



TOP MINI plus

Assembly sets

moveIT

Configuration of the HELLA products

- Powerful product configurator for sun protection products
- All HELLA products are available in the system
- Safe and guided product data recording for offers and orders
- List prices and conditions of purchase are stored for our customers, that the customer can see the correct customer-specific purchase price as well as the margin at any time
- A professional offer is immediately available at the push of a button and can be forwarded to the customer

Advantages

- Easiest employee training due to the possible and allowed selection of a product.
- Saves time and costs
- Reducing extensive training for the products due to options and standard recordings.
- Graphic support in the course of the configuration
- Printed price lists are no longer required.
- Products and prices are always up-to-date
- Ongoing checking of the products for feasibility due to comprehensive, integrated checks; in this way products that are technically not feasible are excluded
- Orders are immediately digitally forwarded to HELLA, the completion of forms is no longer necessary and thus no transmission errors can occur and manual input is not required.
- Tailor-made interfaces to industrial systems
- Data exchange via XML OpenTrans possible

Available systems

moveIT@ISS+

- Advanced possibilities for dealers of sun protection products with own customer management
- Management of own articles
- Digital order direct at HELLA
- Products are offline available at the customer

moveIT@EASY

- WEB solution for small dealers of sun protection products
- Easiest offer preparation and digital order directly at HELLA
- No software installation

moveIT@WEB as interface to SBH realised

- Integrated directly in the industry-sector-specific software from SBH
- Offer preparation and order management directly from within SBH
- Digital order direct at HELLA

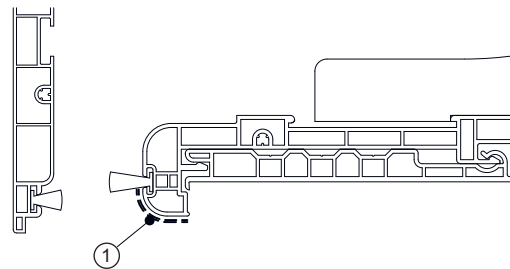
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Innovations/modifications

Introduction of profile kits with roll-off geometry in black

Profile kits with roll-off geometry in black are newly available. This provides a visual advantage in the view from below, especially for elements with a front top board in dark décor colors.



Legend

① Roll-off geometry

Further changes to profile kits

“Profile kits without front top board, without adapter profile” are newly available. “Profile kits with front top board, without adapter profile” and “Profile kits monobloc” are no longer available.

Conversion of profiles in décor black-brown from color 18 to color 181

Hornschuch has changed the pigmentation of the décor foil color 18 due to a pigment no longer available from previous suppliers. Décor no. 18 has therefore expired and has already been replaced by the new décor no. 181.

Please note: After the old profiles have been sold off, only the new color number can be supplied. The new color number is already available.

Old décor no. 18 = 436-5010

New décor no. 181 = 436-5071

Innovations/modifications

Conversion of plaster base panels

With the previous dimensions, it was not possible to deliver the plaster base panels on EURO pallets.

This results in the following changes:

- the plaster base panels will be available up to a thickness of 60 mm in the future; for higher thicknesses, the pallets will have to be doubled.
- the outer dimensions of the panels have been adapted such that they can be packed on EURO pallets.
- the article numbers change - see list below

Until now			New		
Art. no.	Description	Designation 2	Art. no.	Description	Designation 2
01550466	EPS insulation board	Dimension 1250x1225x10 mm dark grey	01501416	EPS insulation board	Dimension 1200x500x10 mm dark grey
01550454	EPS insulation board	Dimension 1250x1225x20 mm dark grey	01501417	EPS insulation board	Dimension 1200x500x20 mm dark grey
01550455	EPS insulation board	Dimension 1250x1225x30 mm dark grey	01501418	EPS insulation board	Dimension 1200x500x30 mm dark grey
01550456	EPS insulation board	Dimension 1250x1225x40 mm dark grey	01501419	EPS insulation board	Dimension 1200x500x40 mm dark grey
01550457	EPS insulation board	Dimension 1250x1225x50 mm dark grey	01501420	EPS insulation board	Dimension 1200x500x50 mm dark grey
01550458	EPS insulation board	Dimension 1250x1225x60 mm dark grey	01501421	EPS insulation board	Dimension 1200x500x60 mm dark grey
01550459	EPS insulation board	Dimension 1250x1225x70 mm dark grey		no follow-up article	
01550460	EPS insulation board	Dimension 1250x1225x80 mm dark grey		no follow-up article	
01550461	EPS insulation board	Dimension 1250x1225x90 mm dark grey		no follow-up article	
01550462	EPS insulation board	Dimension 1250x1225x100 mm dark grey		no follow-up article	
01550463	EPS insulation board	Dimension 1250x1225x110 mm dark grey		no follow-up article	
01550464	EPS insulation board	Dimension 1250x1225x120 mm dark grey		no follow-up article	
01550465	EPS insulation board	Dimension 1250x1225x130 mm dark grey		no follow-up article	

PVC - adapter profile for window system VEKA Softline 82

The specific clip adapter for the VEKA Softline 82 window system is available from Q4/2023 (art. no. 01530402_9016).

Roller shutter profile A37

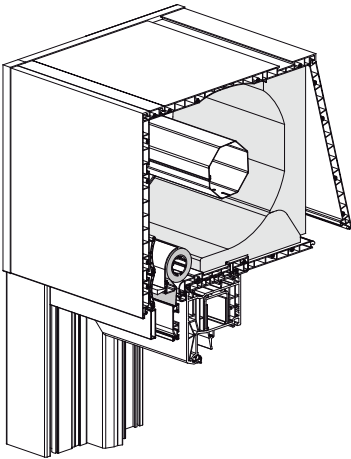
The roller shutter profile A37 is now also available in color 8019 (grey-brown). Deliverable from Q4/2023.

Assembly instructions - cutting dimensions for RvI/RvU and RvA shown separately

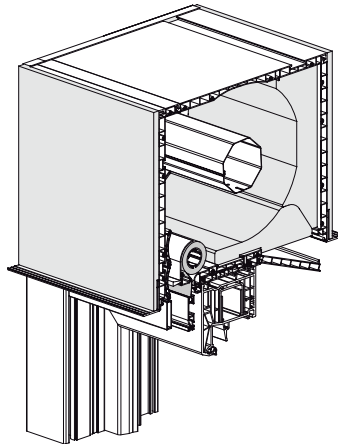
The table has been divided for a clearer presentation of the cutting dimensions. Thus, the cutting dimensions for RvI/RvU and RvA are each shown in separate tables.

Type overview

Type: TOP MINI plus RvU/RvI - Inspection from the bottom side/from the inside



TOP MINI plus RvI
Inspection from the inside
Optionally available with moscita insect roller screen on the inside
Optionally available with plaster base boards on the outside



TOP MINI plus RvU
Inspection from the bottom side
Optionally available with moscita insect roller screen on the inside
Optionally available with plaster base boards on the inside/outside

TOP MINI plus RvI

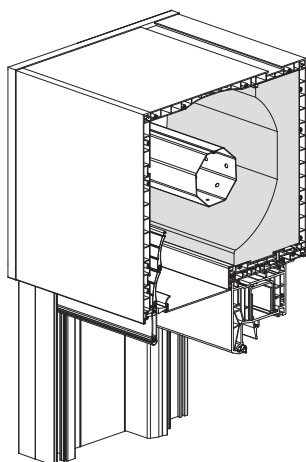
Box sizes	175/240	220/240	250/263
Box height	175	220	250
Box depth	240	240	263
Box depth with moscita	263	263	286

TOP MINI plus RvU

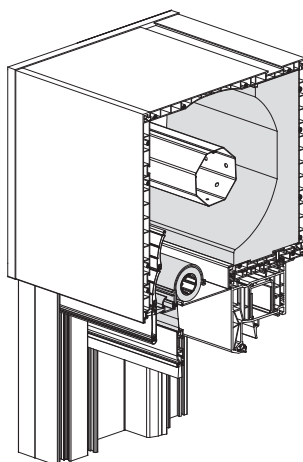
Box sizes	175/240	220/240	250/263
Box height	175	220	250
Box height with additional thermal insulation	to 235	to 280	to 310
Box depth	240	240	263
Box depth with moscita	263	263	286
Box depth with plaster base	to 523	to 523	546

Type overview

Type: TOP MINI plus RvA - Inspection from the outside



TOP MINI plus RvA
Inspection from the outside

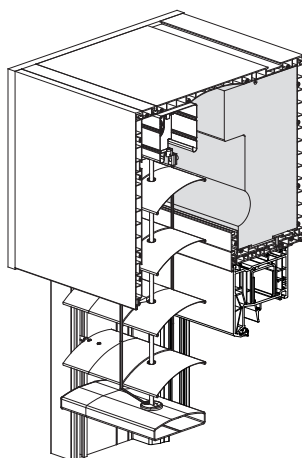


TOP MINI plus RvA
Inspection from the outside
optional available with moscita insect roller
screen on the inside
Optionally available with plaster base
boards on the inside/outside

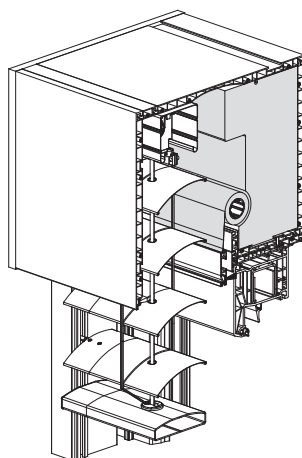
Box sizes	175/240	220/240	250/263
Box height	175	220	250
Box height with additional thermal insulation	to 235	to 280	to 310
Box depth	240	240	263
Box depth with moscita	240	240	263
Box depth with plaster base	500	500	523

Type overview

Type: TOP MINI plus store



TOP MINI plus store
Outdoor blind box



TOP MINI plus store
Outdoor blind box
optional with moscitta insect roller screen on the
inside
Optionally available with plaster base boards on the
inside/outside

Box size	220/263
Box height	220
Box height with additional thermal insulation	to 280
Box depth	263
Box depth with moscitta	263
Box depth with plaster base	to 523

General notes

➔ Assembly instructions

The work steps described in these assembly instructions are a proposal of how the individual top-mounted elements can be produced. The working steps are not mandatory!
The illustrations shown are only examples. These instructions are also applicable for other types of top-mounted elements.

➔ Legal notes

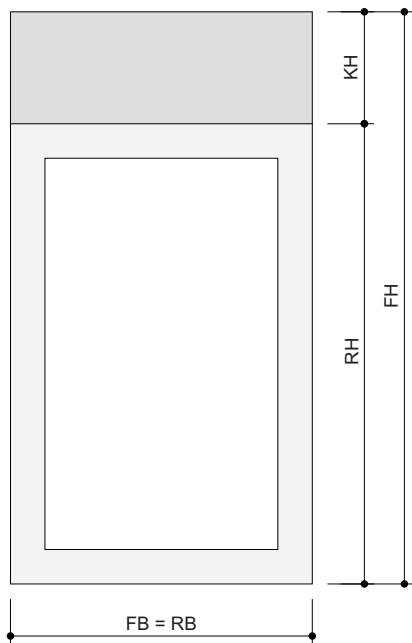
The graphs and texts of these instructions were carefully prepared. We cannot be held liable for any errors and their potential consequences! Subject to technical modifications to the product and to these instructions! These instructions include copyrighted information. All rights reserved! The listed product or brand names are trademarks of the respective owners.

Processing guidelines for top-mounted boxes

1. With dark-coloured roller shutter boxes, guide rails and roller shutter profiles an increased **linear expansion conditioned by temperature** must be considered.
2. As a standard coloured roller shutter boxes must be **sealed on all sides** with a permanently elastic material.
3. With the exception of plastic profiles in white, grey, light grey and beige, we **cannot give any guarantee** for the color and form stability of plastic profiles that are not provided with a surface protection.
4. The plastic profiles must be stored **pressure-free** and **fully supported**. The storage temperature in rooms must correspond to the processing temperature. The temperature of the plastic profiles must be adjusted to the room temperature at least 8 hours before cutting. The plastic profiles must be protected from **one-sided sunlight, even behind glass**. Plastic profiles that are **stored outdoors** must be protected from **direct sunlight/weathering**.
5. We recommend to use a **bottom strengthening profile** for split elements with a width above 2000 mm. This must be screwed shear-resistantly to the window frame.
6. With TOP MINI plus a **front top board made of aluminium** must be used, if the element width exceeds 2800 mm.
7. **If the roller shutter curtain of the selected roller shutter has more than 20 kg, an additional fixing device has to be provided for the roller shutter box.**
If the element width exceeds 1600 mm, we recommend to **fix the box every 800 mm to the lintel**, to increase the stability of the complete element (window or door with box) when it is built-in.
8. Front top boards in decor may only be used, if two-thirds of the top boards are **protected by the lintel against direct sunlight**. If more than 1/3 of the top board is exposed to direct sunlight, a **front top board made of aluminium** must be used. As a standard a front top board made of aluminium must be used, if the complete width of the element with decor exceeds 2100 mm.
9. **Profiles with protective coating** can be used up to a height of 1800 m above sea level and to the north of the 46th parallel (in Europe, incl. Austria and Switzerland). To the south of the 46th parallel the use is limited.
10. The inspection cover is part of the roller shutter box and must be removable without damage.
11. The connections to the building must be carried out in accordance with the **requirements of the structural physics**.
12. To fix the fastening handles to the end caps, only screws, which are not longer than 20 mm, are allowed to be used.

Taking off dimensions

General



Legend

FB	Complete width
FH	Complete height
KH	Box height
LRH	Clear element height of the window
RB	Element width of the window frame
RH	Element height of the window frame

Ordering information

Complete width	$FB = RB$
Complete height	$FH = RH + KH$

Structural-physical parameters

Type: TOP MINI plus RvI/RvU - Inspection from the inside/from the bottom side

Noise insulation and thermotechnical test certificates				
KG175 RvU / RvI				
Blind position	Top / bottom	Sound protection class	Thermal transfer coefficient	Temperature factor
Additional measure	R _w [dB]	SSK	U _{sb}	f _{Rsi}
Do not use	39/40	3/4	0.73 W/(m ² /K)	0.72
Silicone gasket	42/40	4		
Silicone gasket and heavy weight foil	45/45	5		
Interior wall finish	41/41	4		
Silicone gasket and interior wall finish	46/44	5/4		
Silicone gasket, mass loaded vinyl barrier and interior wall finish	48/46	5		

KG220 RvU / RvI				
Blind position	Top / bottom	Sound protection class	Thermal transfer coefficient	Temperature factor
Additional measure	R _w [dB]	SSK	U _{sb}	f _{Rsi}
Do not use	34/37	2/3	0.75 W/(m ² /K)	0.72
Silicone gasket	39/42	3/4		
Silicone gasket and heavy weight foil	42/46	4/5		
Interior wall finish	37/42	3/4		
Silicone gasket and interior wall finish	43/47	4/5		
Silicone gasket, mass loaded vinyl barrier and interior wall finish	44/47	4/5		

KG250 RvU / RvI				
Blind position	Top / bottom	Sound protection class	Thermal transfer coefficient	Temperature factor
Additional measure	R _w [dB]	SSK	U _{sb}	f _{Rsi}
Do not use	35/37	3	0.73 W/(m ² /K)	0.71
Silicone gasket	41/39	4/3		
Silicone gasket and heavy weight foil	43/43	4		
Interior wall finish	40/43	4		
Silicone gasket and interior wall finish	43/45	4/5		
Silicone gasket, mass loaded vinyl barrier and interior wall finish	42/44	4		

Basis Standards

Airborne sound insulation

EN ISO 10140-1 : 2016

EN ISO 10140-2 : 2010

EN ISO 717-1 : 2013

R_w...rated sound reduction index in accordance with DIN 4109

Thermal insulation

EN ISO 10077-2:2018-02

Note:

The test reports are available on request.

Image standard as per test report.

Structural-physical parameters

Type: TOP MINI plus RvA - Inspection from the outside

Noise insulation and thermotechnical test certificates				
KG175 RvA				
Blind position	top/bottom	Sound protection class	Thermal transfer coefficient	Temperature factor
Additional measure	R _w [dB]	SSK	U _{sb}	f _{Rsi}
Do not use	32/39	2/3	0.51 W/(m²/K)	0.78
Silicone gasket	37/42	3/4		
Silicone gasket and heavy weight foil	43/47	4/5		
Interior wall finish	41/49	4/5		
Silicone gasket and interior wall finish	42/50	4/6		
Silicone gasket, mass loaded vinyl barrier and interior wall finish	49/52	5/6		

KG220 RvA				
Blind position	top/bottom	Sound protection class	Thermal transfer coefficient	Temperature factor
Additional measure	R _w [dB]	SSK	U _{sb}	f _{Rsi}
Do not use	33/39	2/3	0.63 W/(m²/K)	0.79
Silicone gasket	37/41	3/4		
Silicone gasket and heavy weight foil	43/49	4/5		
Interior wall finish	40/47	4/5		
Silicone gasket and interior wall finish	41/49	4/5		
Silicone gasket, mass loaded vinyl barrier and interior wall finish	44/52	4/6		

KG250 RvA				
Blind position	top/bottom	Sound protection class	Thermal transfer coefficient	Temperature factor
Additional measure	R _w [dB]	SSK	U _{sb}	f _{Rsi}
Do not use	40/41	4	0.61 W/(m²/K)	0.77
Silicone gasket	43/42	4		
Silicone gasket and heavy weight foil	46/49	5		
Interior wall finish	46/51	5/6		
Silicone gasket and interior wall finish	47/52	5/6		
Silicone gasket, mass loaded vinyl barrier and interior wall finish	49/53	5/6		

Basis Standards

Airborne sound insulation

EN ISO 10140-1 : 2016

EN ISO 10140-2 : 2010

EN ISO 717-1 : 2013

R_w...rated sound reduction index in accordance with DIN 4109

Thermal insulation

EN ISO 10077-2:2018-02

Note:

The test reports are available on request.

Image standard as per test report.

Structural-physical parameters

Type: TOP MINI plus store

Noise insulation and thermotechnical test certificates				
KG220 store				
Blind position	top/bottom	Sound protection class	Thermal transfer coefficient	Temperature factor
Additional measure	R _w [dB]	SSK	U _{sb}	f _{Rsi}
Do not use	34/32	2	0.42	0.76
Silicone gasket	-	-	W/(m ² /K)	
Silicone gasket and heavy weight foil	-	-		
Interior wall finish	42/41	4		
Silicone gasket and interior wall finish	-	-		
Silicone gasket, mass loaded vinyl barrier and interior wall finish	-	-		
Heavy weight foil	40/38	4/3		

Basis Standards

Airborne sound insulation

EN ISO 10140-1 : 2016

EN ISO 10140-2 : 2010

EN ISO 717-1 : 2013

R_w...rated sound reduction index in accordance with DIN 4109

Thermal insulation

EN ISO 10077-2:2018-02

Note:

The test reports are available on request.

Image standard as per test report.

Explanations

R_w Rated sound reduction index

U_{sb} Thermal transfer coefficient

Ψ [in other linear thermal transfer coefficient - Example: installation situation in a monolithic outer wall

words: psi]

f_{Rsi} Temperature factor at the most unfavourable position – transition area between window and box

Noise insulation

No standardized testing methods exist to determine the emissions for manually operated lift tape or crank handle drives (during operation). Therefore it is not possible to give concrete values to the designer, which would enable him in advance to determine the occurring immission in a room in need of protection.

The airborne noise insulation values given in the table "Structural-physical parameters" solely refer to the pure top-mounted box without any sound emissions, which may be caused by operations at the box.

Recommendation: Coordination between professional designer and contractor is recommended to determine on a case-by-case basis the measures (e.g. installation-specific boundary conditions) required to keep the entering of emissions into the building as low as possible.

Source: Information to DIN 4109-1:2018 Sound insulation in above-ground construction - Part 1: Minimum requirements (IVRSA = Industrievereinigung Rollladen - Sonnenschutz - Automation = Industrial Association Roller Shutters - Sun Protection - Automation)

Window frame stabilization

Type: TOP MINI plus

If the window is provided with a top-mounted box, the upper window frame can not be fixed to the ceiling. In this case, a window frame stabilization is provided. The window frame stabilization consists of a multi-part statics bracket, which transfers the wind-load, which put pressure on the window frame, directly into the lintel or the ceiling.

A window element with top-mounted box can be tested according to DIN EN 12211 and be classified according to DIN EN 12210. According to the norm, the results can be transferred over to smaller elements.

Classification of windows with regard to the wind load resistance DIN EN 12210 Table 1

Test class	Test pressure [Pa]
1	400
2	800
3	1200
...	...

Classification of the relative frontal bending DIN EN 12210 Table 2

Test class	Relative frontal bending
A	< l/150
B	< l/200
C	< l/300

Example:

Class B3

Wind load resistance - Window frame bending l/200:	Class B
Wind load resistance - Test pressure 1200 Pa:	Class 3
Classification of the window element:	B3

In this case Class B3 means, that at a test pressure of 1200 Pa a maximum upper window frame bending of l/200 may not be exceeded. Important: The window must meet the requirements for the classification according to DIN EN 12210 too. The maximum bending of frame parts is limited to l/200 or max. 15 mm as given in the "Technical rules for the use of linear mounted glazing (TRLV)". The minor value is decisive.

Which class a window must show at a given installation location? For this purpose the wind pressure that affects the window must be determined. This depends on a variety of factors such as installation height, installation location, form of the building, position of the windows in the building etc. The resultant wind pressure is calculated according to DIN EN 1991-1-4 (Eurocode 1).

This calculation of the affecting loads is the basic requirement for the dimensioning of the window, regardless whether the window is provided with a top-mounted box or not.

Window frame stabilization

Type: TOP MINI plus

Note:

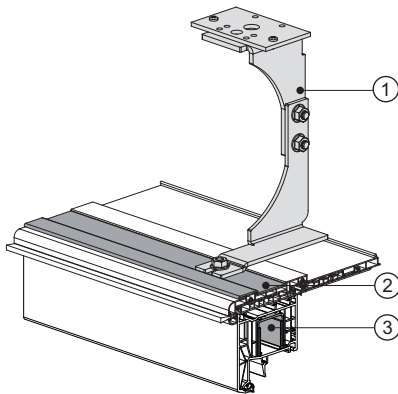
The **wind resistance according to EN 13659** defines the wind resistance classes for **roller shutters**. This wind capability depends mainly on the type of the roller shutter profile, the guide rail/the depth of the guide rail groove and the width of the roller shutter.

The **wind resistance according to DIN EN 12210** defines the wind resistance classes for **window elements with top-mounted boxes**. The classification regarding the wind resistance is classified in two classes: on the one hand the class of the maximum allowable window frame bending and on the other hand in classes, which result from the applied test pressure.

These two norms must be observed independently of each other!

Window frame stabilization

Type: TOP MINI plus



RvI/RvU

The window frame stabilization consists of a multi-part statics bracket, which transfers the wind-load, which put pressure on the window frame, directly into the lintel or the ceiling. Special insulation bodies and the geometry serve for the thermal separation of the statics bracket and for excellent heat-insulating characteristics despite the COMPACT design. The window frame stabilization is always used in combination with the bottom strengthening profile.

mounting material

The selection of the suitable installation type and the use of the suitable mounting material must be checked on-site and has to be adapted to the structural conditions.

Example - mounting base made of reinforced concrete

Fisher concrete screw ULTRACUT FBS II 8 x 130 80/65 US TX

Note:

Ex works the statics bracket is already pre-installed.

The window frame stabilization is possible for the standard box heights 175, 220 and 250 mm.

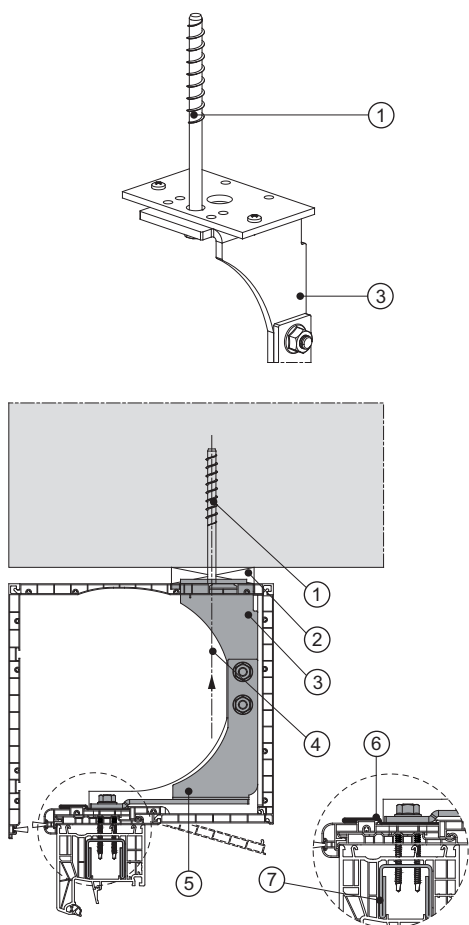
Not possible with ceiling insulation (additional thermal insulation at the top).

Legend

- ① Statics bracket (multiple parts)
- ② Bottom strengthening profile
- ③ Window frame reinforcement

Window frame stabilization

Type: TOP MINI plus



RvU - with installation from the bottom side

Installation from the bottom side

Due to the multi-part structure of the statics bracket, the inspection part can be easily removed for installation or inspection purposes. The statics bracket fixed part is permanently fixed to the box and in further consequence connected with the mounting base.

mounting material

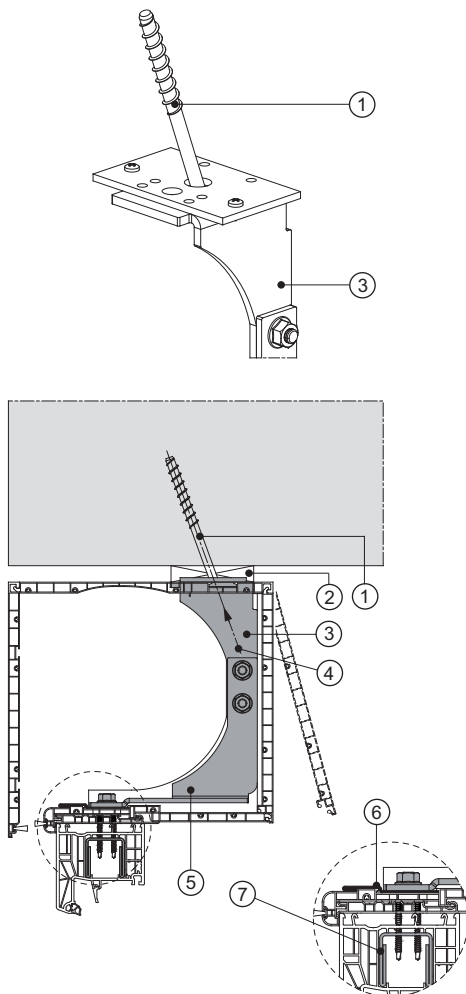
The suitable mounting material must be checked on-site and has to be adapted to the structural conditions.

Legend

- ① Mounting material (not included in the delivery)
- ② Spacer blocks pressure-resistant (not included in the delivery)
- ③ Statics bracket fixed part
- ④ Mounting direction (lower the roller shutter curtain to avoid damage)
- ⑤ Statics bracket inspection part
- ⑥ Bottom strengthening profile
- ⑦ Window frame reinforcement

Window frame stabilization

Type: TOP MINI plus



RvI - with installation from inside

Installation from inside

Due to the multi-part structure of the statics bracket, the inspection part can be easily removed for installation or inspection purposes. The statics bracket fixed part is permanently fixed to the box and in further consequence connected with the mounting base.

mounting material

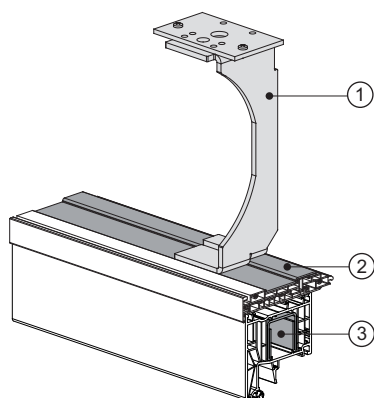
The suitable mounting material must be checked on-site and has to be adapted to the structural conditions.

Legend

- ① Mounting material (not included in the delivery)
- ② Spacer blocks pressure-resistant (not included in the delivery)
- ③ Statics bracket fixed part
- ④ Installation direction
- ⑤ Statics bracket inspection part
- ⑥ Bottom strengthening profile
- ⑦ Window frame reinforcement

Window frame stabilization

Type: TOP MINI plus



RvA

The window frame stabilization consists of a statics bracket, which transfers the wind-load, which put pressure on the window frame, directly into the lintel or the ceiling. Special insulation bodies and the geometry serve for the thermal separation of the statics bracket and for excellent heat-insulating characteristics despite the COMPACT design. The window frame stabilization is always used in combination with the bottom strengthening profile.

mounting material

The selection of the suitable installation type and the use of the suitable mounting material must be checked on-site and has to be adapted to the structural conditions.

Example - mounting base made of reinforced concrete

Fisher concrete screw ULTRACUT FBS II 8 x 130 80/65 US TX

Note:

Ex works the statics bracket is already pre-installed.

The window frame stabilization is possible for the standard box heights 175, 220 and 250mm.

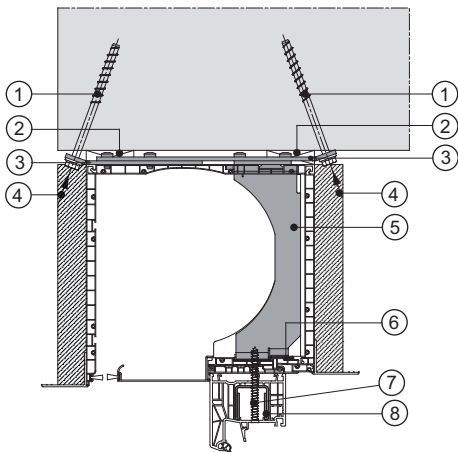
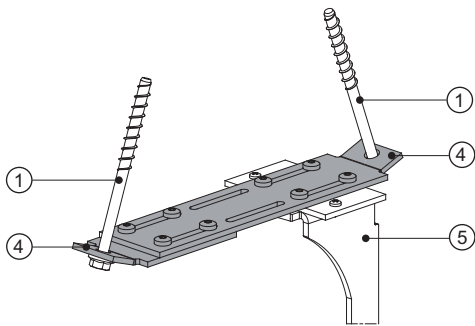
Not possible with ceiling insulation (additional thermal insulation at the top)

Legend

- ① Statics bracket (single part)
- ② Bottom strengthening profile
- ③ Window frame reinforcement

Window frame stabilization

Type: TOP MINI plus



RvA

Fastening lugs

The connection of the window frame stabilization with the wall lintel or the reinforced concrete ceiling is provided via fastening lugs from the outside and from the inside.

Available for all designs (RvU, RvI, RvA).

Connection to the window frame

To enable an optimum distribution of forces, the window frame must be screwed to the statics bracket using the appropriate mounting material.

mounting material

The suitable mounting material must be checked on-site and has to be adapted to the structural conditions.

Note

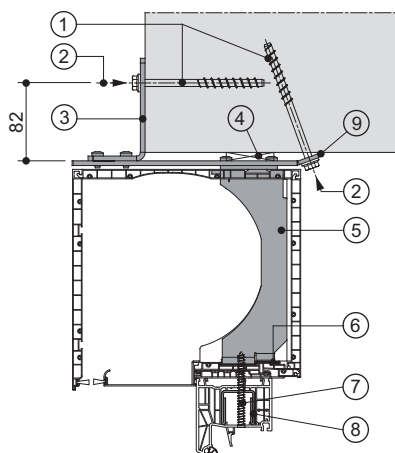
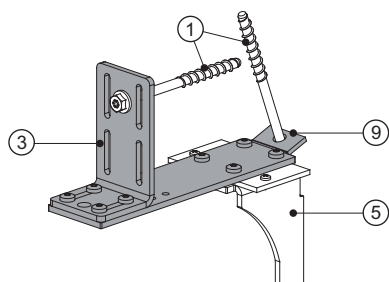
The screw connection to the brickwork must be made on both sides. If it is not possible to screw on both sides, the inner top board of the box must be opened instead and the screw connection must be made directly through the static bracket.

Legend

- ① Mounting material (not included in the delivery)
- ② Spacer blocks (not included in the delivery)
- ③ Fastening lugs inside and outside
- ④ Installation direction
- ⑤ Statics bracket
- ⑥ Bottom strengthening profile
- ⑦ The screw connection from the window frame must be directly in the static bracket (mounting material not included in the delivery)
- ⑧ Window frame reinforcement

Window frame stabilization

Type: TOP MINI plus



RvA

Mounting brackets

The connection of the window frame stabilization with the wall lintel or the reinforced concrete ceiling is provided via mounting brackets from the outside and via fastening lugs from inside. For exact alignment, the mounting bracket is screwed to the statics brackets and the brickwork after the installation of the windows. Available for all designs (RvU, RvI, RvA).

Connection to the window frame

To enable an optimum distribution of forces, the window frame must be screwed to the statics bracket using the appropriate mounting material.

mounting material

The suitable mounting material must be checked on-site and has to be adapted to the structural conditions.

Note

The screw connection to the brickwork must be made on both sides. If it is not possible to screw on both sides, the inner top board of the box must be opened instead and the screw connection must be made directly through the static bracket.

Legend

- ① Mounting material (not included in the delivery)
- ② Installation direction
- ③ Mounting bracket
- ④ Spacer blocks pressure-resistant (not included in the delivery)
- ⑤ Statics bracket
- ⑥ Bottom strengthening profile
- ⑦ Mounting material, connection of the window frame to the box (not included in the delivery)
- ⑧ Window frame reinforcement
- ⑨ Mounting lug

Window frame stabilization

Type: TOP MINI plus - RvA, RvU, RvI, store

Recommended number of statics brackets depending on the element height and element width

Basis of the window and door norm
DIN EN 12210:2016

Calculation basis
Reinforcement in the window frame: Tube 30x30x1.5 $I_y = 2.26 \text{ cm}^4$
Bottom strengthening profile $I_y = 4.17 \text{ cm}^4$

Wind protection class B2

- Frame deflection < 1/200 of the element width
- Test pressure 800 Pa

	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
	Element width [mm]															
1000	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
1200	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1
1400	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	2
1600	0	0	0	0	0	0	1	1	1	1	1	1	1	2	2	2
1800	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2
2000	0	0	0	0	0	0	1	1	1	1	1	2	2	2	2	2
2200	0	0	0	0	0	0	1	1	1	1	2	2	2	2	2	2
2400	0	0	0	0	0	0	1	1	1	2	2	2	2	2	2	2
2600	0	0	0	0	0	0	1	1	1	2	2	2	2	2	2	2
2800	0	0	0	0	0	0	1	1	1	2	2	2	2	2	2	3
3000	0	0	0	0	0	0	1	1	1	2	2	2	2	2	2	3
3200	0	0	0	0	0	0	1	1	1	2	2	2	2	2	3	3
3400	0	0	0	0	0	0	1	1	1	2	2	2	2	2	3	3
3600	0	0	0	0	0	0	1	1	1	2	2	2	2	2	3	3
3800	0	0	0	0	0	0	1	1	1	2	2	2	2	2	3	3
4000	0	0	0	0	0	0	1	1	1	2	2	2	2	2	3	3

Comment: Bracket position see assembly instructions (not evenly distributed).

Wind protection class B3

- Frame deflection < 1/200 of the element width
- Test pressure 1200 Pa

	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
	Element width [mm]															
1000	0	0	0	0	0	0	1	1	1	1	1	1	1	2	2	2
1200	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	2
1400	0	0	0	0	0	1	1	1	1	1	2	2	2	2	2	2
1600	0	0	0	0	0	1	1	1	2	2	2	2	2	2	2	2
1800	0	0	0	0	0	1	1	2	2	2	2	2	2	2	3	3
2000	0	0	0	0	0	1	1	2	2	2	2	2	2	3	3	3
2200	0	0	0	0	0	1	1	2	2	2	2	2	3	3	3	3
2400	0	0	0	0	0	1	1	2	2	2	2	3	3	3	3	4
2600	0	0	0	0	0	1	1	2	2	2	2	3	3	3	4	4
2800	0	0	0	0	0	1	1	2	2	2	2	3	3	4	4	4
3000	0	0	0	0	0	1	1	2	2	2	2	3	4	4	4	5
3200	0	0	0	0	0	1	1	2	2	2	2	3	4	4	4	5
3400	0	0	0	0	0	1	1	2	2	2	2	3	4	4	5	5
3600	0	0	0	0	0	1	1	2	2	2	2	3	4	4	5	5
3800	0	0	0	0	0	1	1	2	2	2	2	3	4	4	5	5
4000	0	0	0	0	0	1	1	2	2	2	2	3	4	4	5	5

Comment: Bracket position see assembly instructions (not evenly distributed).

Wind resistance

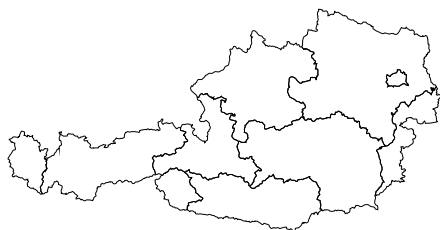
Wind resistance classes and operating classes according to EN 13659

Obligatory application since 01.04.2006

Since 01/04/2006 the outer ends must carry a CE marking pursuant to EN 13659. The following criteria must be observed!

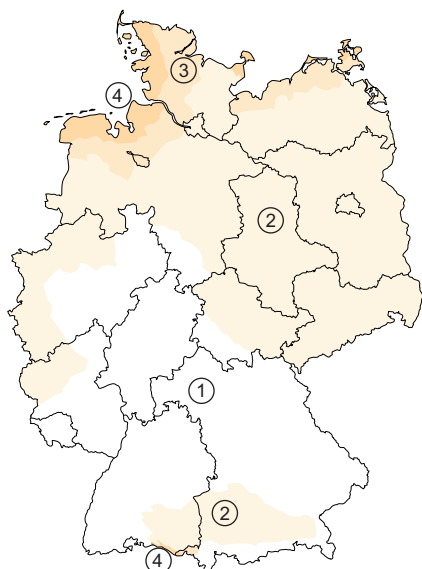
The Federal Association for Roller Shutter & Sun Protection Devices has elaborated the ift guideline that specifies, what wind resistance class is required for which case of application. This guideline "Application recommendation for exterior blinds and shutters" subdivides the federal territory in wind load zones (1) and terrain categories (2). As a result of this zoning, the relevant wind load zone and terrain category can be determined easily via the location of the building. The installation height (3) of the exterior blinds and shutters specifies the third necessary parameter.

1. Determining the wind load zones

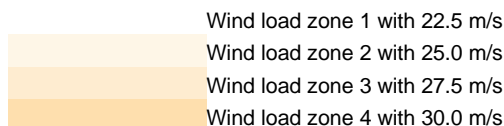


Wind load zones in Austria

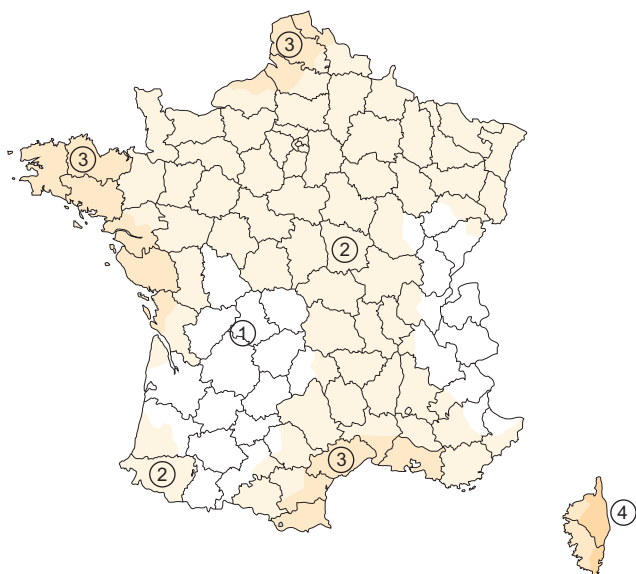
In Austria a calculation of the wind load according to the ÖNORM EN 1991-1-4, ÖNORM B 1991-1-4 must be carried out for each location!



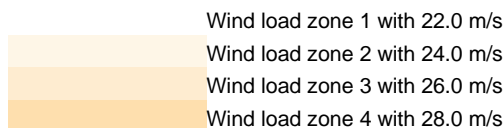
Wind load zones in Germany



Source: DIN 1055-4:2005-3, DIN EN 1991-1-4/NA



Wind load zones in France



Source: Choix des classes de résistance au vent des fermetures (DTU 34.2, NF EN 1991-4/NA)

Wind resistance

Wind resistance classes and operating classes according to EN 13659



Wind load zones in Italy

Zone	Description	$V_{b,0}$ [m/s]	a_0 [m]
①	Aosta Valley, Piedmont, Lombardy, Trentino-Alto Adige, Veneto, Friuli (with the exception of Trieste)	25	1000
②	Emilia Romagna	25	750
③	Tuscany, the Marches, Umbria, Latium, the Abruzzi, Molise, Apulia, Campania, Basilicata, Calabria (with the exception of Reggio Calabria)	27	500
④	Sicily and Reggio Calabria	28	500
⑤	East of Sardinia (from Cape Teulada to the isle Maddalena)	28	750
⑥	West of Sardinia (from Cape Teulada to the isle Maddalena)	28	500
⑦	Liguria	28	1000
⑧	Province of Trieste	30	1500
⑨	Isles (with the exception of Sicily and Sardinia) and the open sea	31	500

Source: www.madosoft.it
(CNR-DT 207-2008)

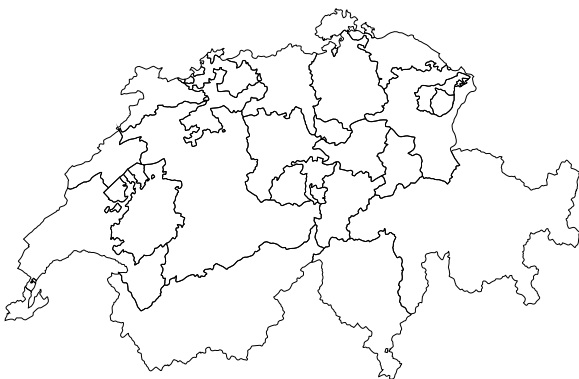
Note:

For regions above 1500 m sea level, specifications regarding the climatic conditions and the location must be made.

$V_{b,0}$ [m/s] Wind speed
 a_0 [m] Sea level

Wind load zones in Switzerland

For Switzerland, the VSR information sheet (Vertical Systems Reseller) regarding the influence of the wind resistance on sun and weather protection systems and the standard SIA 261 stated therein applies.

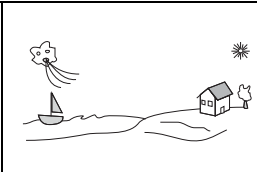
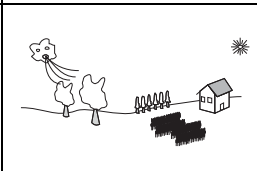
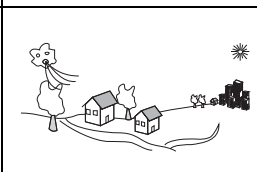
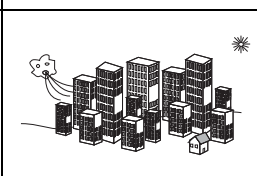


For other countries the values must be requested separately from the local weather services!

Wind resistance

Wind resistance classes and operating classes according to EN 13659

2. Determining the terrain category

<p>Terrain category I High seas, lakes with at least 5 km of free space downwind, plain country without obstacles</p>	
<p>Terrain category II Terrain with hedges, several farm buildings, houses or trees, e.g. agricultural area</p>	
<p>Terrain category III Suburbs, industrial zones or areas zoned for economic activities, forests</p>	
<p>Terrain category IV Urban areas, whereas buildings with an average height of more than 15 m are built on at least 15% of the area.</p>	

Source: DIN 1055-4:2005-3

3. Installation height

The following table of the ift guideline gives the recommended wind resistance class on the basis of the installation height:

Terrain category	Installation height of the exterior blinds and shutters in an average range of 0-8 m				Installation height of the exterior blinds and shutters in an average range of >8-20 m				Installation height of the exterior blinds and shutters in an average range of >20-100 m			
	Wind load zone				Wind load zone				Wind load zone			
	1	2	3	4	1	2	3	4	1	2	3	4
I	3	4	4	4	4	4	5	5	4	5	5	6
II	3	3	4	4	3	4	4	5	4	5	5	5
III	2	3	3	4	3	3	4	4	4	5	5	5
IV	2	3	3	3	3	3	3	4	4	4	4	5

The minimum class regarding the application recommendations is the wind resistance class 2. This does not mean, that products with the classes 0 and 1 may not be applied.

To ensure the highest possible quality standard, a product of the appropriate wind resistance class is to be recommended.

Wind resistance

Wind resistance according to EN 13659

Wind resistances – Specification of wind resistance classes

Pursuant to EN 13659, a wind resistance class has to be specified for roller shutters. Seven (7) wind resistance classes (0 to 6) are defined for this purpose. Wind resistance class 0 is given, if the roller shutter does not meet the requirements of the wind resistance class 1, or if the wind resistance class has not been measured.

To determine the wind resistance classes, the roller shutter curtain will be exposed to the respective pressure as shown in the opposite table. This showed, that the wind capability depends mainly on the type of the roller shutter profile, the guide rail/the depth of the guide rail groove and the width of the roller shutter.

It is possible that the wind resistance class may be improved by modifying the roller shutter profile or the guide rail.

Wind resistance class	Nominal test pressure p [N/m ²]	Safety test pressure $1.5 p$ [N/m ²]
0	<50	<75
1	50	75
2	70	100
3	100	150
4	170	250
5	270	400
6	400	600

Operating forces

In accordance with EN 13659 our products meet the requirements of the guideline for maximum allowable operating forces.

The following table lists the operating classes according to EN 13659.

Type of operation	Operating force in N	
	Class 1	Class 2
Crank handle	30	15
Lift tape	90	50

Source: EN 13659



Operability in case of frost

Outdoor blinds / exterior Venetian blinds and roller shutters are not allowed to be operated with frost. First the units must be freed from snow and ice to make them viable. We do not accept responsibility for damage to the sun protection device, that results from the operation of a frozen unit.

Recommendation: If control devices are used, turn off the automatic control device during winter and check that the unit has been freed from ice and snow before it is operated manually.

Wind resistance

Wind Force according to Beaufort (Beaufort Scale)

The English Admiral Sir Francis Beaufort /1774-1857) elaborated the Beaufort scale in 1806.

With the help of this scale it is possible to estimate the wind force on the basis of the effects of the wind. The scale ranges from wind force 0 (still air) to 12 (hurricane).

Wind force (degrees acc. to Beaufort)	Description	Average wind speed in a height of 10 m above open country		Dynamic pressure [Pa]	Effect of the wind in the interior land
		m/s	km/h		
0	still air	0-0.2	<1	0	Smoke raises vertically
1	slight draught	0.3-1.5	1-5	0-1	The draught of the smoke shows the wind direction
2	light breeze	1.6-3.3	6-11	2-6	Wind is noticeable in the face, leaves and vanes are moving
3	gentle breeze, light wind	3.4-5.4	12-19	7-18	Wind moves thin twigs and stretches pennants
4	moderate breeze, moderate wind	5.5-7.9	20-28	19-39	Wind moves twigs and thin branches, whirls up dust and loose paper
5	fresh breeze, fresh wind	8-10.7	29-38	40-72	Smaller deciduous trees start to sway, white crests are formed on lakes
6	strong wind	10.8-13.8	39-49	73-119	Strong branches sway, it is difficult to hold an umbrella, telegraph cables sough in the wind
7	near gale	13.9-17.1	50-61	120-183	Resistance felt when walking against the wind, whole trees in motion
8	stormy wind	17.2-20.7	62-74	184-268	Branches break off from the trees, walking outside is difficult
9	storm	20.8-24.4	75-88	269-373	Branches break off from trees, houses are damaged slightly (tiles or smoke hatches were lifted from the roof)
10	heavy storm	24.5-28.4	89-102	374-505	Trees are broken off by the wind, buildings are damaged to a greater extent
11	violent storm	28.5-32.6	103-117	506-665	Trees are uprooted by the wind, widespread storm damages
12	hurricane	from 32.7	from 118	666-853	Heavy devastations

Source: ift Rosenheim

Application sizes

Overview box sizes, limit sizes element heights

EH	SW40.		SW60			
	K37	A37	K37	K52	A37	A52
1000	175	175	175	175	175	175
1100						
1200						
1300						
1400						
1500				220		220
1600						
1700						
1800						
1900			220			
2000						
2100	220					
2200					220	
2300		250				
2400						
2500						
2600				250		250
2700						
2800						
2900						
3000			250			
3100						
3200						
3300						
3400						
3500					250	
3600						
3700						
3800						
3900						
4000						

Note:

With integrated insect screen, the maximum element height decreases to 2500 mm!

Legend

KH Box height

KT Box depth

EH Element height (incl. box)

Profile type	Box sizes **	EH			
		Steel shaft 40 mm		Steel shaft 60 mm	
		Standard	with moscita insect roller screen	Standard	with moscita insect roller screen
K37	175/240	2000	2000/1800*	1800	1800/1500*
	220/240	3000	2500	2950	2500
	250/263			3000	2500
K52	175/240			1400	1400/1300*
	220/240			2500	2500
	250/263			3000	2500
A37	175/240	2200	2200/2000*	2100	2100/1700*
	220/240	3400	2500	3400	2500
	250/263			4000	2500
A52	175/240			1400	1400/1300*
	220/240			2500	2500
	250/263			3000	2500

- * ... only with roller shutter RvA
- **... Box depth differing with design moscita insect roller screen
- Element height incl. box

Application sizes

Winding diameter for roller shutter profiles

EH	SW40.		SW60			
	K37	A37	K37	K52	A37	A52
1000	116	118	128	138	122	124
1200	120	125	136	156	130	135
1400	132	132	140	156	136	146
1600	145	135	145	176	145	154
1800	148	142	150	176	147	162
2000	150	146	160	190	155	172
2250	162	153	166	195	155	183
2500	166	165	176	210	167	189
2750	172	165	180	216	167	193
3000	178	178	190	216	180	204
3250		178			180	
3500		190			190	

Legend

EH Element height (incl. box)

Maximum depths of the window frame

TOP MINI plus	Maximum depth of the window frame (mm)
Belt drive RvU	92
Crank handle drive RvU	92
Motor drive RvU, RvA	92
Belt drive RvI	124
Crank handle drive RvI	124
Motor drive RvI	124

Application sizes

Limit sizes blind

Profile type	max. element width [mm]	min. element width [mm]	max. element height [mm]	Max. surface [m ²]	Weight [kg/m ²]
K37	1800	400*	3000	3.1	3.6
K52	2300	400*	2500	4.5	3.5
A37	3000	400*	3400	7.5	2.6
A52	3000	400*	2500	8.0	3.0

* Depending on the drive system, the minimum element width is higher than indicated in the table above:

- 400 mm with lift tape
- 560 mm with short motor SW40
- 590 mm with short motor SW60

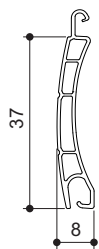
Limit sizes for top-mounted roller shutters

Profile type	Weight [kg/m ²]	Drive system	Min. profile width [mm]	Max. profile width [mm]	Max. surface [m ²]
K37	3.6	Lift tape	400	1800	2.5
	3.6	Lift tape gear	400	1800	3.1
	3.6	Crank handle	400	1800	3.1
	3.6	Motor	¹⁾	1800	3.1
K52	3.5	Lift tape	400	2300	2.8
	3.5	Lift tape gear	400	2300	4.5
	3.5	Crank handle	400	2300	4.5
	3.5	Motor	¹⁾	2300	4.5
A37	2.6	Lift tape	400	3000	3.2
	2.6	Lift tape gear	400	3000	4.6
	2.6	Crank handle	400	3000	6.0
	2.6	Motor	¹⁾	3000	7.5
A52	3.0	Lift tape	400	3000	3.0
	3.0	Lift tape gear	400	3000	5.6
	3.0	Crank handle	400	3000	8.0
	3.0	Motor	¹⁾	3000	8.0

¹⁾ ... see motor application table Chapter "TOP MINI plus – General - Size overview of the drives"!

Application sizes

Type: K37



Double-walled plastic profile made of extruded, solid colored plastic (37x8 mm), with 2 grooves; the profiles are telescoped with a self-supporting connection. The light gaps are shaped like long holes that are punched into the connection piece. The curtain is locked over the complete height on both sides, so that a lateral shifting of the profiles is not possible.

Limit sizes

Number of rods:	27 per metre in height
Min. width:	400 mm
Max. width:	1800 mm
Max. surface:	3.1 m ²
Weight:	3.6 kg/m ² (without end rod)
Covering width:	37 mm

Wind resistance classes as per EN 13659

Guide rail width	53, 58, 61
Wind resistance class	Up to a complete width of [mm]
6	700
5	1000
4	1100
3	1400
2	1600
1	1700

Notes:

- The tables specifying the box sizes are given at the respective box system!
- For available colors see Chapter "Colors for roller shutter profiles".

