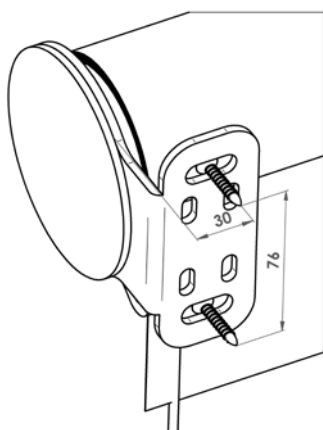
Prior to installing the roller blind, check whether the surface of the assembly place is not damaged and if it is suitable for installation. Select suitable attachment screws (type and dimensions) corresponding to the type of structure onto which the roller blind is to be installed (wood, cement, brick).

NOTE: Faulty installation can lead to accidents. Observe instructions for the proper roller blind assembly to prevent the risk of separation of the roller blind from a wall or window. ISOTRA a. s. shall not be held responsible for defects caused by faulty assembly.

SCREEN LITE

Assembly

Roller blind assembly to ceiling or wall

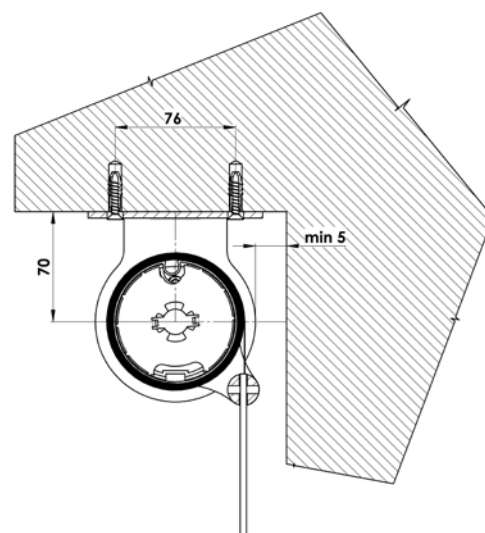


Start the screen roller blind assembly to the ceiling by marking out the attachment holes of the supporting brackets.

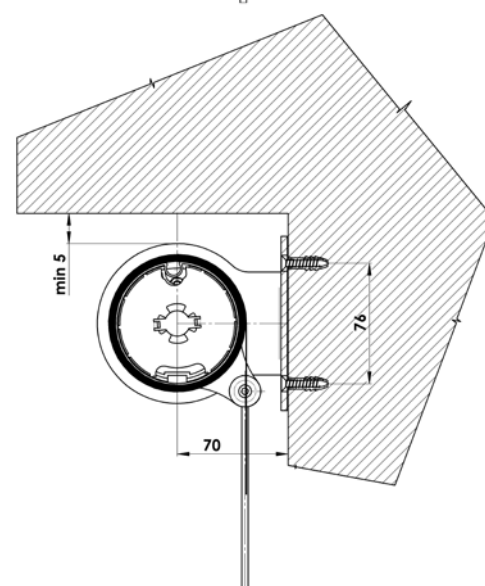
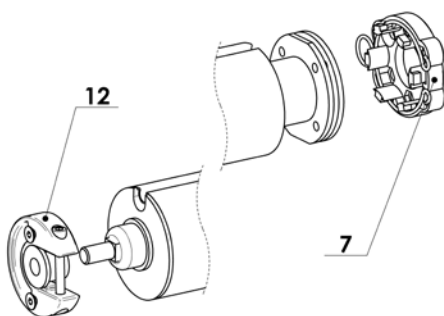
The distance of the screws from the roller blind edge should be 30 mm. The screw spacing is 76 mm.

Leave a gap of at least 5 mm between the wall or ceiling and the supporting bracket, as shown in the picture.

You can check the accuracy of marking before drilling by placing the roller blind in assembled condition. Drill the holes and attach the supporting brackets. Mount and secure the roller blind rolling unit to the attached brackets.



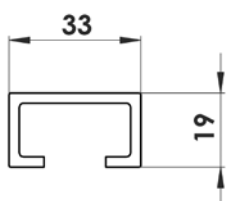
The rolling unit is to be seated at the motor side to HiPro clamp (7) and secured by a lock, while, on the opposite side, the unit is inserted in plastic housing (12) and secured by a screw.



SCREEN LITE

Assembly

Assembly of guide bars

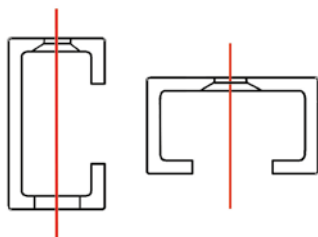


First, attach the box to the ceiling/wall, then install the guide rails. For model SCREEN LITE, only one type of guide rails is available – GC20. The bar is supplied with pre-drilled holes, as per order, from the front or from the side.

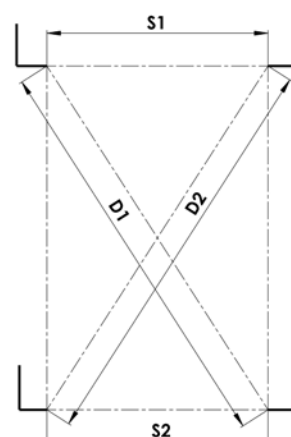
Placement of holes:

- outer holes are placed approx. 10 cm from the rail edge;
- intermediate holes are placed at approx. each 50–80 cm evenly along the guide rail.