Application sizes

Tables to select a motor for roller shutter profile K37

Required torque [Nm] for motor drive with octagon steel shaft 40 mm

		600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
		Width [mm]																	
Height [mm]	600	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4
	800	1	2	2	2	2	3	3	3	3	4	4	4	5	5	5	5	6	6
	1000	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	8
	1200	2	2	3	3	3	4	4	5	5	6	6	6	7	7	8	8	9	9
	1400	2	2	3	3	4	5	5	6	6	6	7	8	8	9	9	10	10	11
	1600	2	3	3	4	5	5	6	6	7	7	8	9	9	10	10	11	12	12
	1800	2	3	4	4	5	6	6	7	8	8	9	10	10	11	12	12	13	
	2000	3	3	4	5	6	6	7	8	9	9	10	11	12	12	13			
	2200	3	4	5	5	6	7	8	9	10	11	11	12	13					
	2400	3	4	5	6	7	8	9	10	11	12	12	13						
	2600	3	5	6	7	8	9	10	11	12	13								
	2800	4	5	6	7	8	9	11	12	13									
	3000	4	5	6	8	9	10	11	13										
	3200	4 Nm	4	6	7	8	10	11	12	13									
	3400		5	6	8	9	10	12	13										
	3600		5	7	8	10	11	13											
3800		6	7	9	10	12	13												
4000		6	7	9	11	13													
		9 Nm			13 Nm														

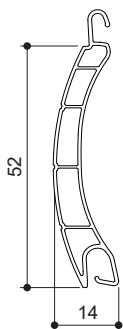
Required torque [Nm] for motor drive with octagon steel shaft 60 mm

		600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
		Width [mm]																	
Height [mm]	600	1	1	2	2	2	2	2	3	3	3	3	4	4	4	4	4	5	5
	800	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	6	7
	1000	2	2	3	3	3	4	4	5	5	5	6	6	7	7	8	8	8	9
	1200	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11
	1400	2	3	3	4	5	5	6	7	7	8	8	9	10	#	11	11	12	13
	1600	3	3	4	5	5	6	7	8	8	9	10	10	11	12	12	13	14	15
	1800	3	4	5	5	6	7	8	9	9	10	12	12	12	13	14	15	16	16
	2000	3	4	5	6	7	8	9	9	10	11	13	13	14	15	16	17	18	18
	2200	3	5	5	6	7	8	9	10	11	12	14	14	15	16	17	18	19	20
	2400	4	5	6	7	8	9	10	11	12	14	16	16	17	18	19	20	21	22
	2600	4	5	6	8	9	10	11	12	14	15	17	17	18	19	21	22	23	24
	2800	4	6	7	8	9	11	12	13	15	16	18	18	20	21	22	24	25	26
	3000	5	6	7	9	10	12	13	14	16	17	20	20	21	23	24	25	27	28
	3200	5	6	8	9	11	12	14	15	17	18	21	21	23	24	26	27	29	30
	3400	5	7	9	10	12	13	15	17	18	20	23	23	25	26	28	29	31	33
	3600	6	7	9	11	12	14	16	18	19	21	24	24	26	28	30	31	33	35
3800	6	8	10	11	13	15	17	19	21	22	26	26	28	30	31	33	35	37	
4000	6	8	10	12	14	16	18	20	22	24	28	28	30	32	34	35	37	39	
		6 Nm		10 Nm		15 Nm		20 Nm			30 Nm					40 Nm			

Note: An increase of the torque by +10% per linked element must be observed.
 Tables serve as the basis for specifying the torque! The dimensional restrictions are shown in the limit size tables!

Application sizes

Type: K52



Double-walled plastic profile made of extruded, solid colored plastic (52x14 mm), with 3 grooves. Profiles are telescoped directly with a self-supporting connection. The light gaps are shaped like long holes that are punched into the connection piece. The curtain is locked over the complete height on both sides, so that a lateral shifting of the profiles is not possible.

Limit sizes

Number of rods:	19 per metre in height
Min. width:	400 mm
Max. width:	2300 mm
Max. surface:	4.5 m ²
Weight:	3.5 kg/m ² (without end rod)
Covering width:	52 mm

Wind resistance classes as per EN 13659

Guide rail width Wind resistance class	53, 58, 61 Up to a complete width of [mm]
6	1100
5	1300
4	1500
3	1800
2	2200
1	2300

Notes:

- The tables specifying the box sizes are given at the respective box system!
- For available colors see Chapter "Colors for roller shutter profiles".

Application sizes

Tables to select a motor for roller shutter profile K52

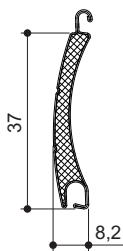
Required torque [Nm] for motor drive with octagon steel shaft 60 mm

		600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000	
		Width [mm]																		
Height [mm]	600	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	
	800	2	2	2	3	3	3	4	4	4	5	5	6	6	6	7	7	7	8	
	1000	2	2	3	3	4	4	5	5	6	6	7	7	8	8	8	9	9	10	
	1200	2	3	3	4	5	5	6	6	7	7	8	9	9	10	10	11	11	12	
	1400	3	3	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	
	1600	3	4	4	5	6	7	8	8	9	10	11	11	12	13	14	15	15	16	
	1800	3	4	5	6	7	8	8	9	10	11	12	13	14	15	16	16	17	18	
	2000	3	5	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
	2200	4	5	6	7	8	9	11	12	13	14	15	16	17	18	19	21	22	23	
	2400	4	5	7	8	9	10	12	13	14	15	16	18	19	20	21	23	24	25	
	2600	5	6	7	9	10	11	13	14	15	17	18	19	21	22	24	25	26	28	
	2800	5	6	8	9	11	12	14	15	17	18	20	21	23	24	26	27	29	30	
	3000	5	7	9	10	12	13	15	17	18	20	21	23	25	26	28	29	31	33	
	3200	6	7	9	11	13	14	16	18	20	21	23	25	27	28	30	32	34	35	
	3400	6 Nm	6	8	10	12	14	16	17	19	21	23	25	27	29	31	32	34	36	38
	3600		7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	
3800		7	9	11	13	16	18	20	22	24	26	29	31	33	35	37	39			
4000		7	10	12	14	17	19	21	24	26	28	31	33	35	37	40				
		10 Nm			15 Nm			20 Nm			30 Nm				40 Nm					

Note: An increase of the torque by +10% per linked element must be observed.
 Tables serve as the basis for specifying the torque! The dimensional restrictions are shown in the limit size tables!

Application sizes

Type: A37



Double-walled, roll formed aluminium roller shutter profile with light gaps (37x8.2 mm), with 2 grooves; hollow space foamed with polyurethane. Outer surfaces coated with thick lacquer, profiles are telescoped with a self-supporting connection. The light gaps are shaped like long holes that are punched into the connection piece. The curtain is locked over the complete height on both sides, so that a lateral shifting of the profiles is not possible.

Limit sizes

Number of rods:	27 per metre in height
Min. width:	400 mm
Max. width:	3000 mm
Max. surface:	7.5 m ²
Weight:	2.6 kg/m ² (without end rod)
Covering width:	37 mm

Wind resistance classes as per EN 13659

Guide rail width	53,58,61
Wind resistance class	Up to a complete width of [mm]
6	1500
5	1800
4	2200
3	2600
2	2900
1	3000

Notes:

- The tables specifying the box sizes are given at the respective box system!
- For available colors see Chapter "Colors for roller shutter profiles".

Application sizes

Tables to select a motor for roller shutter profile A37

Required torque [Nm] for motor drive with octagon steel shaft 40 mm

Height [mm]	Width [mm]																	
	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
600	1	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	3	4
800	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5
1000	1	2	2	2	2	3	3	3	3	4	4	4	5	5	5	5	6	6
1200	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7
1400	2	2	2	3	3	3	4	4	5	5	5	6	6	7	7	7	8	8
1600	2	2	3	3	3	4	4	5	5	6	6	7	7	7	8	8	9	9
1800	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
2000	2	3	3	4	4	5	5	6	7	7	8	8	9	9	10	11	11	12
2200	2	3	4	4	5	5	6	7	7	8	9	9	10	10	11	12	12	13
2400	3	3	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	
2600	3	3	4	5	6	6	7	8	9	9	10	11	12	12	13			
2800	3	4	5	5	6	7	8	9	10	10	11	12	13					
3000	3	4	5	6	7	8	9	9	10	11	12	13						
3200	3	4	5	6	7	8	9	10	11	12	13							
3400	4	5	6	7	8	9	10	11	12	13								
3600	4	5	6	7	8	9	11	12	13									
3800	4	5	6	8	9	10	11	12										
4000	4	6	7	8	9	11	12	13										

4 Nm | 9 Nm | 13 Nm

Required torque [Nm] for motor drive with octagon steel shaft 60 mm

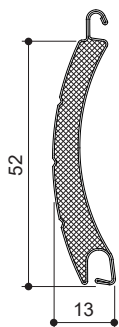
Height [mm]	Width [mm]																	
	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
600	1	1	1	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4
800	1	2	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
1000	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	6	7
1200	2	2	2	3	3	4	4	4	5	5	6	6	6	7	7	8	8	8
1400	2	2	3	3	4	4	5	5	6	6	6	7	7	8	8	9	9	10
1600	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	11	11
1800	2	3	3	4	5	5	6	6	7	8	8	9	9	10	11	11	12	12
2000	2	3	4	5	5	6	6	7	8	9	9	10	11	11	12	12	13	14
2200	3	3	4	5	6	6	7	8	9	9	10	11	12	12	13	14	15	15
2400	3	4	5	5	6	7	8	9	9	10	11	12	13	13	14	15	16	17
2600	3	4	5	6	7	8	8	9	10	11	12	13	14	15	15	16	17	18
2800	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	19
3000	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
3200	4	5	6	7	8	9	10	12	13	14	15	16	17	18	19	20	21	23
3400	4	5	6	8	9	10	11	12	13	15	16	17	18	19	21	22	23	24
3600	4	6	7	8	9	11	12	13	14	16	17	18	19	21	22	23	24	26
3800	5	6	7	9	10	11	13	14	15	17	18	19	21	22	23	25	26	27
4000	5	6	8	9	11	12	13	15	16	18	19	21	22	23	25	26	28	29

6 Nm | 10 Nm | 15 Nm | 20 Nm | 30 Nm

Note: An increase of the torque by +10% per linked element must be observed.
 Tables serve as the basis for specifying the torque! The dimensional restrictions are shown in the limit size tables!

Application sizes

Type: A52



Double-walled, roll formed aluminium roller shutter profile with light gaps (52x13 mm), with 3 grooves; hollow space foamed with polyurethane. Outer surfaces coated with thick lacquer, profiles are telescoped with a self-supporting connection. The light gaps are shaped like long holes that are punched into the connection piece. The blind is locked over the complete height on both sides, so that a lateral shifting of the profiles is not possible.

Limit sizes

Number of rods:	19 per metre in height
Min. width:	400 mm
Max. width:	3000 mm
Max. surface:	8 m ²
Weight:	3 kg/m ² (without end rod)
Covering width:	52 mm

Wind resistance classes as per EN 13659

Guide rail width	53,58,61
Wind resistance class	Up to a complete width of [mm]
6	2000
5	2400
4	2800
3	3000
2	
1	

Notes:

- The tables specifying the box sizes are given at the respective box system!
- For available colors see Chapter "Colors for roller shutter profiles".

Application sizes

Tables to select a motor for roller shutter profile A52

Required torque [Nm] for motor drive with octagon steel shaft 60 mm

		600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
		Width [mm]																	
Height [mm]	600	1	1	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5
	800	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7
	1000	2	2	3	3	3	4	4	5	5	5	6	6	7	7	7	8	8	9
	1200	2	2	3	3	4	5	5	5	6	6	7	8	8	8	9	9	10	11
	1400	2	3	3	4	5	5	6	6	7	8	8	9	9	10	11	11	12	12
	1600	3	3	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14
	1800	3	4	4	5	6	7	7	8	9	10	11	11	12	13	14	14	15	16
	2000	3	4	5	6	6	7	8	9	10	11	12	13	13	14	15	16	17	18
	2200	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	19
	2400	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	21	22
	2600	4	5	6	8	9	10	11	12	13	14	16	17	18	19	20	21	23	24
	2800	4	6	7	8	9	11	12	13	14	16	17	18	19	21	22	23	25	26
	3000	5	6	7	9	10	12	13	14	16	17	18	20	21	22	24	25	27	28
	3200	5	6	8	9	11	12	14	15	17	18	20	21	23	24	26	27	29	30
	3400	5	7	8	10	12	13	15	16	18	20	21	23	24	26	28	29	31	32
	3600	6	7	9	11	13	14	16	18	19	21	23	25	26	28	30	31	33	35
3800	6	8	10	12	13	15	17	19	21	23	24	26	28	30	32	34	35	37	
4000	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	
		6 Nm	10 Nm		15 Nm		17 Nm		20 Nm			30 Nm					40 Nm		

Note: An increase of the torque by +10% per linked element must be observed.
 Tables serve as the basis for specifying the torque! The dimensional restrictions are shown in the limit size tables!

TOP MINI plus – General information

Size overview of the drives

Drive system	Adjustment of the end position	Detection of obstacles Protection against freezing	Intermediate position	Identification Acquisition
Motor drive - Units with 40 mm octagon shaft				
SO-drives standard	automatically	●		M40
868-drives standard	automatically	●	●	F40
WT Ilmo 40	automatically	●		MS40
LS-drives	Knobs			MSM40
io Oximo 40	automatically or via hand-held radio transmitter/wall-mounted radio transmitter	●	●	FIO40
OZ Mech (battery drive)	Knobs			MOZ40
MM-drives object motor	Knobs			MOM40
Motor drive - Units with 60 mm octagon shaft				
SO drives	automatically	●		M
868-drives	automatically	●	●	F
Emergency crank handle RoITop	automatically	●		MSN
DC VariEco	Knobs			MDC
WT Ilmo 50S short motor	automatically	●		MS
WT Ilmo 50	automatically	●		MS
LT drives	Adjusting buttons			MSM
NHK Ilmo 50	automatically			MSN
T5S-drives object motor	automatically	●		MI
ONYX.ROL	automatically	●	●	FX
io Oximo 50S short motor	automatically	●	●	FIO
io Oximo 50	automatically or via hand-held radio transmitter/wall-mounted radio transmitter	●	●	FIO
RS100 io	automatically or via hand-held radio transmitter/wall-mounted radio transmitter	●	●	FS100
OZ Mech (battery drive)	Knobs			MOZ
MM-drives object motor	Knobs			MOM

Note

All motors, except OZRoll and DC VariEco, are operated with 230V alternating voltage.

Detection of obstacles

The motor stops, when during lowering the blind an obstacle causes a counter torque. This function serves as protection for the unit and not for personal safety. Nevertheless, there is danger of squashing due to the weight of the blind!

The drives ONYX.ROL, SO and 868 additionally perform counter movement, so that the obstacle is relieved again.

Protection against freezing

The motor stops, when during raising the blind the torque increases abruptly. This may be caused by a frozen end rod, for example.

Soft cutoff

The drives ONYX.ROL, SO, ESO, 868, E868 and RS100 io are equipped with a so-called soft cutoff. Here the end positions are moved to with reduced speed.

TOP MINI plus – General information

Size overview of the drives

Drive system	Torque [Nm]	Capacity [Watt]	Speed [r.p.m.]	Minimum width [mm]	Max. weight of the roller shutter curtain with end rod [kg]
Manually operated drive system with 40 mm octagon shaft					
Lift tape	-	-	-	400	9
Lift tape gear (2:1)	-	-	-	400	18
Crank handle (3:1)	-	-	-	400	21
Bevel gear unit					
Manually operated drive system with 60 mm octagon shaft					
Crank handle (4:1) Bevel gear unit	-	-	-	400	28

Drive system	Torque [Nm]	Capacity [Watt]	Speed [r.p.m.]	Minimum width [mm]
Motor drive wired – Units with 60 mm octagon shaft				
elero Standard				
ESO RolTopK 06/14	6	140	14	620
SO RolTopD+ 6/14	6	118	14	705
SO RolTopD+ 10/14	10	150	14	705
SO RolTopD+ 20/14	20	220	14	765
SO RolTopD+ 30/14	30	200	14	755
Emergency crank handle motor elero				
NHK RolTop+, 10/14	10	140	14	765
NHK RolTop+, 20/14	20	200	14	825
NHK RolTop+, 30/14	30	200	14	815
elero ExitSafe - direct current drive 12V				
DC VariEcoM, 10/16, 12V	10	48	16	700
DC VariEcoM, 12/16, 12V	12	42	16	720
Somfy				
WT Ilmo 50S 06/17 short	6	90	17	610
WT Ilmo 50 06/17	6	90	17	740
WT Ilmo 50 10/17	10	120	17	740
WT Ilmo 50 15/17	15	140	17	760
WT Ilmo 50 20/17	20	160	17	890
WT Ilmo 50 30/17	30	160	17	910
Emergency crank handle motor Somfy				
NHK Ilmo, 10/17	10	120	17	910
NHK Ilmo, 20/17	20	160	17	1020
Somfy mechanical				
LT Ariane 6/17	6	90	17	740
LT Atlas 15/17	15	140	17	760
LT Gemini 25/17	25	170	17	795
LT Mariner 40/17	40	270	17	890

Minimum widths with top-mounted roller shutter refers to the element width!

TOP MINI plus – General information

Size overview of the drives

Drive system	Torque [Nm]	Capacity [Watt]	Speed [r.p.m.]	Minimum width [mm]
Object motor mechanical				
MM 10/17	10	155	17	680
MM 15/17	15	175	17	680
MM 25/14	25	225	14	770
MM 35/14	35	225	14	770
Object motor electronic				
T5S AUTO+ 06/17	6	90	17	730
T5S AUTO+ 10/17	10	120	17	740
T5S AUTO+ 15/17	15	140	17	760
T5S AUTO+ 20/17	20	160	17	840
Battery drive 12V – DC				
OZ Mech 20/16	20	60	16	800
Motor drive radio-controlled – Units with 60 mm octagon shaft				
ONYX				
ONYX.ROL.D+ 10//14	10	115	14	705
ONYX.ROL.D+ 20//14	20	184	14	765
elero Standard				
E868 RolTopK 06/14	6	140	14	620
868 RolTopD+ 06/14	6	140	14	705
868 RolTopD+ 10/14	10	140	14	705
868 RolTopD+ 20/14	20	200	14	765
868 RolTopD+ 30/14	30	200	14	755
Somfy				
io Oximo 50 S 06/17 short	6	90	17	610
io Oximo 50 06/17	6	90	17	840
io Oximo 50 10/17	10	120	17	890
io Oximo 50 20/17	20	160	17	890
io Oximo 50 30/17	30	240	17	910
RS100 io 06/6-17	6	40	6-17	710
RS100 io 10/6-17	10	55	6-17	720
RS100 io 20/6-17	20	100	6-17	780

Minimum widths with top-mounted roller shutter refers to the element width!

TOP MINI plus – General information

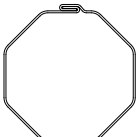


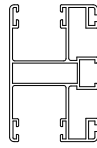
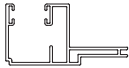
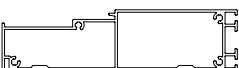
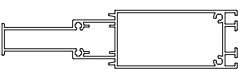
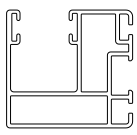
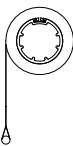
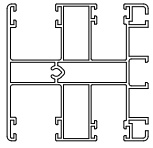
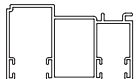
Size overview of the drives

Drive system	Torque [Nm]	Capacity [Watt]	Speed [r.p.m.]	Minimum width [mm]
Motor drive wired – Units with 40 mm octagon shaft				
elero Standard				
SO RolTopD+, 05/17	5	130	17	735
SO RolTopD+, 08/17	8	175	17	735
SO RolTopD+, 12/17	12	175	17	735
Somfy				
WT Ilmo 40, 04/16	4	80	16	680
WT Ilmo 40, 09/16	9	110	16	690
WT Ilmo 40, 13/10	13	110	10	690
Somfy mechanical				
LS Aries S, 04/16	4	80	16	595
LS Mars, 09/16	9	110	16	665
LS Vulcan, 13/10	13	110	10	665
Object motor mechanical				
MM Ares K, 06/14	6	130	14	605
MM Ares, 10/14	10	125	14	695
MM Ursus, 13/14	13	155	14	695
Battery drive 12V – DC				
OZ-Mech, 10/16	10	28	16	750
Motor drive radio-controlled – Units with 40 mm octagon shaft				
elero Standard				
868 RolTopD+, 05/17	5	130	17	735
868 RolTopD+, 08/17	8	168	17	735
868 RolTopD+, 12/17	12	168	17	735
Somfy				
io Oximo 40, 09/16	9	110	16	690
io Oximo 40, 13/10	13	110	10	690

Minimum widths with top-mounted roller shutter refers to the element width!

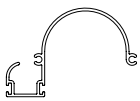


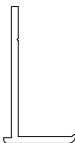


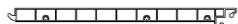

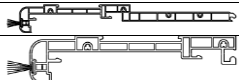




Overview of profiles

General

Profile	Article number	Name	
	02610301 02610309 01550303	Octagon steel shaft Octagon steel shaft Octagon steel shaft	SW40, wall thickness 0.6mm SW60, wall thickness 0.6mm SW60, wall thickness 1.0mm
	01510497 01510496 01530409	Top board profile Top board profile Top board profile	175 – front 220 – front 250 – front
	01520470	Inspection cover - standard	for RvA
	01130903	Guide rail	61x39mm – double, without brush and seal
	01100919 01100920	Guide rail Guide rail with spacing large	30x60mm – single without brush and seal 30x60mm – single without brush and seal
	01130923	Guide rail	32x125mm – single, base profile
	01130926	Guide rail	32x125mm – double, base profile
	01130934 01130935	Guide rail Guide rail with spacing large	36x39mm – single without brush and seal 36x39mm – single without brush and seal
	06040101 06040103 06040104 06040105 06040107	Insect screen fabric Insect screen fabric Insect screen fabric Insect screen fabric VistaScreen Insect screen fabric	Height 1800mm on shaft ø23 Height 2800mm on shaft ø23 Height 2500mm on shaft ø23 Height 2600mm on shaft ø23 Height 2300mm on shaft ø23
	01500904	Insect screen guide rail	61x62.5 – double, without brush and seal, on the inside
	01130928 01130927	Insect screen guide rail Insect screen guide rail with spacing large	36x60mm – single without brush and seal 36x60mm – single without brush and seal

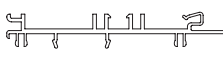
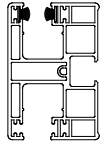
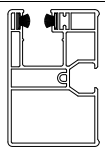
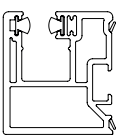
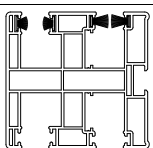

Overview of profiles

General

Profile	Article number	Name	
	01520471	Cassette profile - insect screen	for RvA
	01520472	Inspection cover - insect screen	for RvA
	01510413	Chamber profile	for insect screen, on the inside
	01510401	Plaster base profile	Usable leg length 15mm
	01120404	Plaster base profile	Usable leg length 23mm
	01520418	Plaster base profile	Usable leg length 35mm
	01550423	Plaster base profile	Usable leg length 45mm
	01510426	Plaster base profile	Usable leg length 55mm
	01510427	Plaster base profile	Usable leg length 65mm
	01550431	Plaster base profile	Usable leg length 75mm
	01550427	Plaster base profile	Usable leg length 85mm
	01550432	Plaster base profile	Usable leg length 95mm
	01550428	Plaster base profile	Usable leg length 105mm
01550433	Plaster base profile	Usable leg length 115mm	
01520420	Plaster base profile	Usable leg length 125mm	
01520421	Plaster base profile	Usable leg length 135mm	
01510443	Plaster base profile	Usable leg length 145mm	
	01510456	Top board profile made of PVC	23mm, H10
	01510450	Top board profile made of PVC	Upper side
	01510454	Top board profile made of PVC	175 – Inspection cover inside
	01510455	Top board profile made of PVC	220 – Inspection cover inside
	01511401	Top board profile made of PVC	250 – Inspection cover inside
	01510452	Top board profile made of PVC	175 – front, with brush
	01510453	Top board profile made of PVC	220 – front, with brush
	01511402	Top board profile made of PVC	250 – front, with brush
	01510446	Floor base profile made of PVC	RvI with brush
	01510445	Floor base profile made of PVC	RvU with brush
	01520469	Floor base profile made of PVC	RvA
	01510451	Top board profile made of PVC	Inspection cover at the bottom
	01510448	Adapter profile made of PVC	Universal
	01530490	Adapter profile made of PVC	Universal, aluminium shell


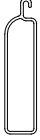
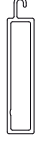

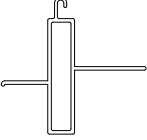
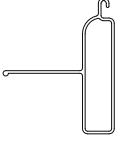

Overview of profiles

General

Profile	Article number	Name	
	01520484	Adapter profile made of PVC	SA76, Salamander 76 salamander-white
	01520490	Adapter profile made of PVC	SC82, Schüco Living 82 white
	01520498	Adapter profile made of PVC	GE83, Gealan 6000/9000 white
	01520499	Adapter profile made of PVC	AP85, Aluplast IDEAL 7000/8000 white
	01530488	Adapter profile made of PVC	VE76, Veka Softline 76 white
	01530403	Adapter profile made of PVC	PR76, Profine 76/88 (KBE, Trocal, Kömmerling)
	01530402	Adapter profile made of PVC	VE82, Veka Softline 82 white
	01130909	PVC - guide rail	61x41mm – double, with brush on one side
	01130902	PVC – guide rail with spacing large	61x41mm – double, with brush on one side
	01130901	PVC - guide rail	61x41mm – single with brush
	01130936	PVC guide rail	45x40mm - single with brush
	01500902	PVC – insect screen guide rail	61x63.5 - double, with brush on one side, on the inside
	01520447	Strengthening of the bottom	Standard

Overview of profiles

General

Profile	Article number	Name	
	06040807	End rod	40x9 for insect roller blind
	01130801	End rod for roller shutter curtain	A52, K52
	01500807	End rod for roller shutter curtain	A37, K37
	02610824	End rod for roller shutter curtain	A37, K37 with groove for sealing profile
	01500810	End rod for roller shutter curtain	A37, K37 with stop tabs on both sides
	01500812	End rod for roller shutter curtain	A52, K52, with stop tab on one side
	02610828	End rod for roller shutter curtain	A37, K37 with groove for sealing profile

Color overview

Color no.	Description
11	Mahogany 13
13	Walnut
16	Bog oak
181*	Black brown
19	Light oak
21	Silver-grey
22	Ruby red
25	Dark oak
26	Oregon 4
27	Mountain oak
28	Oak-maroon
29	Oak natural
30	Mahogany
31	Tobacco-oak
32	Fir green
33	Douglas fir stripes
34	Winter douglas fir
35	Rustic oak
36	Chocolate brown
38	Moss-green
39	Brilliant blue
40	Brown maroon
44	Bog oak
45	Golden Oak
46	Oregon 3
47	Mountain pine
51	Black Cherry
52	Siena Rosso

Color no.	Description
53	Siena Noche
54	Quartz grey plane
55	Quartz grey
67	Montana/Siera
68	Indian/Nevada
69	Canadian/Nogal
89	Cream white
92	Anthracite-grey
93	Steel blue
94	Pure white
130	Birch
131	Basalt grey Sand structure
132	Anthracite grey Sand structure
133	Aluminium grey
134	Grey Sand structure
135	Walnut terra
136	Walnut amaretto
140	Basalt grey plane
141	Anthracite-grey plane
142	Silver grey plane
143	Alux DB703
150	Basalt grey structure
151	Anthracite-grey ulti-matt
152	Black ulti-matt
236	Chocolate brown

Color no.	Description
6005G.	Moss-green smooth
6005F.	Anthracite-grey moss-green fine structure smooth
7016G.	Anthracite-grey plane
9016G	Normal white smooth
8017G.	chocolate brown smooth
9016F.	normal white fine structure
G7015.	Gealan slate grey
G7016.	Gealan anthracite grey
G7038.	Gealan agate grey
G7040.	Gealan window grey
G8014.	Gealan sepia brown
G8022.	Gealan black brown
9016	Normal white
8077	Dark brown
C0	Natural coloured anodized
SOFA	Special color powder-coated
GSOFA	Gealan special color
82	Salamander white
9001	Cream white
DEKB	Foil in special color laminated on brown profile
DEKW	Foil in special color laminated on white profile
DEKC	Special color laminated on aluminium

* Color no. 181 is the successor décor foil of color no. 18. This change became necessary due to a change at the upstream supplier. Color number 18 has expired and is no longer available.

Color overview

Color no.	Description	Application	Renolit color no.	Hornschuch color no.	KG 175/220/250	
					complete	interior white/ exterior décor
11	Mahogany 13	Hornschuch	9.2097.013-116700	436-2085	●	●
13	Walnut	Hornschuch	9.2178.007-116700	436-2048	●	●
16	Bog oak	Hornschuch	9.2052.089-116700	436-2007	●	●
181*	Black brown	Hornschuch	2.11.81000101.116700	436-5071	-	●
19	Light oak	Renolit	9.3156003-116700	not available	-	-
21	Silver-grey	Hornschuch	02.11.71.000047.116700	436-5049	-	●
22	Ruby red	Renolit	02.11.31.000013.116700	'436-5013	-	-
25	Dark oak	Renolit	9.2140006-116700	not available	-	-
26	Oregon 4	Renolit	9.1192.001-116700	not available	-	-
27	Mountain oak	Hornschuch	9.2052.090-116700	426-2005	-	-
28	Oak-maroon	Hornschuch	9.3167.004-116700	426-2046	-	●
29	Office oak	Renolit	9.3167011-116700	not available	-	-
30	Mahogany 21	Hornschuch	9.2065.021-116700	436-2001	-	●
31	Tobacco oak	Renolit	9.3167002-116700	not available	-	-
32	Dark green	Hornschuch	02.11.61.000009.116700	436-5021	-	●
33	Salamander douglas fir	Hornschuch	9.3152.009-116700	426-2022	-	-
34	Winter douglas fir	Renolit	9.3069037-116700	not available	-	-
35	Rustic oak	Hornschuch	9.3149.008-116700	426-2012	-	-
36	Chocolate brown	Hornschuch	02.11.81.000122.116700	426-5011	-	●
38	Moss-green	Hornschuch	02.11.61.000013-116700	426-5014	-	-
39	Brilliant blue	Hornschuch	02.11.51.000028-116700	425-5026	-	-
40	Chestnut	Hornschuch	809905-116700	425-5025	-	-
44	Bog oak	Renolit	9.2140005-116700	not available	-	-
45	Golden Oak	Hornschuch	9.2178.001-116700	436-2036	●	●
46	Oregon 3	Hornschuch	9.2115008-116700	425-2053	-	-
47	Mountain pine	Hornschuch	9.3069.041-116700	436-2009	-	-
51	Black Cherry	Renolit	9.3202.001-116700	'436-2032	-	-
52	Siena Rosso	Cova	4.0131.005-114800	not available	-	-
53	Siena Noche	Cova	4.0131.003-114800	not available	-	-
54	Quartz grey plane	Renolit	02.11.71.000046.808300	not available	-	-
55	Quartz grey	Renolit	02.11.71.000046.116700	not available	●	●
67	Montana/Sierra	Cova	3.0178.001-101100	not available	-	-
68	Indian/Nevada	Cova	3.0178.003-101100	not available	-	-
69	Canadian/Nogal T	Cova	3.0178.002-101100	not available	-	-

Legend

● available (delivery may take longer if a front top board made of aluminium is ordered!)

- not immediately available / delivery time on request

KG Box size

* Color no. 181 is the successor décor foil of color no. 18. This change became necessary due to a change at the upstream supplier. Color number 18 has expired and is no longer available.

Color overview

Art. no.	Varieties of colors number																																
	11	13	16	181	19	21	22	25	26	27	28	29	30	31	32	33	34	35	36	38	39	40	44	45	46	47	51	52	53	54	55		
01500902	•	•	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•	○	○	○	○	○	○	○	○	•
01510446	•	•	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•	○	○	○	○	○	○	○	○	•
01510447	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
01510448	•	•	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•	○	○	○	○	○	○	○	○	•
01510449	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
01510450	•	•	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•	○	○	○	○	○	○	○	○	•
01510451	•	•	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•	○	○	○	○	○	○	○	○	•
01510452	•	•	•	•	○	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•	○	○	○	○	○	○	○	○	•
01510453	•	•	•	•	○	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•	○	○	○	○	○	○	○	○	•
01510454	•	•	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•	○	○	○	○	○	○	○	○	•
01510455	•	•	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•	○	○	○	○	○	○	○	○	•
01510457	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
01510458	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
01510496	•	•	•	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•
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01511401	•	•	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•
01511402	•	•	•	•	○	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•
01520469	•	•	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•
01530409	•	•	•	•	○	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•
01530490	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
01130901	•	•	•	•	○	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•
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01130936	•	•	•	•	○	•	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	•

Legend

- in stock
- order-related

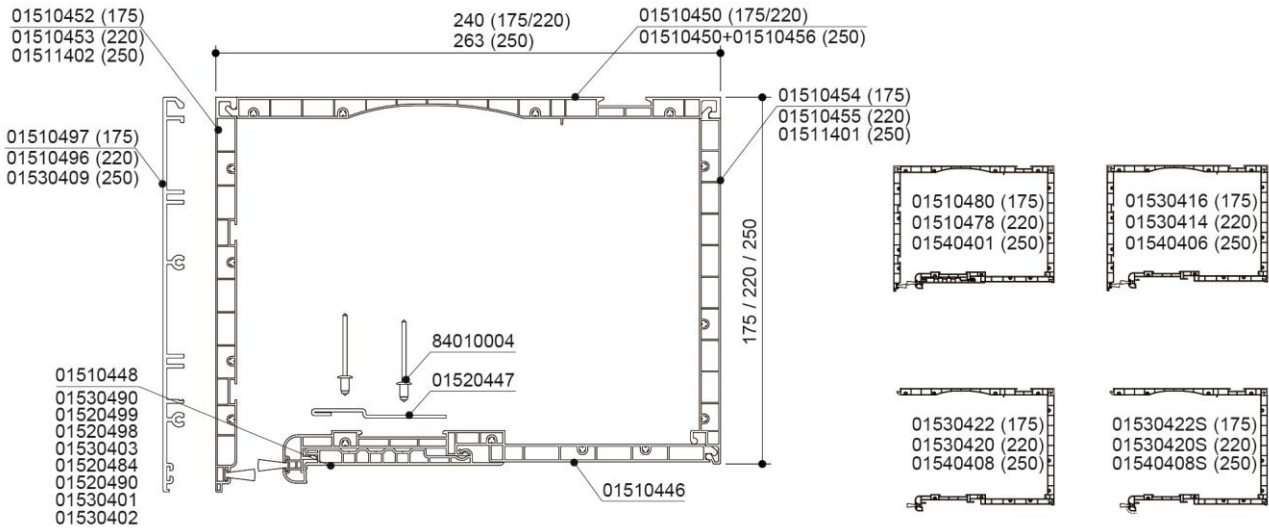
Color overview

Art. no.	Varieties of colors number																													
	67	68	69	89	92	93	94	130	131	132	133	134	135	136	140	141	142	143	144	145	150	151	152	236	G7015	G7016	G7038	G7040	G8014	G8022
01500902	o	o	o	o	•	o	o	o	o	•	o	o	o	o	o	•	o	•	o	o	•	o	o	o						
01510446	o	o	o	o	•	o	o	o	o	•	o	o	o	o	o	•	o	•	o	o	•	o	o	o						
01510447	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o						
01510448	o	o	o	o	•	o	o	o	o	•	o	o	o	o	o	•	o	•	o	o	•	o	o	o						
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01510450	o	o	o	o	•	o	o	o	o	•	o	o	o	o	o	•	o	•	o	o	•	o	o	o						
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01510452	o	o	o	•	•	o	•	o	•	•	o	o	o	o	•	•	•	•	o	o	•	•	•	o	o	o	o	o	o	o
01510453	o	o	o	•	•	o	•	o	•	•	o	o	o	o	•	•	•	•	o	o	•	•	•	o	o	o	o	o	o	o
01510454	o	o	o	o	•	o	o	o	o	•	o	o	o	o	o	•	o	•	o	o	•	o	o	o						
01510455	o	o	o	o	•	o	o	o	o	•	o	o	o	o	o	•	o	•	o	o	•	o	o	o						
01510457	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o						
01510458	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o						
01510496	o	o	o	o	•	o	o	o	o	•	o	o	o	o	o	•	o	•	o	o	•	o	o	o	o	o	o	o	o	o
01510497	o	o	o	o	•	o	o	o	o	•	o	o	o	o	o	•	o	•	o	o	•	o	o	o	o	o	o	o	o	o
01511401	o	o	o	o	•	o	o	o	o	•	o	o	o	o	•	o	•	o	o	•	o	o	o	o						
01511402	o	o	o	•	•	o	•	o	•	•	o	o	o	o	•	•	•	•	o	o	•	•	•	o						
01520469	o	o	o	o	•	o	o	o	o	•	o	o	o	o	o	•	o	•	o	o	•	o	o	o						
01530409	o	o	o	•	•	o	•	o	•	•	o	o	o	o	•	•	•	•	o	o	•	•	•	o						
01530490	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o						
01130901	o	o	o	•	•	o	•	o	•	•	o	o	o	o	•	•	•	•	o	o	•	•	•	o						
01130902	o	o	o	•	•	o	•	o	•	•	o	o	o	o	•	•	•	•	o	o	•	•	•	o	•	•		o	•	•
01130909	o	o	o	•	•	o	•	o	•	•	o	o	o	o	•	•	•	•	o	o	•	•	•	o	•	•	o	o	•	•
01130936	o	o	o	•	•	o	•	o	•	•	o	o	o	o	•	•	•	•	o	o	•	•	•	o						

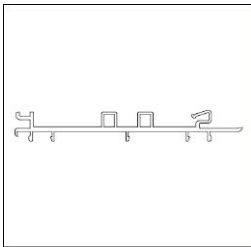
Legend

- in stock
- o order-related

01. TOP MINI plus - top boards of the box RvI - clip technology

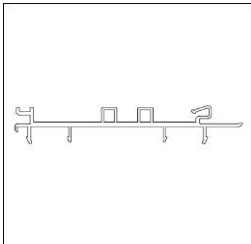


Adapter profile made of PVC
AP85, Aluplast IDEAL 7000/8000



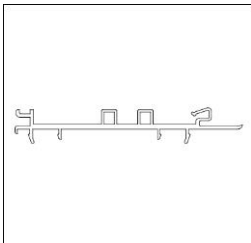
Article No.	Color	Sales representative
01520499_9016	white	10 x 6 LM

Adapter profile made of PVC
GE83, Gealan 6000/9000



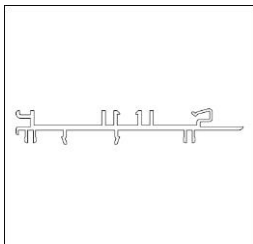
Article No.	Color	Sales representative
01520498_9016	white	10 x 6 LM

Adapter profile made of PVC
PR76, Profine 76/88 (KBE, Trocal, Kömmerling)



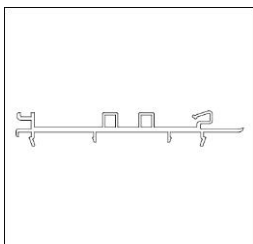
Article No.	Color	Sales representative
01530403_9016	white	10 x 6 LM

Adapter profile made of PVC
SA76, Salamander 76



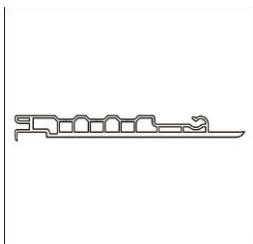
Article No.	Color	Sales representative
01520484_82	salamander white	1 x 6 LM

Adapter profile made of PVC
SC82, Schüco Living 82



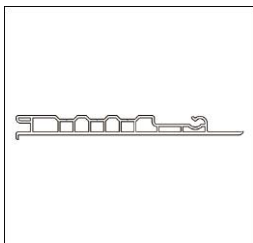
Article No.	Color	Sales representative
01520490_9016	white	10 x 6 LM

Adapter profile made of PVC
Universal, aluminium shell



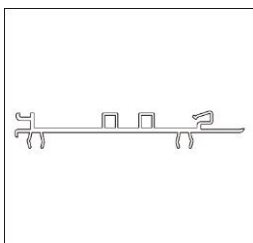
Article No.	Color	Sales representative
01530490_9016	white	10 x 6 LM
01530490_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01530490_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01530490_XXXX	Color as per color chart	10 x 6 LM

Adapter profile made of PVC
Universal, standard



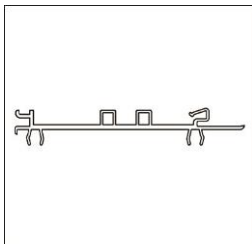
Article No.	Color	Sales representative
01510448_9016	white	10 x 6 LM
01510448_DEKB	Foil in special color laminated on brown profile	5 x 6 LM
01510448_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510448_XXXX	Color as per color chart	1 x 6 LM

Adapter profile made of PVC
VE76, Veka Softline 76



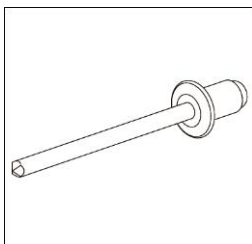
Article No.	Color	Sales representative
01530488_9016	white	10 x 6 LM

Adapter profile made of PVC
VE82, Veka Softline 82



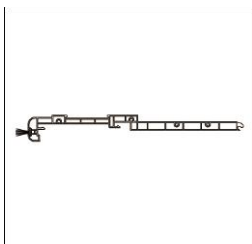
Article No.	Color	Sales representative
01530402_9016	white	10 x 6 LM

Blind rivet
DIN7337A 04x6



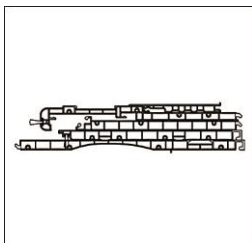
Article No.	Color	Sales representative
84010004	Aluminium/galvanized	500 STK

Floor base profile made of PVC
Inspection from the inside, with brush - standard



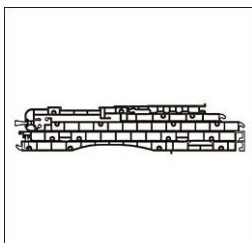
Article No.	Color	Sales representative
01510446_9016	white	5 x 6 LM
01510446_DEKB	Foil in special color laminated on brown profile	5 x 6 LM
01510446_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510446_XXXX	olor as per color chart	1 x 6 LM
01510446S_9016-699	white	1 x 6 LM

Profile assembly set
175x240 inspection from the inside - square, with clip connection



Article No.	Color	Sales representative
01510480_82	salamander white	1 x 6 LM
01510480_9016	white	1 x 6 LM

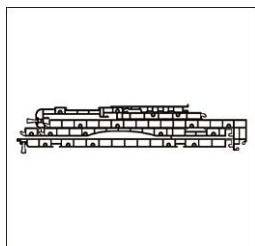
Profile assembly set
220x240 inspection from the inside - square, with clip connection



Article No.	Color	Sales representative
01510478_82	salamander white	1 x 6 LM
01510478_9016	white	1 x 6 LM

Profile assembly set

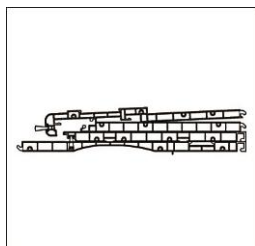
250x263 inspection from the inside - square, with clip connection



Article No.	Color	Sales representative
01540401_82	salamander white	1 x 6 LM
01540401_9016	white	1 x 6 LM

Profile kit without adapter profile

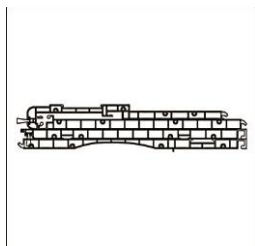
175x240 inspection from the inside - square, with clip connection



Article No.	Color	Sales representative
01530416_82	salamander white	1 x 6 LM
01530416_9016	white	1 x 6 LM

Profile kit without adapter profile

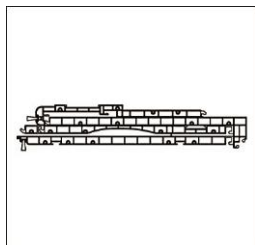
220x240 inspection from the inside - square, with clip connection



Article No.	Color	Sales representative
01530414_82	salamander white	1 x 6 LM
01530414_9016	white	1 x 6 LM

Profile kit without adapter profile

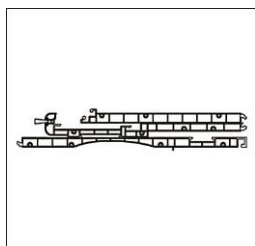
250x263 inspection from the inside - square, with clip connection



Article No.	Color	Sales representative
01540406_82	salamander white	1 x 6 LM
01540406_9016	white	1 x 6 LM

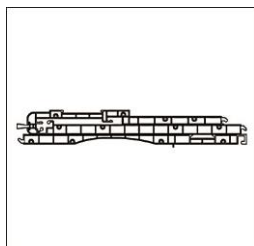
Profile kit without front top board, adapter profile, AG black

175x240 inspection from the inside - square, with clip connection



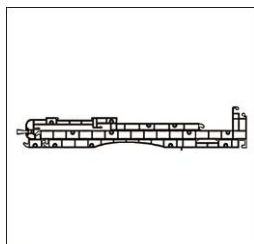
Article No.	Color	Sales representative
01530422S_9016	white	1 x 6 LM

Profile kit without front top board, adapter profile, AG black
 220x240 inspection from the inside - square, with clip connection



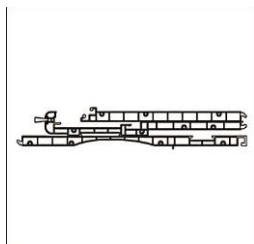
Article No.	Color	Sales representative
01530420S_9016	white	1 x 6 LM

Profile kit without front top board, adapter profile, AG black
 250x263 inspection from the inside - square, with clip connection



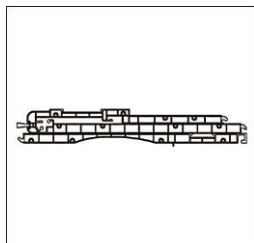
Article No.	Color	Sales representative
01540408S_9016	white	1 x 6 LM

Profile kit, without front top board and adapter profile
 175x240 inspection from the inside - square, with clip connection



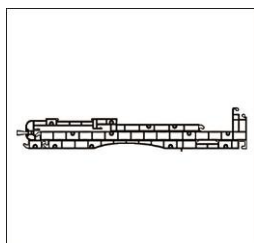
Article No.	Color	Sales representative
01530422_82	salamander white	1 x 6 LM
01530422_9016	white	1 x 6 LM

Profile kit, without front top board and adapter profile
 220x240 inspection from the inside - square, with clip connection



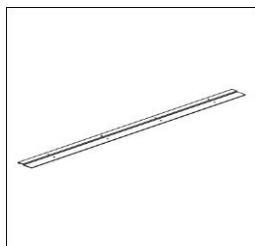
Article No.	Color	Sales representative
01530420_82	salamander white	1 x 6 LM
01530420_9016	white	1 x 6 LM

Profile kit, without front top board and adapter profile
 250x263 inspection from the inside - square, with clip connection



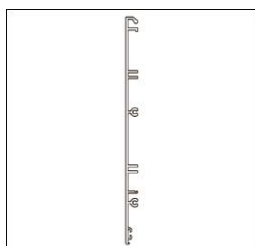
Article No.	Color	Sales representative
01540408_82	salamander white	1 x 6 LM
01540408_9016	white	1 x 6 LM

Strengthening of the bottom
Standard



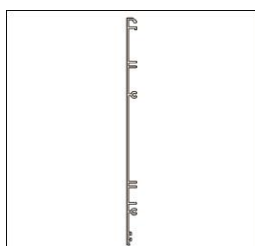
Article No.	Color	Sales representative
01520447	Galvanized	10 x 6 LM

Top board profile
175 - Front side



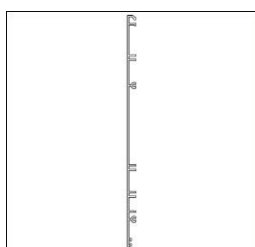
Article No.	Color	Sales representative
01510497_8077	dark brown	5 x 6 LM
01510497_9016	normal white	5 x 6 LM
01510497_BL	blank	5 x 6 LM
01510497_C0	naturally anodised E6-EV1	5 x 6 LM
01510497_DEKC	Foil in special color laminated on chromated profile	1 x 6 LM
01510497_SOFA	Special color powder-coated	1 x 6 LM
01510497_XXXX	Color as per color chart	1 x 6 LM

Top board profile
220 - Front side



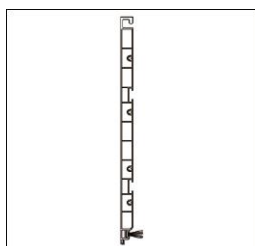
Article No.	Color	Sales representative
01510496_8077	dark brown	5 x 6 LM
01510496_9016	normal white	5 x 6 LM
01510496_BL	blank	5 x 6 LM
01510496_C0	naturally anodised E6-EV1	5 x 6 LM
01510496_DEKC	Foil in special color laminated on chromated profile	1 x 6 LM
01510496_SOFA	Special color powder-coated	1 x 6 LM
01510496_XXXX	Color as per color chart	1 x 6 LM

Top board profile
250 - Front side



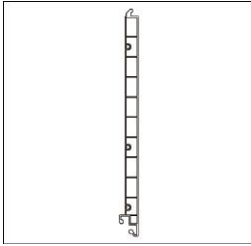
Article No.	Color	Sales representative
01530409_8077	dark brown	2 x 6 LM
01530409_9016	normal white	2 x 6 LM
01530409_BL	blank	2 x 6 LM
01530409_C0	naturally anodised E6-EV1	2 x 6 LM
01530409_DEKC	laminated on chromated profile	2 x 6 LM
01530409_SOFA	Special color powder-coated	1 x 6 LM
01530409_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
175 - front side, with brush



Article No.	Color	Sales representative
01510452_9016	white	5 x 6 LM
01510452_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01510452_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510452_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
175 - inspection cover inside



Article No.	Color	Sales representative
01510454_9016	white	5 x 6 LM
01510454_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01510454_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510454_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
220 - front side, with brush



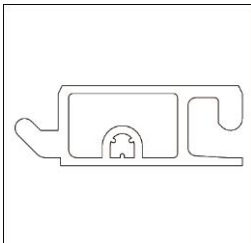
Article No.	Color	Sales representative
01510453_9016	white	5 x 6 LM
01510453_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01510453_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510453_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
220 - inspection cover inside



Article No.	Color	Sales representative
01510455_9016	white	5 x 6 LM
01510455_DEKB	Foil in special color laminated on brown profile	5 x 6 LM
01510455_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510455_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
23mm, H10



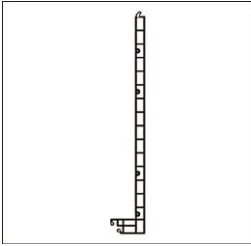
Article No.	Color	Sales representative
01510456_82	salamander white	10 x 6 LM
01510456_9016	white	10 x 6 LM

Top board profile made of PVC
250 - front side, with brush



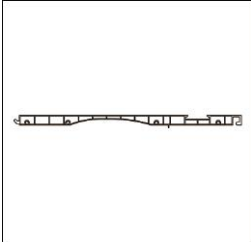
Article No.	Color	Sales representative
01511402_9016	white	5 x 6 LM
01511402_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01511402_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01511402_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
250 - inspection cover inside



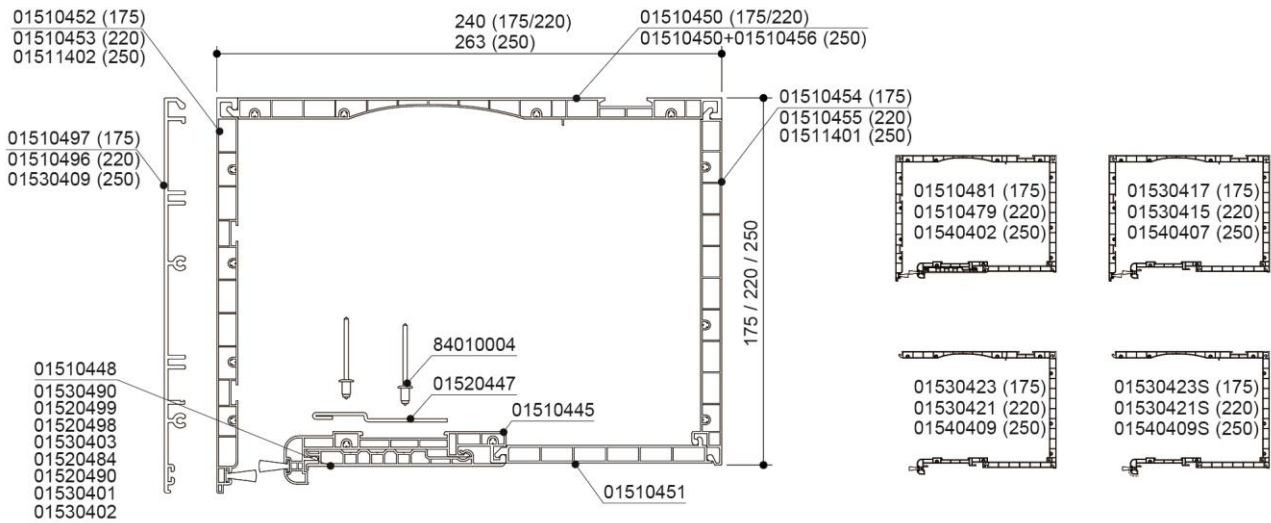
Article No.	Color	Sales representative
01511401_9016	white	5 x 6 LM
01511401_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01511401_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01511401_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
Upper side