The red line indicates the vertical axis for attachment screws. Use the drilled guide bars as a template for transferring the hole positions to the window wing wall. Attach the guide bars to the wall using screws and components suitable for the type of structure onto which they are to be attached (metallic structure, cement, brick, etc.). For front guide bar installation, self-adhesive covers are supplied to cover the attachment screw holes.



Once the installation is finished, check parallelism and rectangularity of the guide bars. This can be done by measuring two distances "S1" and "S2" or diagonals "D1" and "D2". The dimensions must be the same ± 2 mm. Proper guide bar placement is vital, otherwise the function of the roller blind can be impaired.

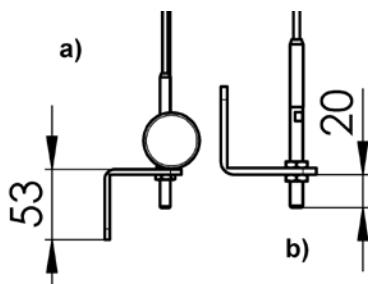


SCREEN LITE

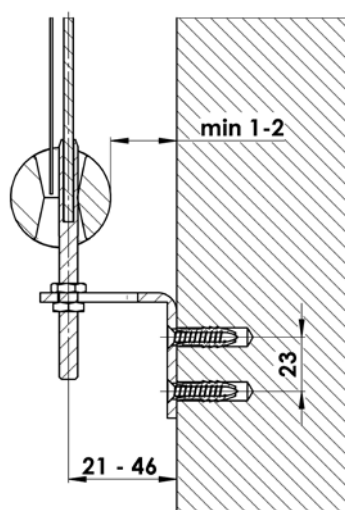
Assembly

Assembly of cords in roller blinds without boxes

Steel cords $\varnothing 4$ mm are supplied cut to length with a pre-pressed threaded end piece. The exact cord configuration may vary per specific projects. After attaching the upper box, pass the cord through the attachment roller on the side board and secure with a bolt.



floor or window sill.



Lower brackets can be installed on the side or front, while the angle section aims down (a) or up (b).

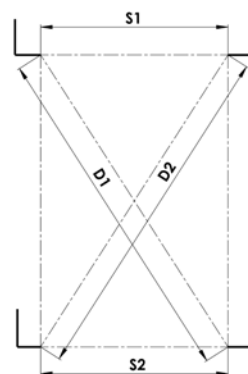
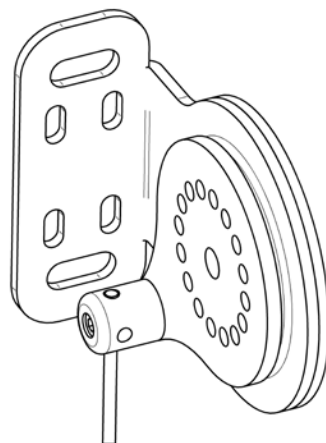
Note: The places for the installation of the brackets must be selected before ordering the roller blinds, as this position determines the cord length.

If brackets are installed upwards (b), leave at least 20 mm of space between the bracket and the

Attach the brackets to the wall using screws and components suitable for the type of structure onto which they are to be attached (metallic structure, cement, brick, etc.). A gap of 1–2 mm should be left between the lower section and the wall/window to prevent mutual damage during operation. If necessary, increase the bracket distance from the wall by washers. Always tighten the cord and hold it to prevent twisting.

NOTE

Check parallelism and rectangularity of the four attachment points. This can be done by measuring two distances "S1" and "S2" or diagonals "D1" and "D2". The dimensions must be the same ± 1 mm.



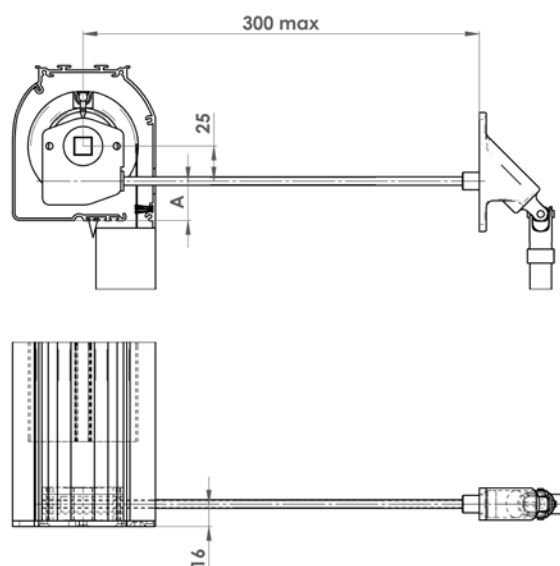
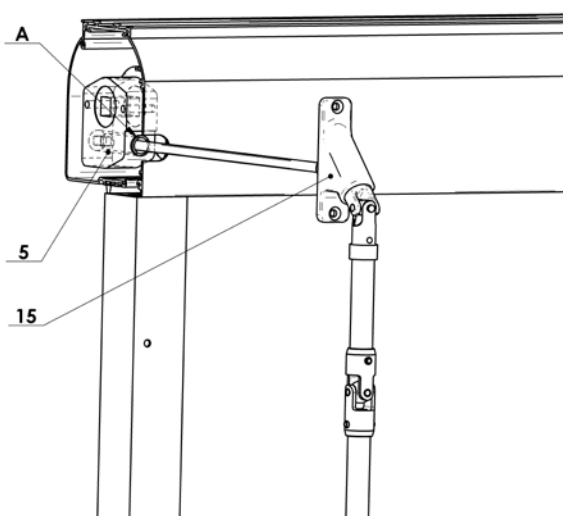
SCREEN LITE