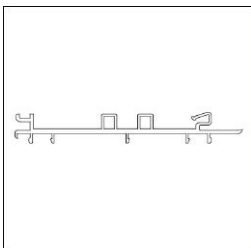


Article No.	Color	Sales representative
01510450_9016	white	5 x 6 LM
01510450_DEKB	Foil in special color laminated on brown profile	5 x 6 LM
01510450_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510450_XXXX	Color as per color chart	1 x 6 LM

02. TOP MINI plus - top boards of the box RvU - clip technology

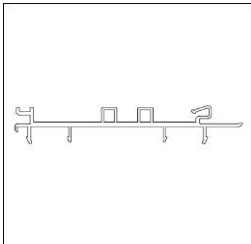


Adapter profile made of PVC
AP85, Aluplast IDEAL 7000/8000



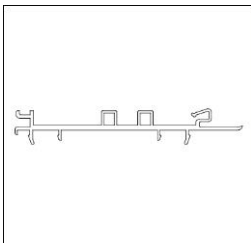
Article No.	Color	Sales representative
01520499_9016	white	10 x 6 LM

Adapter profile made of PVC
GE83, Gealan 6000/9000



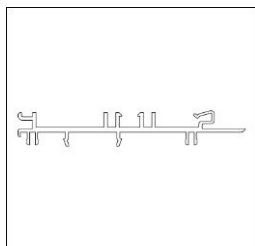
Article No.	Color	Sales representative
01520498_9016	white	10 x 6 LM

Adapter profile made of PVC
PR76, Profine 76/88 (KBE, Trocal, Kömmerling)



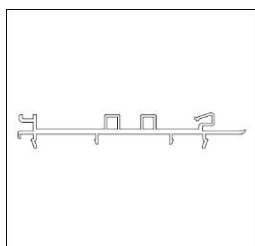
Article No.	Color	Sales representative
01530403_9016	white	10 x 6 LM

Adapter profile made of PVC
SA76, Salamander 76



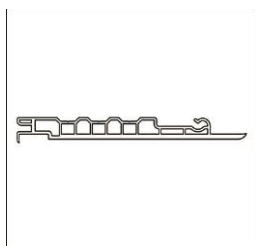
Article No.	Color	Sales representative
01520484_82	salamander white	1 x 6 LM

Adapter profile made of PVC
SC82, Schüco Living 82



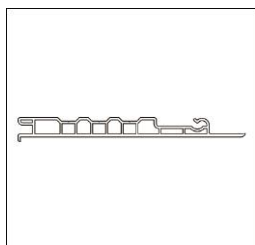
Article No.	Color	Sales representative
01520490_9016	white	10 x 6 LM

Adapter profile made of PVC
Universal, aluminium shell



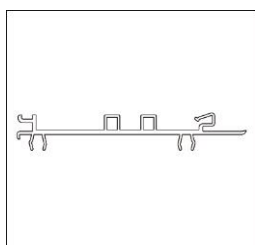
Article No.	Color	Sales representative
01530490_9016	white	10 x 6 LM
01530490_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01530490_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01530490_XXXX	Color as per color chart	10 x 6 LM

Adapter profile made of PVC
Universal, standard



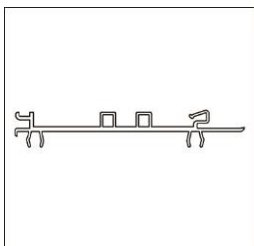
Article No.	Color	Sales representative
01510448_9016	white	10 x 6 LM
01510448_DEKB	Foil in special color laminated on brown profile	5 x 6 LM
01510448_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510448_XXXX	Color as per color chart	1 x 6 LM

Adapter profile made of PVC
VE76, Veka Softline 76



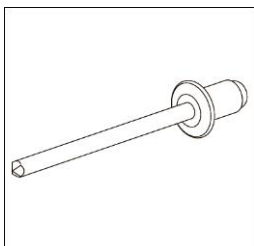
Article No.	Color	Sales representative
01530488_9016	white	10 x 6 LM

Adapter profile made of PVC
VE82, Veka Softline 82



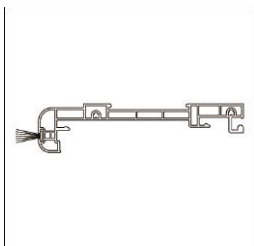
Article No.	Color	Sales representative
01530402_9016	white	10 x 6 LM

Blind rivet
DIN7337A 04x6



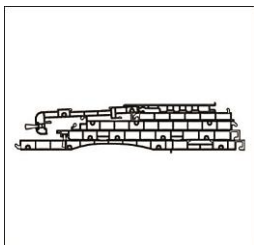
Article No.	Color	Sales representative
84010004	Aluminium/galvanized	500 STK

Floor base profile made of PVC
RvU, with brush



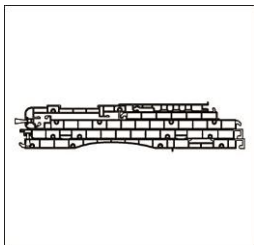
Article No.	Color	Sales representative
01510445_9016	white	5 x 6 LM
01510445S_9016-699	white	1 x 6 LM

Profile assembly set
175x240 inspection from the bottom side - square, with clip connection



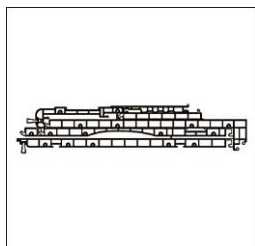
Article No.	Color	Sales representative
01510481_82	salamander white	1 x 6 LM
01510481_9016	white	1 x 6 LM

Profile assembly set
220x240 RvU - square, with clip connection



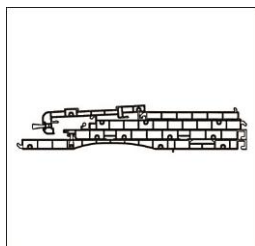
Article No.	Color	Sales representative
01510479_82	salamander white	1 x 6 LM
01510479_9016	white	1 x 6 LM

Profile assembly set
250x263 inspection from the bottom side - square, with clip connection



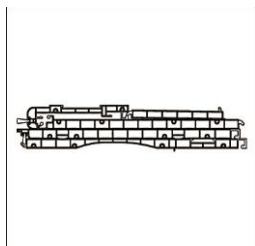
Article No.	Color	Sales representative
01540402_82	salamander white	1 x 6 LM
01540402_9016	white	1 x 6 LM

Profile kit without adapter profile
175x240 inspection from the bottom side - square, with clip connection



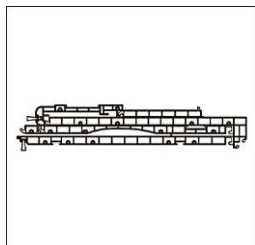
Article No.	Color	Sales representative
01530417_82	salamander white	1 x 6 LM
01530417_9016	white	1 x 6 LM

Profile kit without adapter profile
220x240 RvU - square, with clip connection



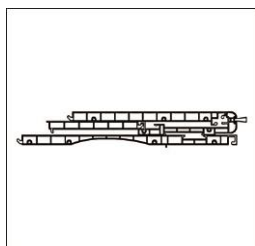
Article No.	Color	Sales representative
01530415_82	salamander white	1 x 6 LM
01530415_9016	white	1 x 6 LM

Profile kit without adapter profile
250x263 inspection from the bottom side - square, with clip connection



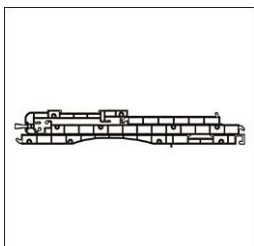
Article No.	Color	Sales representative
01540407_82	salamander white	1 x 6 LM
01540407_9016	white	1 x 6 LM

Profile kit without front top board, adapter profile, AG black
175x240 inspection from the bottom side - square, with clip connection



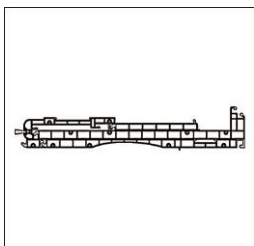
Article No.	Color	Sales representative
01530423S_9016	white	1 x 6 LM

Profile kit without front top board, adapter profile, AG black
 220x240 RvU - square, with clip connection



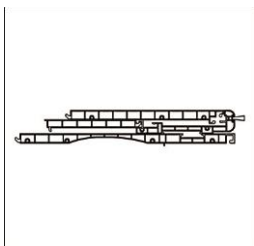
Article No.	Color	Sales representative
01530421S_9016	white	1 x 6 LM

Profile kit without front top board, adapter profile, AG black
 250x263 inspection from the bottom side - square, with clip connection



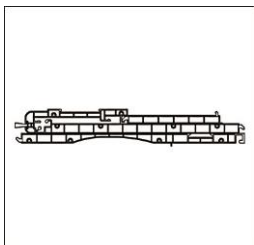
Article No.	Color	Sales representative
01540409S_9016	white	1 x 6 LM

Profile kit, without front top board and adapter profile
 175x240 inspection from the bottom side - square, with clip connection



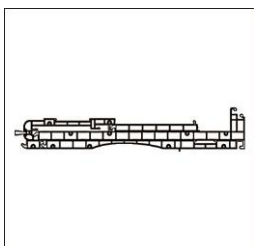
Article No.	Color	Sales representative
01530423_82	salamander white	1 x 6 LM
01530423_9016	white	1 x 6 LM

Profile kit, without front top board and adapter profile
 220x240 RvU - square, with clip connection



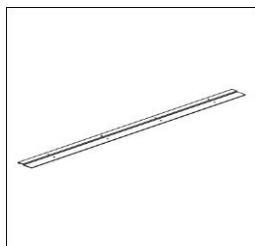
Article No.	Color	Sales representative
01530421_82	salamander white	1 x 6 LM
01530421_9016	white	1 x 6 LM

Profile kit, without front top board and adapter profile
 250x263 inspection from the bottom side - square, with clip connection



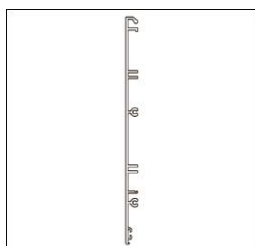
Article No.	Color	Sales representative
01540409_82	salamander white	1 x 6 LM
01540409_9016	white	1 x 6 LM

Strengthening of the bottom
Standard



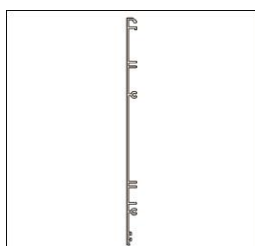
Article No.	Color	Sales representative
01520447	Galvanized	10 x 6 LM

Top board profile
175 - Front side



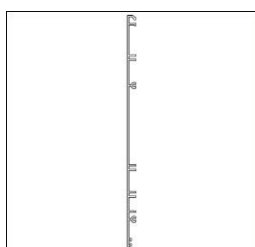
Article No.	Color	Sales representative
01510497_8077	dark brown	5 x 6 LM
01510497_9016	normal white	5 x 6 LM
01510497_BL	blank	5 x 6 LM
01510497_C0	naturally anodised E6-EV1	5 x 6 LM
01510497_DEKC	Foil in special color laminated on chromated profile	1 x 6 LM
01510497_SOFA	Special color powder-coated	1 x 6 LM
01510497_XXXX	Color as per color chart	1 x 6 LM

Top board profile
220 - Front side



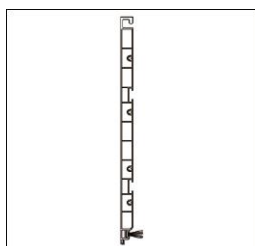
Article No.	Color	Sales representative
01510496_8077	dark brown	5 x 6 LM
01510496_9016	normal white	5 x 6 LM
01510496_BL	blank	5 x 6 LM
01510496_C0	naturally anodised E6-EV1	5 x 6 LM
01510496_DEKC	Foil in special color laminated on chromated profile	1 x 6 LM
01510496_SOFA	Special color powder-coated	1 x 6 LM
01510496_XXXX	Color as per color chart	1 x 6 LM

Top board profile
250 - Front side



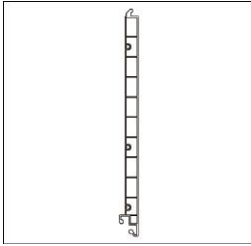
Article No.	Color	Sales representative
01530409_8077	dark brown	2 x 6 LM
01530409_9016	normal white	2 x 6 LM
01530409_BL	blank	2 x 6 LM
01530409_C0	naturally anodised E6-EV1	2 x 6 LM
01530409_DEKC	laminated on chromated profile	2 x 6 LM
01530409_SOFA	Special color powder-coated	1 x 6 LM
01530409_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
175 - front side, with brush



Article No.	Color	Sales representative
01510452_9016	white	5 x 6 LM
01510452_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01510452_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510452_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
175 - inspection cover inside



Article No.	Color	Sales representative
01510454_9016	white	5 x 6 LM
01510454_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01510454_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510454_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
220 - front side, with brush



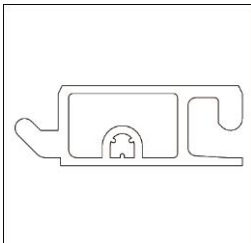
Article No.	Color	Sales representative
01510453_9016	white	5 x 6 LM
01510453_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01510453_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510453_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
220 - inspection cover inside



Article No.	Color	Sales representative
01510455_9016	white	5 x 6 LM
01510455_DEKB	Foil in special color laminated on brown profile	5 x 6 LM
01510455_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510455_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
23mm, H10



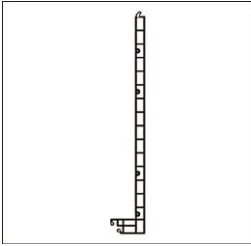
Article No.	Color	Sales representative
01510456_9016	white	10 x 6 LM

Top board profile made of PVC
250 - front side, with brush



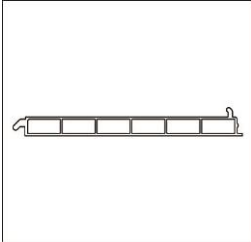
Article No.	Color	Sales representative
01511402_9016	white	5 x 6 LM
01511402_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01511402_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01511402_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
250 - inspection cover inside



Article No.	Color	Sales representative
01511401_9016	white	5 x 6 LM

Top board profile made of PVC
Inspection cover at the bottom



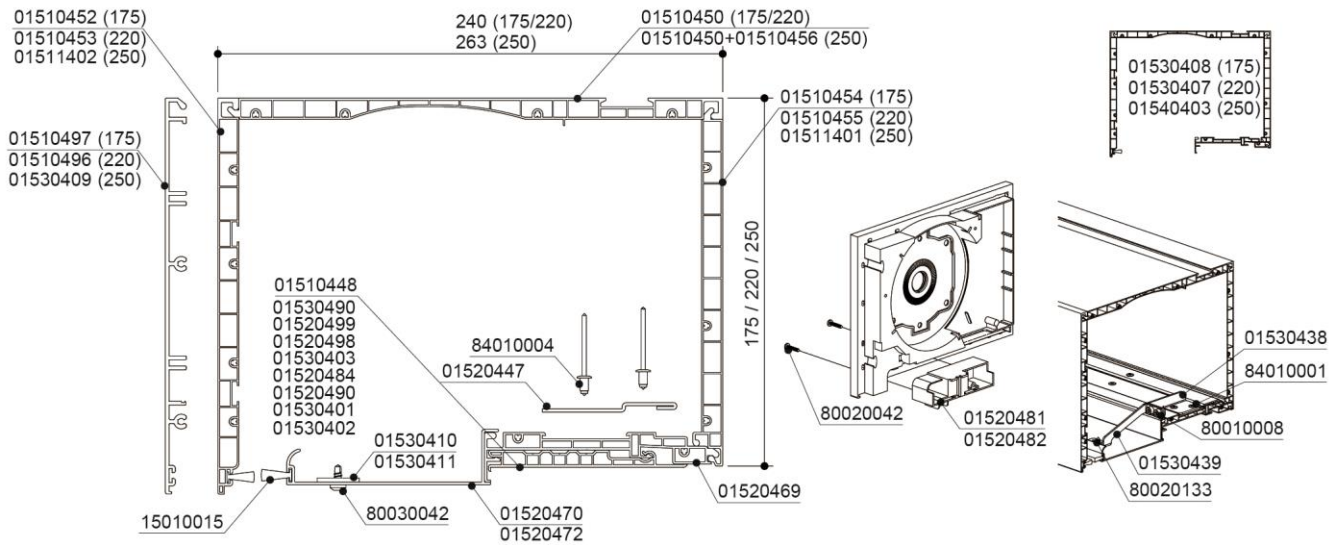
Article No.	Color	Sales representative
01510451_9016	white	5 x 6 LM
01510451_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01510451_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510451_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
Upper side

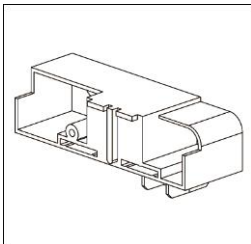


Article No.	Color	Sales representative
01510450_9016	white	5 x 6 LM
01510450_DEKB	Foil in special color laminated on brown profile	5 x 6 LM
01510450_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510450_XXXX	Color as per color chart	1 x 6 LM

03. TOP MINI plus - top boards of the box RvA - clip technology

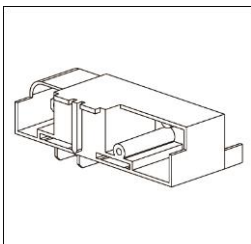


Adapter for end cap RvA, on the left side



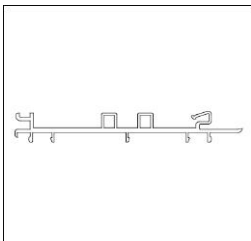
Article No.	Color	Sales representative
01520481	white	50 STK

Adapter for end cap RvA, on the right side



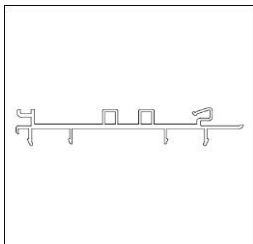
Article No.	Color	Sales representative
01520482	white	50 STK

Adapter profile made of PVC AP85, Aluplast IDEAL 7000/8000



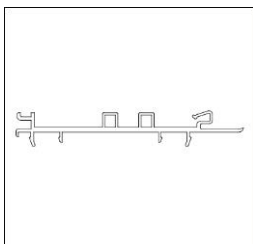
Article No.	Color	Sales representative
01520499_9016	white	10 x 6 LM

Adapter profile made of PVC
GE83, Gealan 6000/9000



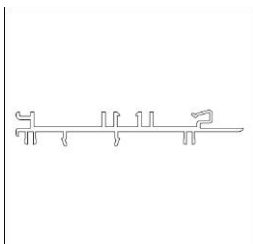
Article No.	Color	Sales representative
01520498_9016	white	10 x 6 LM

Adapter profile made of PVC
PR76, Profine 76/88 (KBE, Trocal, Kömmerling)



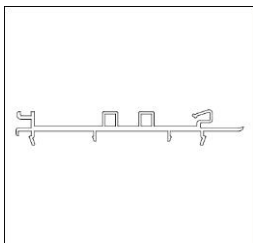
Article No.	Color	Sales representative
01530403_9016	white	10 x 6 LM

Adapter profile made of PVC
SA76, Salamander 76



Article No.	Color	Sales representative
01520484_82	salamander white	1 x 6 LM

Adapter profile made of PVC
SC82, Schüco Living 82



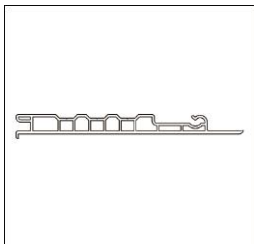
Article No.	Color	Sales representative
01520490_9016	white	10 x 6 LM

Adapter profile made of PVC
Universal, aluminium shell



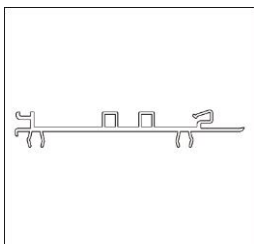
Article No.	Color	Sales representative
01530490_9016	white	10 x 6 LM
01530490_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01530490_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01530490_XXXX	Color as per color chart	10 x 6 LM

Adapter profile made of PVC
Universal, standard



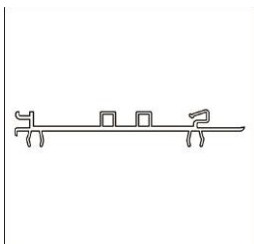
Article No.	Color	Sales representative
01510448_9016	white	10 x 6 LM
01510448_DEKB	Foil in special color laminated on brown profile	5 x 6 LM
01510448_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510448_XXXX	Color as per color chart	1 x 6 LM

Adapter profile made of PVC
VE76, Veka Softline 76



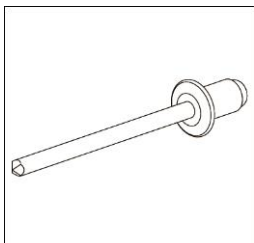
Article No.	Color	Sales representative
01530488_9016	white	10 x 6 LM

Adapter profile made of PVC
VE82, Veka Softline 82



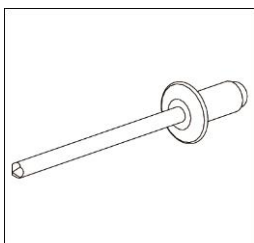
Article No.	Color	Sales representative
01530402_9016	white	10 x 6 LM

Blind rivet
DIN7337A 04x6



Article No.	Color	Sales representative
84010004	Aluminium/galvanized	500 STK

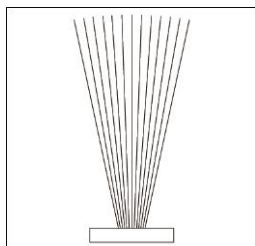
Blind rivet
DIN7337A 04x8



Article No.	Color	Sales representative
84010001	Aluminium/galvanized	1000 STK

Brush

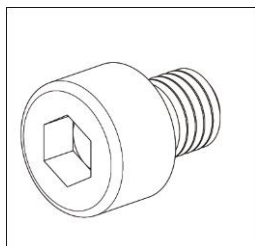
Width of the holder insert 4.8mm x height 13mm



Article No.	Color	Sales representative
15010015_9005	Black	1 x 200 LM

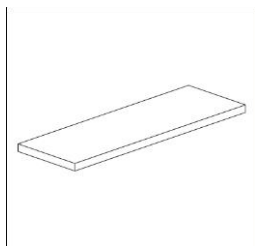
Cylinder head bolt

DIN912 05x6 hexagon socket



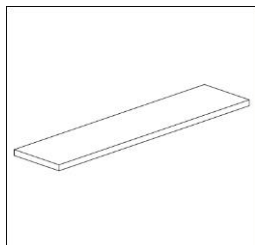
Article No.	Color	Sales representative
80010008_VZ	Galvanized	500 STK

Fastening lug 60mm
for inspection cover RvA



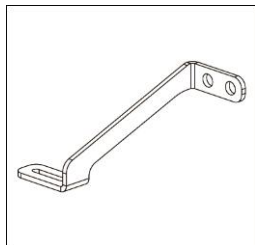
Article No.	Color	Sales representative
01530410	blank	10 STK

Fastening lug 85mm
for inspection cover RvA



Article No.	Color	Sales representative
01530411	blank	10 STK

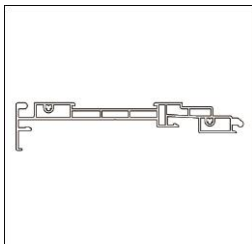
Fastening lug, removable
for fastening inspection cover RvA



Article No.	Color	Sales representative
01530439	Galvanized	10 STK

Floor base profile made of PVC

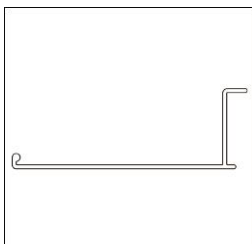
RvA



Article No.	Color	Sales representative
01520469_9016	white	5 x 6 LM
01520469_DEKB-054	Foil in special color laminated on brown profile	5 x 6 LM
01520469_DEKW-054	Foil in special color laminated on white profile	5 x 6 LM
01520469_XXXX-054	Color as per color chart	5 x 6 LM

Inspection cover - insect screen

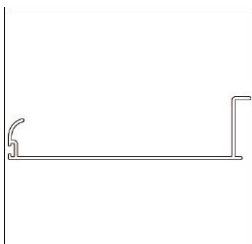
for RvA



Article No.	Color	Sales representative
01520472_7016	anthracite-grey	5 x 6 LM
01520472_9016	normal white	5 x 6 LM
01520472_BL	blank	5 x 6 LM
01520472_SOFA	Special color powder-coated	1 x 6 LM

Inspection cover - standard

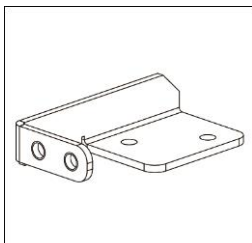
for RvA



Article No.	Color	Sales representative
01520470_7016	anthracite-grey	5 x 6 LM
01520470_9016	normal white	5 x 6 LM
01520470_BL	blank	4 x 6 LM
01520470_SOFA	Special color powder-coated	1 x 6 LM

Mounting bracket fix

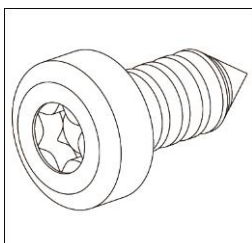
for fastening inspection cover RvA



Article No.	Color	Sales representative
01530438	Galvanized	10 STK

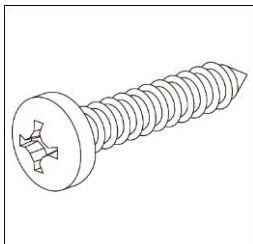
Pan-head tapping screw

DIN7981C 3.9x9.5 AW20



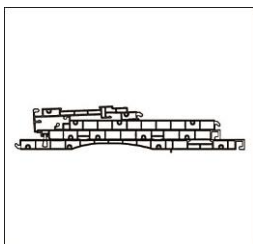
Article No.	Color	Sales representative
80020133	blank A2	1000 STK

Pan-head tapping screw
similar DIN7981C 3.5x19 - C - 3.9H cross recession



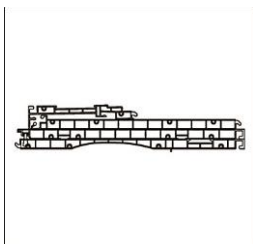
Article No.	Color	Sales representative
80020042_VZ	Galvanized	1000 STK

Profile kit without adapter profile
175x240 inspection from the outside - square, with clip connection



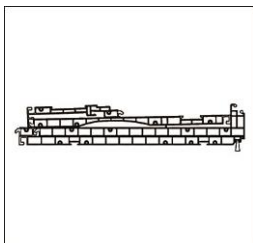
Article No.	Color	Sales representative
01530408_82	salamander white	1 x 6 LM
01530408_9016	white	1 x 6 LM

Profile kit without adapter profile
220x240 RvA - square, with clip connection



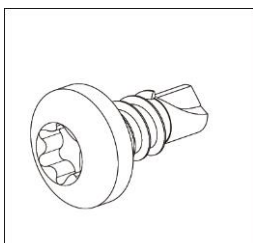
Article No.	Color	Sales representative
01530407_82	salamander white	1 x 6 LM
01530407_9016	white	1 x 6 LM

Profile kit without adapter profile
250x263 inspection from the outside - square, with clip connection



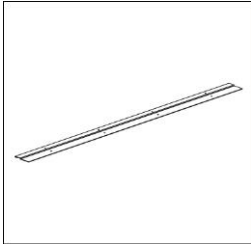
Article No.	Color	Sales representative
01540403_82	salamander white	1 x 6 LM
01540403_9016	white	1 x 6 LM

Self-drilling head screw
DIN7504N 3.9x9.5 AW20



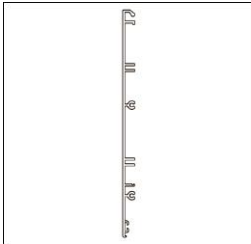
Article No.	Color	Sales representative
80030042_VZ	Galvanized	5000 STK

Strengthening of the bottom
Standard



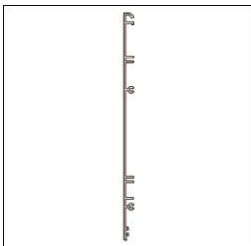
Article No.	Color	Sales representative
01520447	Galvanized	10 x 6 LM

Top board profile
175 - Front side



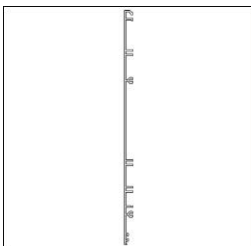
Article No.	Color	Sales representative
01510497_8077	dark brown	5 x 6 LM
01510497_9016	normal white	5 x 6 LM
01510497_BL	blank	5 x 6 LM
01510497_C0	naturally anodised E6-EV1	5 x 6 LM
01510497_DEKC	Foil in special color laminated on chromated profile	1 x 6 LM
01510497_SOFA	Specialcolor powder-coated	1 x 6 LM
01510497_XXXX	Color as per color chart	1 x 6 LM

Top board profile
220 - Front side



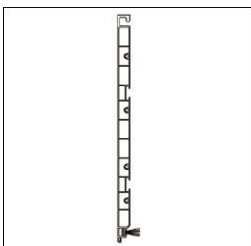
Article No.	Color	Sales representative
01510496_8077	dark brown	5 x 6 LM
01510496_9016	normal white	5 x 6 LM
01510496_BL	blank	5 x 6 LM
01510496_C0	naturally anodised E6-EV1	5 x 6 LM
01510496_DEKC	Foil in special color laminated on chromated profile	1 x 6 LM
01510496_SOFA	Special color powder-coated	1 x 6 LM
01510496_XXXX	Color as per color chart	1 x 6 LM

Top board profile
250 - Front side



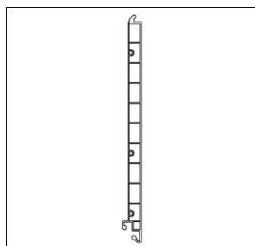
Article No.	Color	Sales representative
01530409_8077	dark brown	2 x 6 LM
01530409_9016	normal white	2 x 6 LM
01530409_BL	blank	2 x 6 LM
01530409_C0	naturally anodised E6-EV1	2 x 6 LM
01530409_DEKC	laminated on chromated profile	2 x 6 LM
01530409_SOFA	Special color powder-coated	1 x 6 LM
01530409_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
175 - front side, with brush



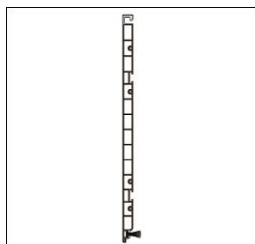
Article No.	Color	Sales representative
01510452_9016	white	5 x 6 LM
01510452_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01510452_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510452_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
175 - inspection cover inside



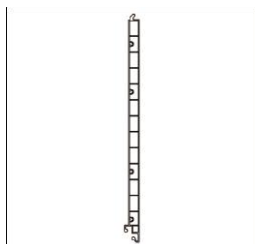
Article No.	Color	Sales representative
01510454_9016	white	5 x 6 LM
01510454_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01510454_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510454_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
220 - front side, with brush



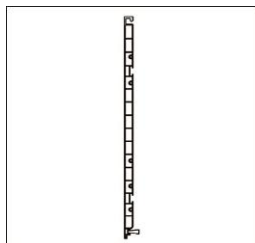
Article No.	Color	Sales representative
01510453_9016	white	5 x 6 LM
01510453_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01510453_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510453_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
220 - inspection cover inside



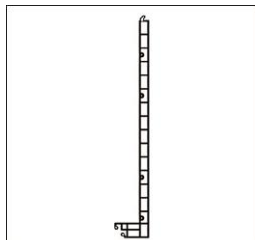
Article No.	Color	Sales representative
01510455_9016	white	5 x 6 LM
01510455_DEKB	Foil in special color laminated on brown profile	5 x 6 LM
01510455_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510455_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
250 - front side, with brush



Article No.	Color	Sales representative
01511402_9016	white	5 x 6 LM
01511402_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01511402_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01511402_XXXX	Color as per color chart	1 x 6 LM

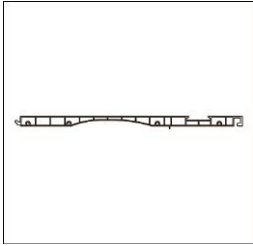
Top board profile made of PVC
250 - inspection cover inside



Article No.	Color	Sales representative
01511401_9016	white	5 x 6 LM
01511401_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01511401_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01511401_XXXX	Color as per color chart	1 x 6 LM

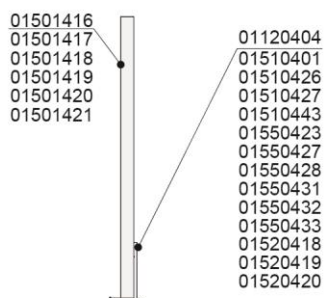
Top board profile made of PVC

Upper side

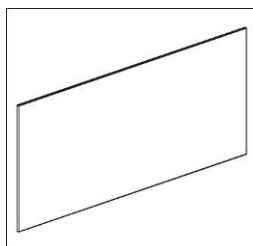


Article No.	Color	Sales representative
01510450_9016	white	5 x 6 LM
01510450_DEKB	Foil in special color laminated on brown profile	5 x 6 LM
01510450_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510450_XXXX	Color as percolor chart	1 x 6 LM

04. TOP MINI plus - top boards of the box - plaster base

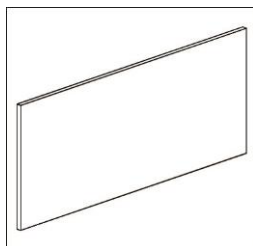


EPS insulation board
1200x500x10mm



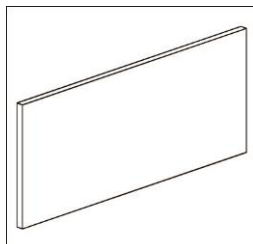
Article No.	Color	Sales representative
01501416	dark grey	96 M2

EPS insulation board
1200x500x20mm



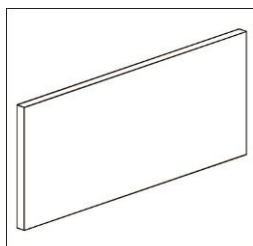
Article No.	Color	Sales representative
01501417	dark grey	54 M2

EPS insulation board
1200x500x30mm



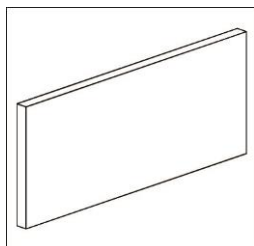
Article No.	Color	Sales representative
01501418	dark grey	38 M2

EPS insulation board
1200x500x40mm



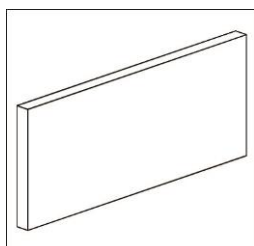
Article No.	Color	Sales representative
01501419	dark grey	28 M2

EPS insulation board
1200x500x50mm



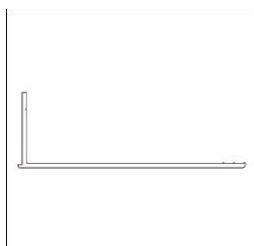
Article No.	Color	Sales representative
01501420	dark grey	21 M2

EPS insulation board
1200x500x60mm



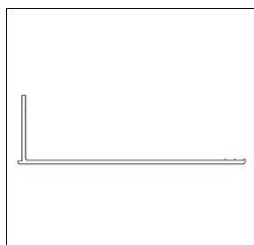
Article No.	Color	Sales representative
01501421	dark grey	18 M2

Plaster base profile
usable leg length 105mm



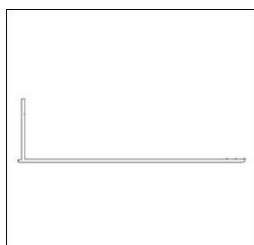
Article No.	Color	Sales representative
01550428_7016	anthracite-grey	5 x 6 LM
01550428_9016	normal white	5 x 6 LM
01550428_BL	blank	5 x 6 LM
01550428_C0	naturally anodised E6-EV1	5 x 6 LM
01550428_SOFA	Special color powder-coated	5 x 6 LM

Plaster base profile
usable leg length 115mm



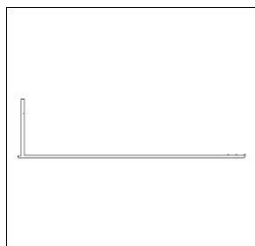
Article No.	Color	Sales representative
01550433_7016	anthracite-grey	5 x 6 LM
01550433_9016	normal white	5 x 6 LM
01550433_BL	blank	5 x 6 LM
01550433_C0	naturally anodised E6-EV1	5 x 6 LM
01550433_SOFA	Special color powder-coated	5 x 6 LM

Plaster base profile
usable leg length 125mm



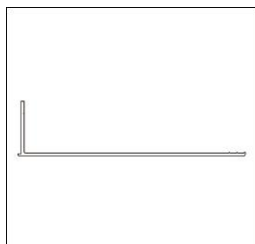
Article No.	Color	Sales representative
01520419_7016	anthracite-grey	5 x 6 LM
01520419_9016	normal white	5 x 6 LM
01520419_BL	blank	5 x 6 LM
01520419_C0	naturally anodised E6-EV1	5 x 6 LM
01520419_SOFA	Special color powder-coated	5 x 6 LM

Plaster base profile
usable leg length 135mm



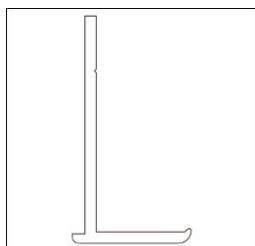
Article No.	Color	Sales representative
01520420_7016	anthracite-grey	5 x 6 LM
01520420_9016	normal white	5 x 6 LM
01520420_BL	blank	5 x 6 LM
01520420_C0	naturally anodised E6-EV1	5 x 6 LM
01520420_SOFA	Special color powder-coated	5 x 6 LM

Plaster base profile
usable leg length 145mm



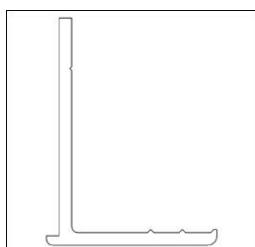
Article No.	Color	Sales representative
01510443_7016	anthracite-grey	5 x 6 LM
01510443_9016	normal white	5 x 6 LM
01510443_BL	blank	5 x 6 LM
01510443_C0	naturally anodised E6-EV1	5 x 6 LM
01510443_SOFA	Special color powder-coated	5 x 6 LM

Plaster base profile
usable leg length 15mm



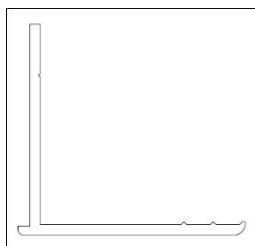
Article No.	Color	Sales representative
01510401_7016	anthracite-grey	10 x 6 LM
01510401_8077	dark brown	10 x 6 LM
01510401_9016	normal white	10 x 6 LM
01510401_BL	blank	10 x 6 LM
01510401_C0	naturally anodised E6-EV1	10 x 6 LM
01510401_SOFA	Special color powder-coated	10 x 6 LM

Plaster base profile
usable leg length 23mm



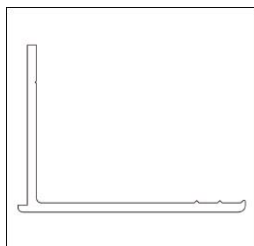
Article No.	Color	Sales representative
01120404_7016	anthracite-grey	10 x 6 LM
01120404_8077	dark brown	10 x 6 LM
01120404_9016	normal white	10 x 6 LM
01120404_BL	blank	10 x 6 LM
01120404_C0	naturally anodised E6-EV1	10 x 6 LM
01120404_SOFA	Special color powder-coated	10 x 6 LM

Plaster base profile
usable leg length 35mm



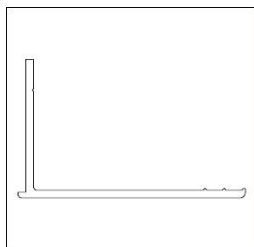
Article No.	Color	Sales representative
01520418_7016	anthracite-grey	10 x 6 LM
01520418_9016	normal white	10 x 6 LM
01520418_BL	blank	10 x 6 LM
01520418_C0	naturally anodised E6-EV1	10 x 6 LM
01520418_SOFA	Special color powder-coated	10 x 6 LM

Plaster base profile
usable leg length 45mm



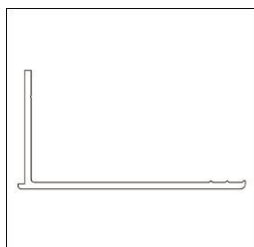
Article No.	Color	Sales representative
01550423_7016	anthracite-grey	10 x 6 LM
01550423_8077	dark brown	10 x 6 LM
01550423_9016	normal white	10 x 6 LM
01550423_BL	blank	10 x 6 LM
01550423_C0	naturally anodised E6-EV1	10 x 6 LM
01550423_SOFA	Special color powder-coated	10 x 6 LM

Plaster base profile
usable leg length 55mm



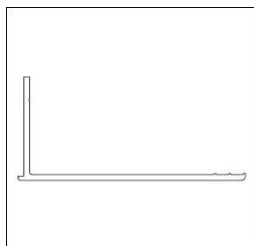
Article No.	Color	Sales representative
01510426_7016	anthracite-grey	5 x 6 LM
01510426_9016	normal white	5 x 6 LM
01510426_BL	blank	5 x 6 LM
01510426_C0	naturally anodised E6-EV1	5 x 6 LM
01510426_SOFA	Special color powder-coated	5 x 6 LM

Plaster base profile
usable leg length 65mm



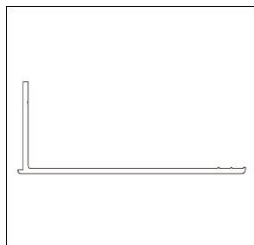
Article No.	Color	Sales representative
01510427_7016	anthracite-grey	5 x 6 LM
01510427_9016	normal white	5 x 6 LM
01510427_BL	blank	5 x 6 LM
01510427_C0	naturally anodised E6-EV1	5 x 6 LM
01510427_SOFA	Special color powder-coated	5 x 6 LM

Plaster base profile
usable leg length 75mm



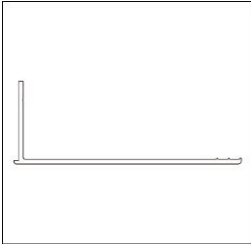
Article No.	Color	Sales representative
01550431_7016	anthracite-grey	5 x 6 LM
01550431_9016	normal white	5 x 6 LM
01550431_BL	blank	5 x 6 LM
01550431_C0	naturally anodised E6-EV1	5 x 6 LM
01550431_SOFA	Special color powder-coated	5 x 6 LM

Plaster base profile
usable leg length 85mm



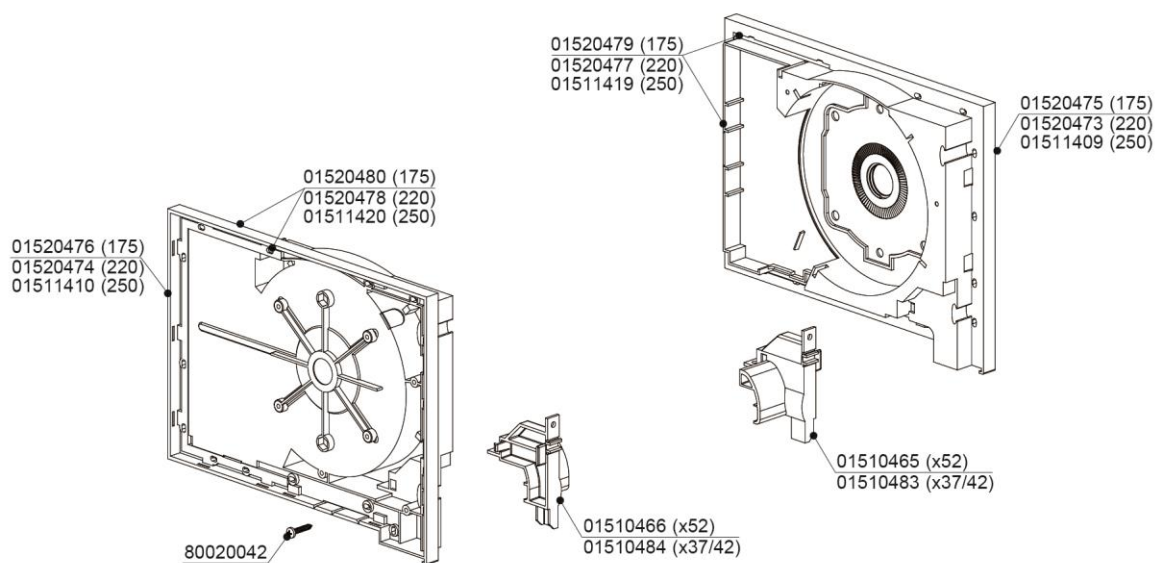
Article No.	Color	Sales representative
01550427_7016	anthracite-grey	5 x 6 LM
01550427_9016	normal white	5 x 6 LM
01550427_BL	blank	5 x 6 LM
01550427_C0	naturally anodised E6-EV1	5 x 6 LM
01550427_SOFA	Special color powder-coated	5 x 6 LM

Plaster base profile
usable leg length 95mm

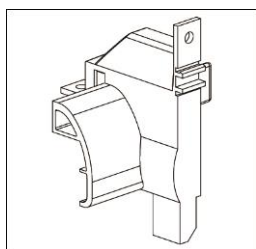


Article No.	Color	Sales representative
01550432_7016	anthracite-grey	5 x 6 LM
01550432_9016	normal white	5 x 6 LM
01550432_BL	blank	5 x 6 LM
01550432_C0	naturally anodised E6-EV1	5 x 6 LM
01550432_SOFA	Special color powder-coated	5 x 6 LM

05. TOP MINI plus - headers

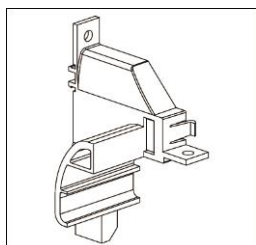


Entry guide standard
for guide groove large, on the left



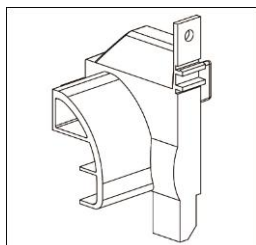
Article No.	Color	Sales representative
01510465	white	100 STK

Entry guide standard
for guide groove large, on the right



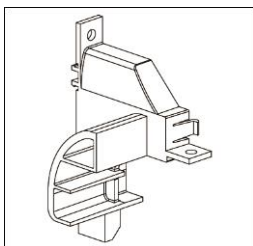
Article No.	Color	Sales representative
01510466	white	100 STK

Entry guide standard
for guide groove small, on the left



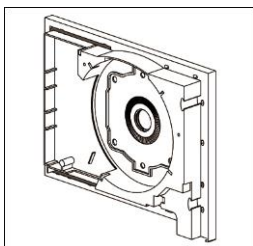
Article No.	Color	Sales representative
01510483	grey	100 STK

Entry guide standard
for guide groove small, on the right



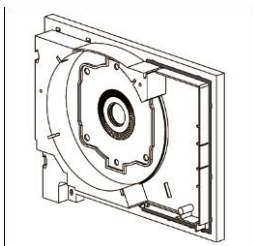
Article No.	Color	Sales representative
01510484	grey	100 STK

Header with sealing cord
175x240 square, on the left side



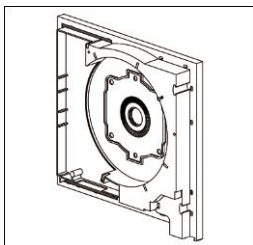
Article No.	Color	Sales representative
01520479_8077	Brown	50 STK
01520479_9016	white	50 STK

Header with sealing cord
175x240 square, on the right side



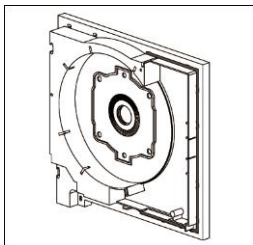
Article No.	Color	Sales representative
01520480_8077	Brown	50 STK
01520480_9016	white	50 STK

Header with sealing cord
220x240 square, on the left side



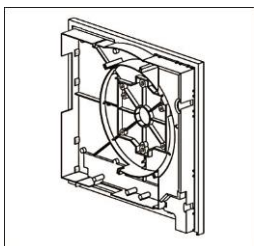
Article No.	Color	Sales representative
01520477_8077	Brown	50 STK
01520477_9016	white	50 STK

Header with sealing cord
220x240 square, on the right side



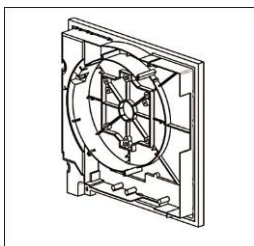
Article No.	Color	Sales representative
01520478_8077	Brown	50 STK
01520478_9016	white	50 STK

Header with sealing cord
250x263 square, on the left side



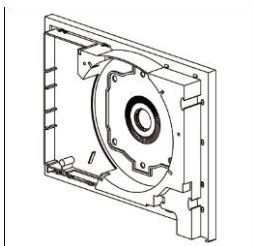
Article No.	Color	Sales representative
01511419_8077	Brown	20 STK
01511419_9016	white	20 STK

Header with sealing cord
250x263 square, on the right side



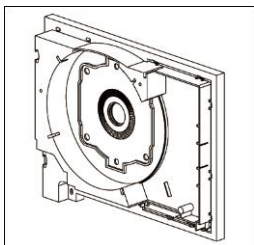
Article No.	Color	Sales representative
01511420_8077	Brown	20 STK
01511420_9016	white	20 STK

Header without sealing cord
175x240 square, on the left side



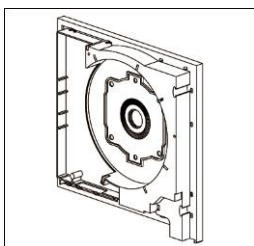
Article No.	Color	Sales representative
01520475_8077	Brown	50 STK
01520475_9016	white	50 STK

Header without sealing cord
175x240 square, on the right side



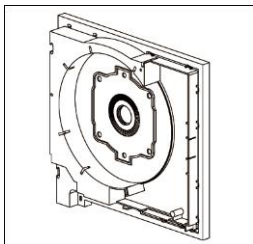
Article No.	Color	Sales representative
01520476_8077	Brown	50 STK
01520476_9016	white	50 STK

Header without sealing cord
220x240 square, on the left side



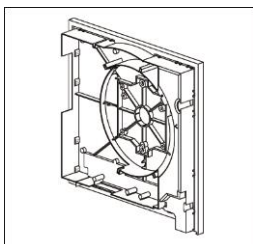
Article No.	Color	Sales representative
01520473_8077	Brown	50 STK
01520473_9016	white	50 STK

Header without sealing cord
220x240 square, on the right side



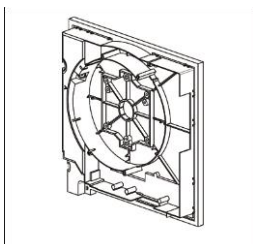
Article No.	Color	Sales representative
01520474_8077	Brown	50 STK
01520474_9016	white	50 STK

Header without sealing cord
250x263 square, on the left side



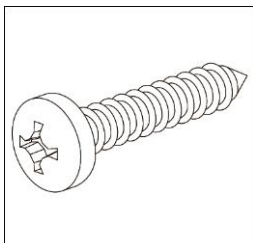
Article No.	Color	Sales representative
01511409_8077	Brown	40 STK
01511409_9016	white	20 STK

Header without sealing cord
250x263 square, on the right side



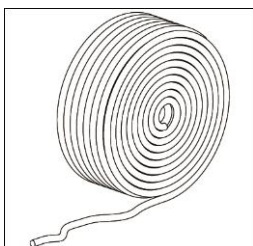
Article No.	Color	Sales representative
01511410_8077	Brown	20 STK
01511410_9016	white	20 STK