Assembly

Exterior assembly with sleeve passing through wall

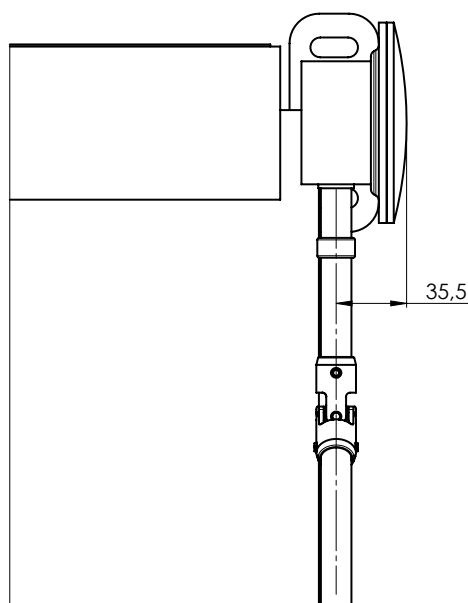
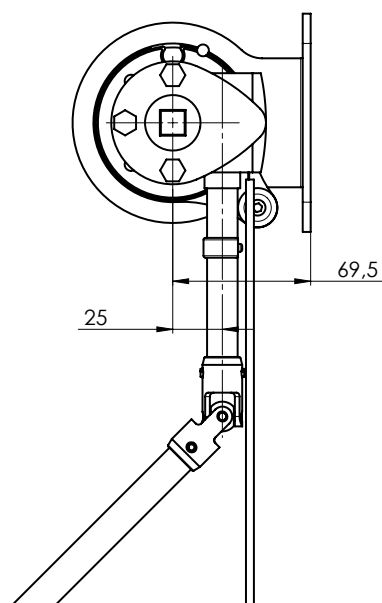
For exterior roller blinds installed with a sleeve passing through a wall and with a crank rod in the interior, it is necessary to calculate the exact position of the hole for a 30-cm angular rod (15).

- Attach the brackets to a wall or ceiling and install the roller blind in its place. Use a pencil to mark the position of the box lower corner on the wall or window frame. Remove the roller blind from the brackets and measure the distance from the box lower corner to the centre of the hole (A) in the rear part of the box (which serves for inserting the angular rod to control the transmission system). Mark the same distance on the wall, thus marking the centre of the hole to be drilled.
- Carefully drill a hole through the wall using an 8-mm drill bit. The hole must be as level as possible.
- Install the roller blind back and insert a sleeve from the interior to check accuracy of the hole position. Then cut the angular rod to size using a hack-saw. The rod size depends on the wall thickness.



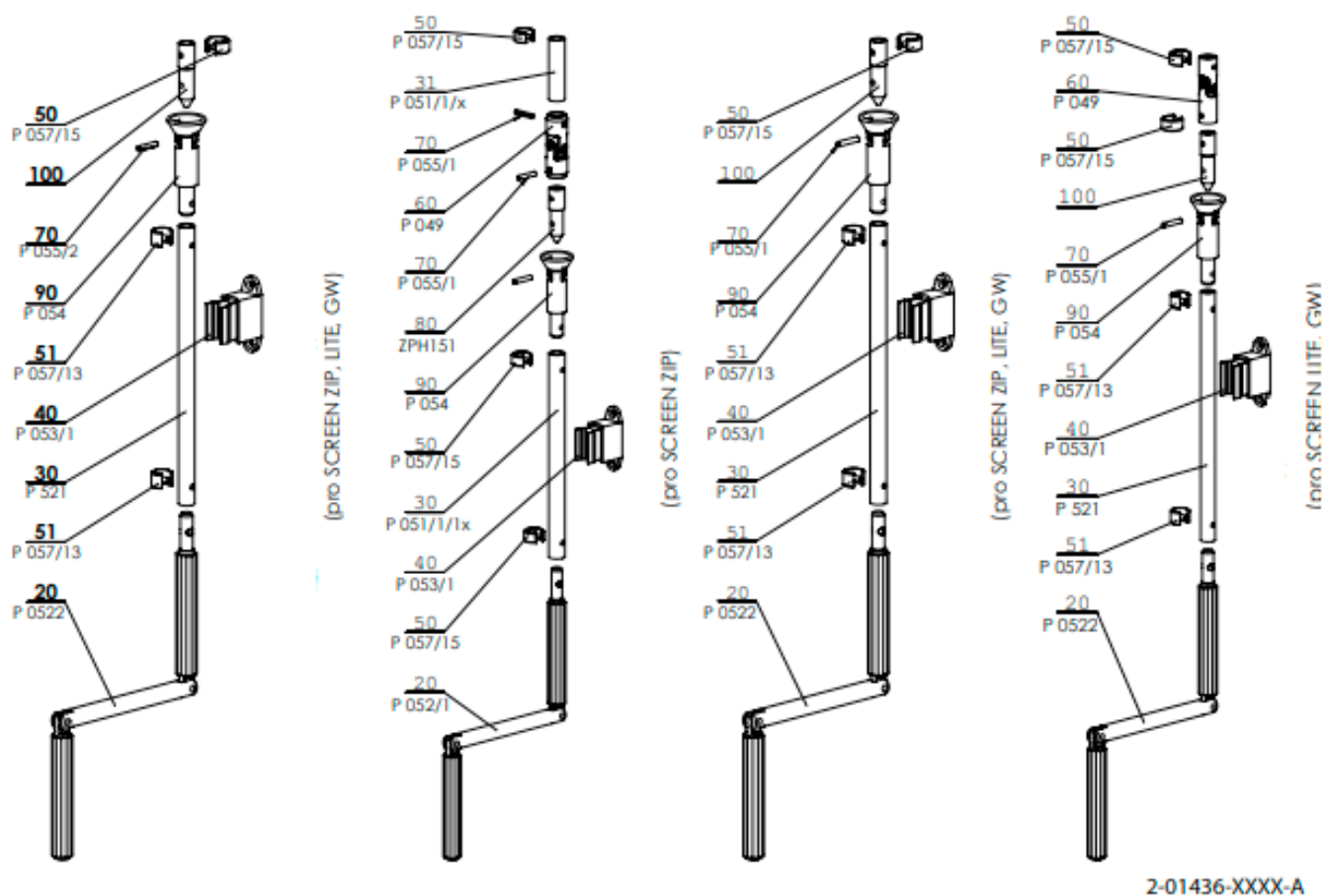
Handle – straight option (K)

Handle with roller blind by delivery connected



SCREEN ZIP, GW, LITE

Control - Handle

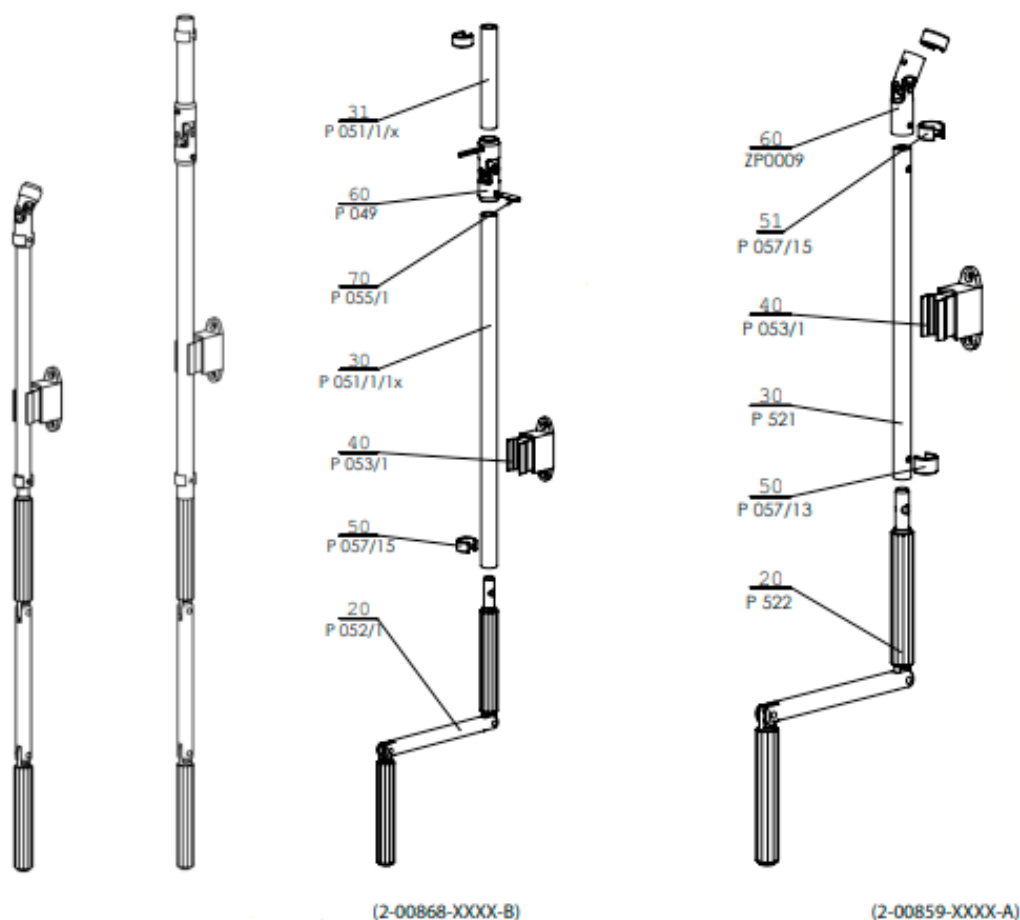


Handle removable for SCREEN (2-01436-XXXX-0)

position	item name	business name	drawing number
20	Cranked handle Al – dia 12 mm grey	P 052/1	6-006682-0000
20	Cranked handle Al – dia 10 mm grey	P 522	6-001255-0000
30,31	Connecting tube Al – dia 15 mm elox	P 051/1/X	7-301797-PU52
30	Connecting tube Al – dia13 mm elox	P 521	6-001254-0000
40	Handle holder– universal grey	P 053/1	6-006683-7045
50	Locking ring with pin 15 mm grey	P 057/15	6-006467-7035
53	Locking ring with pin 13 mm grey	P 057/13	6-006468-7035
60	Tube joint 15 mm	P 049	6-001182-0000
70	Pivot elastic 4x22 Din 1481	P 055/1	6-004581-0000
80	Adaptation – kargan	ZPH151	6-014318-0000
90	Handle funnle square	P 054	6-001190-0000
100	Pin for handle		3-03287-0000