Pan-head tapping screw
similar DIN7981C 3.5x19 - C - 3.9H cross recession



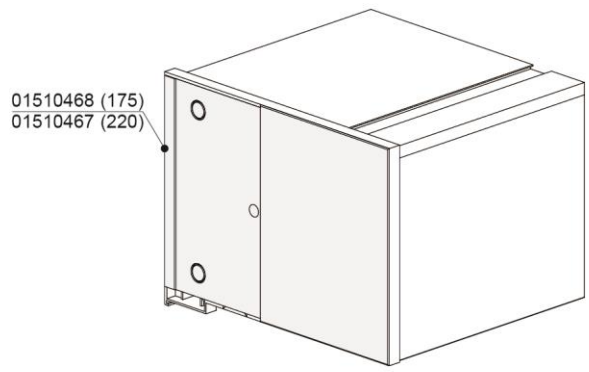
Article No.	Color	Sales representative
80020042_VZ	Galvanized	1000 STK

Silicone-foam round cord
ø4mm

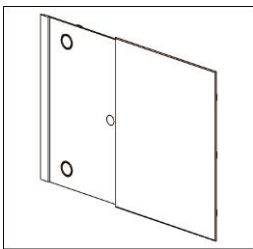


Article No.	Color	Sales representative
15100029	white	1 x 200 LM

06. TOP MINI plus - headers - cover plates

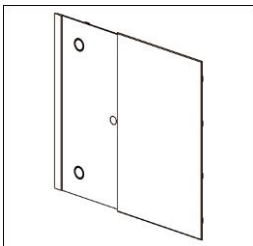


Covering cap
175x240 square



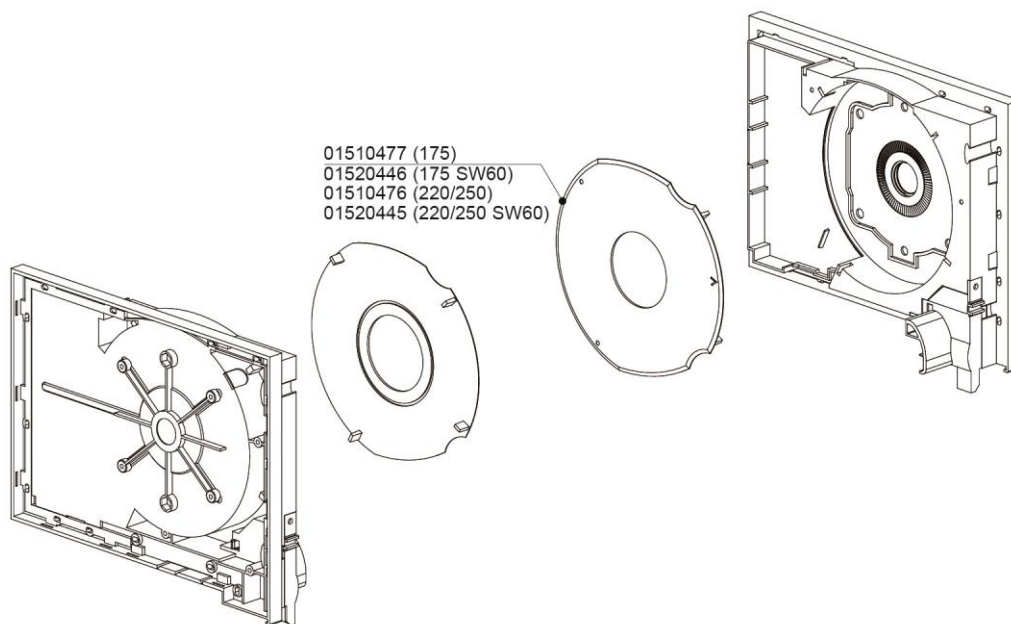
Article No.	Color	Sales representative
01510468_8077	Brown	50 STK
01510468_9016	white	50 STK

Covering cap
220x240 square

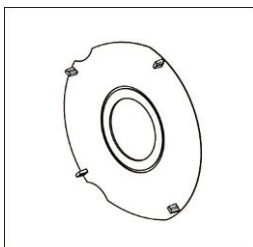


Article No.	Color	Sales representative
01510467_8077	Brown	50 STK
01510467_9016	white	50 STK

07. TOP MINI plus - headers - deflector plates

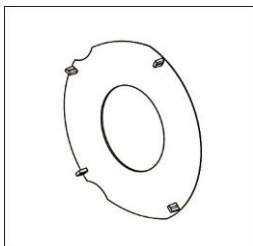


Deflector plate
175, SW40/SW60



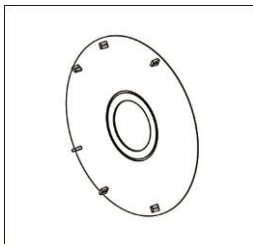
Article No.	Color	Sales representative
01510477	Black	50 STK

Deflector plate
175, SW60



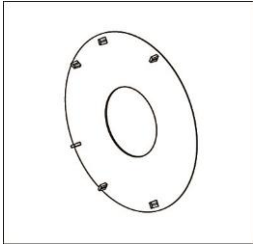
Article No.	Color	Sales representative
01520446	Black	50 STK

Deflector plate
220/250, SW40/SW60



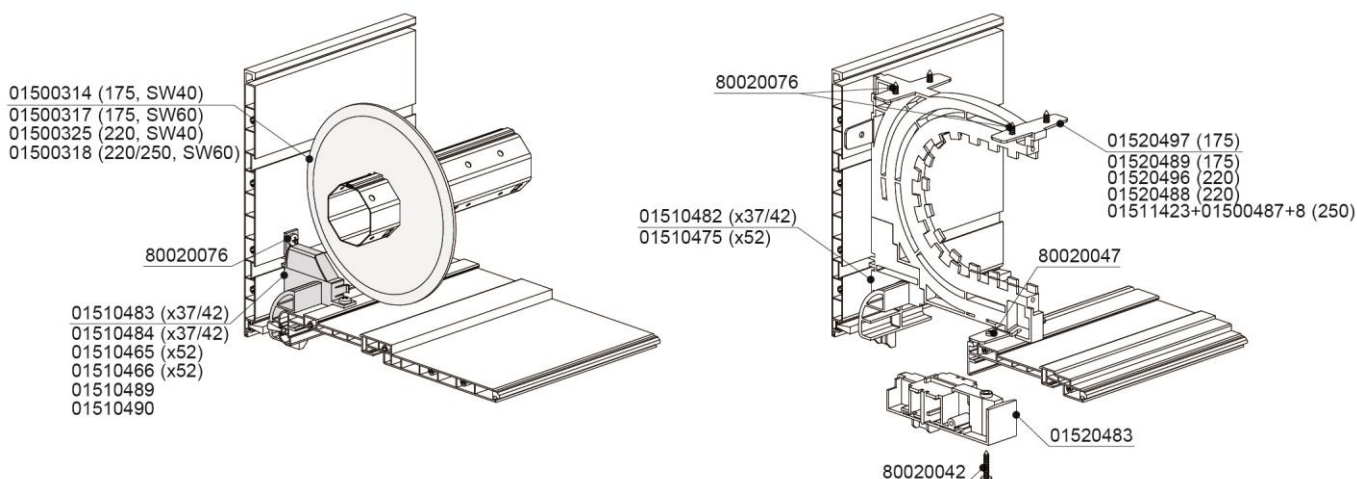
Article No.	Color	Sales representative
01510476	Black	50 STK

Deflector plate
220/250, SW60

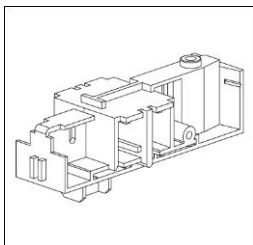


Article No.	Color	Sales representative
01520445	Black	50 STK

08. TOP MINI plus - headers - guide rail offset

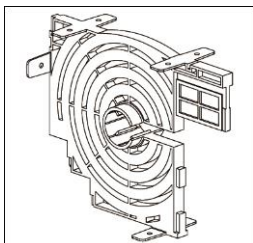


Adapter for centre bearing
RvA



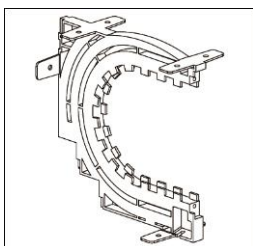
Article No.	Color	Sales representative
01520483	Black	500 STK

Centre bearing body for RvI, RvU, RvA
175 for parted shaft



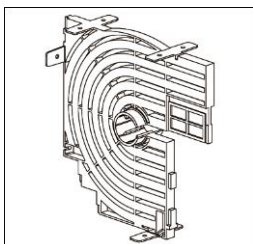
Article No.	Color	Sales representative
01520489	Black	25 STK

Centre bearing body for RvI, RvU, RvA
175 for slide-in bearing



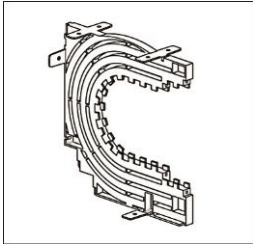
Article No.	Color	Sales representative
01520497	Black	25 STK

Centre bearing body for RvI, RvU, RvA
220 for parted shaft



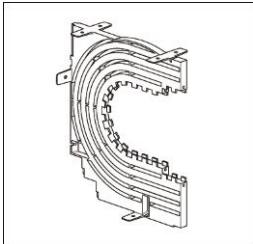
Article No.	Color	Sales representative
01520488	Black	25 STK

Centre bearing body for RvI, RvU, RvA
220 for slide-in bearing



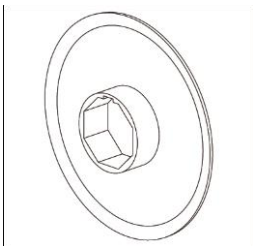
Article No.	Color	Sales representative
01520496	Black	25 STK

Centre bearing body for RvI, RvU, RvA
250 for slide-in bearing



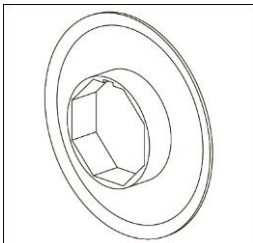
Article No.	Color	Sales representative
01511423	Black	50 STK

Deflector plate
ø140mm, for cap for tubes SW40



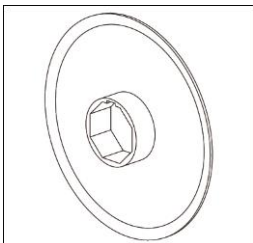
Article No.	Color	Sales representative
01500314	Black	100 STK

Deflector plate
ø140mm, SW60



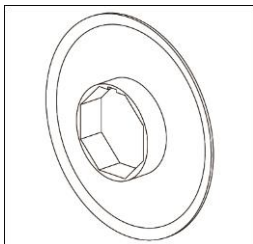
Article No.	Color	Sales representative
01500317	Black	100 STK

Deflector plate
ø160mm, for cap for tubes SW40



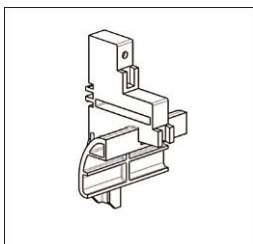
Article No.	Color	Sales representative
01500325	Black	100 STK

Deflector plate
ø160mm, SW60



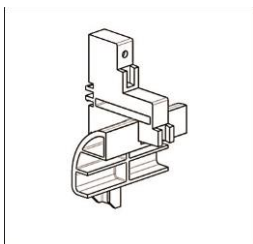
Article No.	Color	Sales representative
01500318	Black	100 STK

Entry guide for centre bearing
for large spacing



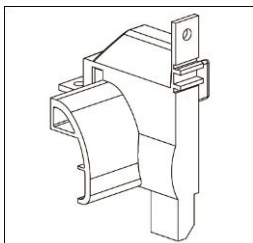
Article No.	Color	Sales representative
01510475	Black	100 STK

Entry guide for centre bearing
for small spacing



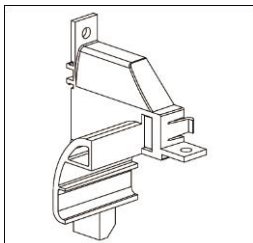
Article No.	Color	Sales representative
01510482	Black	100 STK

Entry guide standard
for guide groove large, on the left



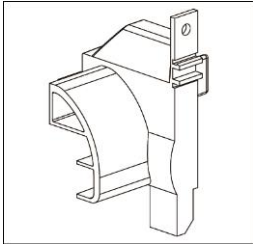
Article No.	Color	Sales representative
01510465	white	100 STK

Entry guide standard
for guide groove large, on the right



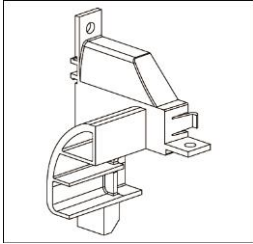
Article No.	Color	Sales representative
01510466	white	100 STK

Entry guide standard
for guide groove small, on the left



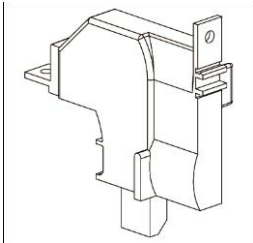
Article No.	Color	Sales representative
01510483	grey	100 STK

Entry guide standard
for guide groove small, on the right



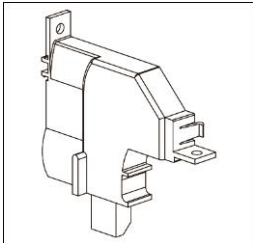
Article No.	Color	Sales representative
01510484	grey	100 STK

Filler piece for box retrofitting
for insect screen inside, on the left



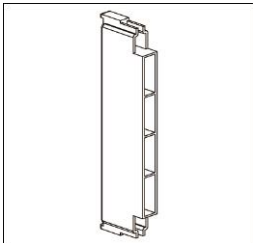
Article No.	Color	Sales representative
01510489	Black	50 STK

Filler piece for box retrofitting
for insect screen inside, on the right



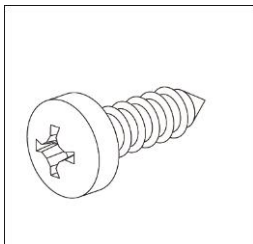
Article No.	Color	Sales representative
01510490	Black	50 STK

Filler piece for centre bearing
for slide-in bearing



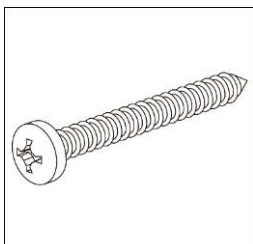
Article No.	Color	Sales representative
01500487	Black	100 STK

Pan-head tapping screw
DIN7981C 2.9x9.5 with cross recess



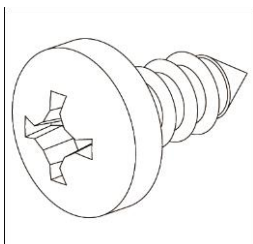
Article No.	Color	Sales representative
80020047_VZ	Galvanized	1000 STK

Pan-head tapping screw
DIN7981C 3.5x32 with cross recess



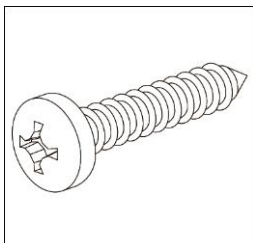
Article No.	Color	Sales representative
80020131_VZ	Galvanized	1000 STK

Pan-head tapping screw
DIN7981C 3.9x9.5 with cross recess



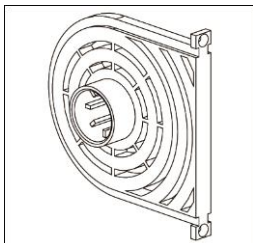
Article No.	Color	Sales representative
80020076_VZ	Galvanized	1000 STK

Pan-head tapping screw
similar DIN7981C 3.5x19 - C - 3.9H cross recession



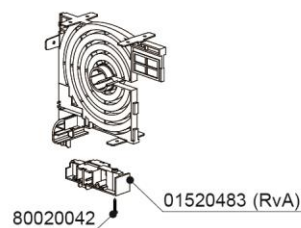
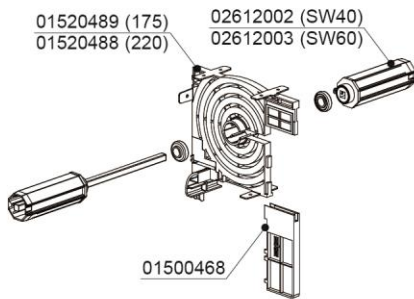
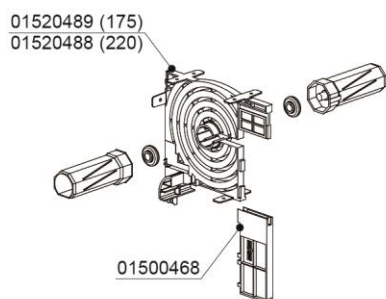
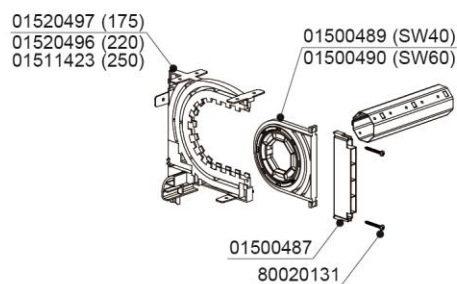
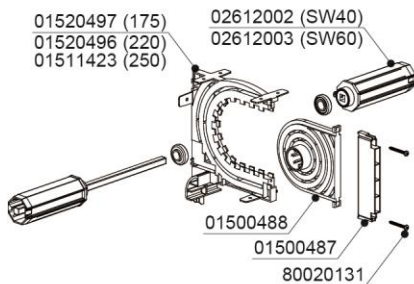
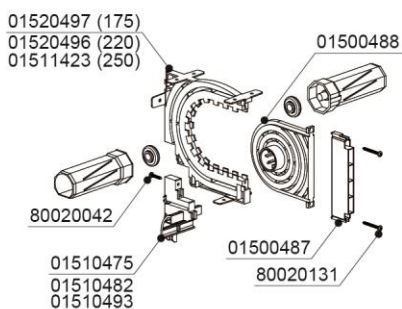
Article No.	Color	Sales representative
80020042_VZ	Galvanized	1000 STK

Slide-in bearing for RvI, RvU, RvA
separate drive, bearing holder ø28mm

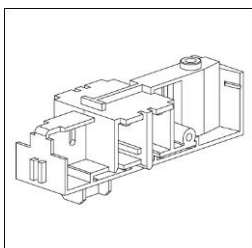


Article No.	Color	Sales representative
01500488	Black	25 STK

09. TOP MINI plus - headers - centre bearing

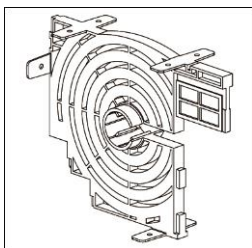


Adapter for centre bearing
RvA



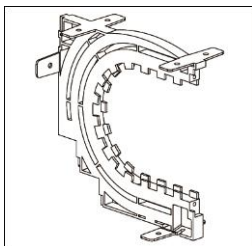
Article No.	Color	Sales representative
01520483	Black	500 STK

Centre bearing body for RvI, RvU, RvA
175 for parted shaft



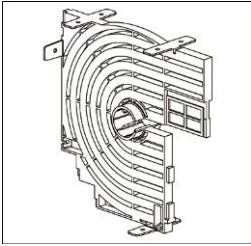
Article No.	Color	Sales representative
01520489	Black	25 STK

Centre bearing body for RvI, RvU, RvA
175 for slide-in bearing



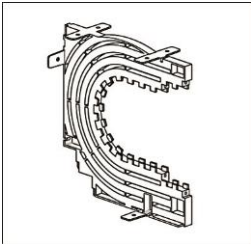
Article No.	Color	Sales representative
01520497	Black	25 STK

Centre bearing body for RvI, RvU, RvA
220 for parted shaft



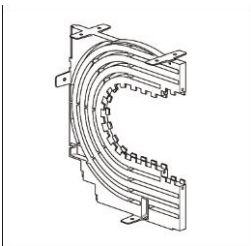
Article No.	Color	Sales representative
01520488	Black	25 STK

Centre bearing body for RvI, RvU, RvA
220 for slide-in bearing



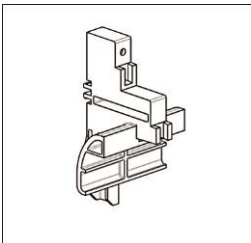
Article No.	Color	Sales representative
01520496	Black	25 STK

Centre bearing body for RvI, RvU, RvA
250 for slide-in bearing



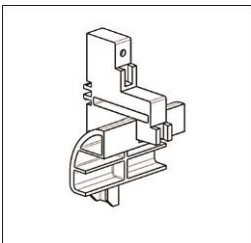
Article No.	Color	Sales representative
01511423	Black	50 STK

Entry guide for centre bearing
for large spacing



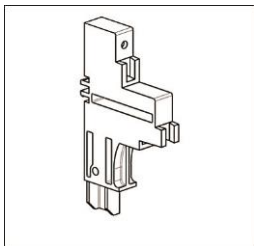
Article No.	Color	Sales representative
01510475	Black	100 STK

Entry guide for centre bearing
for small spacing



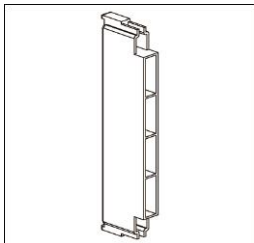
Article No.	Color	Sales representative
01510482	Black	100 STK

Filler piece for centre bearing
for insect screen on the inside



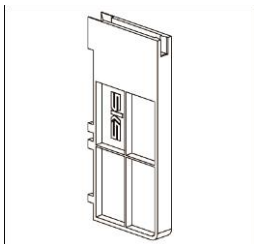
Article No.	Color	Sales representative
01510493	Black	50 STK

Filler piece for centre bearing
for slide-in bearing



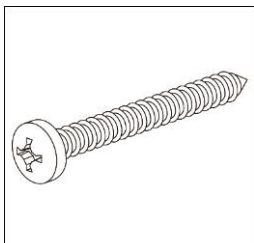
Article No.	Color	Sales representative
01500487	Black	100 STK

Locking device for centre bearing
for parted shaft



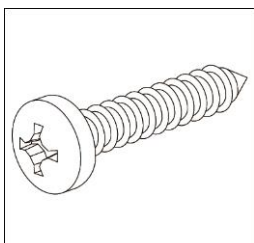
Article No.	Color	Sales representative
01500468	Black	100 STK

Pan-head tapping screw
DIN7981C 3.5x32 with cross recess



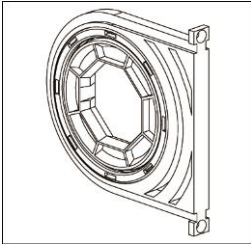
Article No.	Color	Sales representative
80020131_VZ	Galvanized	1000 STK

Pan-head tapping screw
similar DIN7981C 3.5x19 - C - 3.9H cross recession



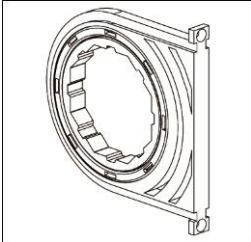
Article No.	Color	Sales representative
80020042_VZ	Galvanized	1000 STK

Slide-in bearing for RvI
Octagon steel shaft SW40mm



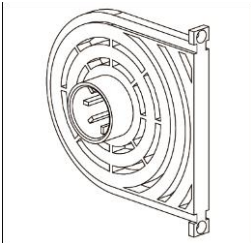
Article No.	Color	Sales representative
01500489	natural	10 STK

Slide-in bearing for RvI
Octagon steel shaft SW60mm



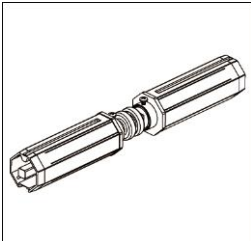
Article No.	Color	Sales representative
01500490	natural	10 STK

Slide-in bearing for RvI, RvU, RvA
separate drive, bearing holder ø28mm



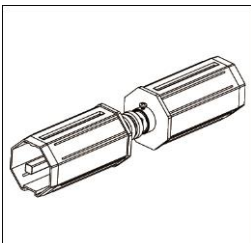
Article No.	Color	Sales representative
01500488	Black	25 STK

Twin screw bolt with plastic roller capsule
SW40 for coupling, ball bearing ø28



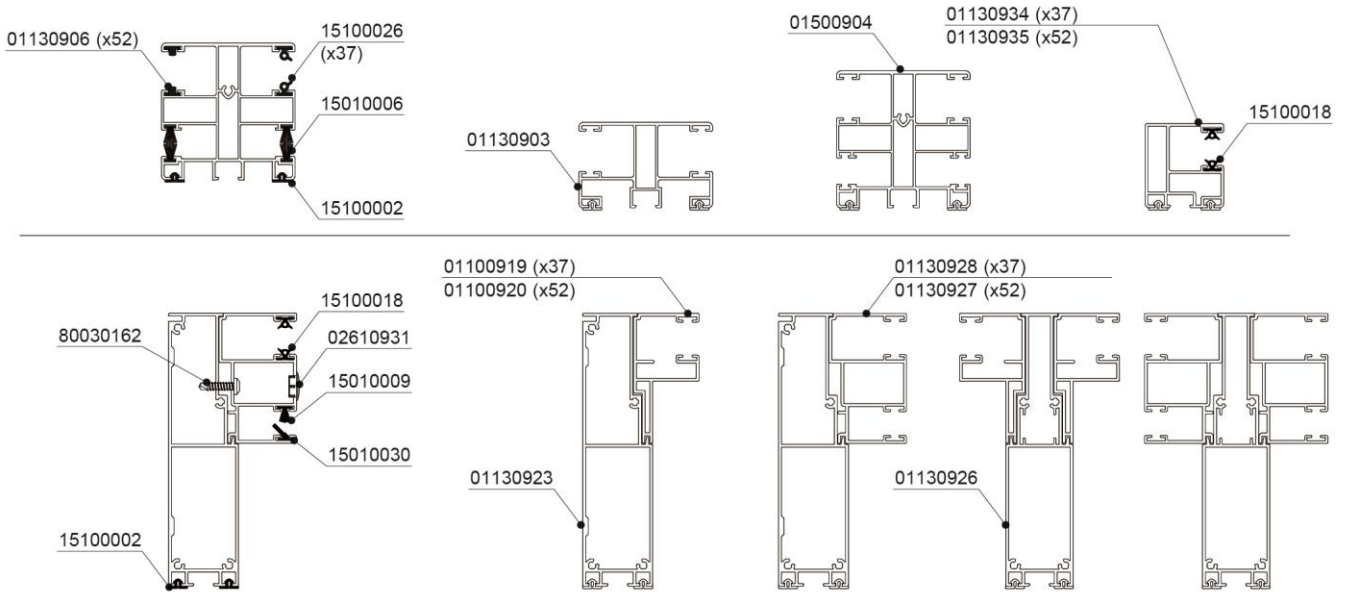
Article No.	Color	Sales representative
02612002	Black	20 STK

Twin screw bolt with plastic roller capsule
SW60 for coupling, ball bearing ø28



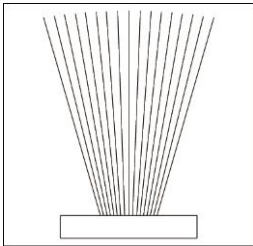
Article No.	Color	Sales representative
02612003	Black	20 STK

10. TOP MINI plus - guide rails - aluminium



Brush

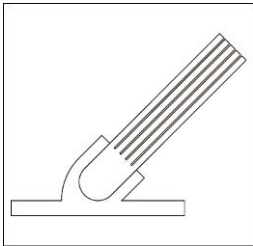
Width of the holder insert 4.8mm x height 8mm



Article No.	Color	Sales representative
15010006_9005	Black	1 x 100 LM

Brush

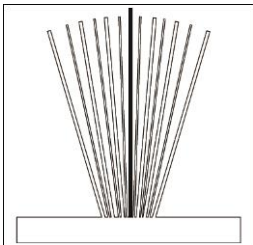
Width of the holder insert 6.9mm x height 11mm, in a slanted position 45°



Article No.	Color	Sales representative
15010030_9005	Black	1 x 350 LM

Brush

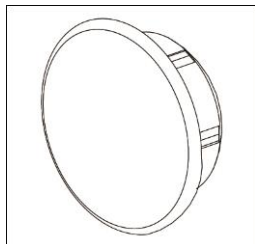
Width of the holder insert 6.9mm x height 7mm with centre bar



Article No.	Color	Sales representative
15010009_9005	Black	1 x 450 LM

Covering cap

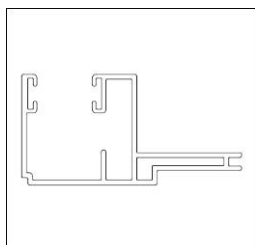
Height 4.8mm, for boreholes ø10mm



Article No.	Color	Sales representative
02610931_1019	grey beige	100 STK
02610931_1023	traffic yellow	100 STK
02610931_3003	ruby red	100 STK
02610931_3004	purple red	100 STK
02610931_3020	traffic red	100 STK
02610931_5002	ultramarine blue	100 STK
02610931_5014	pigeon blue	100 STK
02610931_6005	moss-green	100 STK
02610931_6009	fir green	100 STK
02610931_7001	silver-grey	100 STK
02610931_7012	granite grey	100 STK
02610931_7015	slate grey	100 STK
02610931_7016	anthracite-grey	100 STK
02610931_7035	light grey	100 STK
02610931_7038	agate grey	100 STK
02610931_7040	window grey	100 STK
02610931_8001	ochre brown	100 STK
02610931_8003	clay brown	100 STK
02610931_8007	fawn brown	100 STK
02610931_8011	nut brown	100 STK
02610931_8014	sepia brown	100 STK
02610931_8015	chestnut brown	100 STK
02610931_8016	mahogany brown	100 STK
02610931_8017	chocolate brown	100 STK
02610931_8022	black brown	100 STK
02610931_8025	pale brown	100 STK
02610931_8028	terra brown	100 STK
02610931_8077	dark brown	100 STK
02610931_9001	cream	100 STK
02610931_9005	jet black	100 STK
02610931_9006	white-aluminium	100 STK
02610931_9007	grey-aluminium	100 STK
02610931_9010	pure white	100 STK
02610931_9016	normal white	1000 STK

Guide rail

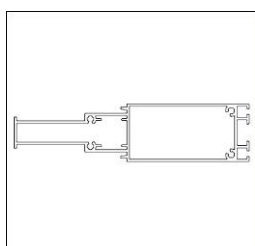
30x60mm - single without brush and keder



Article No.	Color	Sales representative
01100919_7016	anthracite-grey	4 x 6 LM
01100919_9016	normal white	4 x 6 LM
01100919_BL	blank	4 x 6 LM
01100919_SOFA	Special color powder-coated	4 x 6 LM

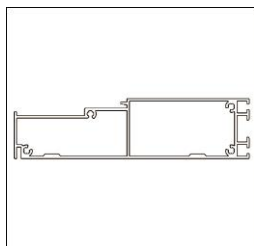
Guide rail

32x125mm - double, base profile



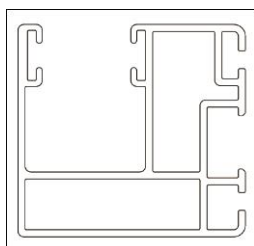
Article No.	Color	Sales representative
01130926_7016	anthracite-grey	2 x 6 LM
01130926_9016	normal white	2 x 6 LM
01130926_BL	blank	2 x 6 LM
01130926_SOFA	Special color powder-coated	1 x 6 LM

Guide rail
32x125mm - single, base profile



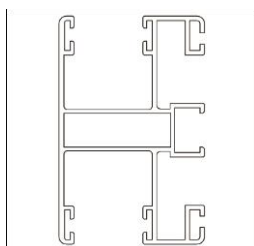
Article No.	Color	Sales representative
01130923_7016	anthracite-grey	2 x 6 LM
01130923_9016	normal white	2 x 6 LM
01130923_BL	blank	2 x 6 LM
01130923_SOFA	Special color powder-coated	1 x 6 LM

Guide rail
36x39mm - single without brush and keder



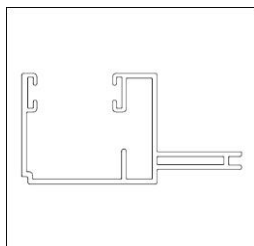
Article No.	Color	Sales representative
01130934_7016	anthracite-grey	4 x 6 LM
01130934_9016	normal white	4 x 6 LM
01130934_BL	blank	4 x 6 LM
01130934_SOFA	Special color powder-coated	4 x 6 LM

Guide rail
61x39mm - double, without brush and keder



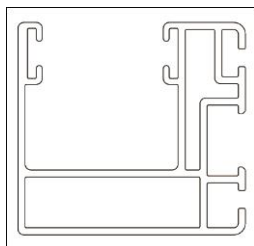
Article No.	Color	Sales representative
01130903_7016	anthracite-grey	4 x 6 LM
01130903_8077	dark brown	4 x 6 LM
01130903_9016	normal white	4 x 6 LM
01130903_BL	blank	4 x 6 LM
01130903_C0	naturally anodised E6-EV1	4 x 6 LM
01130903_SOFA	Special color powder-coated	4 x 6 LM

Guide rail with large guide groove
30x60mm - single without brush and keder



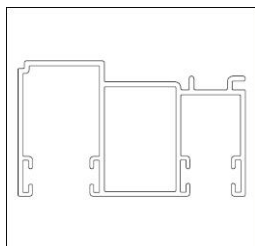
Article No.	Color	Sales representative
01100920_7016	anthracite-grey	4 x 6 LM
01100920_9016	normal white	4 x 6 LM
01100920_BL	blank	4 x 6 LM
01100920_SOFA	Special color powder-coated	4 x 6 LM

Guide rail with large guide groove
36x39mm - single without brush and keder



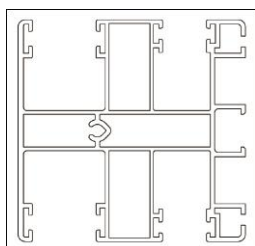
Article No.	Color	Sales representative
01130935_7016	anthracite-grey	4 x 6 LM
01130935_9016	normal white	4 x 6 LM
01130935_BL	blank	4 x 6 LM
01130935_SOFA	Special color powder-coated	4 x 6 LM

Insect screen guide rail
36x60mm - single without brush and keder



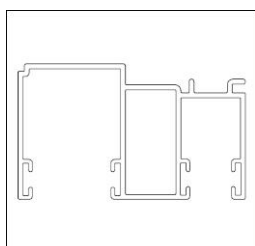
Article No.	Color	Sales representative
01130928_7016	anthracite-grey	4 x 6 LM
01130928_9016	normal white	4 x 6 LM
01130928_BL	blank	4 x 6 LM
01130928_SOFA	Special color powder-coated	1 x 6 LM

Insect screen guide rail
61x62.5mm - double, without brush and keder, on the inside



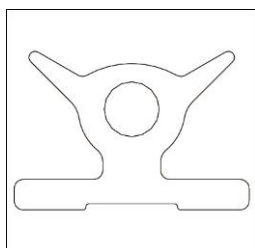
Article No.	Color	Sales representative
01500904_7016	anthracite-grey	4 x 6 LM
01500904_8077	dark brown	4 x 6 LM
01500904_9016	normal white	4 x 6 LM
01500904_BL	blank	4 x 6 LM
01500904_DEKC	Foil in special color laminated on chromated profile	4 x 6 LM
01500904_SOFA	Special color powder-coated	4 x 6 LM
01500904_XXXX	Color as per color chart	4 x 6 LM

Insect screen guide rail with spacing large
36x60mm - single without brush and keder



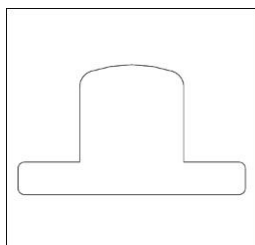
Article No.	Color	Sales representative
01130927_7016	anthracite-grey	4 x 6 LM
01130927_9016	normal white	4 x 6 LM
01130927_BL	blank	4 x 6 LM
01130927_SOFA	Special color powder-coated	1 x 6 LM

Keder
Width of the holder insert 7.7mm x height 5.2mm



Article No.	Color	Sales representative
15100018	Black	1 x 700 LM

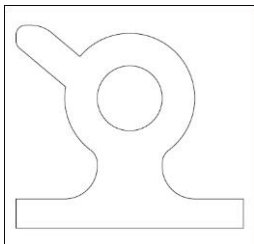
Keder
Width of the holder insert 7mm x height 4mm



Article No.	Color	Sales representative
01130906_9005	Black	1 x 100 LM

Keder

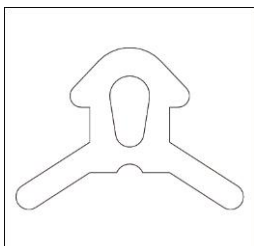
Width of the holder insert 7mm x height 6.2mm



Article No.	Color	Sales representative
15100026	Black	1 x 200 LM

Sealing profile

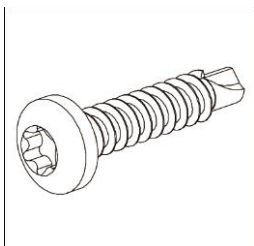
for guide rail connection to the window frame



Article No.	Color	Sales representative
15100002	Black	1 x 100 LM

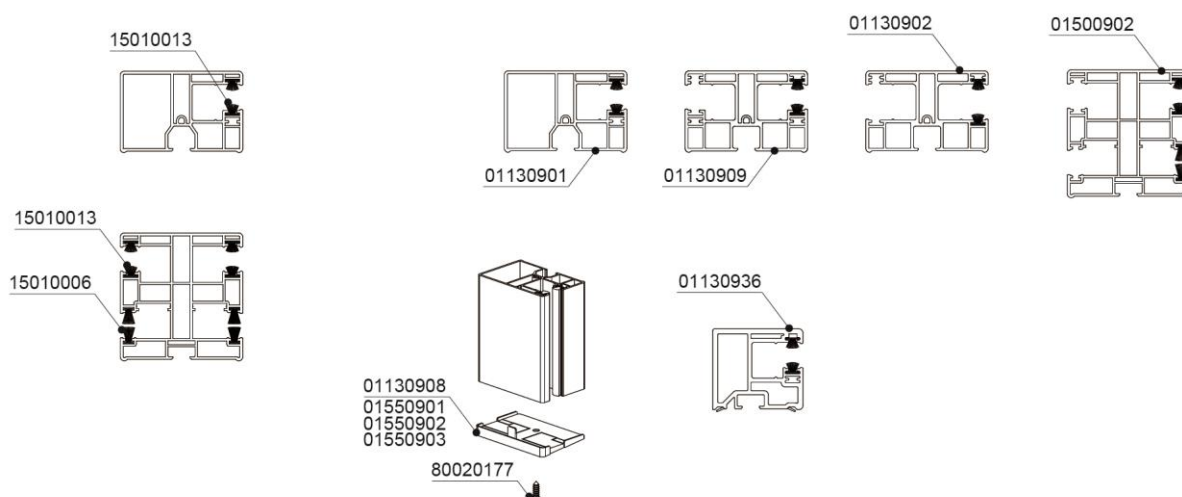
Self-drilling head screw

DIN7504N 3.9x16 AW20



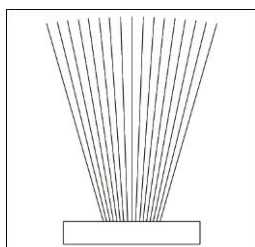
Article No.	Color	Sales representative
80030162	Galvanized	1000 STK

11. TOP MINI plus - guide rails - plastic



Brush

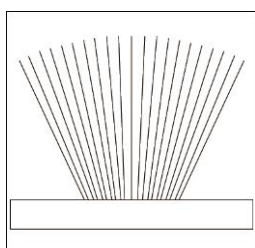
Width of the holder insert 4.8mm x height 8mm



Article No.	Color	Sales representative
15010006_9005	Black	1 x 100 LM

Brush

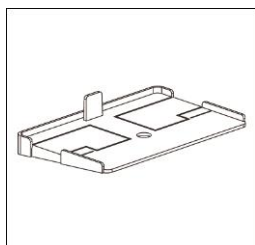
Width of the holder insert 6.6mm x height 5.25mm



Article No.	Color	Sales representative
15010013_9005	Black	1 x 350 LM

End cap

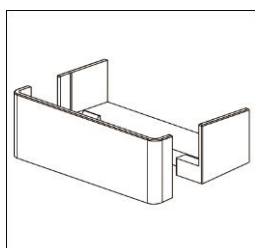
5 degree, for guide rail



Article No.	Color	Sales representative
01130908_7016	anthracite-grey	100 STK
01130908_8077	Brown	100 STK
01130908_9016	white	100 STK

End cap

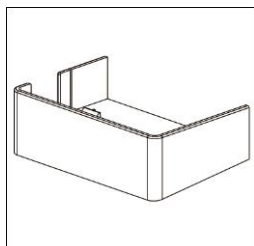
5°, variable for PVC guide rails, double



Article No.	Color	Sales representative
01550903_7016	anthracite-grey	100 STK
01550903_8003	clay brown	100 STK
01550903_8077	Brown	100 STK
01550903_9016	white	100 STK

End cap

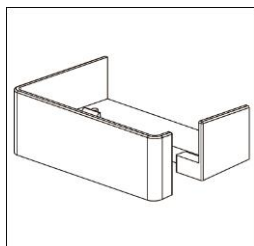
5°, variable for PVC guide rails, left



Article No.	Color	Sales representative
01550901_7016	anthracite-grey	100 STK
01550901_8003	clay brown	100 STK
01550901_8077	Brown	100 STK
01550901_9016	white	100 STK

End cap

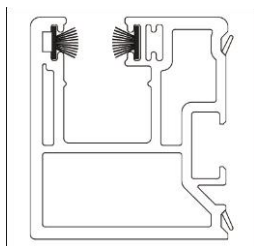
5°, variable for PVC guide rails, right



Article No.	Color	Sales representative
01550902_7016	anthracite-grey	100 STK
01550902_8003	clay brown	100 STK
01550902_8077	Brown	100 STK
01550902_9016	white	100 STK

PVC guide rail

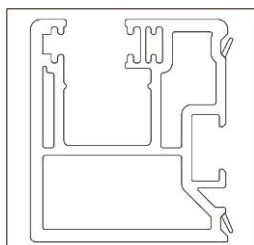
45x40mm - single with brush



Article No.	Color	Sales representative
01130936_85	white CSTB	4 x 6 LM
01130936_9016	white	4 x 6 LM
01130936_DEKB	Foil in special color laminated on brown profile	4 x 6 LM
01130936_DEKW	Foil in special color laminated on white profile	4 x 6 LM
01130936_XXXX	Color as per color chart	4 x 6 LM

PVC guide rail

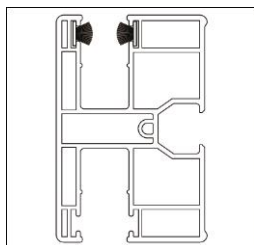
45x40mm - single without brush



Article No.	Color	Sales representative
01130936_9016-009	normal white	4 x 6 LM

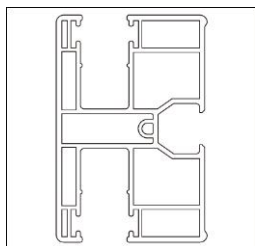
PVC guide rail

61x41mm - double, with brush on one side



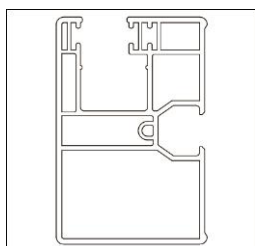
Article No.	Color	Sales representative
01130909_8077	dark brown	4 x 6 LM
01130909_9016	white	4 x 6 LM
01130909_DEKB	Foil in special color laminated on brown profile	4 x 6 LM
01130909_DEKW	Foil in special color laminated on white profile	4 x 6 LM
01130909_XXXX	Color as per color chart	4 x 6 LM

PVC guide rail
61x41mm - double, without brush



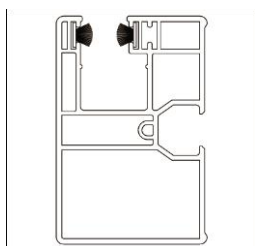
Article No.	Color	Sales representative
01130909_9016-009	white	4 x 6 LM

PVC guide rail
61x41mm - single without brush



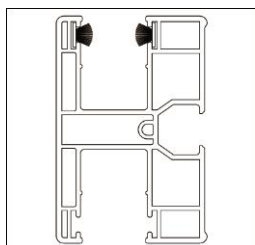
Article No.	Color	Sales representative
01130901_9016-009	white	8 x 6 LM

PVC guide rail
61x41mm - single, with brush



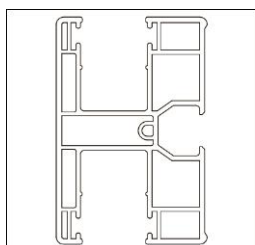
Article No.	Color	Sales representative
01130901_8077	dark brown	8 x 6 LM
01130901_9016	white	8 x 6 LM
01130901_DEKB	Foil in special color laminated on brown profile	4 x 6 LM
01130901_DEKW	Foil in special color laminated on white profile	4 x 6 LM
01130901_XXXX	Color as per color chart	8 x 6 LM

PVC guide rail with large guide groove
61x41mm - double, with brush on one side



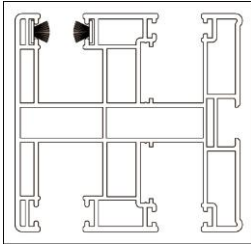
Article No.	Color	Sales representative
01130902_9016	white	4 x 6 LM
01130902_DEKB	Foil in special color laminated on brown profile	4 x 6 LM
01130902_DEKW	Foil in special color laminated on white profile	4 x 6 LM
01130902_XXXX	Color as per color chart	4 x 6 LM

PVC guide rail with large guide groove
61x41mm - double, without brush



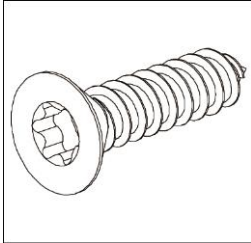
Article No.	Color	Sales representative
01130902_9016-009	white	4 x 6 LM

PVC insect screen guide rail
 61x63.5 - double, with brush on one side, on the inside



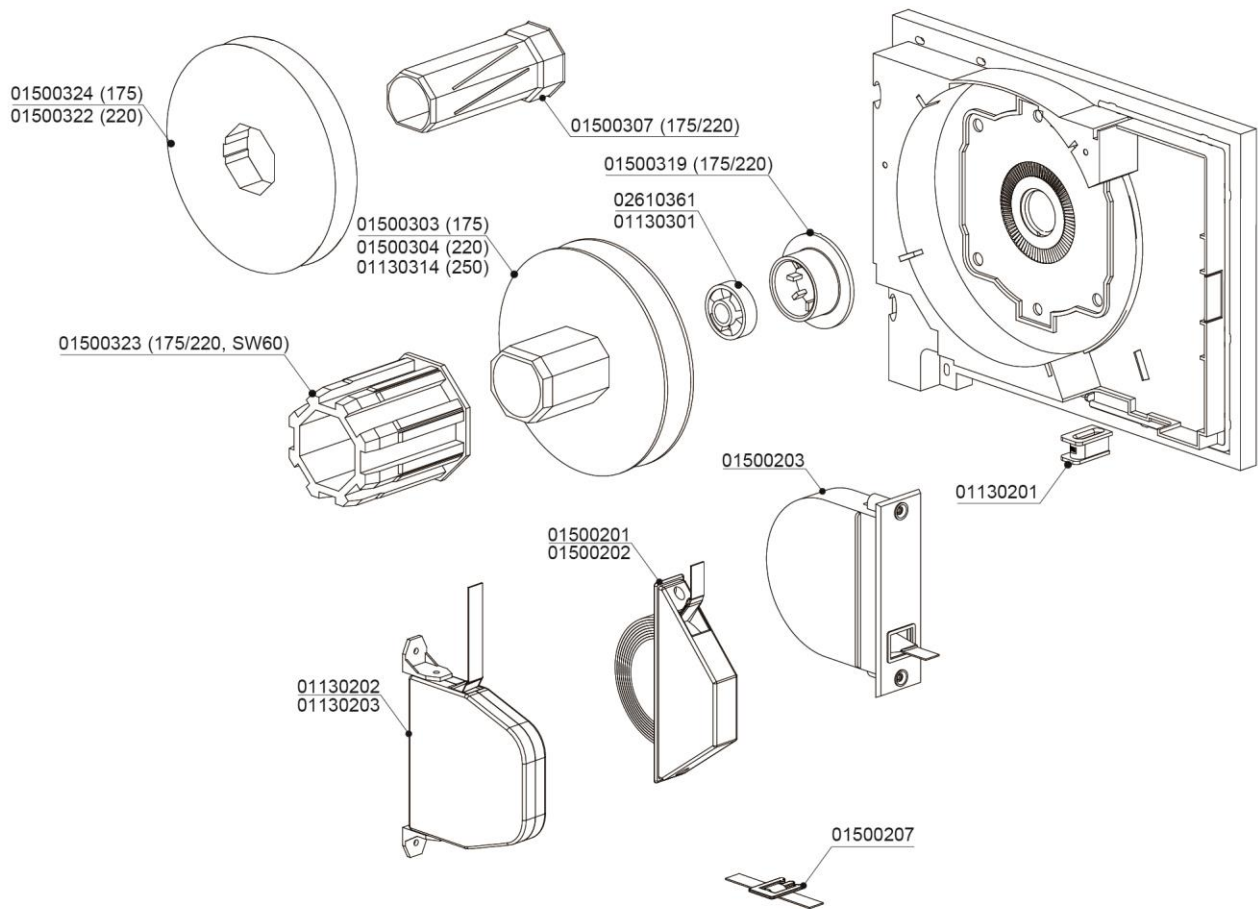
Article No.	Color	Sales representative
01500902_8077	dark brown	4 x 6 LM
01500902_9016	white	4 x 6 LM
01500902_DEKB	Foil in special color laminated on brown profile	4 x 6 LM
01500902_DEKW	Foil in special color laminated on white profile	4 x 6 LM
01500902_XXXX	Color as per color chart	4 x 6 LM

Tapping screw with countersunk head
 DIN7982C 3.5x19 AW10

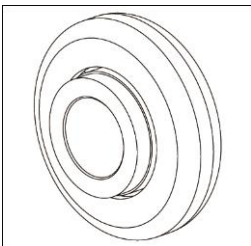


Article No.	Color	Sales representative
80020252	blank A2	1000 STK

12. TOP MINI plus - drive - lift tape 14mm

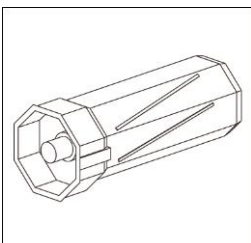


Ball bearing
ø28mm / ø10mm with plastic collar



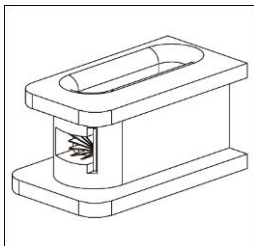
Article No.	Color	Sales representative
01130301		100 STK

Cap for tubes
SW40, with shaft pin ø10mm



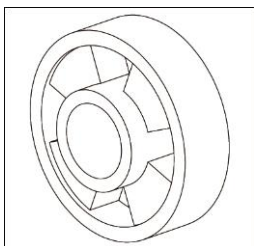
Article No.	Color	Sales representative
01500307	Black	100 STK

Guidance for lift tape
14mm lift tape, with brush



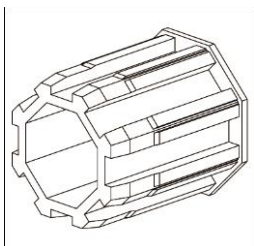
Article No.	Color	Sales representative
01130201_8077	dark brown	100 STK
01130201_9016	white	100 STK

Plastic slide bearing
ø28 / ø10 with collar



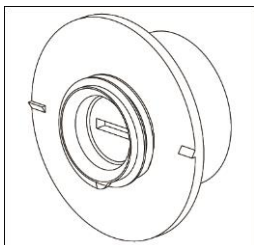
Article No.	Color	Sales representative
02610361	Black	100 STK

Shaft adapter
SW40 to SW60



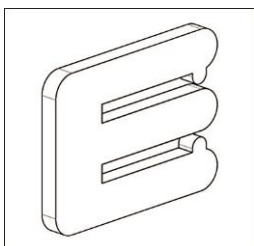
Article No.	Color	Sales representative
01500323	Black	100 STK

Socket for screwing
with ball bearing holder ø28mm



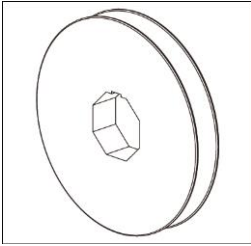
Article No.	Color	Sales representative
01500319	Black	100 STK

Tape clip
for transport safety



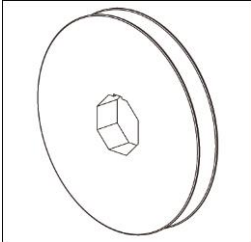
Article No.	Color	Sales representative
01500207	Black	500 STK

Tape pulley
14mm lift tape, \varnothing 140mm, for cap for tubes SW40



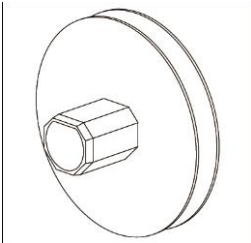
Article No.	Color	Sales representative
01500324	Black	100 STK

Tape pulley
14mm lift tape, \varnothing 160mm, for cap for tubes SW40



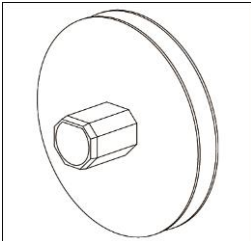
Article No.	Color	Sales representative
01500322	Black	100 STK

Tape pulley with cap for tubes
14mm lift tape, \varnothing 140mm, SW40 with shaft pin \varnothing 10mm



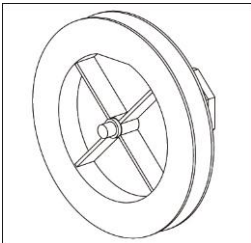
Article No.	Color	Sales representative
01500303	Black	100 STK

Tape pulley with cap for tubes
14mm lift tape, \varnothing 160mm, SW40 with shaft pin \varnothing 10mm



Article No.	Color	Sales representative
01500304	Black	100 STK

Tape pulley with cap for tubes
14mm lift tape, \varnothing 160mm, SW60 with outer shaft pin \varnothing 10x9mm



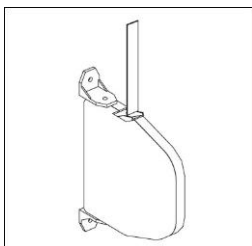
Article No.	Color	Sales representative
01130314	Black	50 STK

Tape take-up reel
14mm lift tape - 5m, partially flush-mounted



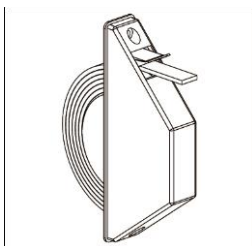
Article No.	Color	Sales representative
01500202_8077	Brown	50 STK
01500202_9016	white	50 STK

Tape take-up reel
14mm lift tape - 5m, swivelling



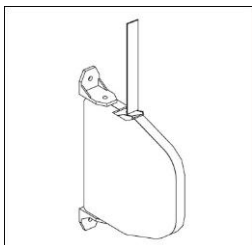
Article No.	Color	Sales representative
01130202_8077	Brown	50 STK
01130202_9016	white	50 STK

Tape take-up reel
14mm lift tape - 6m, partially flush-mounted



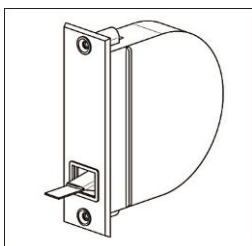
Article No.	Color	Sales representative
01500201_8077	Brown	50 STK
01500201_9016	white	50 STK

Tape take-up reel
14mm lift tape - 6m, swivelling



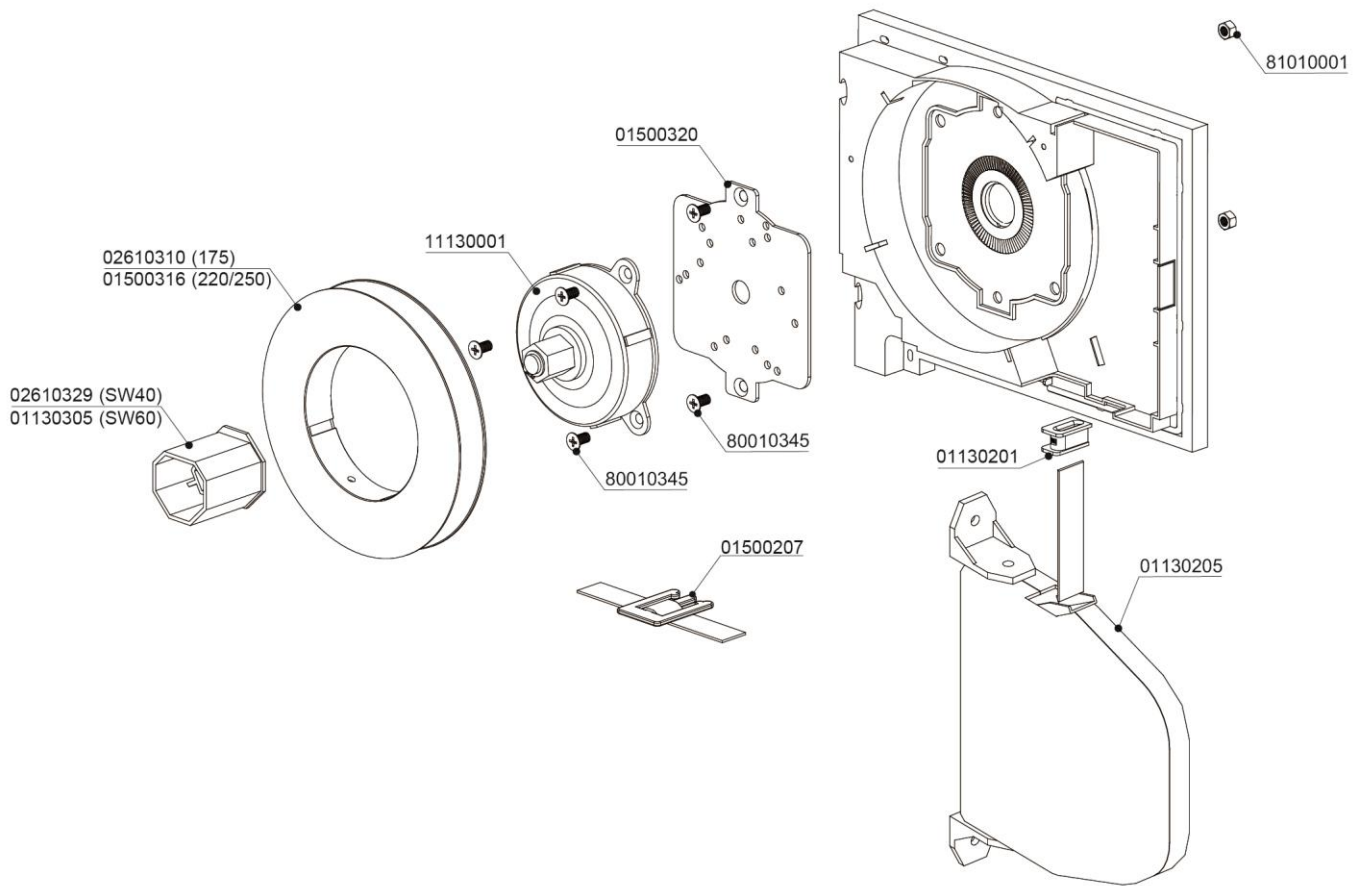
Article No.	Color	Sales representative
01130203_8077	Brown	50 STK
01130203_9016	white	50 STK

Tape take-up reel with covering cap
14mm lift tape - 5m, can be flush-mounted with wall housing

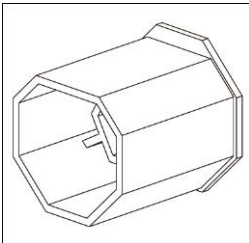


Article No.	Color	Sales representative
01500203_9016	white	25 STK

13. TOP MINI plus - drive - lift tape gear

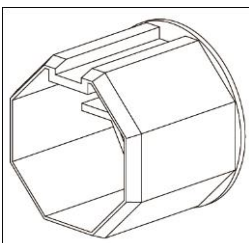


Cap for tubes
SW40, lift tape gear



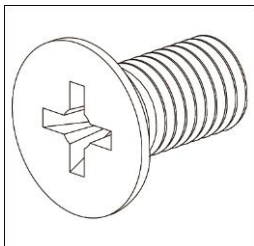
Article No.	Color	Sales representative
02610329	white	50 STK

Cap for tubes
SW60, lift tape gear



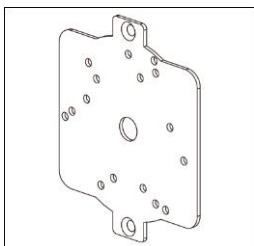
Article No.	Color	Sales representative
01130305	white	25 STK

Countersunk screw
DIN965 05x10 with cross recess



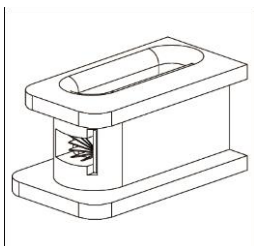
Article No.	Color	Sales representative
80010345_VZ	Galvanized	100 STK

Fastening board
for gear



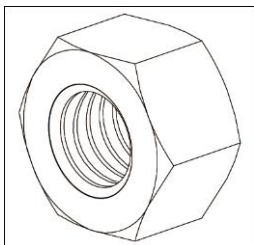
Article No.	Color	Sales representative
01500320	Galvanized	50 STK

Guidance for lift tape
14mm lift tape, with brush



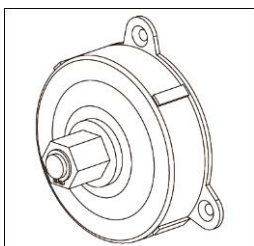
Article No.	Color	Sales representative
01130201_8077	dark brown	100 STK
01130201_9016	white	100 STK

Hexagon nut
DIN934 05



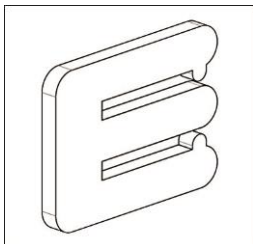
Article No.	Color	Sales representative
81010001_VZ	Galvanized	1000 STK

Lift tape gear
Gear reduction 2:1



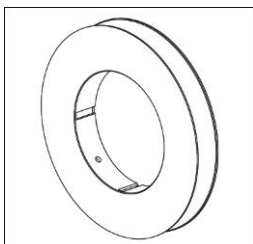
Article No.	Color	Sales representative
11130001	grey	25 STK

Tape clip
for transport safety



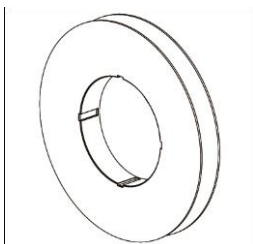
Article No.	Color	Sales representative
01500207	Black	500 STK

Tape pulley for lift tape gear
ø140mm, 14mm lift tape



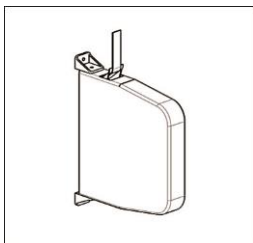
Article No.	Color	Sales representative
02610310	Black	100 STK

Tape pulley for lift tape gear
ø160mm, 14mm lift tape



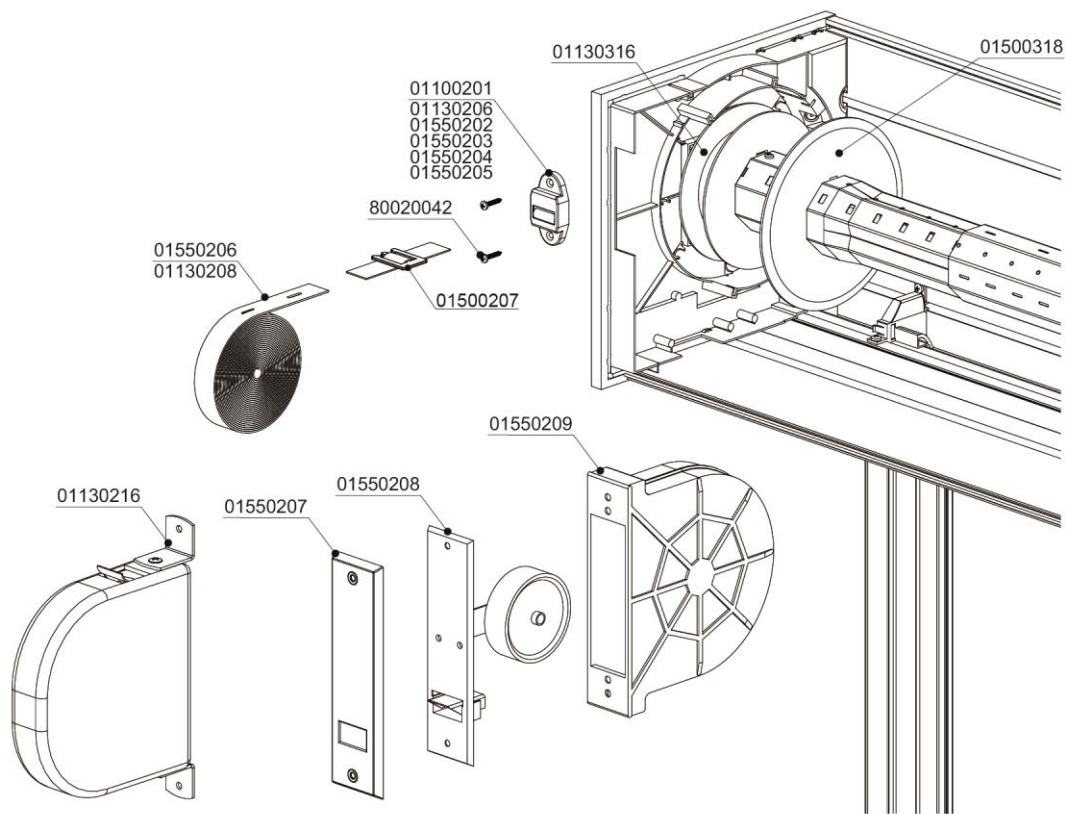
Article No.	Color	Sales representative
01500316	Black	100 STK

Tape take-up reel
14mm lift tape - 11m, swivelling

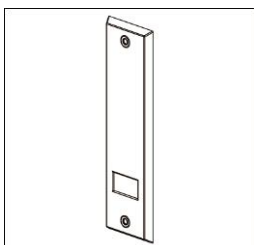


Article No.	Color	Sales representative
01130205_9016	white	20 STK

14. TOP MINI plus - drive - lift tape 22mm offset for box size 250

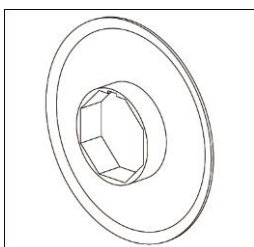


Covering cap
22mm lift tape, for tape take-up reel, can be flush-mounted



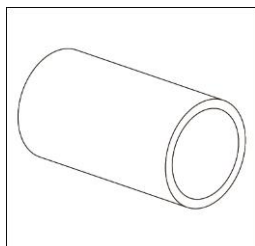
Article No.	Color	Sales representative
01550207_9016	white	50 STK

Deflector plate
ø160mm, SW60



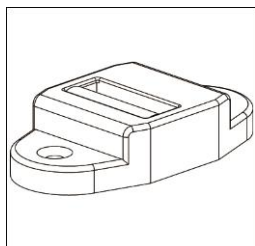
Article No.	Color	Sales representative
01500318	Black	100 STK

Extension tube for through-bearing of the tape
for offset drive with insulation body >50mm



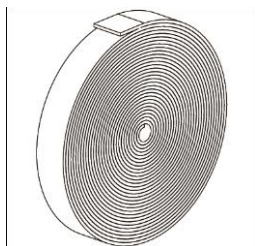
Article No.	Color	Sales representative
01550205	white	1 STK

Guidance for lift tape
22mm lift tape, guide roll with brush



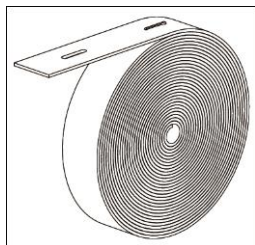
Article No.	Color	Sales representative
01100201_9016	white	100 STK

Lift tape
22mm in lift tape roll, 50m



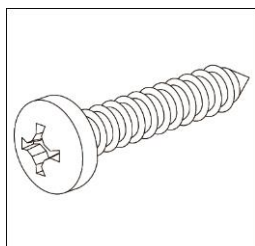
Article No.	Color	Sales representative
01130208	grey	5 x 50 LM

Lift tape
22mm x 6m, ready for installation



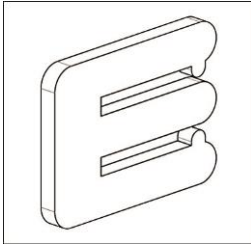
Article No.	Color	Sales representative
01550206	grey	5 STK

Pan-head tapping screw
DIN7981C 3.5x19 with cross recess



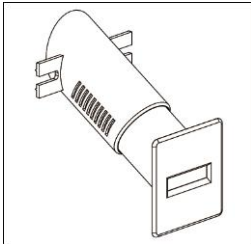
Article No.	Color	Sales representative
80020042	blank A2	1000 STK

Tape clip
for transport safety



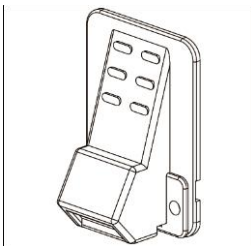
Article No.	Color	Sales representative
01500207	Black	500 STK

Tape guidance for offset drive system
22mm lift tape, adjustable for plaster base board 30-50mm



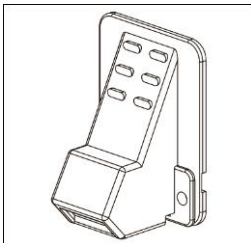
Article No.	Color	Sales representative
01550204	white	100 STK

Tape guidance for plastering
22mm lift tape, height 23mm



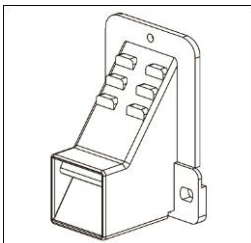
Article No.	Color	Sales representative
01130206_9016	white	100 STK

Tape guidance for plastering
22mm lift tape, height 35mm



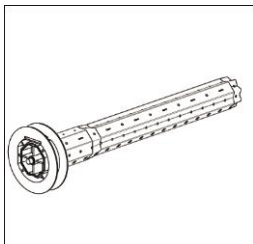
Article No.	Color	Sales representative
01550202	white	500 STK

Tape guidance for plastering
22mm lift tape, height 50mm



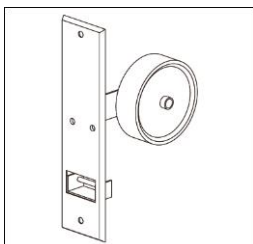
Article No.	Color	Sales representative
01550203	white	100 STK

Tape pulley with telescopic shaft
22mm lift tape, ø130mm, SW60 with outer shaft pin ø10x9mm



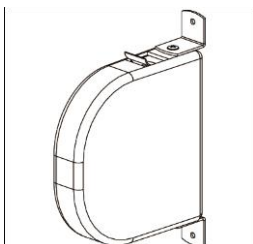
Article No.	Color	Sales representative
01130316		20 STK

Tape take-up reel
22mm lift tape - 5m, can be flush-mounted



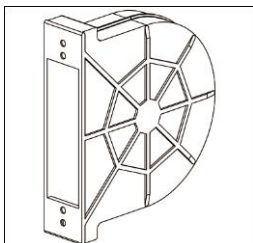
Article No.	Color	Sales representative
01550208		50 STK

Tape take-up reel
22mm lift tape, screwable, without lift tape



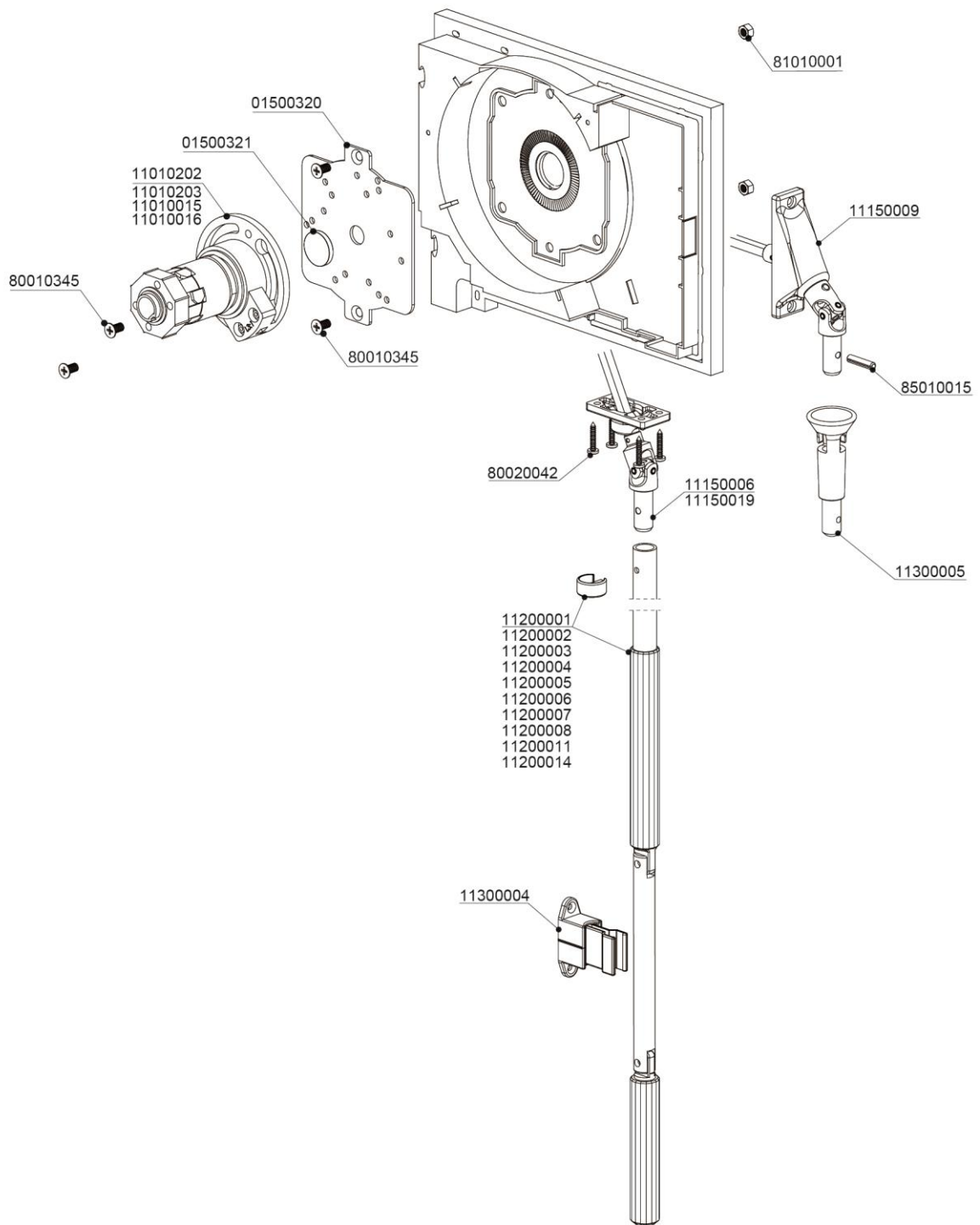
Article No.	Color	Sales representative
01130216_9016	white	25 STK

Wall housing
for tape take up reel, 22mm/12m, lift tape, can be flush-mounted

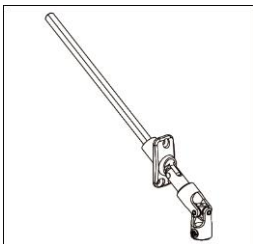


Article No.	Color	Sales representative
01550209	grey	100 STK

15. TOP MINI plus - drive - operating handle



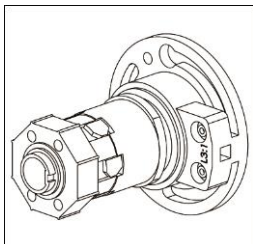
Bearing for crank rod $\varnothing 12$
 45°, VK6x175mm, base plate 22x45mm, plastic



Article No.	Color	Sales representative
11150019_8019	Brown	50 STK
11150019_9016	white	50 STK

Bevel gear unit

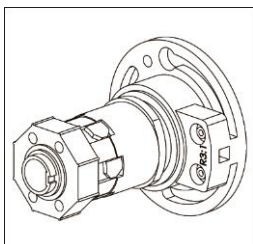
Gear reduction 3:1, SW40, VK6mm, on the left side



Article No.	Color	Sales representative
11010202	gold/blue	10 STK

Bevel gear unit

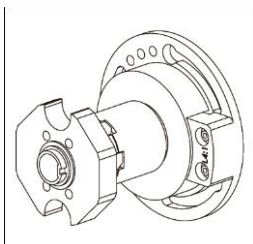
Gear reduction 3:1, SW40, VK6mm, on the right side



Article No.	Color	Sales representative
11010203	gold/blue	10 STK

Bevel gear unit

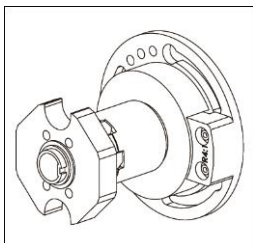
Gear reduction 4:1, SW60, on the left side



Article No.	Color	Sales representative
11010015	gold/blue	10 STK

Bevel gear unit

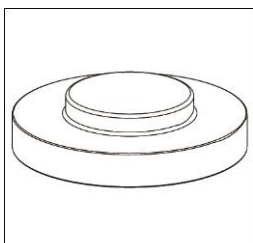
Gear reduction 4:1, SW60, on the right side



Article No.	Color	Sales representative
11010016	gold/blue	10 STK

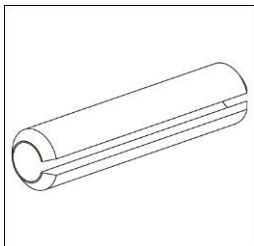
Centring aid

for crank handle gear



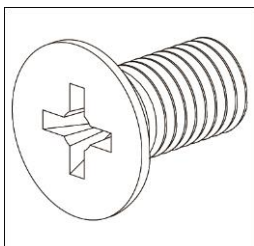
Article No.	Color	Sales representative
01500321	blank	100 STK

Clamping pin
DIN1481 04x20



Article No.	Color	Sales representative
85010015	Galvanized	1000 STK

Countersunk screw
DIN965 05x10 with cross recess



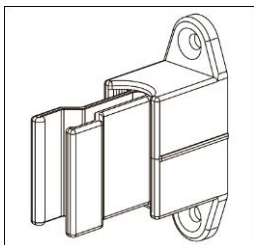
Article No.	Color	Sales representative
80010345_VZ	Galvanized	100 STK

Crank handle funnel
for removable crank rod



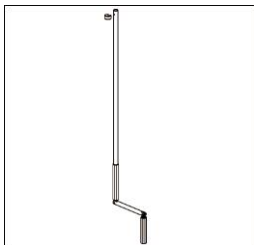
Article No.	Color	Sales representative
11300005	nickel-plated	100 STK

Crank holder
62x20.5mm, adjustable, range of adjustment 33-53mm



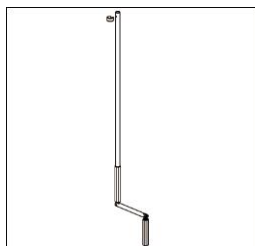
Article No.	Color	Sales representative
11300004_8019	Brown	25 STK
11300004_9016	white	25 STK

Crank rod with folding handle
1000mm, with fastening clip



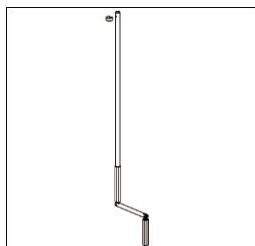
Article No.	Color	Sales representative
11200001_9016	normal white	10 STK
11200001_C0	naturally anodised E6-EV1	10 STK

Crank rod with folding handle
1100mm, with fastening clip



Article No.	Color	Sales representative
11200002_9016	normal white	10 STK
11200002_C0	naturally anodised E6-EV1	10 STK

Crank rod with folding handle
1200mm, with fastening clip



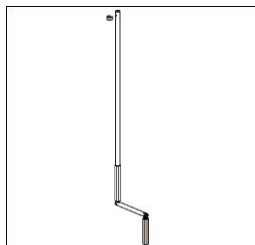
Article No.	Color	Sales representative
11200003_9016	normal white	10 STK
11200003_C0	naturally anodised E6-EV1	10 STK

Crank rod with folding handle
1300mm, with fastening clip



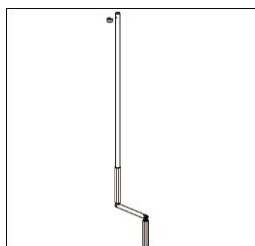
Article No.	Color	Sales representative
11200012_9016	normal white	10 STK
11200012_C0	naturally anodised E6-EV1	10 STK

Crank rod with folding handle
1400mm, with fastening clip



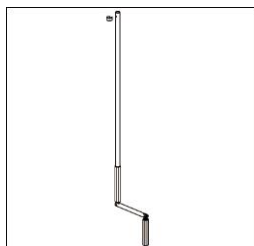
Article No.	Color	Sales representative
11200004_9016	normal white	10 STK
11200004_C0	naturally anodised E6-EV1	10 STK

Crank rod with folding handle
1500mm, with fastening clip



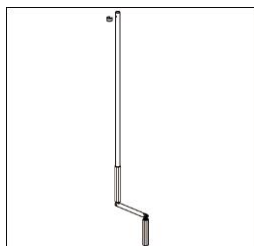
Article No.	Color	Sales representative
11200005_9016	normal white	10 STK
11200005_C0	naturally anodised E6-EV1	10 STK

Crank rod with folding handle
1600mm, with fastening clip



Article No.	Color	Sales representative
11200006_9016	normal white	10 STK
11200006_C0	naturally anodised E6-EV1	10 STK

Crank rod with folding handle
1800mm, with fastening clip



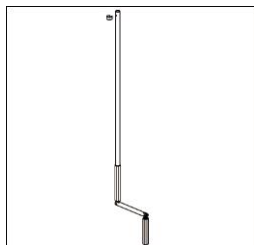
Article No.	Color	Sales representative
11200007_9016	normal white	10 STK
11200007_C0	naturally anodised E6-EV1	10 STK

Crank rod with folding handle
2800mm, with fastening clip



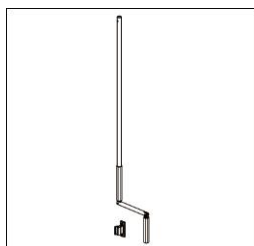
Article No.	Color	Sales representative
11200008_9016	normal white	10 STK
11200008_C0	naturally anodised E6-EV1	10 STK

Crank rod with folding handle
800mm, with fastening clip



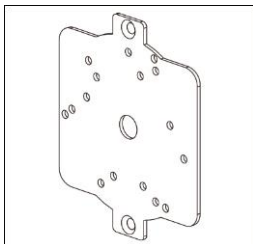
Article No.	Color	Sales representative
11200011_9016	normal white	10 STK
11200011_C0	naturally anodised E6-EV1	10 STK

Crank rod with folding handle
ø12, 1300mm with crank holder



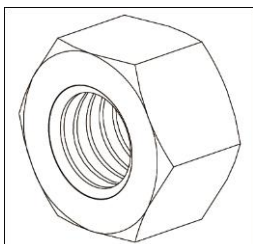
Article No.	Color	Sales representative
11200014_8019	dark brown	10 STK
11200014_9016	normal white	25 STK

Fastening board
for gear



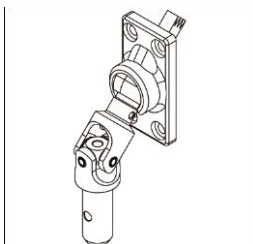
Article No.	Color	Sales representative
01500320	Galvanized	50 STK

Hexagon nut
DIN934 05



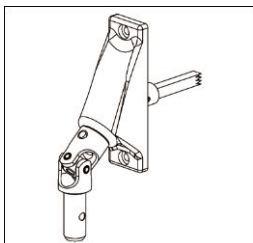
Article No.	Color	Sales representative
81010001_VZ	Galvanized	1000 STK

Joint bearing
45°, VK6x300mm, base plate 26x52mm, plastic



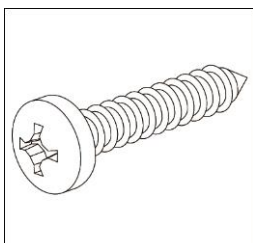
Article No.	Color	Sales representative
11150006_8019	Brown	25 STK
11150006_9006	grey	25 STK
11150006_9016	white	25 STK

Joint bearing
90°, VK6x500mm, base plate 25x85mm, plastic



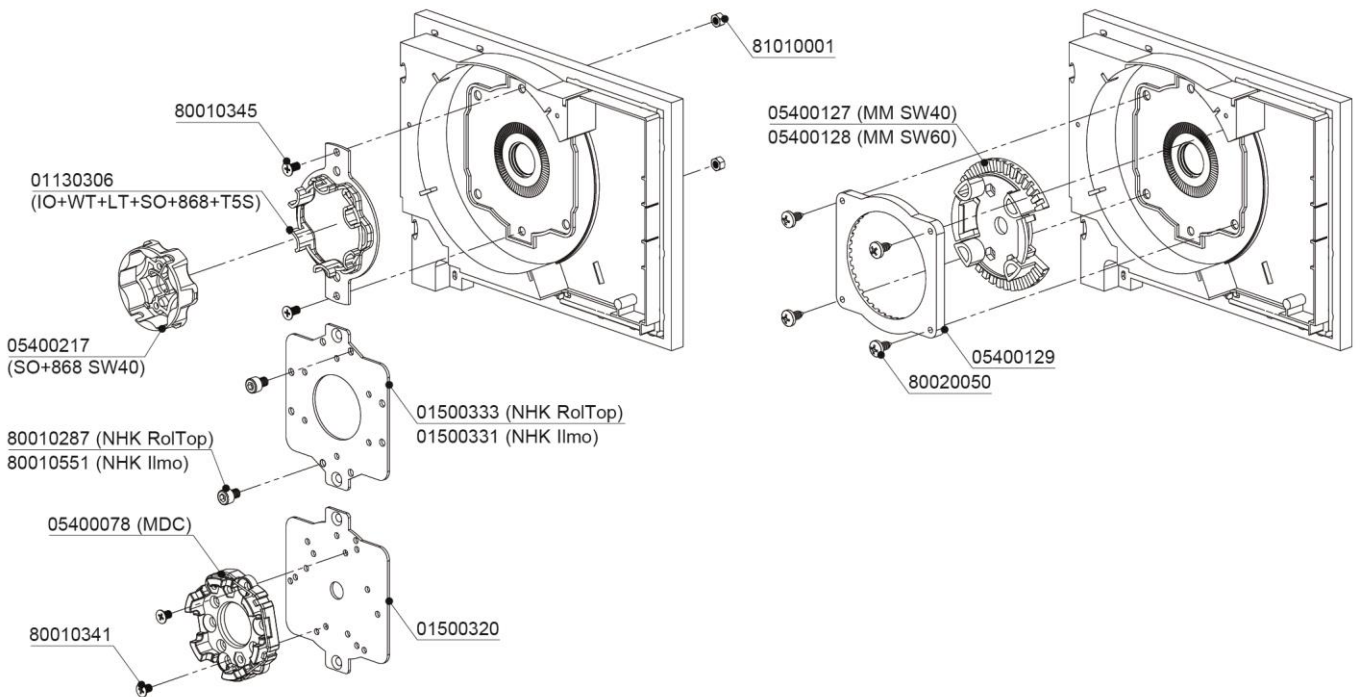
Article No.	Color	Sales representative
11150009_9006	grey	25 STK
11150009_9016	white	25 STK

Pan-head tapping screw
DIN7981C 3.5x19 with cross recess

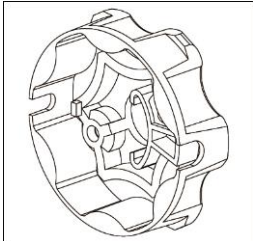


Article No.	Color	Sales representative
80020042	blank A2	1000 STK

16. TOP MINI plus - drive - motor

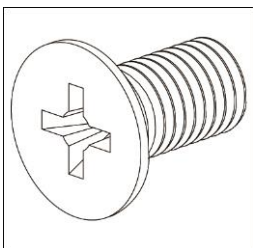


Adapter bearing
SW40 to SH for motor SO, ESO, 868, E868



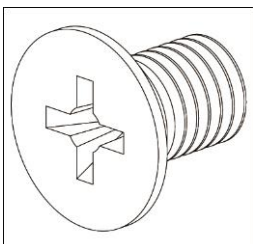
Article No.	Color	Sales representative
05400217	Black	1 STK

Countersunk screw
DIN965 05x10 with cross recess



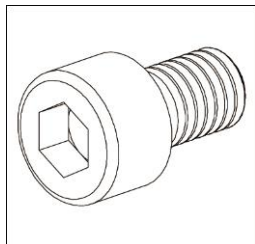
Article No.	Color	Sales representative
80010345_VZ	Galvanized	100 STK

Countersunk screw
DIN965A 05x8 with cross recess



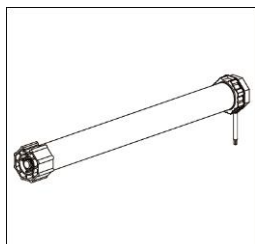
Article No.	Color	Sales representative
80010341	Galvanized	250 STK

Cylinder head bolt
DIN912 06x8 hexagon socket



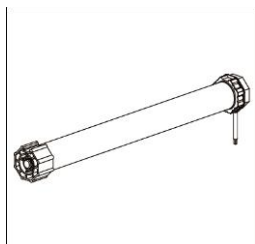
Article No.	Color	Sales representative
80010287_VZ	Galvanized	500 STK

Electric motor DC VarioEco M, 10Nm, 16rpm, cable length: 3m
without connector, with adapter and tappet SW60



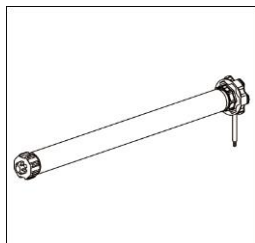
Article No.	Color	Sales representative
05100414	Cable black	1 STK

Electric motor DC VarioEco M, 12Nm, 16rpm, cable length: 3m
without connector, with adapter and tappet SW60



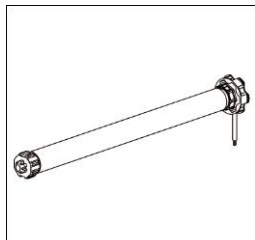
Article No.	Color	Sales representative
05100415	Cable black	1 STK

Electric motor LS AriesS, 04Nm, 16 rpm, cable length: 3m
without plug, with adapter, tappet, adapter bearing



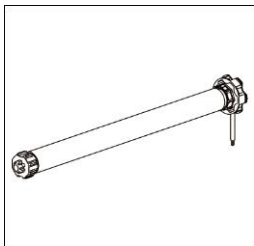
Article No.	Color	Sales representative
05100115_0000-011	Cable black	1 STK

Electric motor LS Mars, 09Nm, 16 rpm, cable length: 3m
without plug, with adapter, tappet, adapter bearing



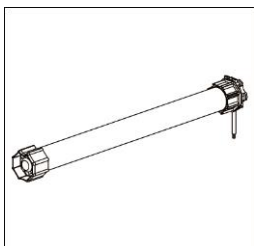
Article No.	Color	Sales representative
05100152_0000-011	Cable black	1 STK

Electric motor LS Vulcan, 13Nm, 10 rpm, cable length: 3m
without plug, with adapter, tappet, adapter bearing



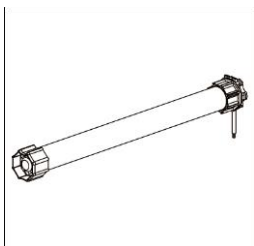
Article No.	Color	Sales representative
05100153_0000-011	Cable black	1 STK

Electric motor LT Ariane, 06Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



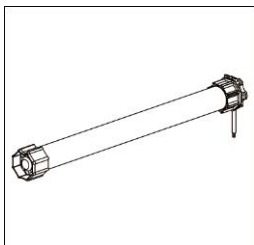
Article No.	Color	Sales representative
05100023	Cable black	1 STK
05100023_0000-605	Cable black	5 STK

Electric motor LT Atlas, 15Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



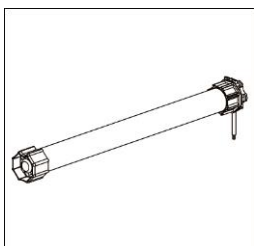
Article No.	Color	Sales representative
05100025	Cable black	1 STK
05100025_0000-601	Cable black	5 STK

Electric motor LT Gemini, 25Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



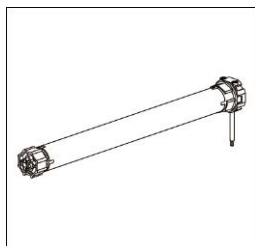
Article No.	Color	Sales representative
05100124	Cable black	1 STK
05100124_0000-601	Cable black	5 STK

Electric motor LT Mariner, 40Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



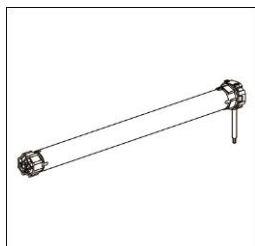
Article No.	Color	Sales representative
05100121	Cable black	1 STK

Electric motor MM Ares K, 06 Nm, 14 rpm, cable length: 3 m
without connector, with adapter and tappet SW40



Article No.	Color	Sales representative
05100329	Cable white	1 STK

Electric motor MM Ares, 10Nm, 14rpm, cable length: 3m
without connector, with adapter and tappet SW40



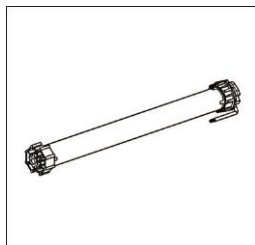
Article No.	Color	Sales representative
05100330	Cable white	1 STK

Electric motor MM Heros, 35Nm, 13rpm, cable length: 3m
without connector, with adapter and tappet SW60



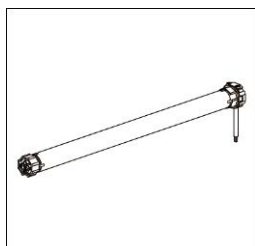
Article No.	Color	Sales representative
05100334	Cable white	10 STK

Electric motor MM Pegasus, 25Nm, 17rpm, cable length: 3m
without connector, with adapter and tappet SW60



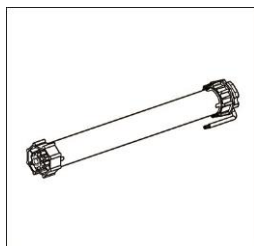
Article No.	Color	Sales representative
05100333	Cable white	10 STK

Electric motor MM Ursus, 13Nm, 14rpm, cable length: 3m
without connector, with adapter and tappet SW40



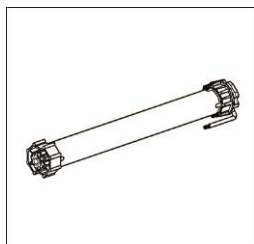
Article No.	Color	Sales representative
05100331	Cable white	18 STK

Electric motor MM Vector, 10Nm, 17rpm, cable length: 2.2m
without connector, with adapter and tappet SW60



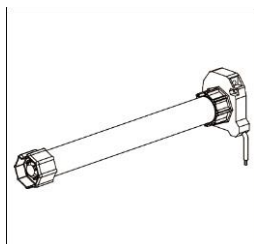
Article No.	Color	Sales representative
05100416	Cable white	10 STK

Electric motor MM Zephir, 15Nm, 17rpm, cable length: 3m
without connector, with adapter and tappet SW60



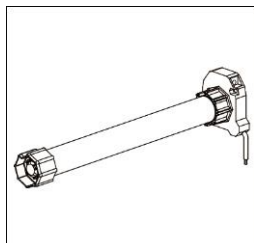
Article No.	Color	Sales representative
05100332	Cable white	10 STK

Electric motor NHK Ilmo, 10Nm, 17rpm, cable length: 3m
without connector, with adapter and tappet SW60



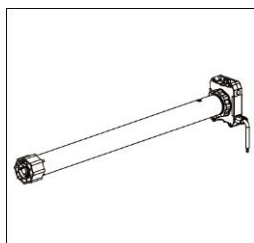
Article No.	Color	Sales representative
05100471	Cable black	5 STK

Electric motor NHK Ilmo, 20Nm, 17rpm, cable length: 3m
without connector, with adapter and tappet SW60



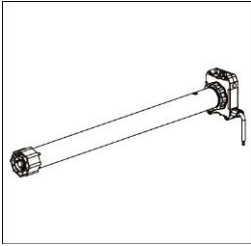
Article No.	Color	Sales representative
05100472	Cable black	5 STK

Electric motor NHK RolTopD+, 10Nm, 14 rpm, cable length: 3m
without connector, with adapter and tappet SW60



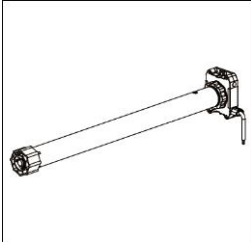
Article No.	Color	Sales representative
05100404	Cable white	1 STK

Electric motor NHK RolTopD+, 20Nm, 14 rpm, cable length: 3m
without connector, with adapter and tappet SW60



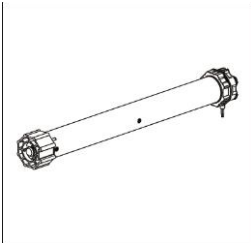
Article No.	Color	Sales representative
05100405	Cable white	1 STK

Electric motor NHK RolTopD+, 30Nm, 14 rpm, cable length: 3m
without connector, with adapter and tappet SW60



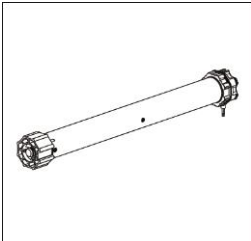
Article No.	Color	Sales representative
05100406	Cable white	1 STK

Electric motor SO RolTopD+ SH, 06Nm, 14 rpm, cable length: 3m
without connector, with adapter and tappet SW60



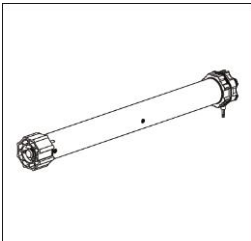
Article No.	Color	Sales representative
05100429	Cable black	1 STK

Electric motor SO RolTopD+ SH, 10Nm, 14 rpm, cable length: 3m
without connector, with adapter and tappet SW60



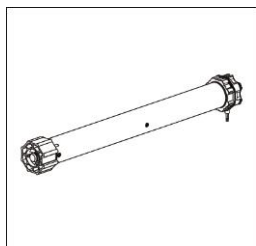
Article No.	Color	Sales representative
05100430	Cable black	1 STK

Electric motor SO RolTopD+ SH, 20Nm, 14 rpm, cable length: 3m
without connector, with adapter and tappet SW60



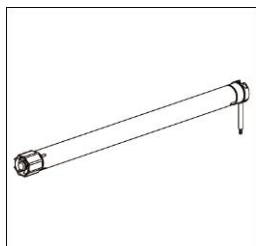
Article No.	Color	Sales representative
05100431	Cable black	1 STK

Electric motor SO RolTopD+ SH, 30Nm, 14 rpm, cable length: 3m
without connector, with adapter and tappet SW60



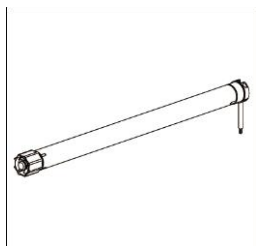
Article No.	Color	Sales representative
05100432	Cable black	1 STK

Electric motor SO RolTopD+, 05Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW40



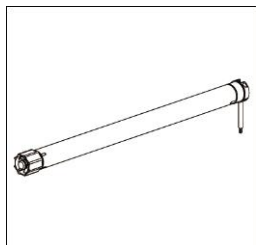
Article No.	Color	Sales representative
05100166	Cable black	1 STK

Electric motor SO RolTopD+, 08Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW40



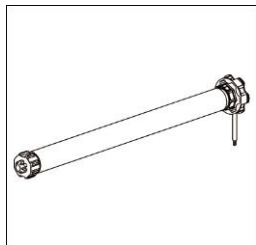
Article No.	Color	Sales representative
05100167	Cable black	1 STK

Electric motor SO RolTopD+, 12Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW40



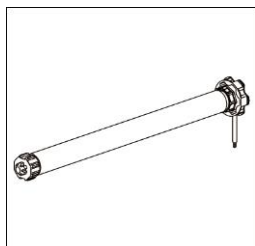
Article No.	Color	Sales representative
05100168	Cable black	1 STK

Electric motor WT Ilmo40, 04Nm, 16 rpm, cable length: 2.5m
without plug, with adapter, tappet, adapter bearing



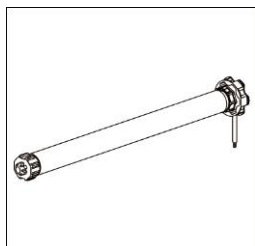
Article No.	Color	Sales representative
05100145_0000-601	Cable black	5 STK

Electric motor WT Ilmo40, 09Nm, 16 rpm, cable length: 2.5m
without plug, with adapter, tappet, adapter bearing



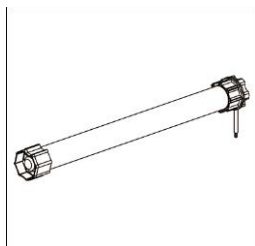
Article No.	Color	Sales representative
05100116_0000-011	Cable black	1 STK

Electric motor WT Ilmo40, 13Nm, 10 rpm, cable length: 2.5m
without plug, with adapter, tappet, adapter bearing



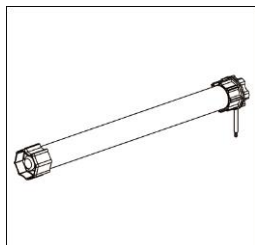
Article No.	Color	Sales representative
05100117_0000-011	Cable black	5 STK

Electric motor WT Ilmo50, 06Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



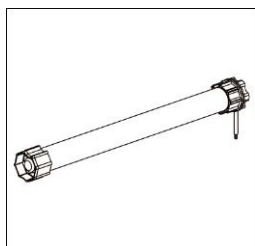
Article No.	Color	Sales representative
05100125	Cable black	1 STK
05100125_0000-601	Cable black	5 STK
05100125_0000-605	Cable black	100 STK

Electric motor WT Ilmo50, 10Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



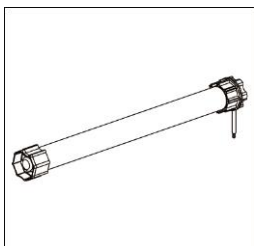
Article No.	Color	Sales representative
05100126	Cable black	1 STK
05100126_0000-601	Cable black	5 STK
05100126_0000-605	Cable black	100 STK

Electric motor WT Ilmo50, 15Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



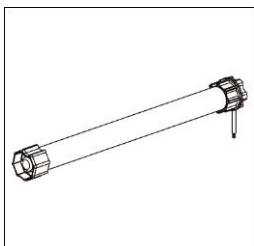
Article No.	Color	Sales representative
05100127	Cable black	1 STK
05100127_0000-601	Cable black	5 STK
05100127_0000-605	Cable black	100 STK

Electric motor WT Ilmo50, 20Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



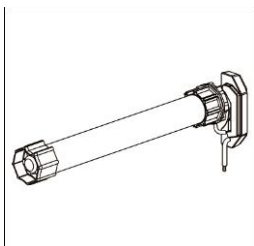
Article No.	Color	Sales representative
05100128	Cable black	1 STK
05100128_0000-601	Cable black	5 STK

Electric motor WT Ilmo50, 30Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



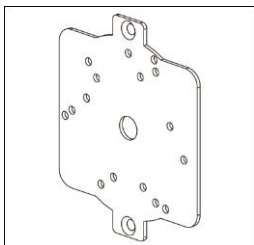
Article No.	Color	Sales representative
05100129	Cable black	1 STK
05100129_0000-601	Cable black	5 STK

Electric motor WT Ilmo50S, 06Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



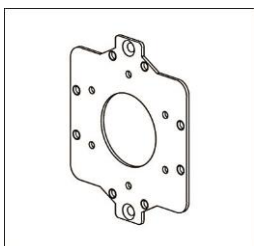
Article No.	Color	Sales representative
05100114	Cable white	1 STK
05100114_0000-601	Cable white	5 STK

Fastening board
for gear



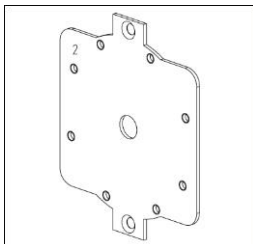
Article No.	Color	Sales representative
01500320	Galvanized	50 STK

Fastening board
for NHK and OZ-Roll



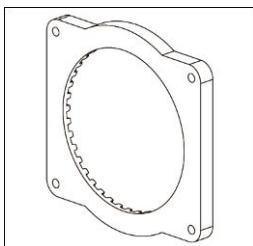
Article No.	Color	Sales representative
01500333	Galvanized	10 STK

Fastening board
for NHK, type 2



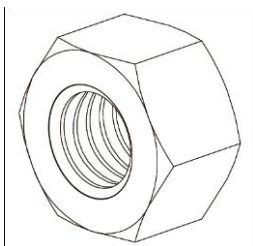
Article No.	Color	Sales representative
01500331	Galvanized	50 STK

Frame board
for motor bearing Mobilus



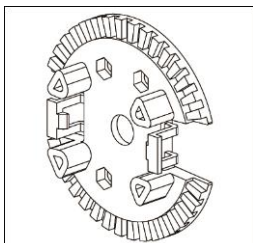
Article No.	Color	Sales representative
05400129	Black	10 STK