SCREEN ZIP

Control - Handle



Handle for SCREEN ZIP (2-00868-XXXX-B)

position	item name	business name	drawing number
20	Cranked handle Al – dia 12 mm grey	P 052/1	6-006682-0000
30,31	Connecting tube Al – dia 15 mm elox	P 051/1/X	7-301797-PU52
40	Handle holder – universal grey	P 053/1	6-006683-7045
50	Locking ring with pin 15 mm grey	P 057/15	6-006467-7035
60	Tube joint 15 mm	P 049	6-001182-0000
70	Pivot elastic 4x22 Din 1481	P 055/1	6-004581-0000

Handle for SCREEN GW, LITE (2-00859-XXXX-A)

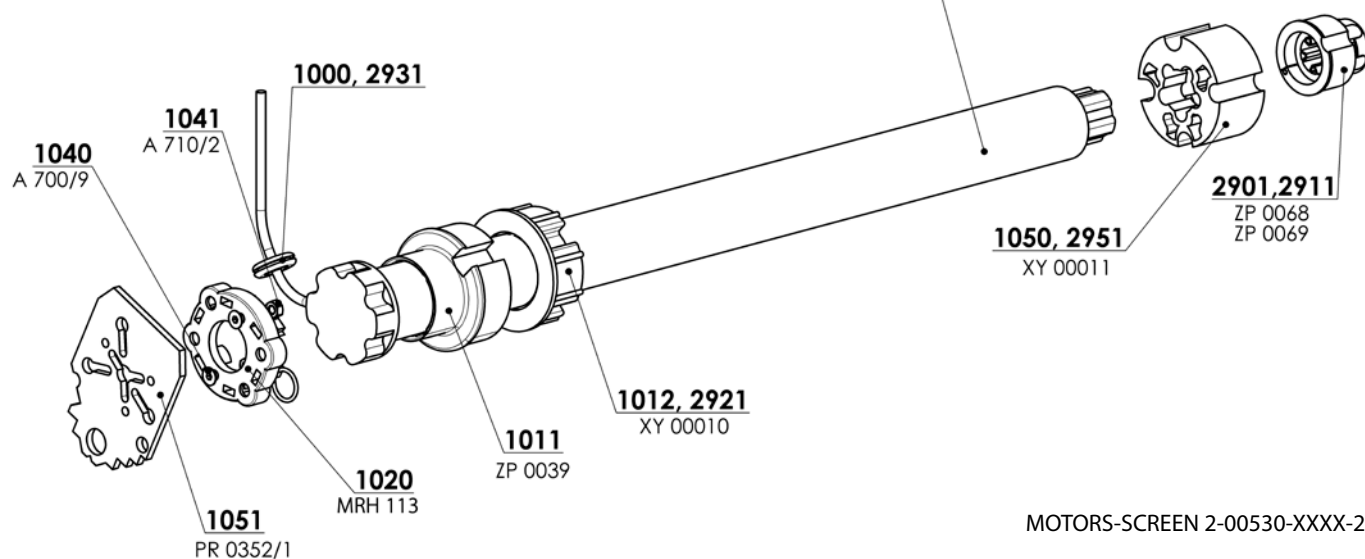
position	item name	business name	drawing number
20	Cranked handle Al – dia 10 mm grey	P 522	6-001255-0000
30	Connecting tube Al – dia 13 mm elox	P 521	6-001254-0000
40	Handle holder – universal grey	P 053/1	6-006683-7045
50	Locking ring with pin 13 mm grey	P 057/13	6-006468-7035
51	Locking ring with pin 15 mm grey	P 057/15	6-006467-7035
60	Cross handle crank 13 mm	ZP0009	6-009181-0000
70	Pivot elastic 4x22 Din 1481	P 055/1	6-004581-0000

SCREEN ZIP, ZIP ECONOMY, GW, LITE

Control - Motor

30, 101 - 803, 2501 - 2601

MOTOR



MOTORS-SCREEN 2-00530-XXXX-2

position	item name	business name	drawing number
1	Motor ALTUS 50 RTS 06/17	MR 091/06	6-011170-0006
102	Motor ALTUS 50 RTS 10/17	MR 091/10	6-011170-0010
103	Motor ALTUS 50 RTS 15/17	MR 091/15	6-011170-0015
201	Motor Sunea 50 Screen io 06/17	ZP0084	6-012559-0617
202	Motor Sunea 50 Screen io 10/17	ZP0085	6-012559-1017
203	Motor Sunea 50 Screen io 15/17	ZP0086	6-012559-1517
301	Motor MAESTRIA +50 IO 06/17 VVF5M	ZP0084/1	6-012538-0617
302	Motor MAESTRIA +50 IO 10/17 VVF5M	ZP0085/1	6-012538-1017
303	Motor MAESTRIA +50 IO 15/17 VVF5M	ZP0086/1	6-012538-1517
401	Motor MAESTRIA WT+50 WT 06/17	ZP0093/06	6-015258-0617
402	Motor MAESTRIA WT+50 WT 10/17	ZP0093/10	6-015258-1017
403	Motor MAESTRIA WT+50 WT 15/17	ZP0093/15	6-015258-1517
1011	Motor adaptor dia. 78 ZIP	ZP0039	6-3-03084-0000
1020	Motor bracket	MRH 113	6-013871-0000
1040	Screw inbus M6x12 Zn DIN 7991	A 700/9	6-003511-0000
1041	Nut M6 DIN 934, 8,8, Zn	A 710/2	6-003188-0005
1050	Driver LT50 for DS78	XY 00011	6-009120-0002
1051	Screen motor bracket	PR0352/1	3-02962-0000
1052	Screw M5x16 Zn DIN 965-H, 4,8 - cross	A 700/10	6-003595-0000
1053	Screw inbus M6x22 A2 DIN 7991		6-013675-0000
2901	Reduction LS40/LT50	ZP0068	6-001594-0000
2911	Reduction of drive head LS40/LT50	ZP0069	6-001595-0000
2921	Adaptor LT50 for DS78	XY 00010	6-009120-0001
2931	Rubber cable, plastic, black		6-017078-0000