Hexagon nut
DIN934 05



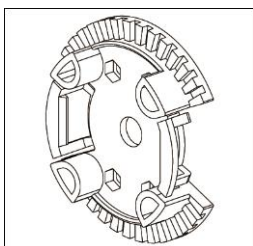
Article No.	Color	Sales representative
81010001_VZ	Galvanized	1000 STK

Motor bearing
Mobilus motors 40mm



Article No.	Color	Sales representative
05400127	Black	100 STK

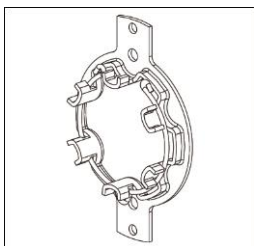
Motor bearing
Mobilus motors 50mm



Article No.	Color	Sales representative
05400128	Black	10 STK

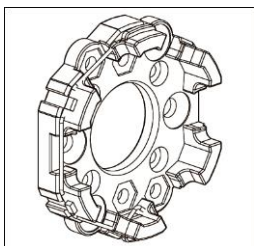
Motor bearing

with helical spring washer small eyelet, for motor LT, WT, RTS, io



Article No.	Color	Sales representative
01130306	Galvanized	150 STK

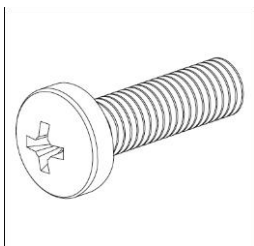
Motor bearing with stop spring
with hexagon nuts 4xM6



Article No.	Color	Sales representative
05400078	blank	10 STK

Pan-head screw

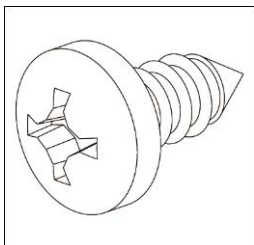
DIN7985 05x18 with cross recess



Article No.	Color	Sales representative
80010551_VZ	Galvanized	500 STK

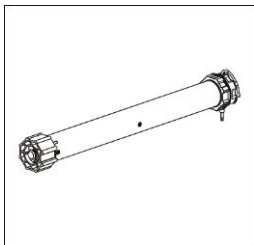
Pan-head tapping screw

DIN7981C 5.5x13 cross recess



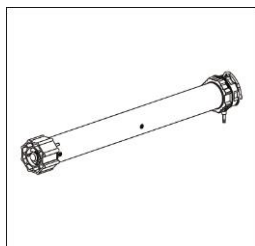
Article No.	Color	Sales representative
80020050_VZ	Galvanized	500 STK

Radio motor 868 RoITopD+ SH, 06Nm, 14 rpm., cable length: 3m
without connector, with adapter and tappet SW60



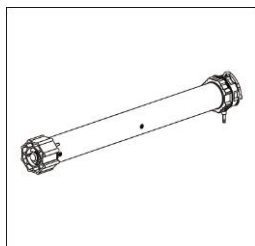
Article No.	Color	Sales representative
05100433	Cable black	1 STK

Radio motor 868 RoITopD+ SH, 10Nm, 14 rpm., cable length: 3m
without connector, with adapter and tappet SW60



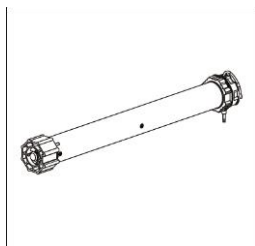
Article No.	Color	Sales representative
05100434	Cable black	1 STK

Radio motor 868 RoITopD+ SH, 20Nm, 14 rpm., cable length: 3m
without connector, with adapter and tappet SW60



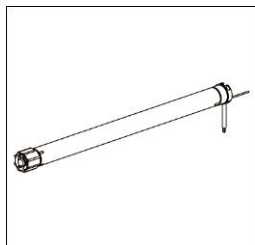
Article No.	Color	Sales representative
05100435	Cable black	1 STK

Radio motor 868 RoITopD+ SH, 30Nm, 14 rpm., cable length: 3m
without connector, with adapter and tappet SW60



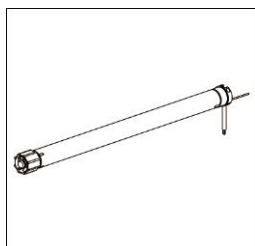
Article No.	Color	Sales representative
05100436	Cable black	1 STK

Radio motor 868 RoITopD+, 05Nm, 17 rpm., cable length: 3m
without connector, with adapter and tappet SW40



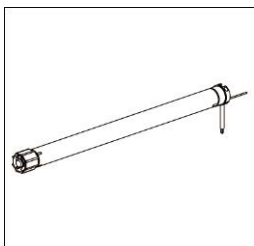
Article No.	Color	Sales representative
05100193	Cable black	1 STK

Radio motor 868 RoITopD+, 08Nm, 17 rpm., cable length: 3m
without connector, with adapter and tappet SW40



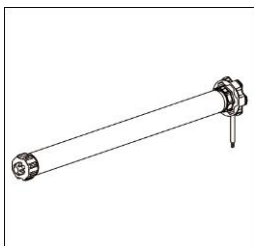
Article No.	Color	Sales representative
05100194	Cable black	1 STK

Radio motor 868 RoITopD+, 12Nm, 17 rpm., cable length: 3m
without connector, with adapter and tappet SW40



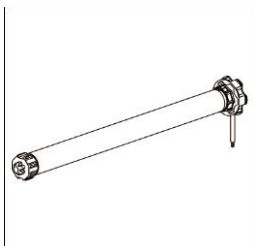
Article No.	Color	Sales representative
05100195	Cable black	1 STK

Radio motor io Oximo40, 09Nm, 16 rpm, cable length: 3m
without plug, with adapter, tappet, adapter bearing



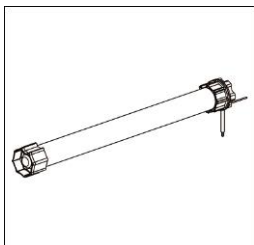
Article No.	Color	Sales representative
05100313_0000-011	Cable black	5 STK

Radio motor io Oximo40, 13Nm, 10 rpm, cable length: 3m
without plug, with adapter, tappet, adapter bearing



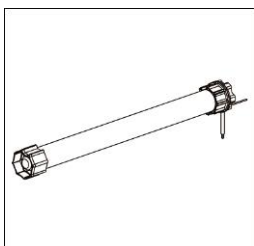
Article No.	Color	Sales representative
05100314_0000-011	Cable black	5 STK

Radio motor io Oximo50, 06Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



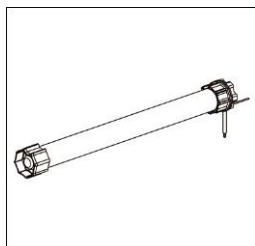
Article No.	Color	Sales representative
05100134	Cable black	1 STK
05100134_0000-601	Cable black	100 STK

Radio motor io Oximo50, 10Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



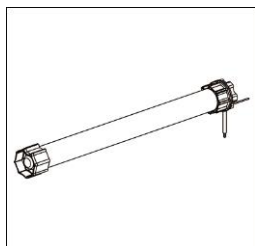
Article No.	Color	Sales representative
05100135	Cable black	1 STK
05100135_0000-601	Cable black	5 STK

Radio motor io Oximo50, 20Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



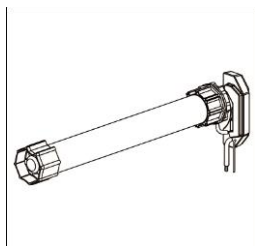
Article No.	Color	Sales representative
05100136	Cable black	1 STK

Radio motor io Oximo50, 30Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



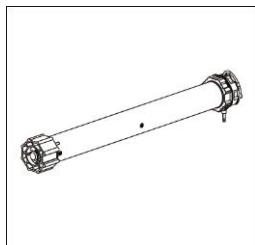
Article No.	Color	Sales representative
05100137	Cable black	1 STK

Radio motor io Oximo50S, 06Nm, 17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



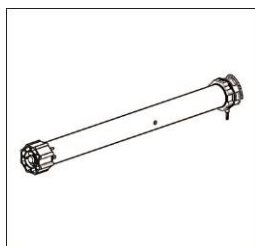
Article No.	Color	Sales representative
05100069	Cable white	1 STK
05100069_0000-601	Cable white	5 STK

Radio motor ONYX.ROL.D+ SH, 10Nm, 14 rpm., cable length: 3m
without connector, with adapter and tappet SW60



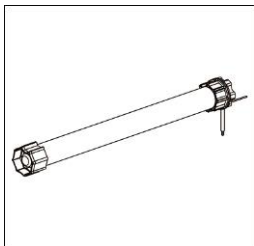
Article No.	Color	Sales representative
05100465	Cable black	1 STK

Radio motor ONYX.ROL.D+ SH, 20Nm, 14 rpm., cable length: 3m
without connector, with adapter and tappet SW60



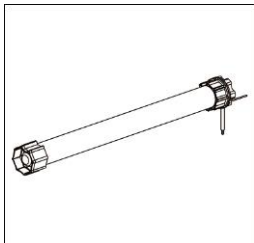
Article No.	Color	Sales representative
05100466	Cable black	1 STK

Radio motor RS100 io, 06Nm, 6-17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



Article No.	Color	Sales representative
05100359	Cable black	1 STK

Radio motor RS100 io, 10Nm, 6-17 rpm, cable length: 3m
without connector, with adapter and tappet SW60



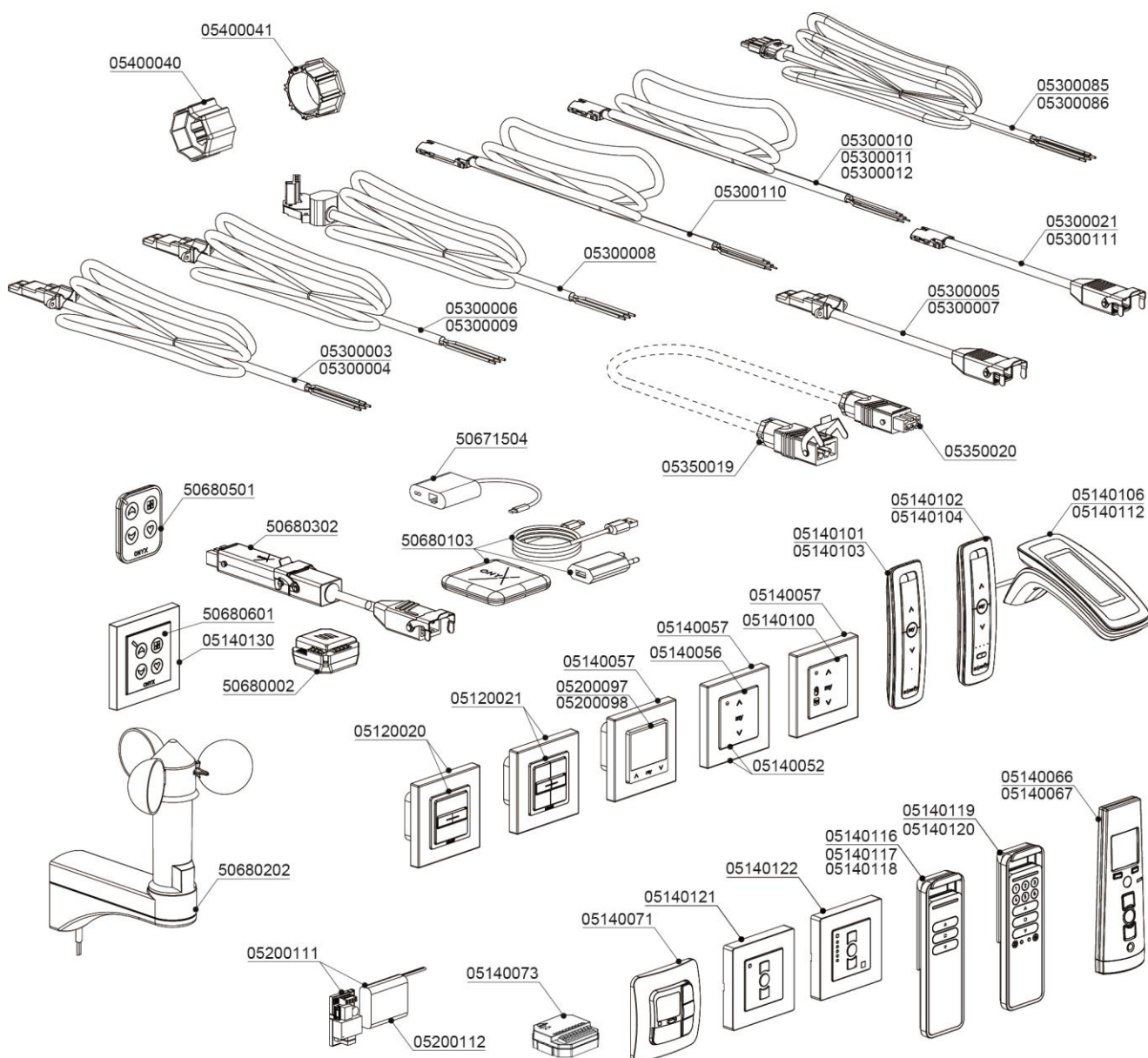
Article No.	Color	Sales representative
05100360	Cable black	1 STK

Radio motor RS100 io, 20Nm, 6-17 rpm, cable length: 3m
without connector, with adapter and tappet SW60

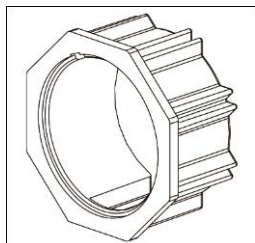


Article No.	Color	Sales representative
05100362	Cable black	1 STK

17. TOP MINI plus - drive - motor accessories

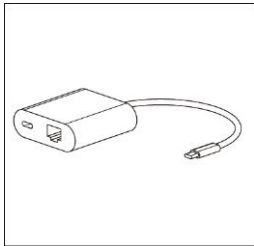


Adapter
SW60/NR63 for electric motors LT, WT, RTS, io, NHK



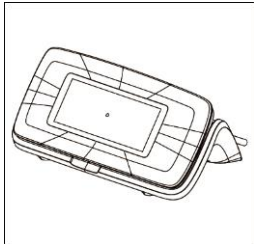
Article No.	Color	Sales representative
05400041	Black	10 STK

Adapter
USB-C for Ethernet



Article No.	Color	Sales representative
50671504	Black	1 STK

Bidirectional touch screen automatic timer
Nina io with table stand, charging cable, exchangeable cover



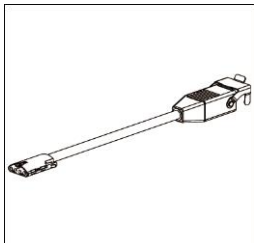
Article No.	Color	Sales representative
05140112	Black	1 STK

Bidirectional touch screen controller
Nina io with table stand, charging cable, exchangeable cover



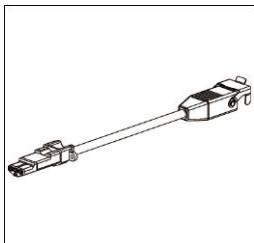
Article No.	Color	Sales representative
05140106	Black	1 STK

Cable
0.4m with elero and Hirschmann connector STAS 3



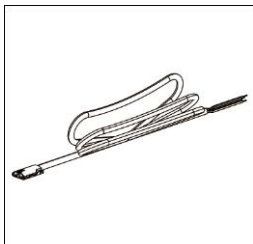
Article No.	Color	Sales representative
05300021	Black	1 STK

Cable
0.5m with HiPro and Hirschmann connector STAS 3



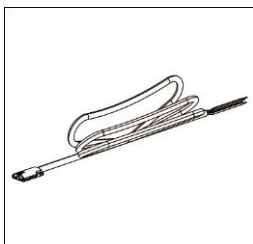
Article No.	Color	Sales representative
05300005	Black	1 STK

Cable
03m with connector for elero motor



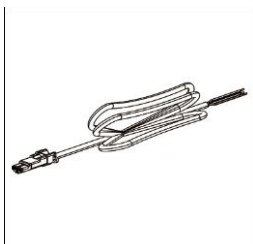
Article No.	Color	Sales representative
05300010	Black	1 STK

Cable
05m with connector for elero motor



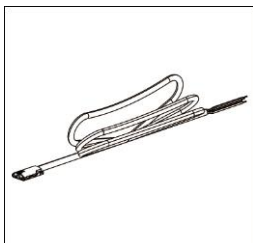
Article No.	Color	Sales representative
05300011	Black	1 STK

Cable
05m with HiPro-plug



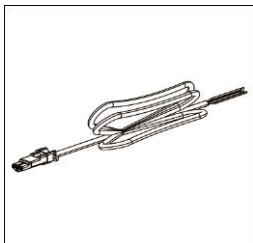
Article No.	Color	Sales representative
05300003	Black	1 STK

Cable
10m with connector for elero motor



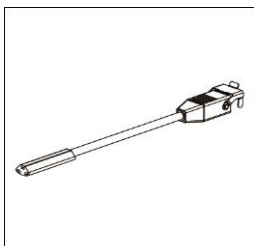
Article No.	Color	Sales representative
05300012	Black	1 STK

Cable
10m with HiPro-plug



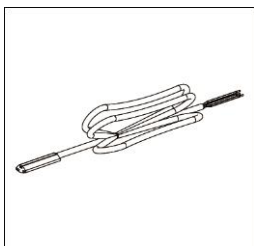
Article No.	Color	Sales representative
05300004	Black	1 STK

Cable NHK
0.4m with elero and Hirschmann connector STAS 3



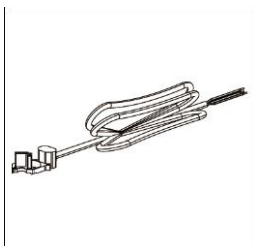
Article No.	Color	Sales representative
05300111	white	1 STK

Cable NHK
10m with connector for elero motor



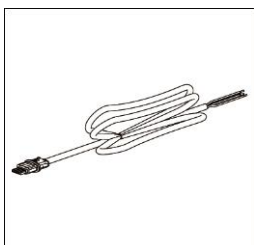
Article No.	Color	Sales representative
05300110	white	10 STK

Cable NHK/CSI
10m, with plug for NHK



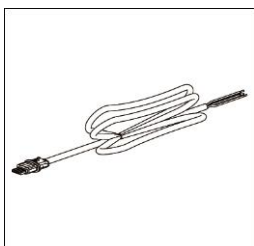
Article No.	Color	Sales representative
05300008	Black	1 STK

Cable RS100 io
05m



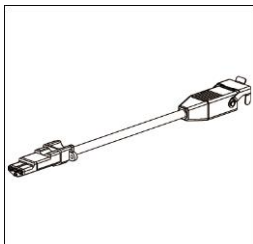
Article No.	Color	Sales representative
05300085	Black	30 STK

Cable RS100 io
10m



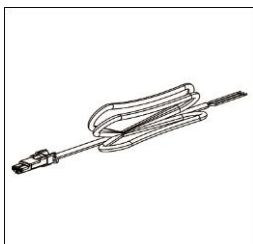
Article No.	Color	Sales representative
05300086	Black	1 STK

Cable RTS/ILT/io
0.5m with HiPro and Hirschmann connector STAS 3



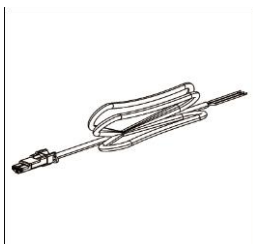
Article No.	Color	Sales representative
05300007	Black	1 STK

Cable RTS/ILT/io
05m with HiPro-plug



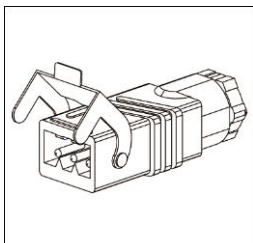
Article No.	Color	Sales representative
05300009	Black	1 STK

Cable RTS/ILT/io
10m with HiPro-plug



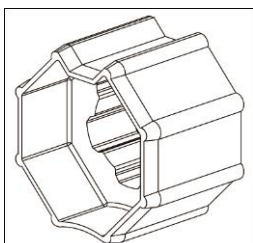
Article No.	Color	Sales representative
05300006	Black	1 STK

Connector
Hirschmann STAS 3 with bracket



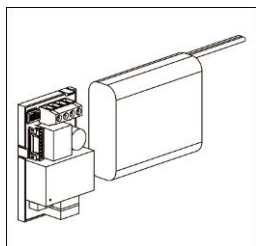
Article No.	Color	Sales representative
05350019_9005	Black	1 STK

Drive ring
SW60 for electric motors LT, WT, RTS, io, NHK



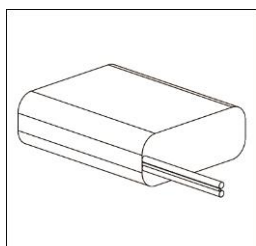
Article No.	Color	Sales representative
05400040	Black	1 STK

ExitSafe
Control module + battery



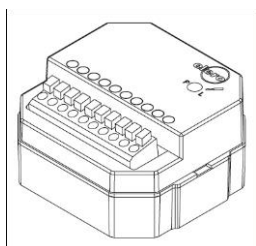
Article No.	Color	Sales representative
05200111		1 STK

ExitSafe-A
Battery



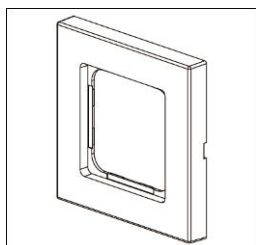
Article No.	Color	Sales representative
05200112		1 STK

Flush-mounted radio receiver
Revio-868



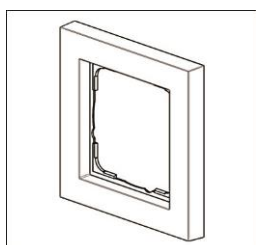
Article No.	Color	Sales representative
05140073	white	1 STK

Frame
for switch programme Smoove



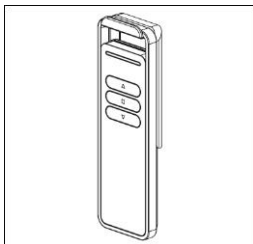
Article No.	Color	Sales representative
05140057_PURE	Pure	1 STK

Frame
Gira E2



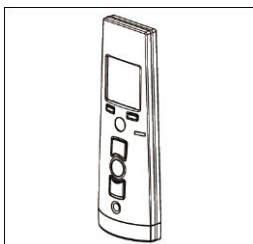
Article No.	Color	Sales representative
05140130_7016	anthracite-grey	1 STK
05140130_9006	grey	1 STK
05140130_9010	pure white	1 STK

Hand-held radio transmitter
MonoCom 1-868



Article No.	Color	Sales representative
05140116	pure white	1 STK

Hand-held radio transmitter
MultiTel 2-868



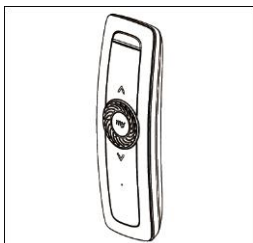
Article No.	Color	Sales representative
05140067	silver	1 STK

Hand-held radio transmitter
ONYX.CLICK



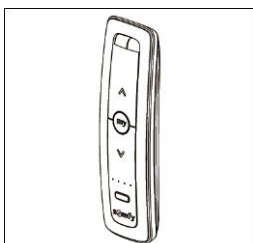
Article No.	Color	Sales representative
50680501	white	1 STK

Hand-held radio transmitter
Situ 1 Variation io



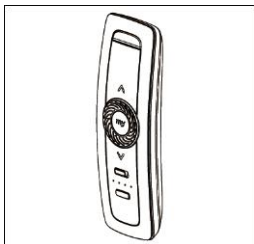
Article No.	Color	Sales representative
05140103_PURE	Pure II	1 STK

Hand-held radio transmitter
Situ 5 io



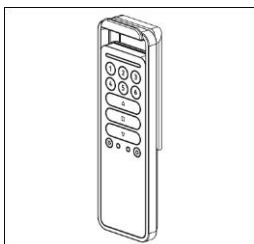
Article No.	Color	Sales representative
05140102_PURE	Pure II	1 STK

Hand-held radio transmitter
Situ 5 Variation A/M io



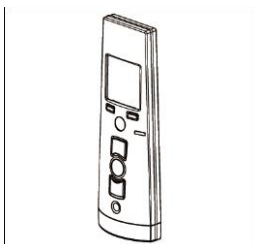
Article No.	Color	Sales representative
05140104_PURE	Pure II	1 STK

Hand-held radio transmitter
VarioCom 6-868



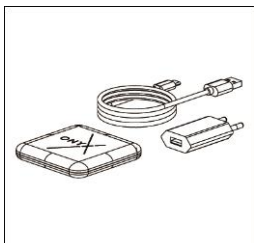
Article No.	Color	Sales representative
05140119	pure white	1 STK

Hand-held radio transmitter with time function
TempoTel 2-868



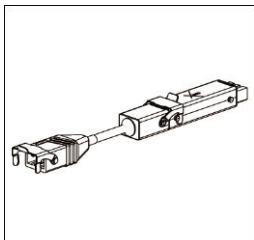
Article No.	Color	Sales representative
05140066	silver	1 STK

ONYX.CENTER 2
with cable and power supply unit



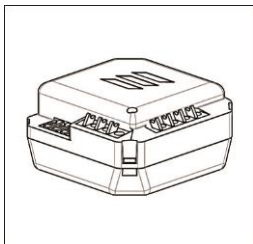
Article No.	Color	Sales representative
50680103	Black	1 STK

ONYX.CONNECTOR
Adapter plug for the control device with cable lengthening



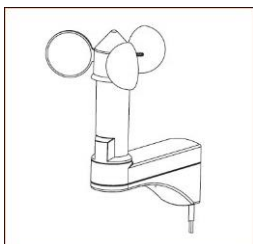
Article No.	Color	Sales representative
50680302		1 STK

ONYX.NODE 2
Control node



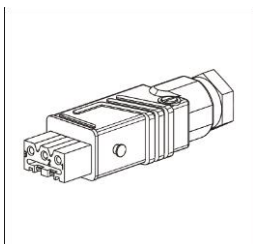
Article No.	Color	Sales representative
50680002		1 STK

ONYX.WEATHER 2
Wind/sun sensor



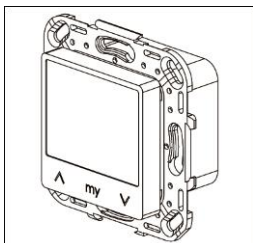
Article No.	Color	Sales representative
50680202		1 STK

Plug-in coupling
Hirschmann STAK 3



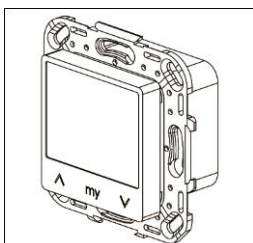
Article No.	Color	Sales representative
05350020_9005	Black	1 STK

Program timer with automatic brightness control
Chronis Smoove Uno S without frame



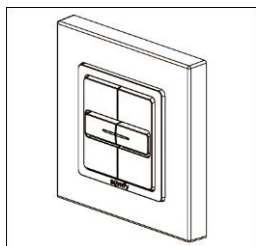
Article No.	Color	Sales representative
05200098_PURE	Pure	1 STK

Programme timer
Chronis Smoove Uno without frame



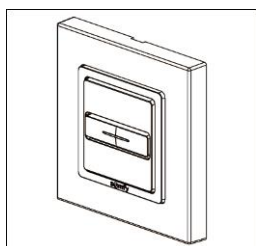
Article No.	Color	Sales representative
05200097_PURE	Pure	1 STK

Switch
Smooove Duo with frame



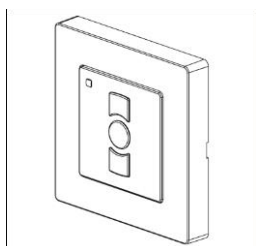
Article No.	Color	Sales representative
05120021	white	90 STK

Switch
Smooove Uno with frame



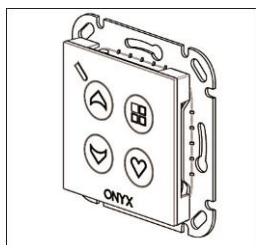
Article No.	Color	Sales representative
05120020	white	90 STK

Wall-mounted radio transmitter
MonoTec 1-868



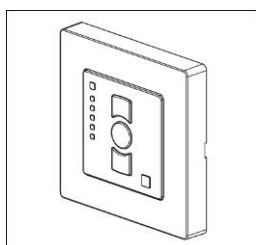
Article No.	Color	Sales representative
05140121	pure white	1 STK

Wall-mounted radio transmitter
ONYX.SWITCH



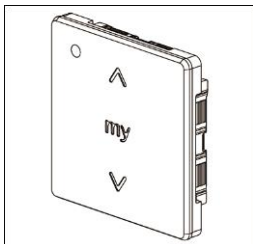
Article No.	Color	Sales representative
50680601		1 STK

Wall-mounted radio transmitter
QuinTec-868 5



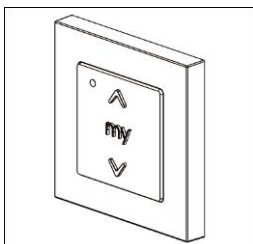
Article No.	Color	Sales representative
05140122	pure white	1 STK

Wall-mounted radio transmitter
Smooove 1 IN io without frame



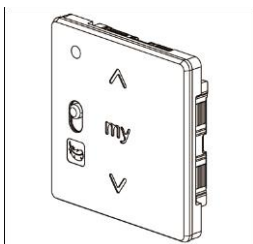
Article No.	Color	Sales representative
05140056_PURE	Pure Shine	1 STK

Wall-mounted radio transmitter
Smooove Origin io with frame



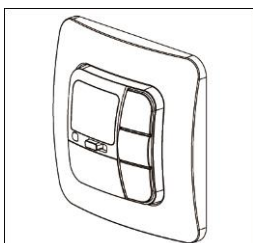
Article No.	Color	Sales representative
05140052_PURE	Pure	1 STK

Wall-mounted radio transmitter
Smooove RS100 IN io without frame



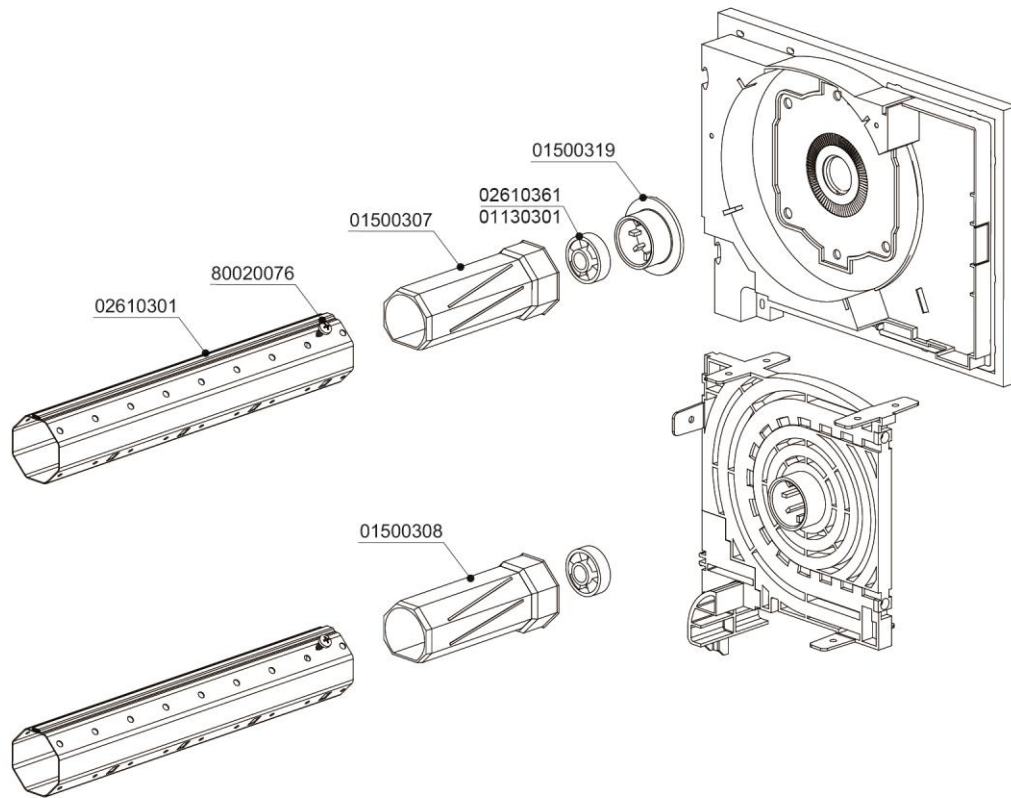
Article No.	Color	Sales representative
05140100_PURE	Pure Shine	1 STK

Wall-mounted radio transmitter with time function
AstroTec-868 bidi

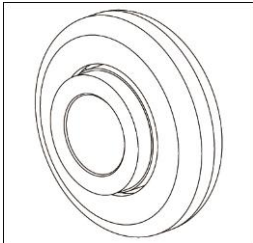


Article No.	Color	Sales representative
05140071	alpine-white	1 STK

18. TOP MINI plus - shaft and bearing - SW40

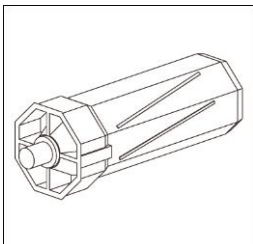


Ball bearing
 ø28mm / ø10mm with plastic collar



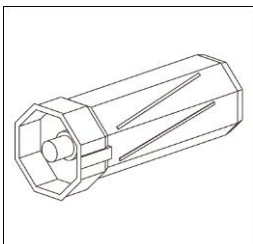
Article No.	Color	Sales representative
01130301		100 STK

Cap for tubes
 SW40, with outer shaft pin ø10mm



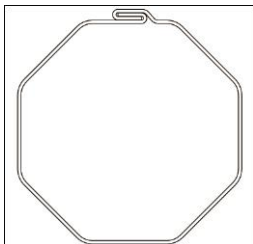
Article No.	Color	Sales representative
01500308	Black	100 STK

Cap for tubes
 SW40, with shaft pin ø10mm



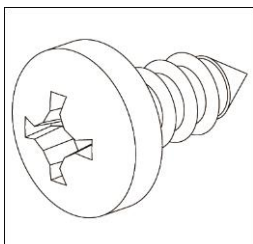
Article No.	Color	Sales representative
01500307	Black	100 STK

Octagon steel shaft
SW40, wall thickness 0.6mm



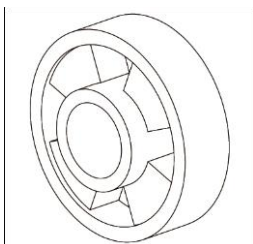
Article No.	Color	Sales representative
02610301	Galvanized	10 x 6 LM

Pan-head tapping screw
DIN7981C 3.9x9.5 with cross recess



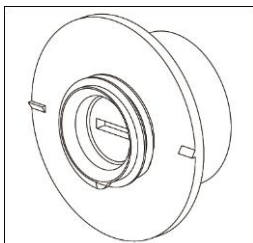
Article No.	Color	Sales representative
80020076_VZ	Galvanized	1000 STK

Plastic slide bearing
ø28 / ø10 with collar



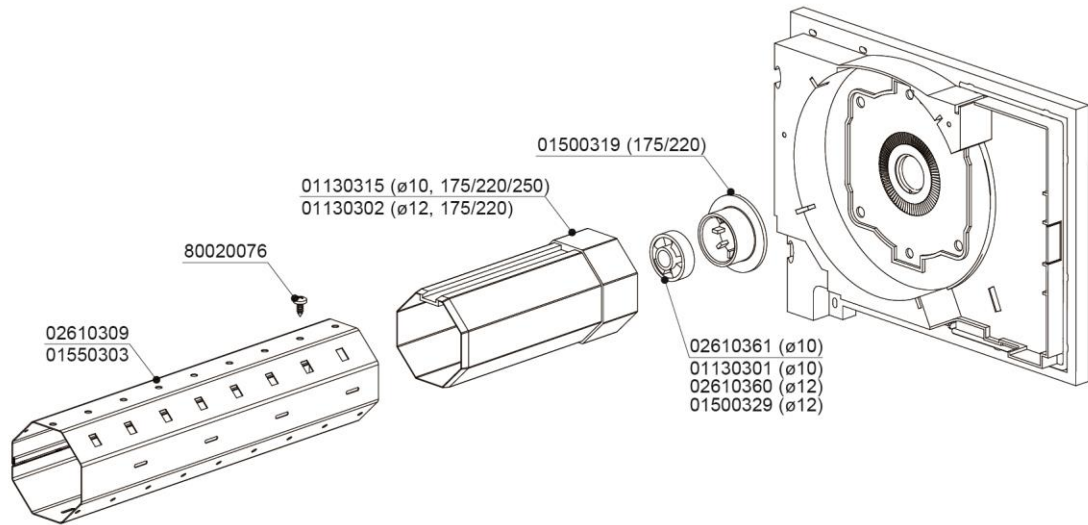
Article No.	Color	Sales representative
02610361	Black	100 STK

Socket for screwing
with ball bearing holder ø28mm

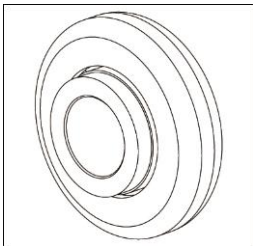


Article No.	Color	Sales representative
01500319	Black	100 STK

19. TOP MINI plus - shaft and bearing - SW60

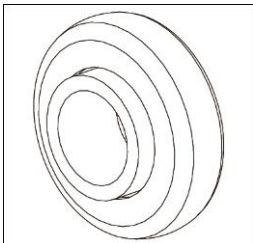


Ball bearing
 ø28mm / ø10mm with plastic collar



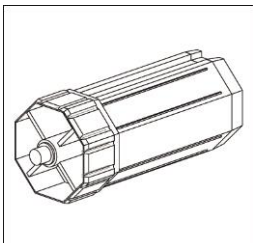
Article No.	Color	Sales representative
01130301		100 STK

Ball bearing
 ø28mm / ø12mm with plastic collar



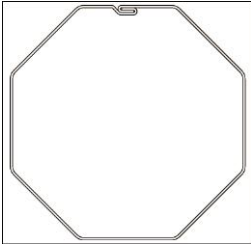
Article No.	Color	Sales representative
01500329		100 STK

Cap for tubes
 SW60 without locking clip long, outer shaft pin ø10x9mm



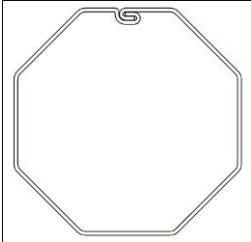
Article No.	Color	Sales representative
01130315	Black	100 STK

Octagon steel shaft
SW60, wall thickness 0.6mm



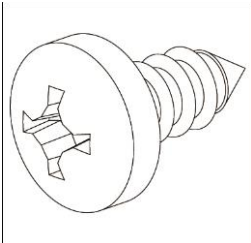
Article No.	Color	Sales representative
02610309	Galvanized	6 x 6 LM

Octagon steel shaft
SW60, wall thickness 1.0mm



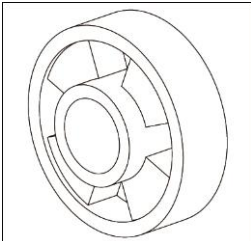
Article No.	Color	Sales representative
01550303	Galvanized	5 x 6 LM

Pan-head tapping screw
DIN7981C 3.9x9.5 with cross recess



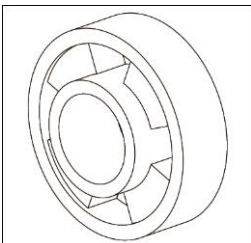
Article No.	Color	Sales representative
80020076_VZ	Galvanized	1000 STK

Plastic slide bearing
ø28 / ø10 with collar



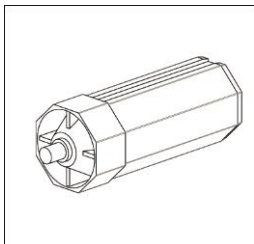
Article No.	Color	Sales representative
02610361	Black	100 STK

Plastic slide bearing
ø28 / ø12 with collar



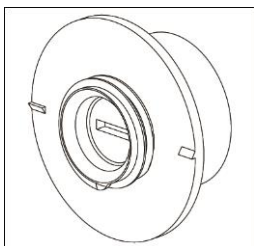
Article No.	Color	Sales representative
02610360	Black	100 STK

Roller capsule with pin on the outside
 SW60 without locking clip long, pin ø12mm



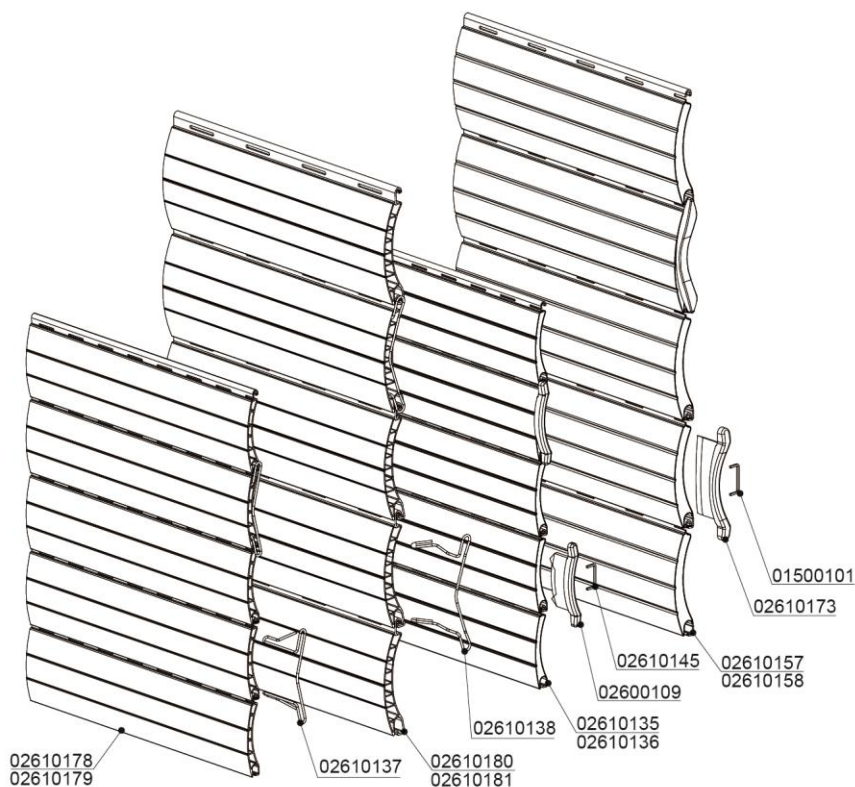
Article No.	Color	Sales representative
01130302	Black	100 STK

Socket for screwing
 with ball bearing holder ø28mm

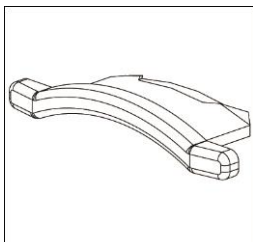


Article No.	Color	Sales representative
01500319	Black	100 STK

20. TOP MINI plus - blind - profiles and locking devices

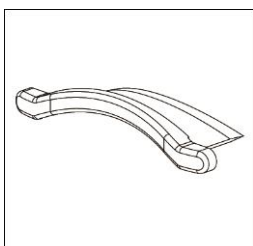


Locking bolt
A37, for clamping



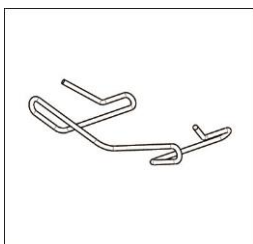
Article No.	Color	Sales representative
02600109	Black	1000 STK

Locking bolt
A52, for clamping



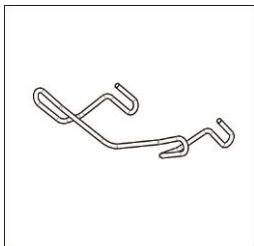
Article No.	Color	Sales representative
02610173	Black	500 STK

Locking clamp
for roller shutter profile K37



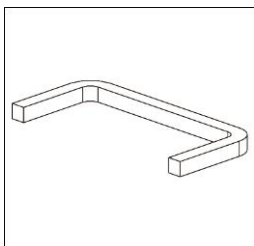
Article No.	Color	Sales representative
02610137	blank	1000 STK

Locking clamp
for roller shutter profile K52



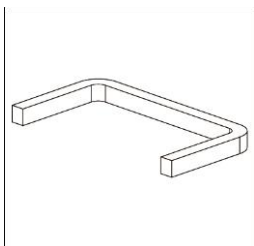
Article No.	Color	Sales representative
02610138	blank	500 STK

Locking clamp with a height of 3.6mm, width of 8.8mm
for roller shutter profile A37



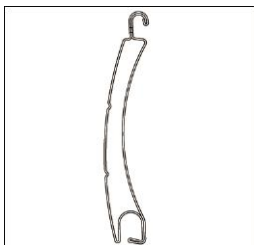
Article No.	Color	Sales representative
02610145	blank	20000 STK

Locking clamp with a height of 5.0mm, width of 8.9mm
for roller shutter profile A52,



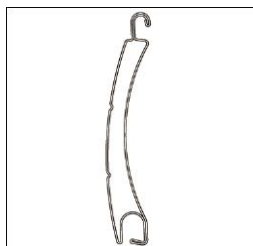
Article No.	Color	Sales representative
01500101	blank	10000 STK

Roller shutter profile
A37 with light gaps



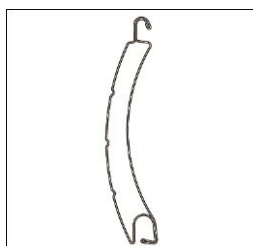
Article No.	Color	Sales representative
02610136_0003	beige	50 x 6 LM
02610136_0011	mahogany	50 x 6 LM
02610136_0044	walnut	50 x 6 LM
02610136_0110	dark beige	50 x 6 LM
02610136_0330	purple red	50 x 6 LM
02610136_0780	bronze	50 x 6 LM
02610136_1015	light ivory	50 x 6 LM
02610136_6005	moss-green	50 x 6 LM
02610136_6104	light oak	50 x 6 LM
02610136_6105	golden oak	50 x 6 LM
02610136_7016	anthracite-grey	50 x 6 LM
02610136_7035	light grey	50 x 6 LM
02610136_7038	agate grey	50 x 6 LM
02610136_8014	sepia brown	50 x 6 LM
02610136_8019	grey-brown	50 x 6 LM
02610136_8077	dark brown	50 x 6 LM
02610136_9006	white-aluminium	50 x 6 LM
02610136_9007	grey-aluminium	50 x 6 LM
02610136_9016	normal white	50 x 6 LM
02610136_DB703	anthracite iron mica	50 x 6 LM

Roller shutter profile
A37 without light gaps



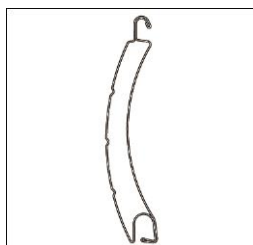
Article No.	Color	Sales representative
02610135_0003	beige	50 x 6 LM
02610135_0011	mahogany	50 x 6 LM
02610135_0044	walnut	50 x 6 LM
02610135_0110	dark beige	50 x 6 LM
02610135_0330	purple red	50 x 6 LM
02610135_0780	bronze	50 x 6 LM
02610135_1015	light ivory	50 x 6 LM
02610135_6005	moss-green	50 x 6 LM
02610135_6104	light oak	50 x 6 LM
02610135_6105	golden oak	50 x 6 LM
02610135_7016	anthracite-grey	50 x 6 LM
02610135_7035	light grey	50 x 6 LM
02610135_7038	agate grey	50 x 6 LM
02610135_8014	sepia brown	50 x 6 LM
02610135_8019	grey-brown	50 x 6 LM
02610135_8077	dark brown	50 x 6 LM
02610135_9006	white-aluminium	50 x 6 LM
02610135_9007	grey-aluminium	50 x 6 LM
02610135_9016	normal white	50 x 6 LM
02610135_DB703	anthracite iron mica	50 x 6 LM

Roller shutter profile
A52 with light gaps



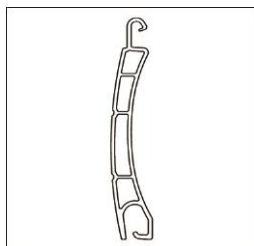
Article No.	Color	Sales representative
02610157_0003	beige	24 x 6 LM
02610157_7016	anthracite-grey	24 x 6 LM
02610157_7035	light grey	24 x 6 LM
02610157_7038	agate grey	24 x 6 LM
02610157_8077	dark brown	24 x 6 LM
02610157_9006	white-aluminium	24 x 6 LM
02610157_9007	grey-aluminium	24 x 6 LM
02610157_9016	normal white	24 x 6 LM
02610157_DB703	anthracite iron mica	24 x 6 LM

Roller shutter profile
A52 without light gaps



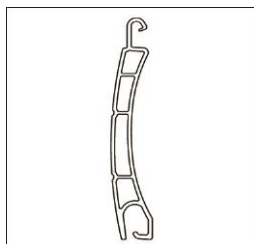
Article No.	Color	Sales representative
02610158_0003	beige	24 x 6 LM
02610158_7016	anthracite-grey	24 x 6 LM
02610158_7035	light grey	24 x 6 LM
02610158_7038	agate grey	24 x 6 LM
02610158_8077	dark brown	24 x 6 LM
02610158_9006	white-aluminium	24 x 6 LM
02610158_9007	grey-aluminium	24 x 6 LM
02610158_9016	normal white	24 x 6 LM
02610158_DB703	anthracite iron mica	24 x 6 LM

Roller shutter profile
K37 with light gaps



Article No.	Color	Sales representative
02610178_0003	beige	50 x 6 LM
02610178_6104	light oak	50 x 6 LM
02610178_6105	golden oak	50 x 6 LM
02610178_7035	light grey	50 x 6 LM
02610178_7038	agate grey	50 x 6 LM
02610178_9016	white	50 x 6 LM

Roller shutter profile
K37 without light gaps



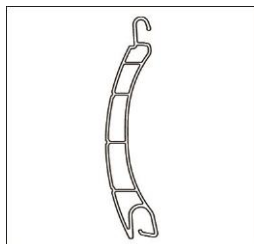
Article No.	Color	Sales representative
02610179_0003	beige	50 x 6 LM
02610179_6104	light oak	50 x 6 LM
02610179_6105	golden oak	50 x 6 LM
02610179_7035	light grey	50 x 6 LM
02610179_7038	agate grey	50 x 6 LM
02610179_9016	white	50 x 6 LM

Roller shutter profile
K52 with light gaps



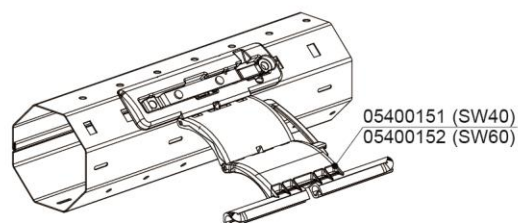
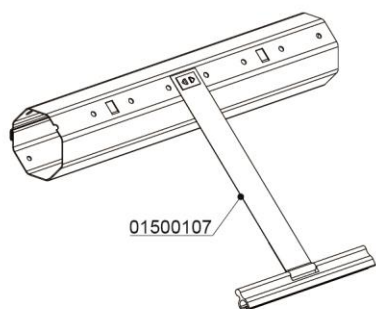
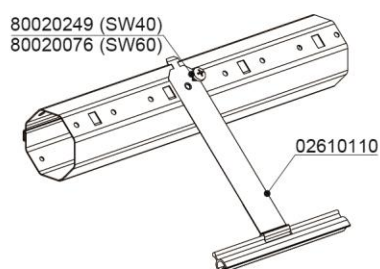
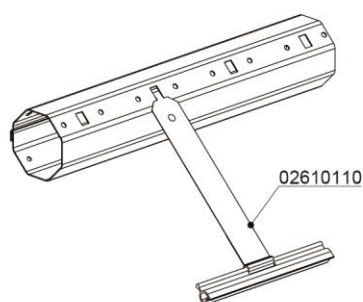
Article No.	Color	Sales representative
02610180_0003	beige	30 x 6 LM
02610180_6104	light oak	30 x 6 LM
02610180_6105	golden oak	30 x 6 LM
02610180_7035	light grey	30 x 6 LM
02610180_7038	agate grey	30 x 6 LM
02610180_9016	white	30 x 6 LM

Roller shutter profile
K52 without light gaps

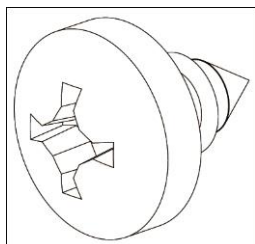


Article No.	Color	Sales representative
02610181_0003	beige	30 x 6 LM
02610181_6104	light oak	30 x 6 LM
02610181_6105	golden oak	30 x 6 LM
02610181_7035	light grey	30 x 6 LM
02610181_7038	agate grey	30 x 6 LM
02610181_9016	white	30 x 6 LM

21. TOP MINI plus - blind - suspensions

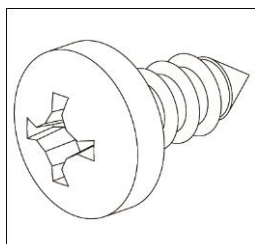


Pan-head tapping screw
DIN7981C 3.9x6.5 cross recession



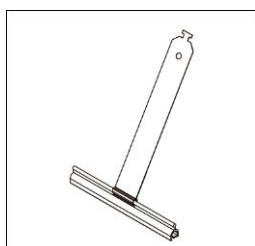
Article No.	Color	Sales representative
80020249_VZ	Galvanized	500 STK

Pan-head tapping screw
DIN7981C 3.9x9.5 with cross recess



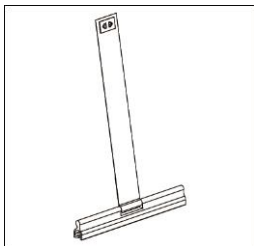
Article No.	Color	Sales representative
80020076_VZ	Galvanized	1000 STK

Safety and fixing spring
Length 123mm



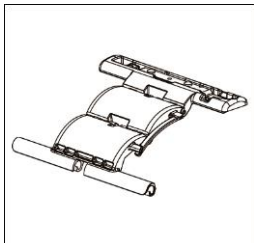
Article No.	Color	Sales representative
02610110	white	250 STK

Safety and fixing spring
 Length: 136mm, with holding clip



Article No.	Color	Sales representative
01500107	grey	1000 STK

Snap-on shaft connector
 SW40, 2-part, fixed



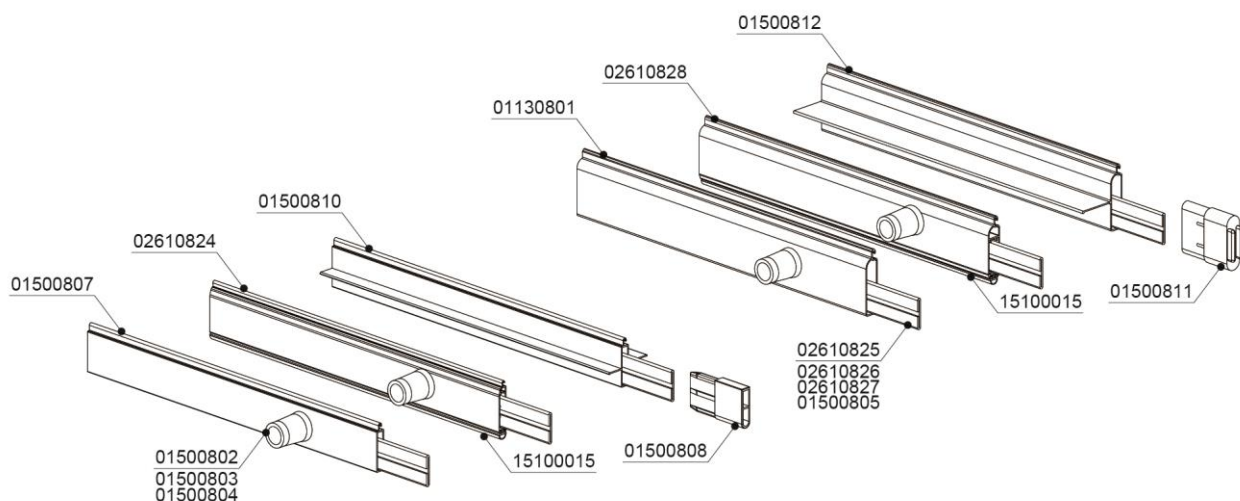
Article No.	Color	Sales representative
05400151	Black	250 STK

Snap-on shaft connector
 SW60, 2-part, fixed

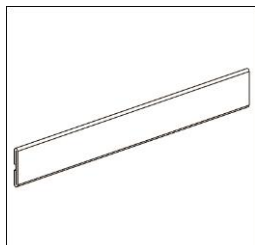


Article No.	Color	Sales representative
05400152	Black	250 STK

22. TOP MINI plus - blind - end rod and weight

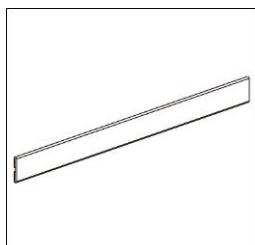


Bottom weight
25x3x200mm folded



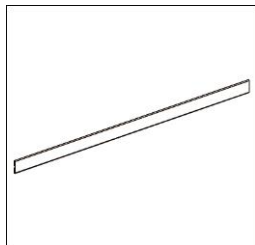
Article No.	Color	Sales representative
02610825	Galvanized	100 STK

Bottom weight
25x3x300mm folded



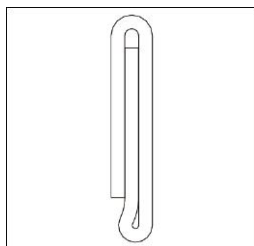
Article No.	Color	Sales representative
02610826	Galvanized	100 STK

Bottom weight
25x3x600mm folded



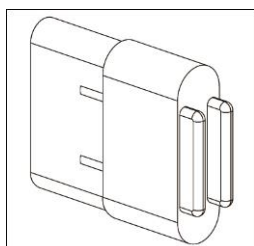
Article No.	Color	Sales representative
02610827	Galvanized	30 STK

Bottom weight
25x4.5mm folded



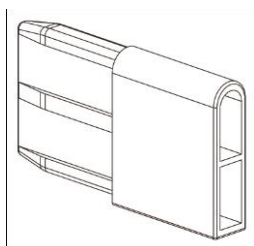
Article No.	Color	Sales representative
01500805	Galvanized	10 x 6 LM

End cap
for end rod A52, K52 with stop tabs



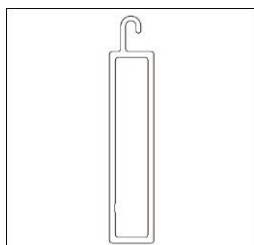
Article No.	Color	Sales representative
01500811_8077	Brown	200 STK
01500811_9016	white	200 STK
01500811_TRANS	transparent	200 STK

End cap
for end rod with stop tabs



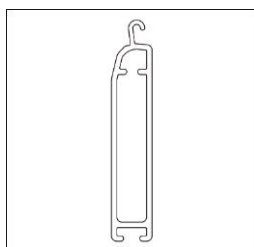
Article No.	Color	Sales representative
01500808_8077	Brown	200 STK
01500808_9006	grey	200 STK
01500808_9016	white	200 STK

End rod for roller shutter curtain
A37, K37



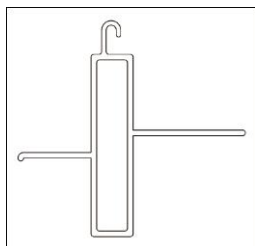
Article No.	Color	Sales representative
01500807_7016	anthracite-grey	20 x 6 LM
01500807_8077	dark brown	20 x 6 LM
01500807_9016	normal white	20 x 6 LM
01500807_BL	blank	20 x 6 LM
01500807_C0	naturally anodised E6-EV1	20 x 6 LM
01500807_C33	middle bronze anodised E6-C33	20 x 6 LM
01500807_C34	dark bronze anodised E6-C34	20 x 6 LM
01500807_SOFA	Special color powder-coated	20 x 6 LM

End rod for roller shutter curtain
A37, K37 with groove for sealing profile



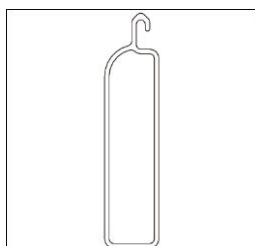
Article No.	Color	Sales representative
02610824_7016	anthracite-grey	10 x 6 LM
02610824_8077	dark brown	10 x 6 LM
02610824_9016	normal white	10 x 6 LM
02610824_BL	blank	10 x 6 LM
02610824_C0	naturally anodised E6-EV1	20 x 6 LM
02610824_C33	middle bronze anodised E6-C33	10 x 6 LM
02610824_C34	dark bronze anodised E6-C34	10 x 6 LM
02610824_ELOX	Special color anodized	10 x 6 LM
02610824_SOFA	Special color powder-coated	10 x 6 LM

End rod for roller shutter curtain
A37, K37 with stop tabs on both sides



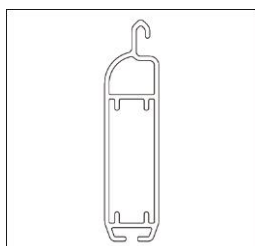
Article No.	Color	Sales representative
01500810_8077	dark brown	5 x 6 LM
01500810_9016	normal white	5 x 6 LM
01500810_BL	blank	5 x 6 LM
01500810_C0	naturally anodised E6-EV1	5 x 6 LM
01500810_SOFA	Special color powder-coated	5 x 6 LM

End rod for roller shutter curtain
A52, K52



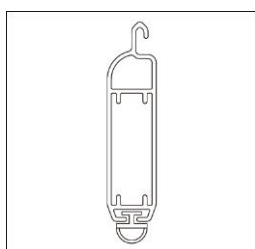
Article No.	Color	Sales representative
01130801_7016	anthracite-grey	10 x 6 LM
01130801_8077	dark brown	10 x 6 LM
01130801_9006	white-aluminium	10 x 6 LM
01130801_9016	normal white	10 x 6 LM
01130801_BL	blank	10 x 6 LM
01130801_C0	naturally anodised E6-EV1	10 x 6 LM
01130801_C33	middle bronze anodised E6-C33	10 x 6 LM
01130801_C34	dark bronze anodised E6-C34	10 x 6 LM
01130801_SOFA	Special color powder-coated	10 x 6 LM

End rod for roller shutter curtain
A52, K52, with groove for sealing profile



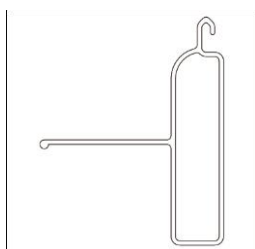
Article No.	Color	Sales representative
02610828_BL	blank	10 x 6 LM
02610828_ELOX	Special color anodized	10 x 6 LM
02610828_SOFA	Special color powder-coated	10 x 6 LM

End rod for roller shutter curtain
A52, K52, with sealing profile



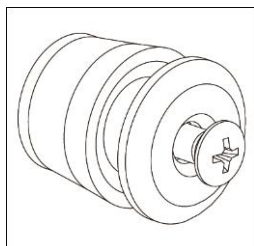
Article No.	Color	Sales representative
02610828_7016-007	anthracite-grey	10 x 6 LM
02610828_8077-007	dark brown	10 x 6 LM
02610828_9016-007	normal white	10 x 6 LM
02610828_C0-007	naturally anodised E6-EV1	10 x 6 LM
02610828_C33-007	middle bronze anodised E6-C33	10 x 6 LM
02610828_C34-007	dark bronze anodised E6-C34	10 x 6 LM

End rod for roller shutter curtain
A52, K52, with stop tab on one side



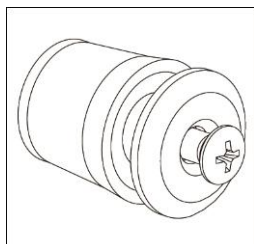
Article No.	Color	Sales representative
01500812_7016	anthracite-grey	5 x 6 LM
01500812_8077	dark brown	10 x 6 LM
01500812_9016	normal white	10 x 6 LM
01500812_BL	blank	10 x 6 LM
01500812_C0	naturally anodised E6-EV1	10 x 6 LM
01500812_C33	middle bronze anodised E6-C33	10 x 6 LM
01500812_C34	dark bronze anodised E6-C34	10 x 6 LM
01500812_SOFA	Special color powder-coated	10 x 6 LM

Limit stop
15mm



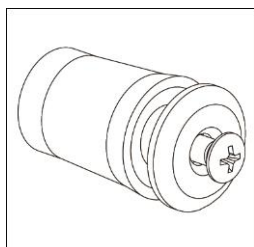
Article No.	Color	Sales representative
01500802_0003	beige	250 STK
01500802_7016	anthracite-grey	100 STK
01500802_7038	grey	100 STK
01500802_8077	Brown	100 STK
01500802_9016	white	100 STK

Limit stop
20mm



Article No.	Color	Sales representative
01500803_0003	beige	100 STK
01500803_6104	wood-light	100 STK
01500803_7016	anthracite-grey	100 STK
01500803_7038	grey	100 STK
01500803_8077	Brown	100 STK
01500803_9016	white	100 STK

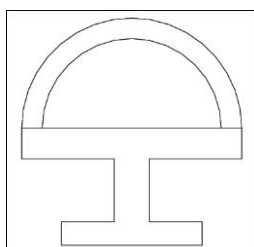
Limit stop
28mm



Article No.	Color	Sales representative
01500804_0003	beige	100 STK
01500804_7016	anthracite-grey	100 STK
01500804_7038	grey	100 STK
01500804_8077	Brown	100 STK
01500804_9016	white	100 STK

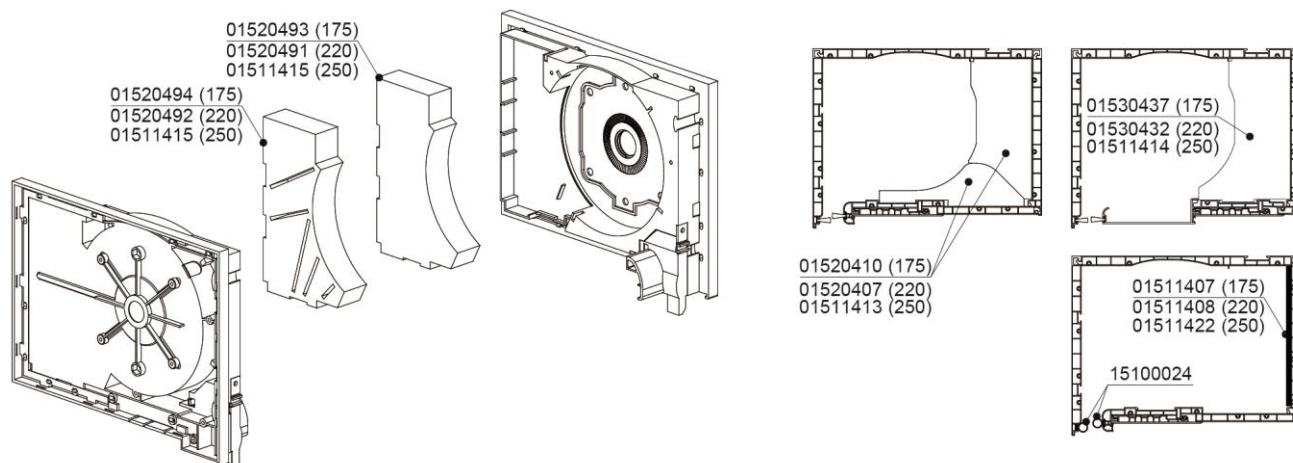
Sealing profile

Width of the holder insert 4.8mm x height 7.75mm



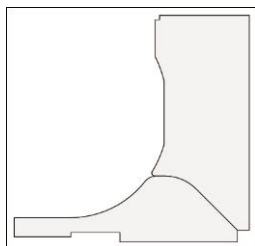
Article No.	Color	Sales representative
15100015_9005	Black	1 x 500 LM

23. TOP MINI plus - insulation - box



Assembly set for thermal insulation

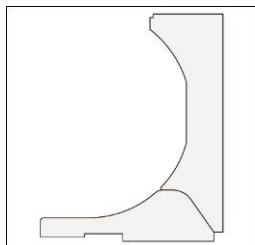
175 RvI+RvU



Article No.	Color	Sales representative
01520410	dark grey	28 x 1 LM

Assembly set for thermal insulation

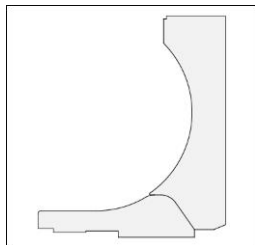
220 RvI+RvU



Article No.	Color	Sales representative
01520407	dark grey	25 x 1 LM

Assembly set for thermal insulation

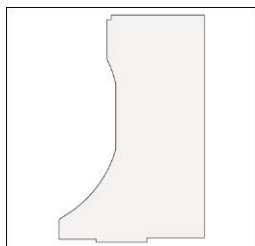
250 RvI+RvU



Article No.	Color	Sales representative
01511413	dark grey	32 x 1 LM

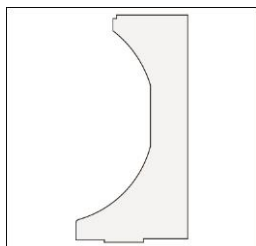
Insulation profile

175 - RvA



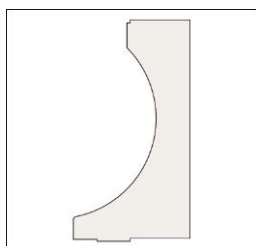
Article No.	Color	Sales representative
01530437	dark grey	37 x 1 LM

Insulation profile
220 - RvA



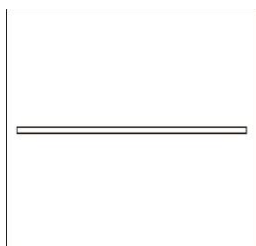
Article No.	Color	Sales representative
01530432	dark grey	35 x 1 LM

Insulation profile
250 - RvA



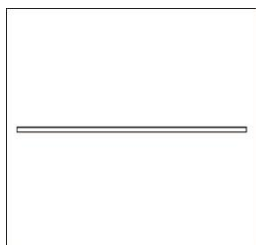
Article No.	Color	Sales representative
01511414	dark grey	25 x 1 LM

PVC noise insulation foil
1200x140x3.7mm, 8kg/qm



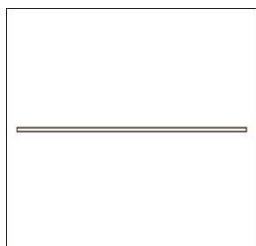
Article No.	Color	Sales representative
01511407	Black	610 x 1 LM

PVC noise insulation foil
1200x185x3.7mm, 8kg/qm



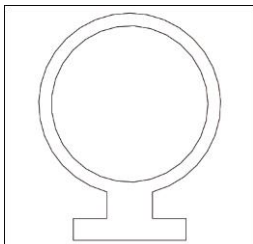
Article No.	Color	Sales representative
01511408	Black	1 x 1 LM

PVC noise insulation foil
1200x220x3.7mm, 8kg/qm



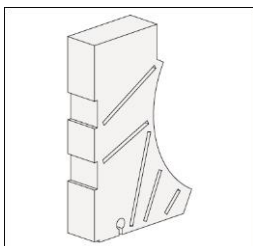
Article No.	Color	Sales representative
01511422	Black	1 x 1 LM

Sealing profile
for increased noise insulation



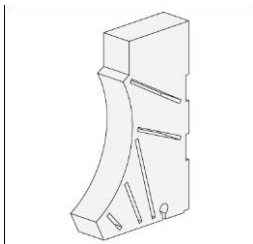
Article No.	Color	Sales representative
15100024	transparent	1 x 25 LM

Side cover insulation
175, left



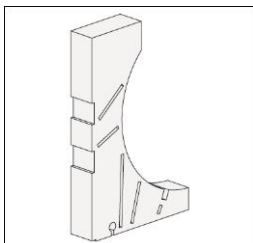
Article No.	Color	Sales representative
01520493	white	240 STK

Side cover insulation
175, right



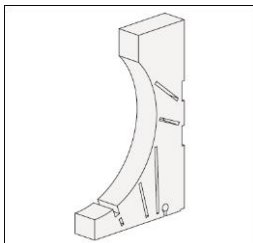
Article No.	Color	Sales representative
01520494	white	240 STK

Side cover insulation
220, left



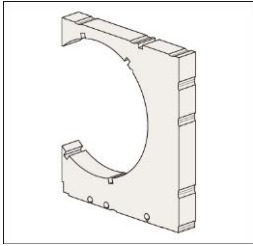
Article No.	Color	Sales representative
01520491	white	190 STK

Side cover insulation
220, right



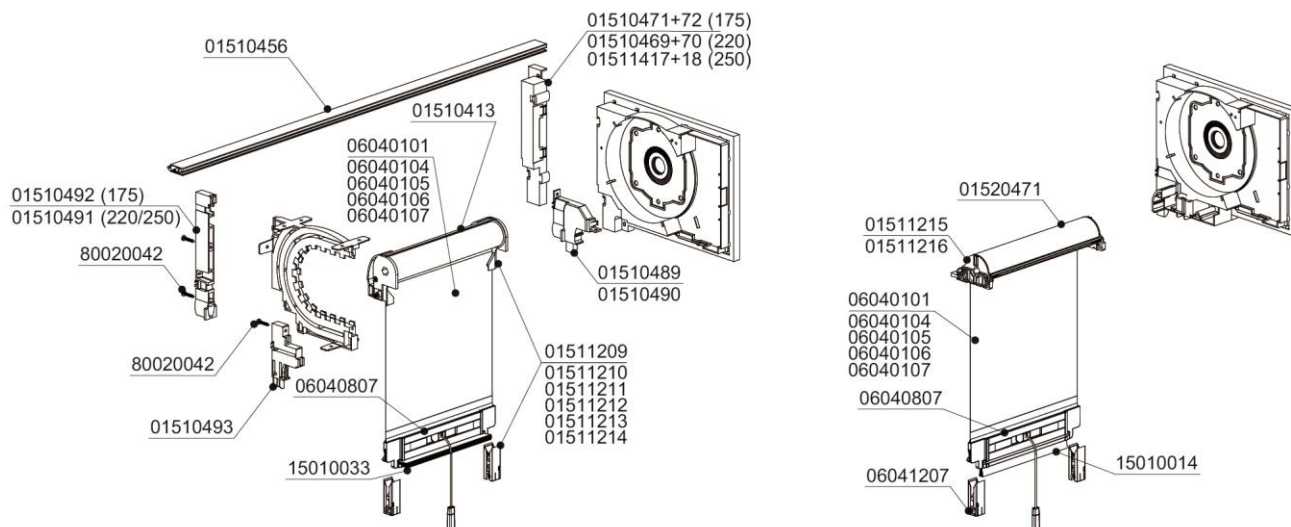
Article No.	Color	Sales representative
01520492	white	190 STK

Side cover insulation
250

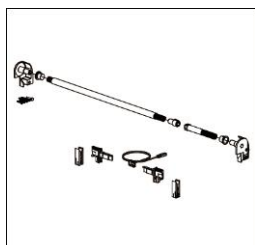


Article No.	Color	Sales representative
01511415	grey	195 STK

24. TOP MINI plus - insect screen integrated

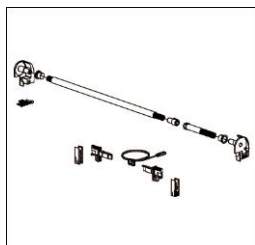


Accessory kit for insect roller screen inside
Large spacing from a screen width of 670mm, aluminium rail



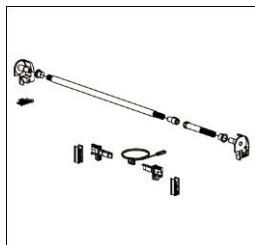
Article No.	Color	Sales representative
01511213		1 STK

Accessory kit for insect roller screen inside
Small spacing from a screen width of 670mm, aluminium rail



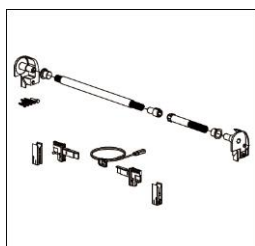
Article No.	Color	Sales representative
01511209		1 STK

Accessory kit for insect roller screen inside
Small spacing from a screen width of 670mm, PVC rail



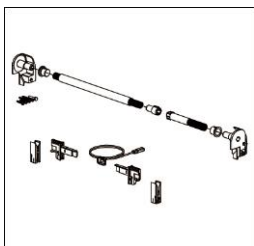
Article No.	Color	Sales representative
01511211		1 STK

Accessory kit for insect roller screen inside
Small spacing up to a screen width of 670mm, aluminium rail



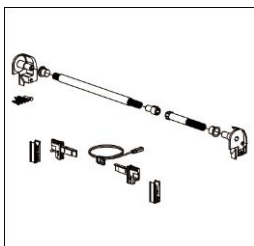
Article No.	Color	Sales representative
01511210		1 STK

Accessory kit for insect roller screen inside
 Small spacing up to a screen width of 670mm, aluminium rail



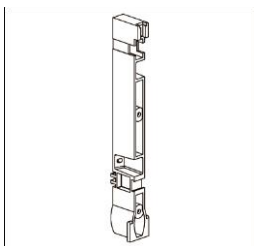
Article No.	Color	Sales representative
01511214		1 STK

Accessory kit for insect roller screen inside
 Small spacing up to a screen width of 670mm, PCV rail



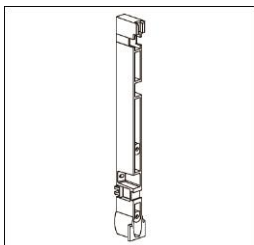
Article No.	Color	Sales representative
01511212		1 STK

Adapter for centre bearing
 175, for box retrofitting with insect screen



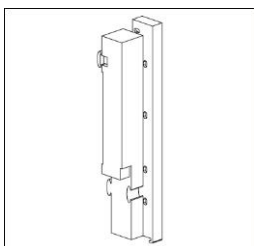
Article No.	Color	Sales representative
01510492	Black	50 STK

Adapter for centre bearing
 250/220, for box retrofitting with insect screen



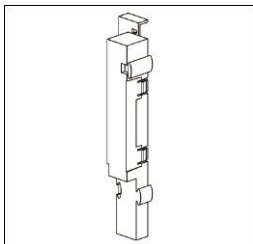
Article No.	Color	Sales representative
01510491	Black	50 STK

Adapter for end cap
 175, for box retrofitting with insect screen, on the left side



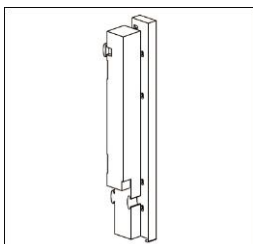
Article No.	Color	Sales representative
01510471_8077	Brown	50 STK
01510471_9016	white	50 STK

Adapter for end cap
175, for box retrofitting with insect screen, on the right side



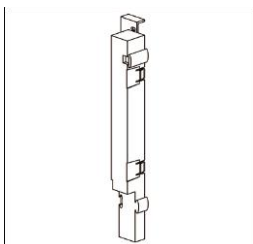
Article No.	Color	Sales representative
01510472_8077	Brown	50 STK
01510472_9016	white	50 STK

Adapter for end cap
220, for box retrofitting with insect screen, on the left side



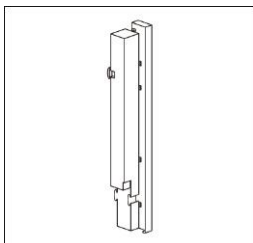
Article No.	Color	Sales representative
01510469_8077	Brown	50 STK
01510469_9016	white	50 STK

Adapter for end cap
220, for box retrofitting with insect screen, on the right side



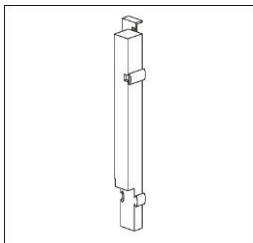
Article No.	Color	Sales representative
01510470_8077	Brown	50 STK
01510470_9016	white	50 STK

Adapter for end cap
250, for box retrofitting with insect screen, on the left side



Article No.	Color	Sales representative
01511417_8077	Brown	50 STK
01511417_9016	white	50 STK

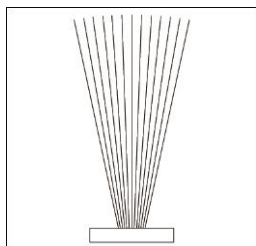
Adapter for end cap
250, for box retrofitting with insect screen, on the right side



Article No.	Color	Sales representative
01511418_8077	Brown	50 STK
01511418_9016	white	50 STK

Brush

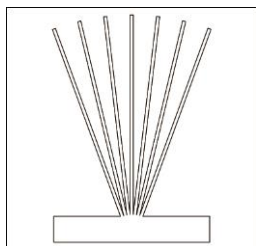
Width of the holder insert 4.8mm x height 13mm



Article No.	Color	Sales representative
15010015_9005	Black	1 x 200 LM

Brush

Width of the holder insert 4.8mm x height 6mm



Article No.	Color	Sales representative
15010018_9005	Black	1 x 100 LM

Brush

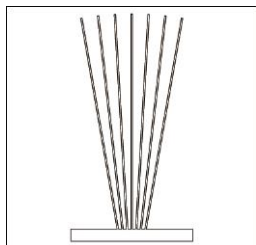
Width of the holder insert 5.0mm x height 20mm



Article No.	Color	Sales representative
15010033_9005	Black	1 x 100 LM

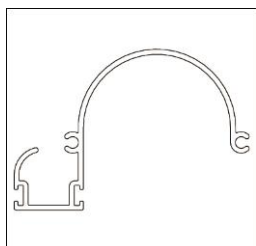
Brush

Width of the holder insert 6.7mm x height 15mm



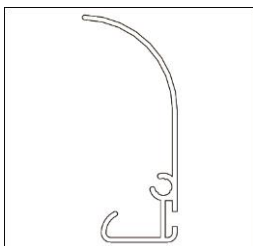
Article No.	Color	Sales representative
15010014_9005	Black	1 x 100 LM
15010014_9006	grey	1 x 100 LM

Cassette profile - insect screen for RvA



Article No.	Color	Sales representative
01520471_7016	anthracite-grey	5 x 6 LM
01520471_9016	normal white	5 x 6 LM
01520471_BL	blank	5 x 6 LM
01520471_SOFA	Special color powder-coated	1 x 6 LM

Chamber profile
for insect screen, on the inside



Article No.	Color	Sales representative
01510413_C0	naturally anodised E6-EV1	5 x 6 LM

Drive set for insect roller screen
RvA from of screen width of 670mm



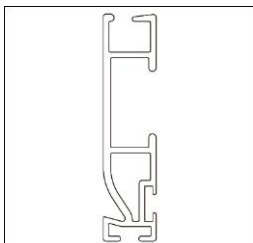
Article No.	Color	Sales representative
01511215		1 STK

Drive set for insect roller screen
RvA up to a screen width of 670mm



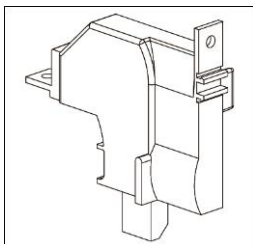
Article No.	Color	Sales representative
01511216		1 STK

End rod
40x9 for insect roller blind



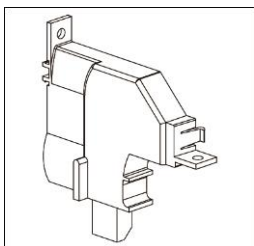
Article No.	Color	Sales representative
06040807_7016	anthracite-grey	10 x 6 LM
06040807_8077	dark brown	10 x 6 LM
06040807_9006	white-aluminium	10 x 6 LM
06040807_9016	normal white	10 x 6 LM
06040807_BL	blank	10 x 6 LM
06040807_C0	naturally anodised E6-EV1	10 x 6 LM
06040807_C33	middle bronze anodised E6-C33	10 x 6 LM
06040807_ELOX	Special color anodized	10 x 6 LM
06040807_SOFA	Special color powder-coated	10 x 6 LM

Filler piece for box retrofitting
for insect screen inside, on the left



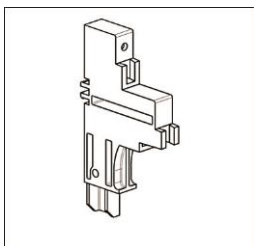
Article No.	Color	Sales representative
01510489	Black	50 STK

Filler piece for box retrofitting
for insect screen inside, on the right



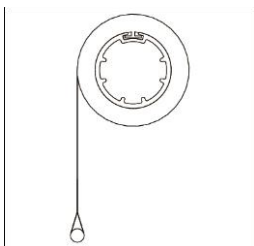
Article No.	Color	Sales representative
01510490	Black	50 STK

Filler piece for centre bearing
for insect screen on the inside



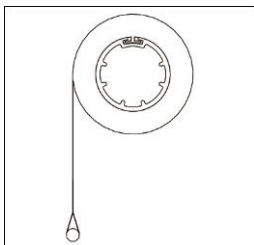
Article No.	Color	Sales representative
01510493	Black	50 STK

Insect screen fabric
Height 1800mm on shaft ø23



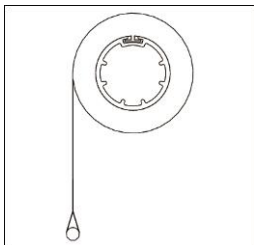
Article No.	Color	Sales representative
06040101_9005	Black	12 x 6 LM
06040101_9006	grey	12 x 6 LM

Insect screen fabric
Height 2300mm on shaft ø23



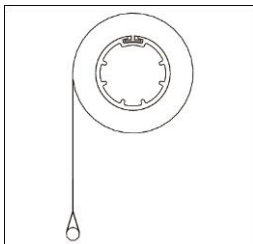
Article No.	Color	Sales representative
06040107_9005	Black	10 x 6 LM
06040107_9006	grey	10 x 6 LM

Insect screen fabric
Height 2500mm on shaft ø23



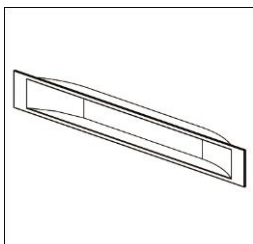
Article No.	Color	Sales representative
06040104_9005	Black	10 x 6 LM
06040104_9006	grey	10 x 6 LM

Insect screen fabric VistaScreen
Height 2600mm on shaft ø23



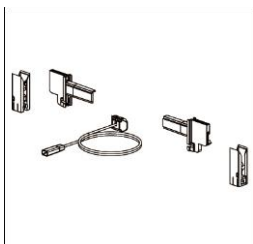
Article No.	Color	Sales representative
06040105_9005	Black	10 x 6 LM

Inset type handle
115x14mm



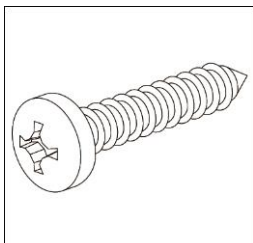
Article No.	Color	Sales representative
06060801_9005	Black	10 STK
06060801_9016	white	10 STK

Locking set
End rod 40x9, 18mm guide rail



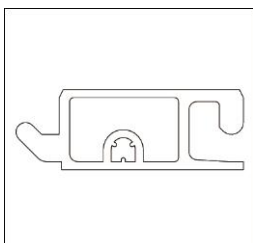
Article No.	Color	Sales representative
06041207_9005	Black	1 STK

Pan-head tapping screw
similar DIN7981C 3.5x19 - C - 3.9H cross recession



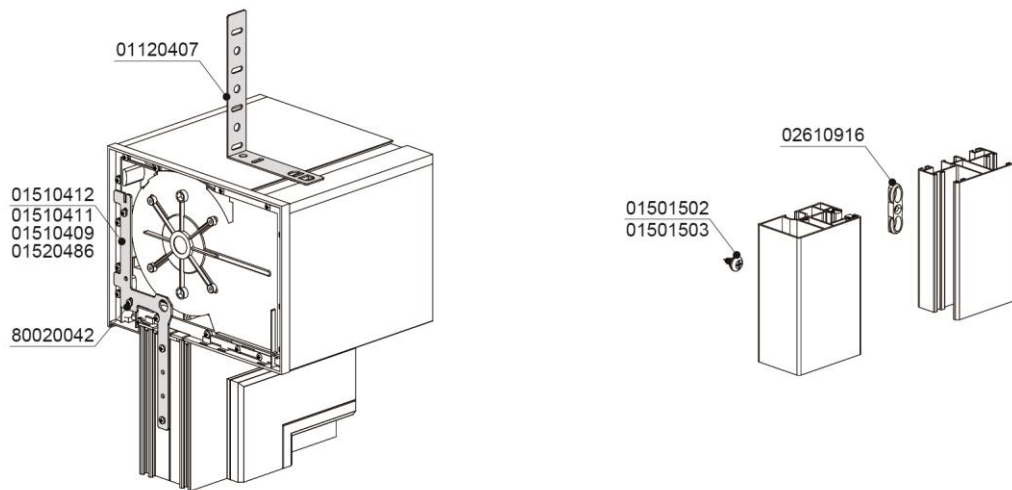
Article No.	Color	Sales representative
80020042_VZ	Galvanized	1000 STK

Top board profile made of PVC
23mm, H10



Article No.	Color	Sales representative
01510456_82	salamander white	10 x 6 LM
01510456_9016	white	10 x 6 LM

25. TOP MINI plus - mounting material



Accessory kit
for installation of guide rail 18 parts



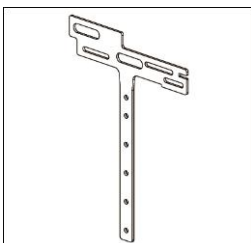
Article No.	Color	Sales representative
01501502	Galvanized	1 STK

Accessory kit
for installation of guide rail 24 parts



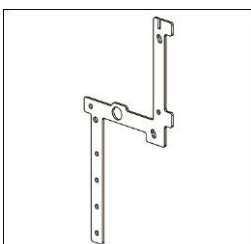
Article No.	Color	Sales representative
01501503	Galvanized	1 STK

Fastening handle
straight



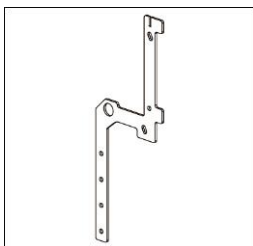
Article No.	Color	Sales representative
01520486	Galvanized	50 STK

Fastening handle
straight, for adapter profile 24mm



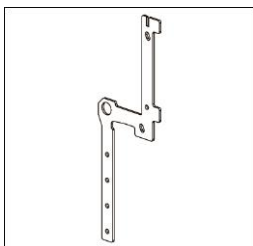
Article No.	Color	Sales representative
01510411	Galvanized	40 STK

Fastening handle
straight, for frame exceeding 70mm



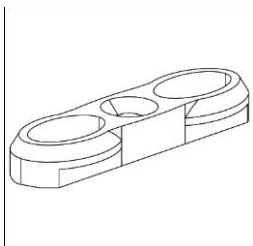
Article No.	Color	Sales representative
01510409	Galvanized	50 STK

Fastening handle
straight, for frame smaller 70mm



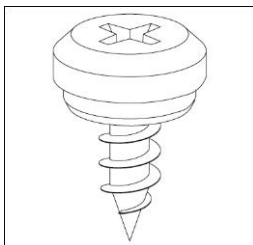
Article No.	Color	Sales representative
01510412	Galvanized	100 STK

Mounting clip
for aluminium guide rails



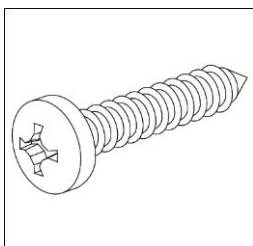
Article No.	Color	Sales representative
02610916	Black	200 STK

Nipple screw
4.2x10 KS without drillbit



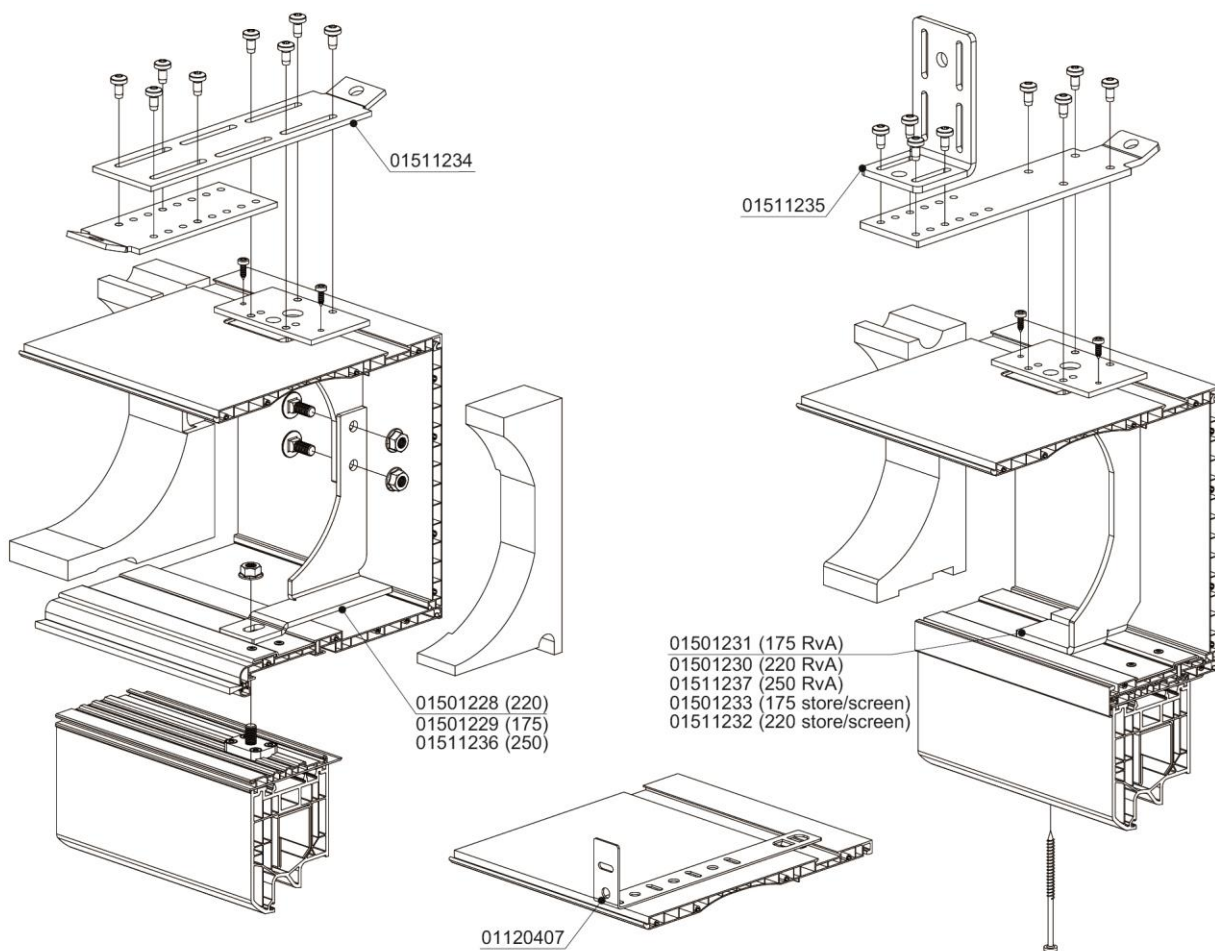
Article No.	Color	Sales representative
80500007	Galvanized	1000 STK

Pan-head tapping screw
similar DIN7981C 3.5x19 - C - 3.9H cross recession

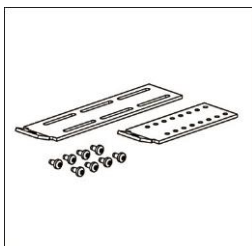


Article No.	Color	Sales representative
80020042_VZ	Galvanized	1000 STK

26. TOP MINI plus - statics bracket

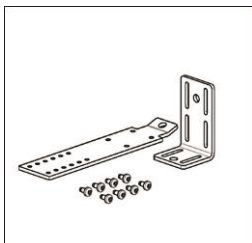


Accessory kit fastening lug
for window frame stabilization



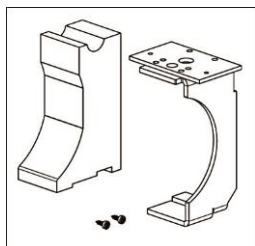
Article No.	Color	Sales representative
01511234		1 STK

Accessory kit mounting bracket
for window frame stabilization



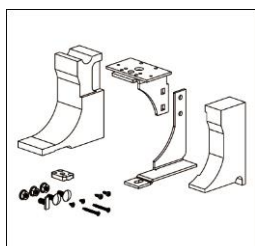
Article No.	Color	Sales representative
01511235		1 STK

Accessory kit window frame stabilization
175, RvA



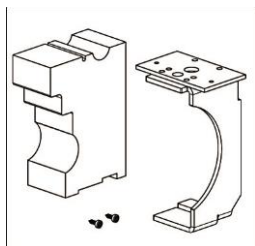
Article No.	Color	Sales representative
01501231		1 STK

Accessory kit window frame stabilization
175, RvU/RvI



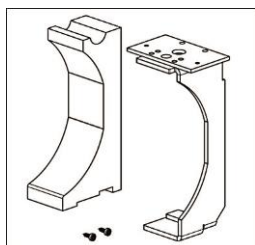
Article No.	Color	Sales representative
01501229		1 STK

Accessory kit window frame stabilization
175, store/screen



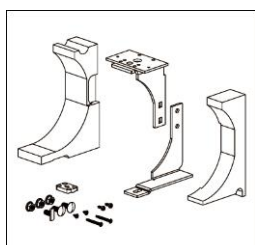
Article No.	Color	Sales representative
01501233		1 STK

Accessory kit window frame stabilization
220, RvA



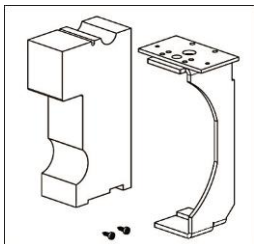
Article No.	Color	Sales representative
01501230		1 STK

Accessory kit window frame stabilization
220, RvU/RvI



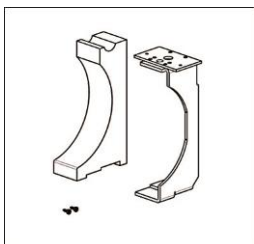
Article No.	Color	Sales representative
01501228		1 STK

Accessory kit window frame stabilization
220, store/screen



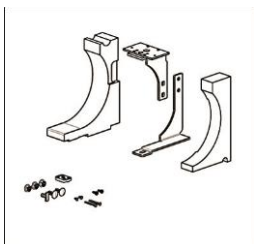
Article No.	Color	Sales representative
01501232		1 STK

Accessory kit window frame stabilization
250, RvA



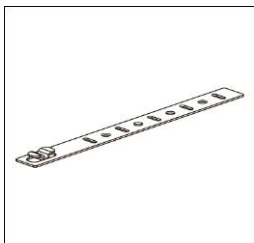
Article No.	Color	Sales representative
01511237		1 STK

Accessory kit window frame stabilization
250, RvU/RvI



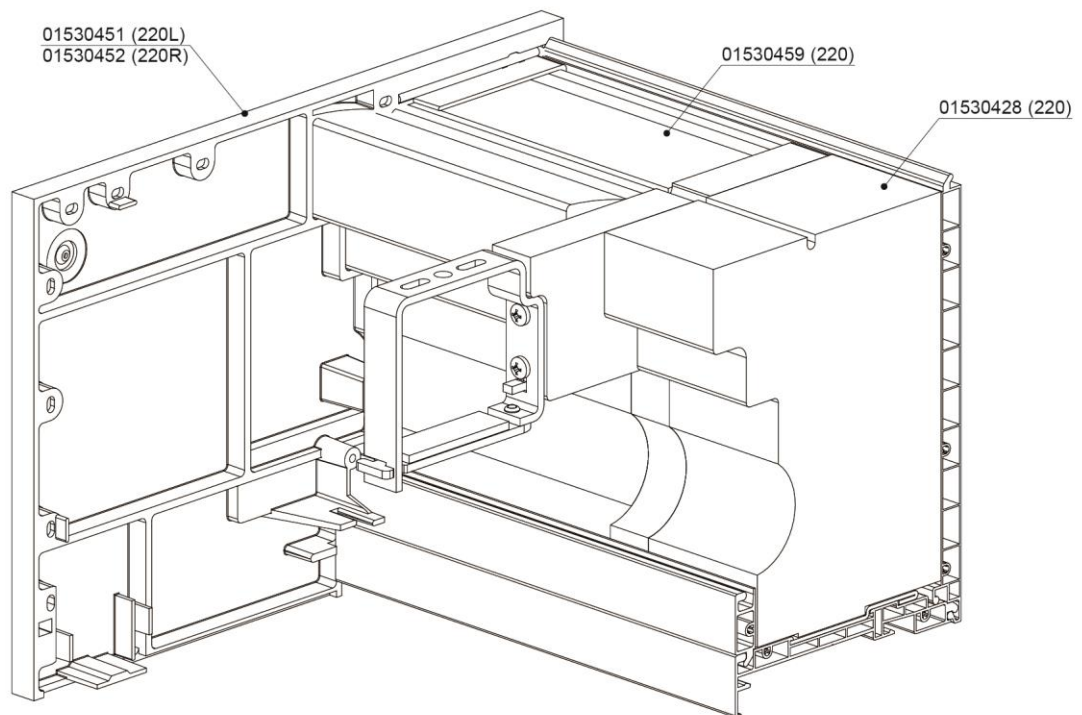
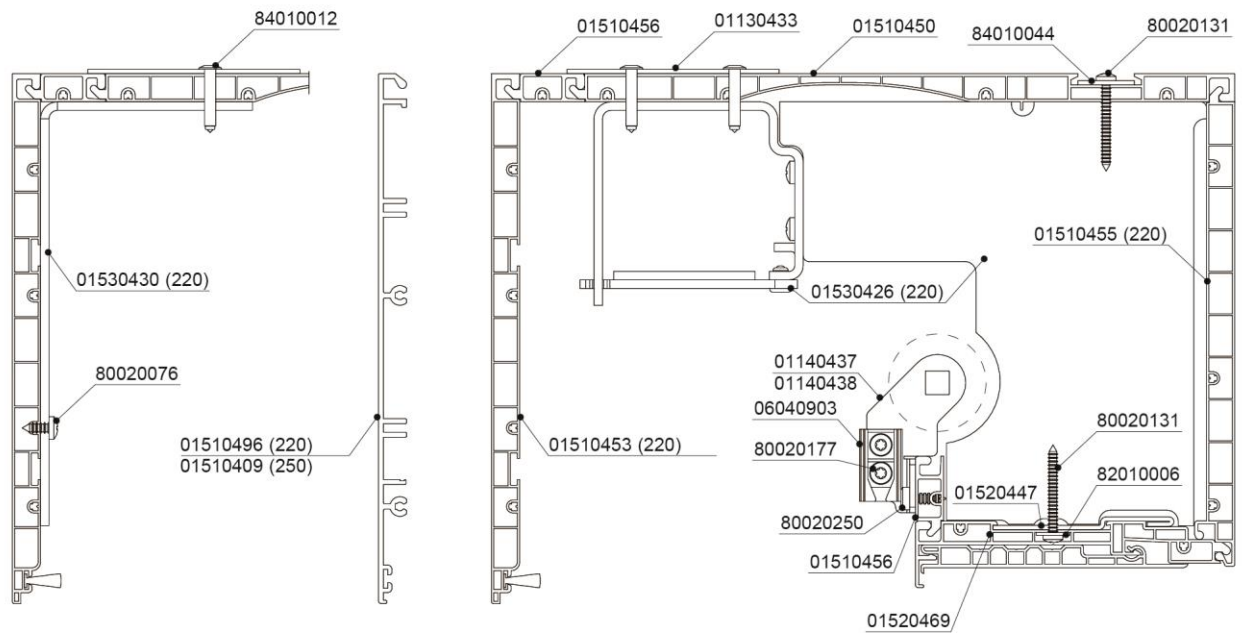
Article No.	Color	Sales representative
01511236		1 STK

Screw-in anchor
for box fixture

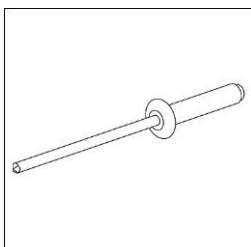


Article No.	Color	Sales representative
01120407	Galvanized	150 STK

27. TOP MINI plus store



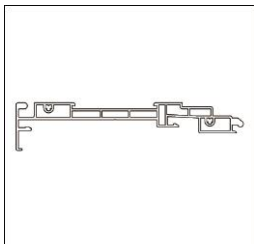
Blind rivet
DIN7337A 04x20



Article No.	Color	Sales representative
84010012	Aluminium/stainless steel	500 STK

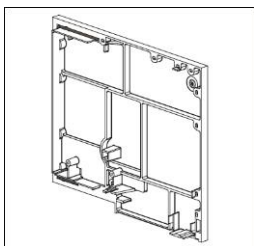
Floor base profile made of PVC

RvA



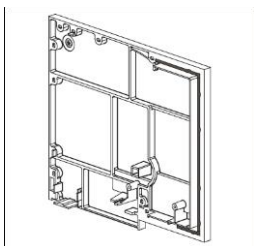
Article No.	Color	Sales representative
01520469_82	salamander white	5 x 6 LM
01520469_9016	white	5 x 6 LM

Header store with sealing cord
220 square, on the left side



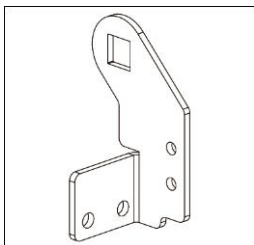
Article No.	Color	Sales representative
01530451_9016	white	20 STK

Header store with sealing cord
220 square, on the right side



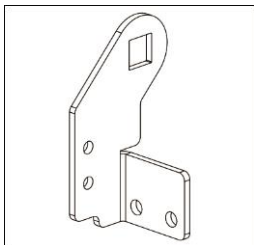
Article No.	Color	Sales representative
01530452_9016	white	20 STK