Motors (Becker) (6-015258 / 6-012538 / 6-002624 / 6-014483)

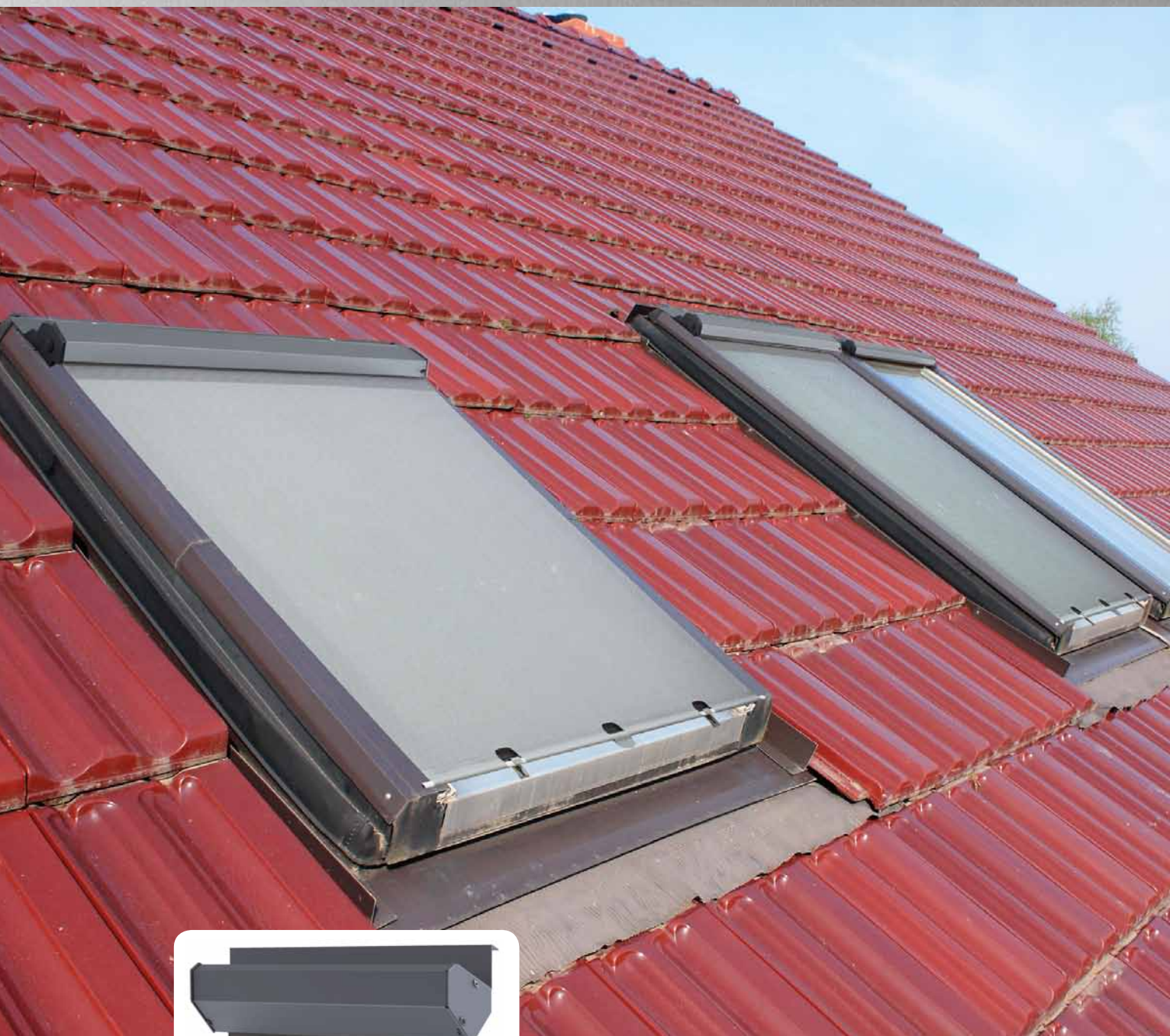
position	item name	business name	drawing number
30	Motor BECKER 50 E 08/17	X.2010/1301590	6-017861-0008
30	Motor BECKER 50 E 12/17	X.2010/1301600	6-017861-0012
30	Motor BECKER 50 E 20/17	X.2010/1301450	6-017861-0020
500	Motor BECKER 50 Screen C 08/17 PLUS	X.2010/1302170	6-018761-0008
500	Motor BECKER 50 Screen C 12/17 PLUS	X.2010/1302180	6-018761-0012
500	Motor BECKER 50 Screen C 20/17 PLUS	X.2020/1301860	6-018761-0020

*Note: E=electronic motor / C=radio motor

Motors (ISOTRA BASIC) SCREEN ZIP, GW, LITE, ZIP ECONOMY

position	item name	business name	drawing number
600	Motor ISOTRA BASIC, 10Nm/17, with integrated receiver, SC zip	X.AM45 10/17S	6-019173-0010
600	Motor ISOTRA BASIC, 15Nm/17, with integrated receiver, SC zip	X.AM45 15/17S	6-019173-0015
600	Motor ISOTRA BASIC, 20Nm/17, with integrated receiver, SC zip	X.AM45 20/17S	6-019173-0020

SCREEN SKY

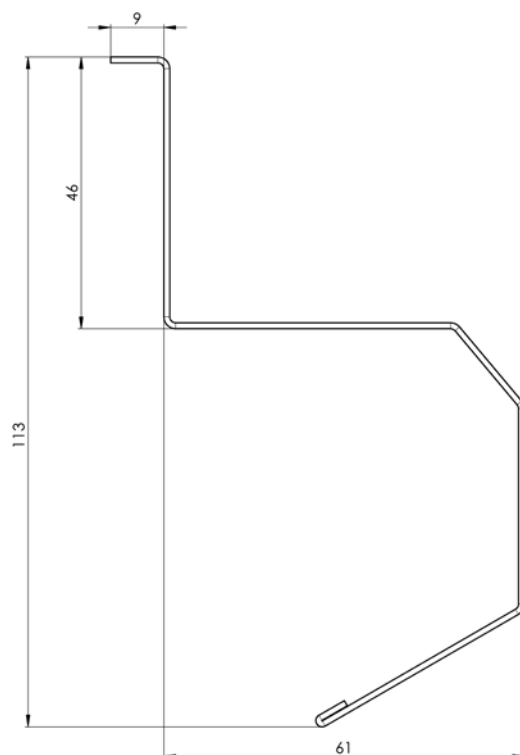


- ▲ Effective protection from light and heat radiation,
- ▲ protection against weather and outside noise,
- ▲ full functionality in any position of the casement,
- ▲ wide selection of fabrics with various levels of light transmittance,
- ▲ wind class 2.

ISOTRA*Quality*

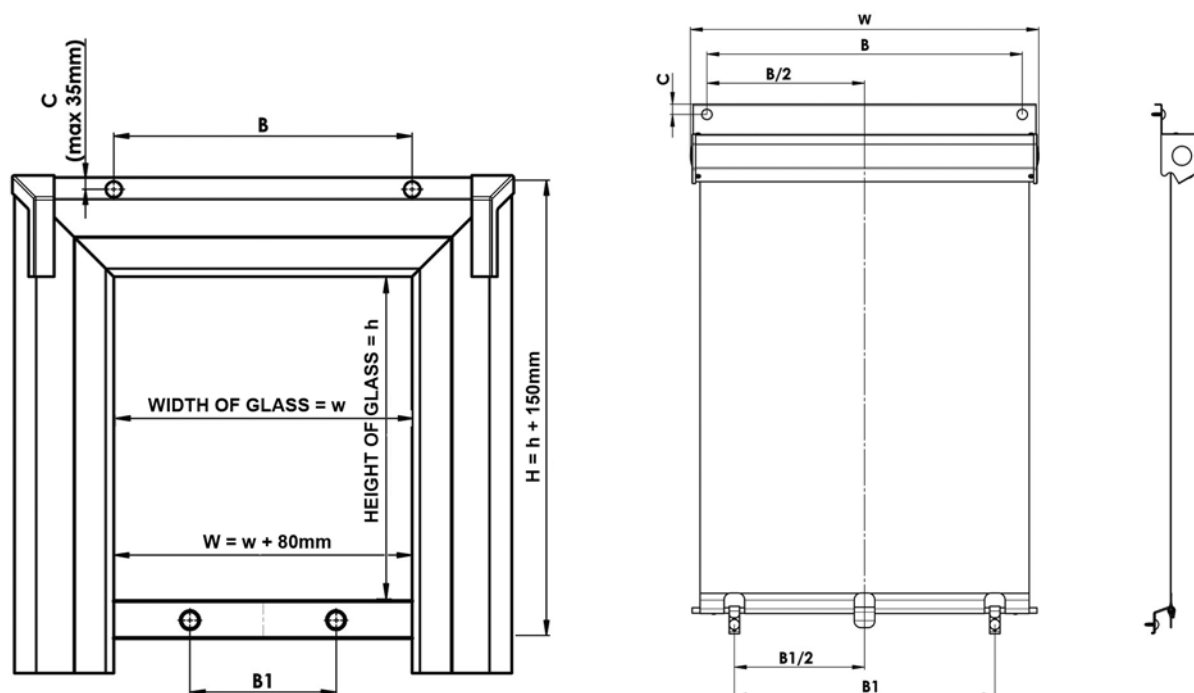
Screen Sky (2-01013-0000)

position	item name	business name	drawing number
10	Profiles - SCREEN - SKY		see Profiles
10/1	Screen cover - S	LR 60	3-02443-0000
10/30	Al tube (D/N) Al - elox	RR 08/41	6-011163-PU52
10/102	Spring, left l=600/1,3	LR 26/2	7-301254-0000
10/110	Tilt rod - triangular	IS 14	7-300050-0000
10/120	Adhesive tape, double DC 5011 LOHM.	RR 21	6-001311-0000
20	Tightener cover	LR 61 XXXX	7-302489-0000
30	Control rod for Screen SKY - 1000 mm	LR 67/1000	2-01400-1000
30	Control rod for Screen SKY - 1500 mm	LR 67/1500	2-01400-1500
30	Control rod for Screen SKY - 2000 mm	LR 67/2000	2-01400-2000
40	Plastic side cap - right	LR 62 XXXX	3-02487-XXXX
41	Plastic side cap - left	LR 63 XXXX	3-02488-XXXX
60	Roller pin - right	LR 17	3-00609-0000
61	Roller pin - left	LR 18	3-00610-0000
70	Screw	LR 102	3-01203-0000
80	Self-tapping screw ST 4,2x16	A 67/4	6-012661-0000
81	wo-part screw cover PVC - black/brown/grey	PR0345/XX	6-002073-XXXX
90	Box	LR 14	3-00650-0000
120	Spring pin	LR 13	3-00608-0000
130	Hook	LR 64	7-302447-0000
140	Rivet 4x6 DIN 7337 A,	SC 142 0000	6-009908-0000
190	Screw 3,5x9,5 DIN 7504 M, Zn	A 67/4	6-003096-0000
220	Fabric screen		see Sampler of Screen fabrics
250	Handle SCREEN-S		3-02445-0000



BOX NA STŘEŠNÍ SCREEN 3-02443-XXXX-A

SCREEN SKY



1. MEASUREMENT OF WINDOWS

It is recommended to make the assessment from the exterior side of the roof window, and at the very plating. If the window is fitted with a nameplate, then in the order form, to its notes, specify the exact name and type of the roof window to verify the accuracy of the measured values.

THE WIDTH AND LOCATION OF BOTTOM HOOK OF ROLLER BLIND IS MEASURED HEREBY:

WIDTH: (W) Measure the diameter of the wing (size **w** of glass) and we recommend to add min.80mm for overlap to measured values. The total measured data (W) must take into account the shape and size of the plating measured roof window. This measured value will be written into the order form FOR ROLLER blinds. The blinds are manufactured to the millimeter widths from 400 mm to 1200 mm width. NB. The WIDTH of the FABRIC (the actual shaded area) is 22 mm less than the total measured value of roller blind.

When the roof window is provided through the belay bolts flashing where the upper box is fixed, measure the distance between these screws (B) and the distance of upper frame (C). If the roof blind isn't provided by them, this figure is not showing. Dimensions beyond the set limits must be consulted with the manufacturer.

HEIGHT: (H)

The height is measured as lightness of window wing (dimensions of glass **h**) and we recommend to add min. 150 mm for overlapping to the measured value. Total measured dimension (H) must take into account the shape and dimension of plating of roof window.

The maximum height of shading is 1600 mm.

Dimensions beyond the set limits must be consulted with the manufacturer, too.

Location of lower hooks

When the roof window is in the bottom wing and is provided through the belay bolts flashing, measure the distance between these screws. (B1) If the roof windows not provided by these screws, this figure is not mentioned and will be assigned in the manufacture of blinds.

NB. When the roof window is in the bottom wing and is provided through the belay bolts flashing, measure always the distance between these screws.

THIS IS NECESSARY TO SPECIFY INTO THE ORDER FORM:

1. All the dimensions wanted
2. Colour design and type of fabric chosen
3. Name + type of window + identification number, specified in the notes of order form

2. ASSEMBLY

Take the assembly only according to this manual which will help you to avoid unnecessary assembly errors or other inconveniences associated with them.

TOOLS FOR ASSEMBLY: • CORDLESS DRILL • SCREWDRIVER PH 2 • KNIFE, SCISSORS, PLIERS

Check: • Before assembly we recommend checking all parts of the delivered goods, which will eliminate potential problems. Any shortcomings or comments concerning the assembly or custom blinds please advise to manufacturers. • Remove all obstacles from the skylight, which could hinder the installation.

ASSEMBLY:

- Open the roof window into position so that the assembly from the exterior can be run out
- If the window is equipped with a locking bolt at the attachment of the upper box blinds, remove these screws (If it is not equipped with a locking bolt, continue with next point).
- When the roof window is in the bottom wing and is provided through the belay bolts flashing, put them out
- Attach the top box blinds securing the top edge flashings and center to center of window
- Screw box of roller blind over plastic washer into the upper window frame plating (types of windows with a locking bolt removed, use only those holes for attachment)
- Place mats to cover plastic pads

FIXATION OF BOTTOM HOOK:

- If the window is equipped with a locking bolt at the attachment of the upper box blinds, remove these screws
- If the roof windows not provided by these screws, measure the pitch of holes at the bottom part of roller blind
- Transfer this pitch on flashing wings depending on the axis of the window
- Screw the hooks through plastic backing
- Place mats to cover plastic pads

FINISHING:

- Open the roof window to its maximal position and fix the bottom rail of roller blind to bottom hooks
- The roller blind will be pulled down automatically when closing the window
- The roller blind is prepared to its usage



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