Holder insect screen
on the left side, guide rail mounted offset, store



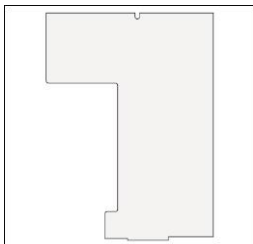
Article No.	Color	Sales representative
01140437	Galvanized	10 STK

Holder insect screen
on the right side, guide rail mounted offset, store



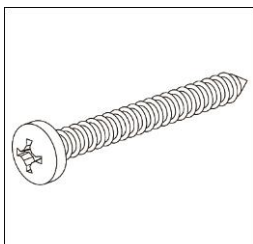
Article No.	Color	Sales representative
01140438	Galvanized	10 STK

Insulation profile
220 - store



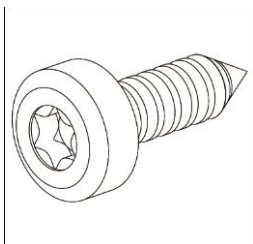
Article No.	Color	Sales representative
01530428		22 x 1 LM

Pan-head tapping screw
DIN7981C 3.5x32 with cross recess



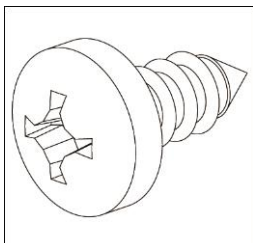
Article No.	Color	Sales representative
80020131_VZ	Galvanized	1000 STK

Pan-head tapping screw
DIN7981C 3.9x13 AW20



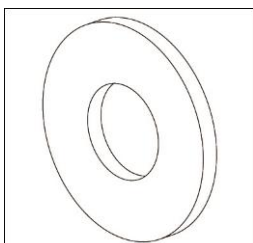
Article No.	Color	Sales representative
80020250	blank A2	1000 STK

Pan-head tapping screw
DIN7981C 3.9x9.5 with cross recess



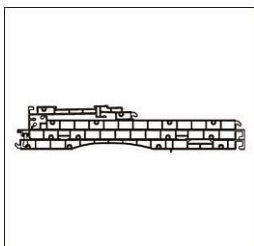
Article No.	Color	Sales representative
80020076_VZ	Galvanized	1000 STK

Plain washer
DIN134 05



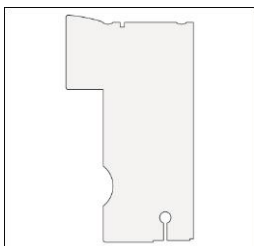
Article No.	Color	Sales representative
82010006	Galvanized	5000 STK

Profile kit without adapter profile
220x240 RvA - square, with clip connection



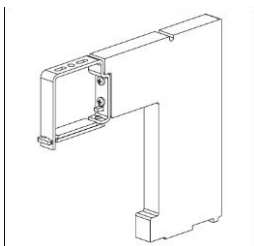
Article No.	Color	Sales representative
01530407_82	salamander white	1 x 6 LM
01530407_9016	white	1 x 6 LM

Side cover insulation
220 store



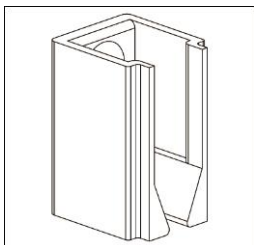
Article No.	Color	Sales representative
01530459	grey	25 x 1 LM

Stabilizer with vertical bracket
220 - store



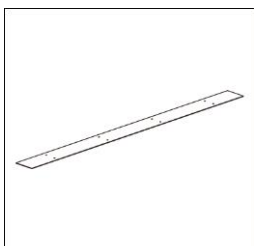
Article No.	Color	Sales representative
01530426		60 STK

Stopper
for insect screen end rod without locking screw



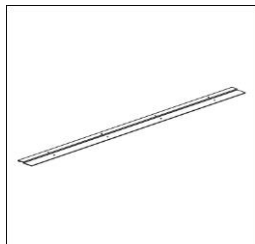
Article No.	Color	Sales representative
06040903	Black	200 STK

Strengthening of the bottom
75x1.5mm



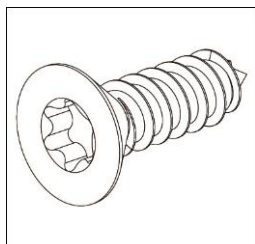
Article No.	Color	Sales representative
01130433	Galvanized	5 x 6 LM

Strengthening of the bottom
Standard



Article No.	Color	Sales representative
01520447	Galvanized	10 x 6 LM

Tapping screw with countersunk head
DIN7982C 3.9x13 AW20



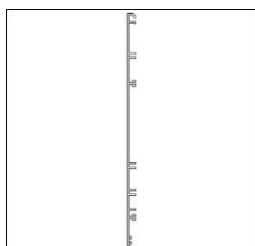
Article No.	Color	Sales representative
80020177	blank A2	1000 STK

Top board profile
220 - Front side



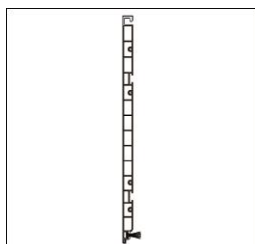
Article No.	Color	Sales representative
01510496_8077	dark brown	5 x 6 LM
01510496_9016	normal white	5 x 6 LM
01510496_BL	blank	5 x 6 LM
01510496_C0	naturally anodised E6-EV1	5 x 6 LM
01510496_DEKC	Foil in special color laminated on chromated profile	1 x 6 LM
01510496_SOFA	Special color powder-coated	1 x 6 LM
01510496_XXXX	Color as per color chart	1 x 6 LM

Top board profile
250 - Front side



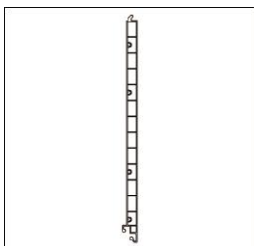
Article No.	Color	Sales representative
01530409_8077	dark brown	2 x 6 LM
01530409_9016	normal white	2 x 6 LM
01530409_BL	blank	2 x 6 LM
01530409_C0	naturally anodised E6-EV1	2 x 6 LM
01530409_DEKC	laminated on chromated profile	2 x 6 LM
01530409_SOFA	Special color powder-coated	1 x 6 LM
01530409_XXXX	Color as percolor chart	1 x 6 LM

Top board profile made of PVC
220 - front side, with brush



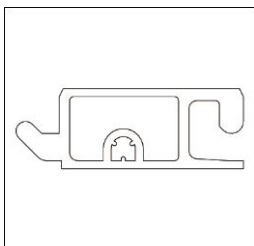
Article No.	Color	Sales representative
01510453_9016	white	5 x 6 LM
01510453_DEKB	Foil in special color laminated on brown profile	1 x 6 LM
01510453_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510453_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
220 - inspection cover inside



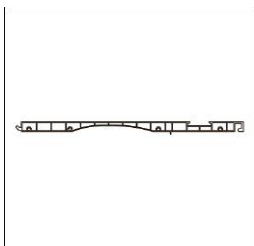
Article No.	Color	Sales representative
01510455_9016	white	5 x 6 LM
01510455_DEKB	Foil in special color laminated on brown profile	5 x 6 LM
01510455_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510455_XXXX	Color as per color chart	1 x 6 LM

Top board profile made of PVC
23mm, H10



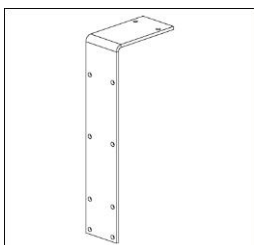
Article No.	Color	Sales representative
01510456_82	salamander white	10 x 6 LM
01510456_9016	white	10 x 6 LM

Top board profile made of PVC
Upper side



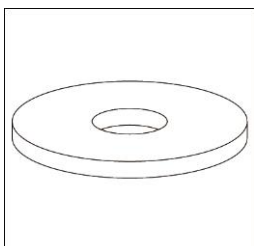
Article No.	Color	Sales representative
01510450_9016	white	5 x 6 LM
01510450_DEKB	Foil in special color laminated on brown profile	5 x 6 LM
01510450_DEKW	Foil in special color laminated on white profile	1 x 6 LM
01510450_XXXX	Color as per color chart	1 x 6 LM

Top board strengthening bracket
220 - store



Article No.	Color	Sales representative
01530430		25 STK

Wing panel
DIN522 6.4x20x1.5

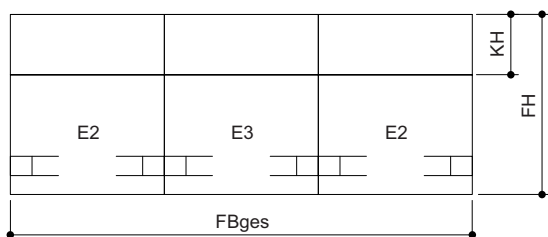
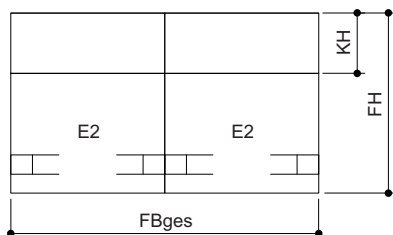
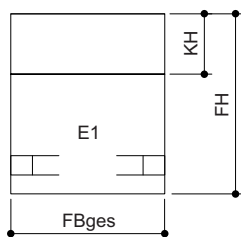


Article No.	Color	Sales representative
82010044_VZ	Galvanized	200 STK

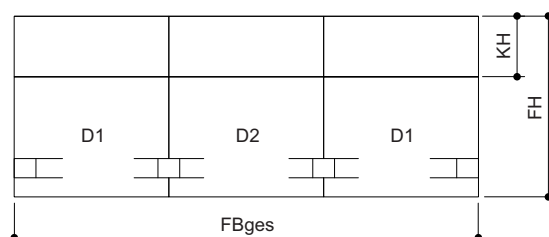
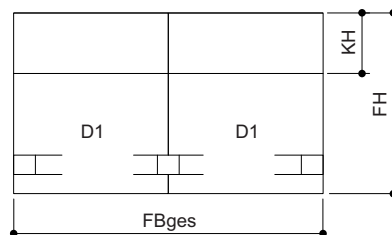
Assembly instructions

Cutting dimensions

Single guide rail



Double guide rail



Legend

- FBges Total complete width (FB1+FB2...)
- FH Complete height
- KH Box height
- VE Offset entry

Note

Illustration seen from the inside

Box size	Box height KH [mm]
175x240	175
220x240	220
250x263	250

Assembly instructions

Cutting dimensions

Profile	Design	Cutting dimension Rv/RvU				
		E1.	E2	E3	D1	D2
Top board profiles	Standard			FBges - 22		
Clip profile	Standard			FBges - 22		
Plaster angle	Standard			FBges		
Plaster base	Standard			FBges		
Strengthening of the bottom	Standard + IS			FBges - 85 - C le - C ri		
Thermal insulation	Standard		FBx - 72		E1 + 30	E1 + 60
End rod	Standard			Cutting dimension of curtain		
	Stop tab			Curtain width - 60		
Curtain width	General		FBx - 82 - VE le + B le - VE ri + B ri		E1 + 30	E1 + 60
	Cutting dimension of plastic profile			Curtain width		
	Cutting dimension A37			Curtain width - 8		
	Cutting dimension A52			Curtain width - 10		
Shaft 40 mm	Standard	FBx - 100	E1 - 37		E1 - 7	
	Linked element		FBx - 137	E2 - 37	FBx - 107	D1 - 7
	Oversize per adjacent twin screw bolt (coupling)			Shaft length + 9 (applies to standard and coupled element)		
Shaft 60 mm	Standard	FBx - 120	E1 - 23		E1 + 7	
	Linked element		FBx - 137	E2 - 23	FBx - 143	D1 + 7
	Measurement per adjacent twin screw bolt (coupling)			Shaft length + 21 (applies to standard and coupled element)		
guide rail	Standard			FH - KH - 9		
	Measurement of diagonal cut			Standard length + FsDepth * tan (cutting angle)		
Insect screens	Chamber profile			FBx - 83 - C le - C ri		
	Shaft with screen			FBx - 86 - C le - C ri		
	End rod			FBx - 133 - C le - C ri		
	Brush in end rod			Length of the insect screen end rod +13		
	Measurement per adjacent double guide rail			Profile length + 31		

VE = engagement dimension of the guide rail (outer edge of guide rail to finished dimension)

Dimension B = Indentation due to guide rail or minimum indentation dimension

- 0 mm for guide rail 01130901, 01130902, 01130903, 01130909, 01500902, 01500904
- 16 mm for guide rail 01130936
- 25 mm for guide rail 01130934, 01130935

Dimension C = actual offset from entry guide from side cover; C=0 or C>10; C = VE - B

Example for determining the curtain width of plastic profiles:

Single element, FB 1000 mm, VE left 0 mm (standard), VE right 30 mm, guide rail 01130936

$$\begin{aligned}
 \text{Curtain width} &= \text{FBx} && - 82 && - \text{VE le} && + \text{B le} && - \text{VE ri} && + \text{B ri} \\
 \text{Curtain width} &= && 1000 && - 82 && - 16 && + 16 && - 30 && + 16 && = 904 \text{ mm}
 \end{aligned}$$

Assembly instructions

Cutting dimensions

Profile	Design	Cutting dimension RvA				
		E1.	E2	E3	D1	D2
Top board profiles	Standard	FBges - 22				
Clip profile	Inspection cover	FBx - 89 - VE le + B le - VE ri + B ri			E1 + 16	E1 + 32
Plaster angle	Standard	FBges				
Plaster base	Standard	FBges				
Strengthening of the bottom	Standard + IS	FBges - 85 - C le - C ri				
Thermal insulation	Standard	FBx - 72	E1 + 11	E1 + 22	E1 + 30	E1 + 60
End rod	Standard	Cutting dimension of curtain				
	Stop tab	Curtain width - 60				
Curtain width	General	FBx - 86 - VE le + B le - VE ri + B ri			E1 + 17	E1 + 34
	Cutting dimension of plastic profile	Curtain width				
	Cutting dimension A37	Curtain width - 8				
	Cutting dimension A52	Curtain width - 10				
Shaft 40 mm	Standard	FBx - 100	E1 - 26		E1 - 7	
	Linked element		FBx - 126	E2 - 26	FBx - 107	D1 - 7
	Measurement per adjacent twin screw bolt (coupling)	Shaft length + 9 (applies to standard and coupled element)				
Shaft 60 mm	Standard	FBx - 120	E1 - 12		E1 + 7	
	Linked element		FBx - 162	E2 - 12	FBx - 143	D1 + 7
	Measurement per adjacent twin screw bolt (coupling)	Shaft length + 21 (applies to standard and coupled element)				
guide rail	Standard	FH - KH - 9				
	Measurement of diagonal cut	Standard length + FsDepth * tan (cutting angle)				
Insect screens	Cassette profile	FBx - Pull-off le - Pull-off ri				
		Pull-off for side cover with C = 0				48.5
		Pull-off for side cover with C > 0				51.5 + C
		Pull-off for deduction E-FS 59x125				40.5
		Pull-off for deduction D-FS 84x125				21.5
	Shaft with screen	Cassette profile - 7				
	End rod	FBx - Pull-off le - Pull-off ri				
		Pull-off for E-FS 59/43x125				74.5 + C
Pull-off for D-FS 84x125				46		
	Brush in end rod	Length of the insect screen end rod +13				

VE = engagement dimension of the guide rail (outer edge of guide rail to finished dimension)

Dimension B = Indentation due to guide rail or minimum indentation dimension: 11 mm

Dimension C = actual offset from entry guide from side cover; C=0 or C>10; C = VE - B

Example for determining the curtain width of plastic profiles:

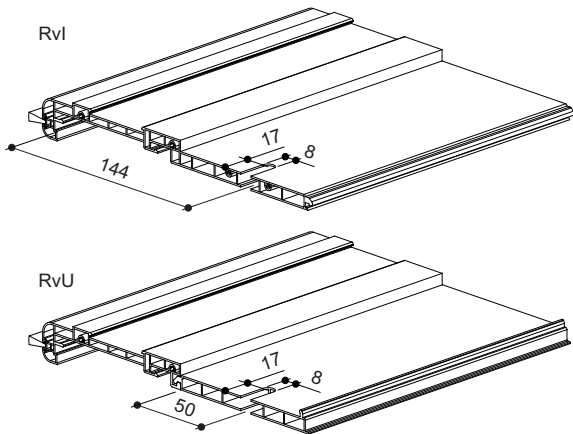
Single element, FB 1000 mm, VE left 11 mm (standard), VE right 30 mm, guide rail 01130923+01100919

Curtain width = FBx - 86 - VE le + B le - VE ri + B ri

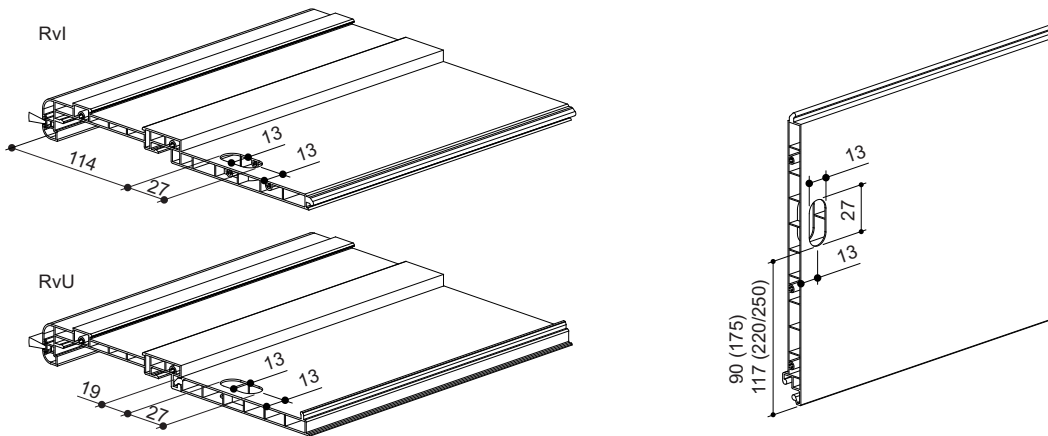
Curtain width = 1000 - 86 - 11 + 11 - 30 + 11 = 895 mm

Assembly instructions

Prefabrication of top boards



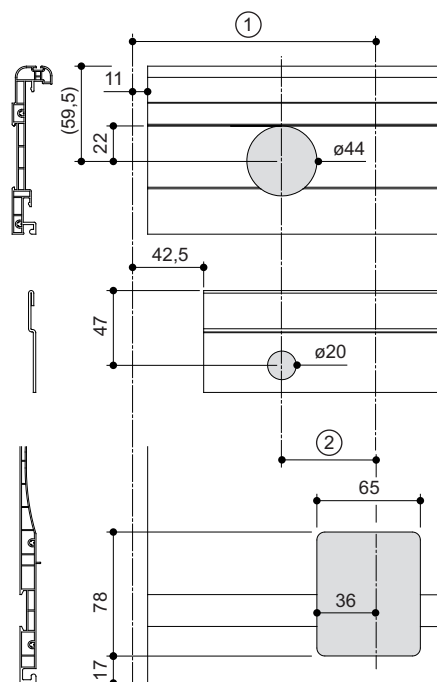
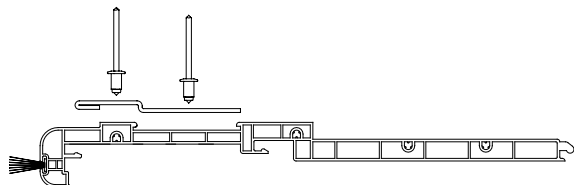
Produce recess for **lift tape guidance** as per sketch (optional with milling fixture) and insert the lift tape guidance into the recess



Crank execution diagonally downwards (left illustration) or **Crank execution** horizontally inwards (right illustration). Carry out processing according to the sketch (optionally with milling fixture).

Assembly instructions

Prefabrication of top boards



Rivet the strengthening profile with the floor profile as per illustration.

Finish the floor profile, the strengthening profile and the top board of the top part for the **statics bracket** as shown in the illustration. Within the box design RvA, only the upper part of the top board must be processed.

Legend

- ① Position of the static bracket
- ② 55 mm - Offset screw position bracket on window (RvI/RvU only)

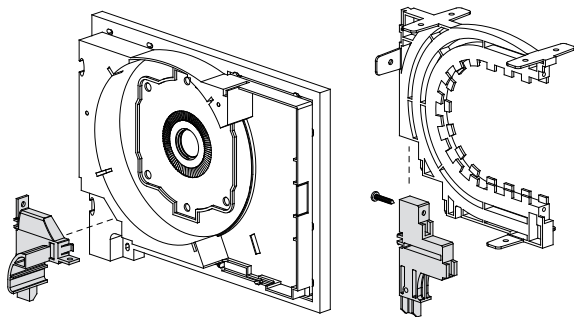
Number of brackets [Unit]	Position of the static bracket				
	A1.	A2	A3	A4	A5
1	0.5xFB				
2	0.4xFB	0.6xFB			
3	0.3xFB	0.5xFB	0.7xFB		
4	0.25xFB	0.425xFB	0.575xFB	0.75xFB	
5	0.25xFB	0.375xFB	0.5xFB	0.625xFB	0.75xFB

Legend

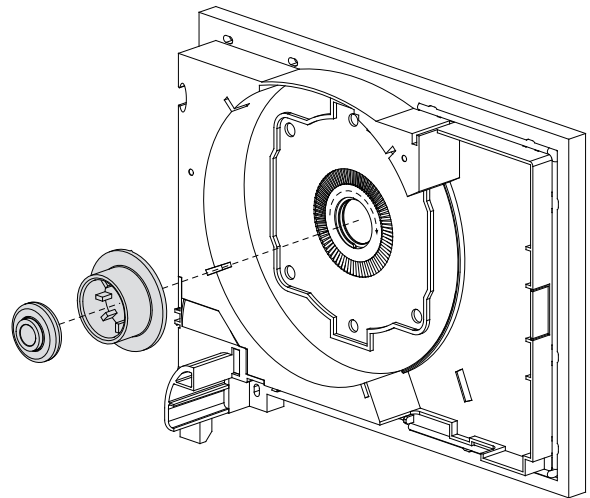
- FB Complete width
- A1 - A5 Position of the static bracket

Assembly instructions

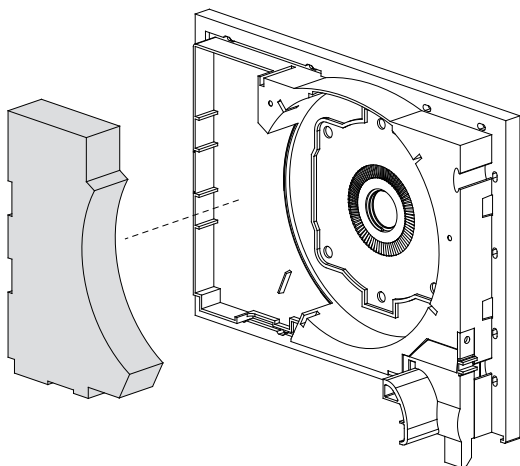
Prefabrication of end caps



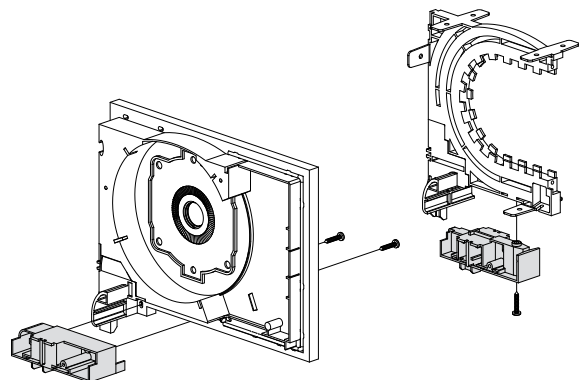
Attach the **entry guide** to the side cover or in case of a centre bearing additionally screw it together. Depending on the type of curtain (small/large spacing) and box design (with/without insect screen inside/outside), different types of entry guides are available.



Screw the **screw-in bushing** at the tape pulley and roller capsule in the side cover and push the **ball bearing/slide bearing** into the screw-in bushing (collar towards the centre of the box). With an offset entry of 11mm the ball bearing/slide bearing is installed with the collar towards the outside at the driving end.



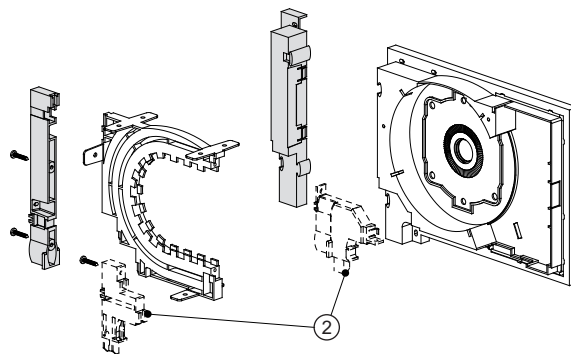
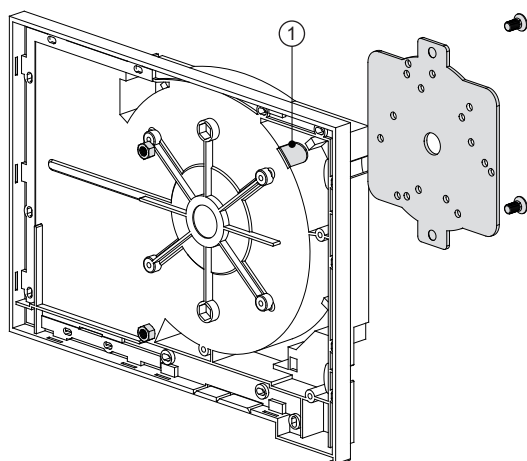
Press the **side cover insulation** into the side cover.



Screw the **side cover adapter RvA** to the side cover and centre bearing, respectively.

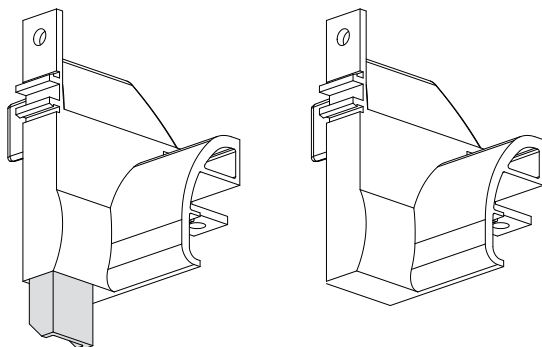
Assembly instructions

Prefabrication of end caps



Break the side cover at the relevant depressions and insert a hexagon nut on the outside. **Screw the mounting plate for the lift tape gear, crank handle or motor drive** onto the side cover. With the motor drive, the break-out section for the cable (1) must be additionally broken through.

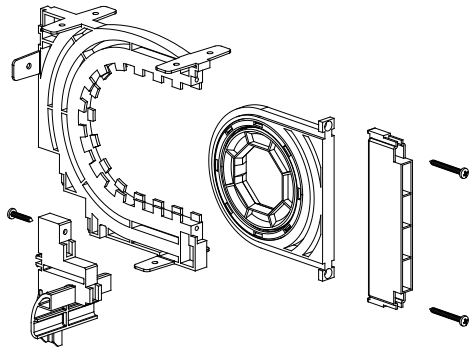
With insect roller screen moscitta: Attach adapter to side cover or in case of centre bearing additionally screw it together. Use entry guide filler pieces (2) instead of the standard entry guide.



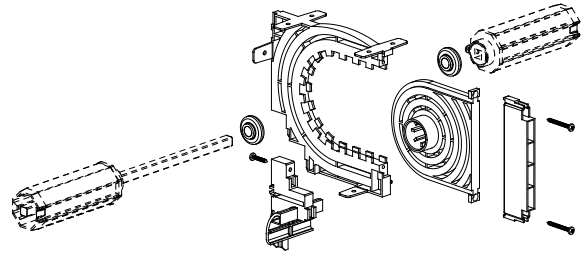
Remove the positioning strut at the entry guide with design RvA without offset guide rail.

Assembly instructions

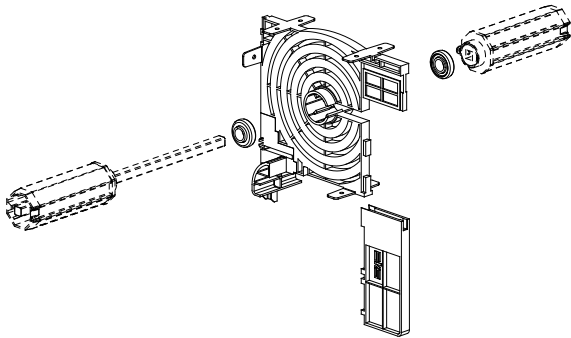
Prefabrication centre bearing



Shaft continuous (only with RvI) slide the slide-in bearing for the suitable shaft size into the centre bearing body, slide-in the centre bearing filler piece into the centre bearing body and screw it together. This design is also used with the offset entry.



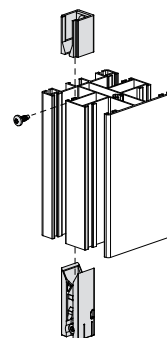
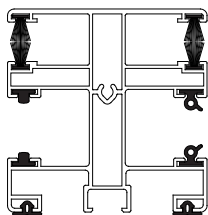
Shaft parted Provide the slide-in bearing with ball bearings/slide bearings (the collar is turned away from the centre bearing) and slide it into the centre bearing body. Slide the centre bearing filler piece into the centre bearing body and screw them together.



Shaft parted with linkage (with RvU and RvA) Insert twin shaft pin with the ball bearings/slide bearings into the centre bearing. The groove in the centre bearing body can be closed by means of the centre bearing lock.

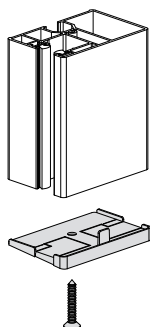
Assembly instructions

Prefabrication of guide rails

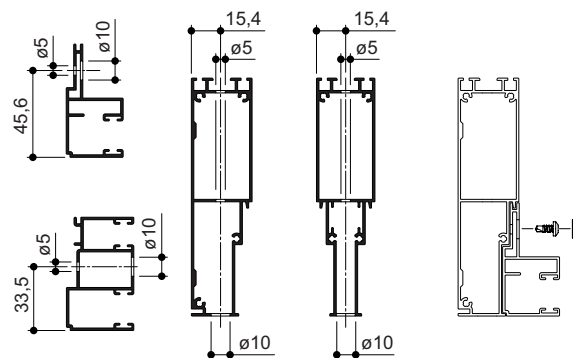


Adjust or complement the **brushes or seals in the guide rails** as needed. Secure the guide rail inserts by means of adhesive or clamps in the aluminium tabs in the guide rail. Cut the keder diagonally at the upper side of the guide rail.

With the **insect roller screen** the **locking piece** must be inserted and clamped into the insect screen running duct flush with the lower edge of the guide rail. To set the upper limit stop of the insect screen end rod to a lower position (optional), insert the stopper into the guide rail and tighten it.



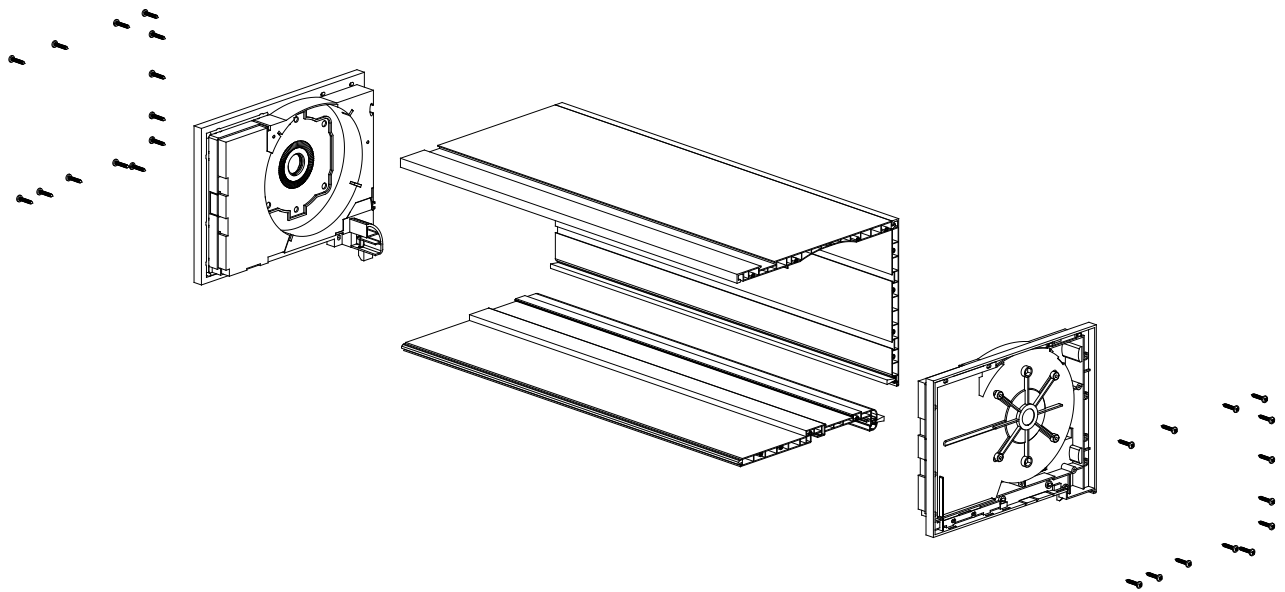
Screw **end cap** onto the guide rail if necessary.



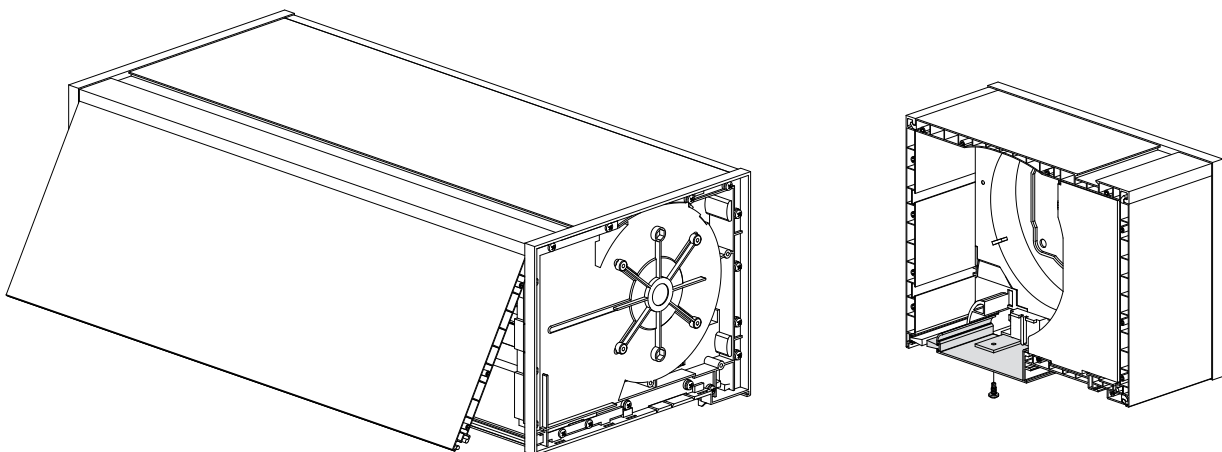
Drill the RvA guide rails and base profiles as per illustration, and assemble this with the drilling screw and the covering cap.

Assembly instructions

Assembling the roller shutter box



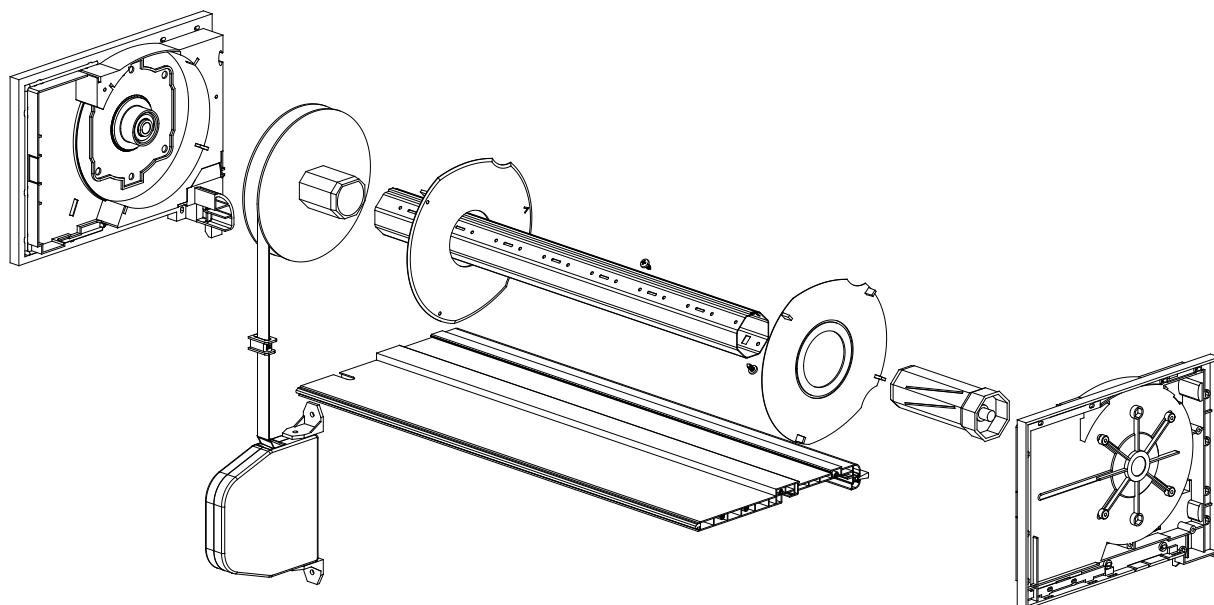
Attach the **floor profile** to the **headers** and screw together. Put the upper part and the front top board together and screw it together with the headers. The rear top board is not closed until the roller shutter curtain and possibly the insect screen are installed.



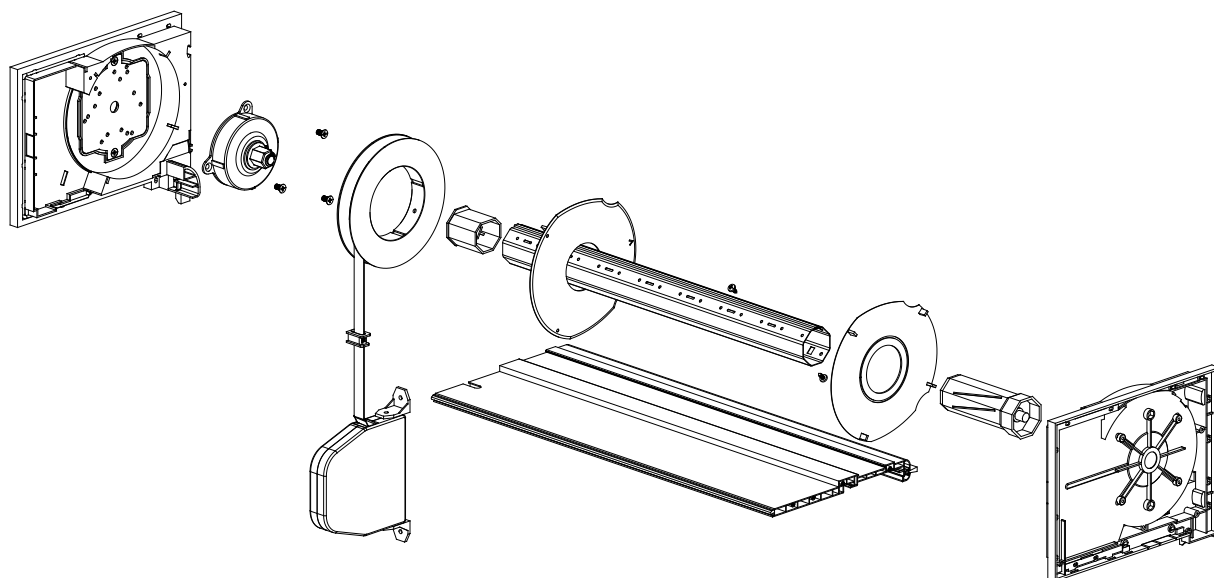
As soon as the roller shutter curtain or the insect screen are installed the **rear top board** is closed. With the design RvU, the rear top cover is also screwed together with the side cover. With the designs RvU and RvA, the rear top board is also screwed together with the side cover. With design RvA, the fastening lugs are stuck into the side cover adapters and then screwed together with the inspection cover.

Assembly instructions

Assembling the octagon steel shaft



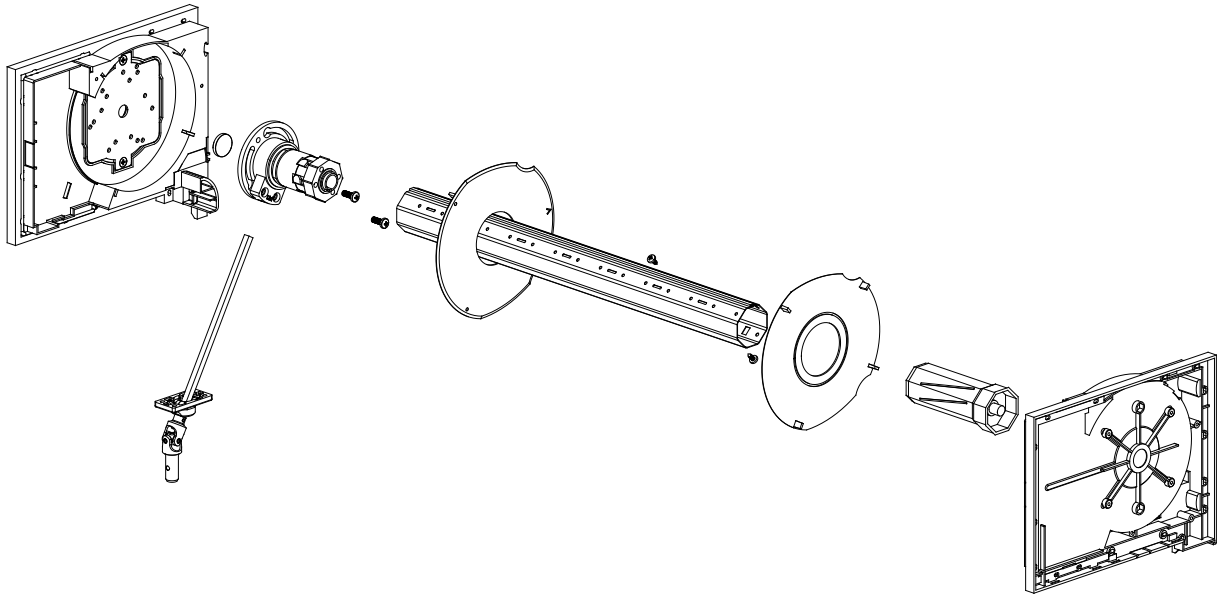
Belt drive: Put together the steel shaft as per illustration. Thread the lift tape through the lift tape guidance and hook it into the tape pulley. Put the roller capsule on the drive side into the roller bearing/slide bearing. Pull the opposite roller capsule out of the shaft and put it into the ball bearing/slide bearing, too. With an axial play of 1mm the roller capsule is secured by means of two opposite screws. Push deflector plates onto headers. Coil the lift tape onto the lift tape roll until 2m are left.



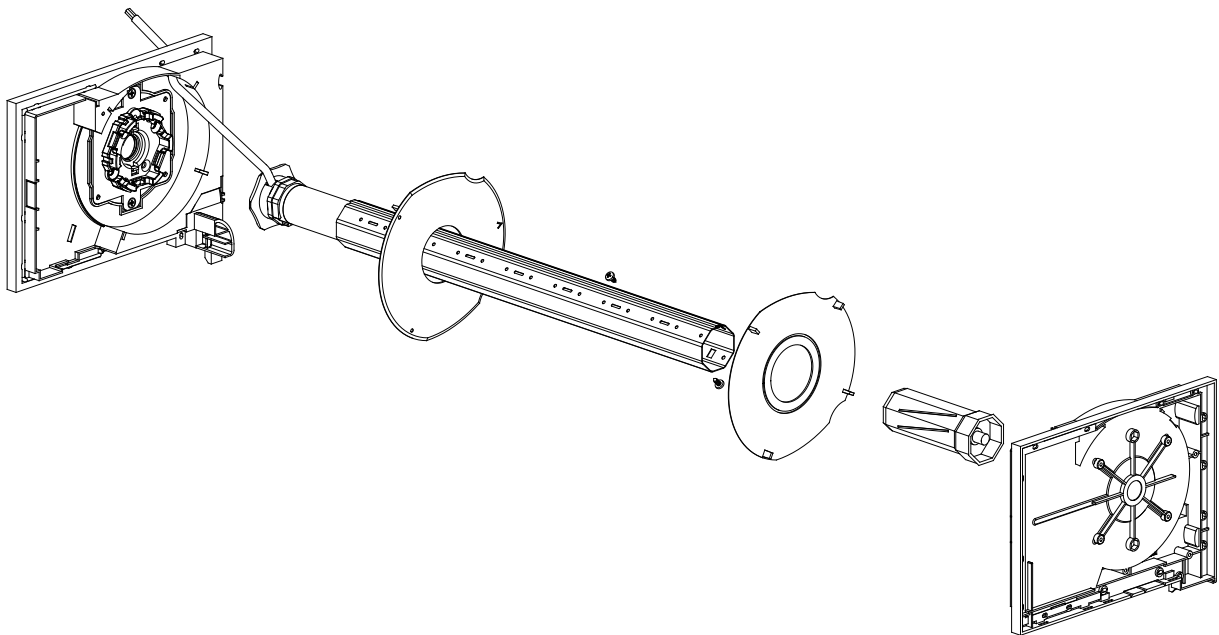
Lift tape gear: Put together the steel shaft as per illustration. Thread the lift tape through the lift tape guidance and hook it into the tape pulley. Screw the gear onto the mounting plate. Pull the roller capsule out of the shaft and insert it into the ball bearing/slide bearing. With an axial play of 1mm the roller capsule is secured by means of two opposite screws. Push deflector plates onto headers. Coil the lift tape onto the lift tape roll until 4m are left.

Assembly instructions

Assembling the octagon steel shaft



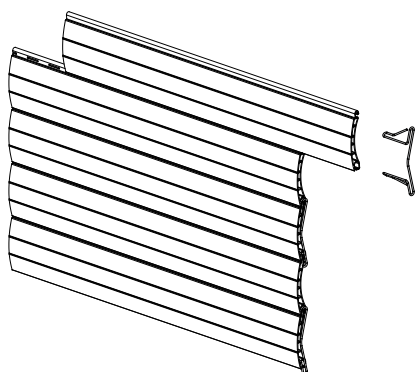
Crank handle drive: Put together the steel shaft as per illustration. Attach the gear onto the mounting plate by means of the centring aid and screw it down. Pull the roller capsule out of the shaft and insert it into the ball bearing/slide bearing. With an axial play of 1mm the roller capsule is secured by means of two opposite screws. Push deflector plates onto headers. Put the spherical bearing square through the top board into the gear and screw down the spherical bearing.



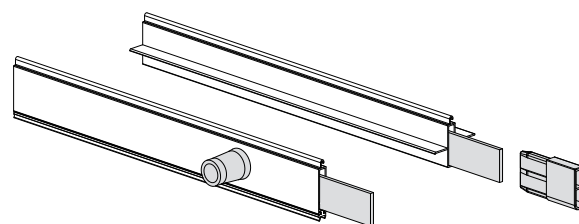
Motor drive: Put together the steel shaft as per illustration. Take the motor cable through the duct hole in the side cover. Put the motor into the motor bearing and equip with a retaining ring if necessary. Pull the roller capsule out of the shaft and insert it into the ball bearing/slide bearing. With an axial play of 1mm the roller capsule is secured by means of two opposite screws. Push deflector plates onto side covers.

Assembly instructions

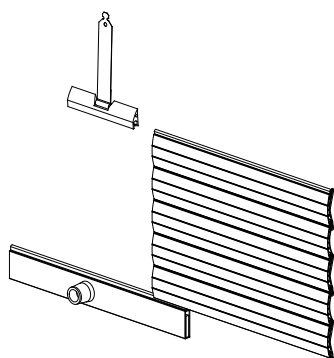
Assembly of the roller shutter curtain



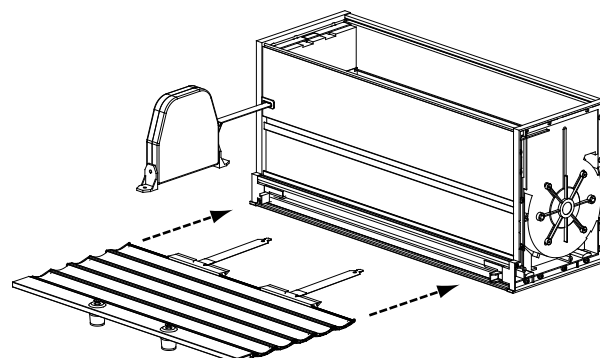
Telescope the **roller shutter profiles** – the upper profiles must be mounted without light gaps. Lock profiles if necessary.



Slightly bend the weighting steel and slide it into the **end rod**. Insert the sealing profile into the groove, if necessary. Attach the end piece to the end rod if necessary. Drill the end rods without stop tab at an edge distance of 42mm and equip them with stop plugs. The stop plugs always butt against the front top board. With *moscita* on the outside the stop plugs are turned towards the inside.



Slide the **suspensions** and end rod onto the roller shutter blind. Roll up the blind with the end rod first.



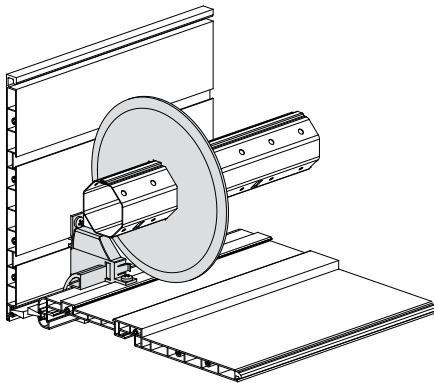
Hook the suspensions into the octagon steel shaft or secure it onto the octagon steel shaft and **roll up the roller shutter curtain in the box** by operating the drive on the shaft.

Recommended number of suspensions with the respective curtain width:

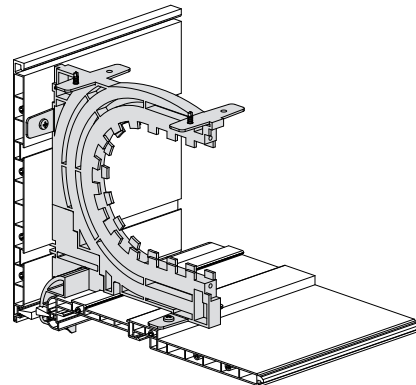
Curtain width	Number
≤1200mm	2 units
1201 – 1800 mm	3 units
1801 – 2400 mm	4 units
2401 – 3000 mm	5 units
3001 – 3600 mm	6 units
3601 – 4000 mm	7 units

Assembly instructions

Assembly of guide rail offset



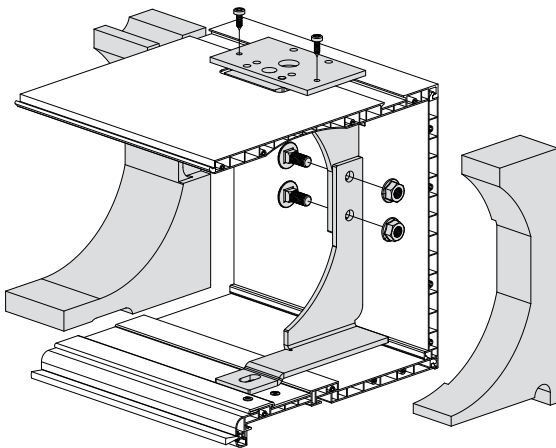
Offset entry with deflector plate: Screw the entry guide to the floor profile and the front top board. Position the deflector disc flush with the entry guide and secure it by means of two screws. Not available with insect screen on the outside.



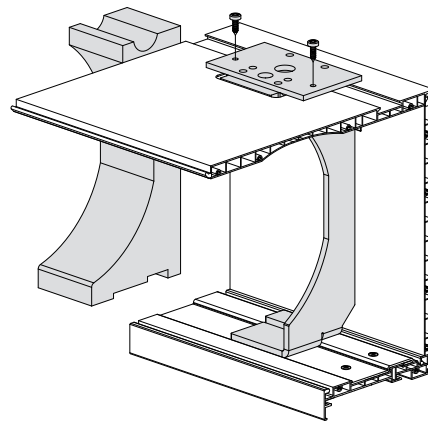
Offset entry with centre bearing: See article "Prefabrication centre bearing" for assembly of the centre bearing. Screw the centre bearing onto the top boards on the blind side.

- **Offset >36mm**
no additional processings
- **Offset 23-36mm**
Remove the fastening lugs facing the side cover at the centre bearing
- **Offset 11-22mm**
Remove the entry guide facing the side cover and fastening lugs at the centre bearing.

Mounting the window frame stabilization



Screw the upper part of the window frame stabilization RvU/RvI to the upper part of the top board profile. Screw the upper and lower part of the window frame stabilization together and insert the insulation parts.



Screw the window frame stabilization RvA to the upper part of the top board profile and insert the insulation part.

Assembly instructions

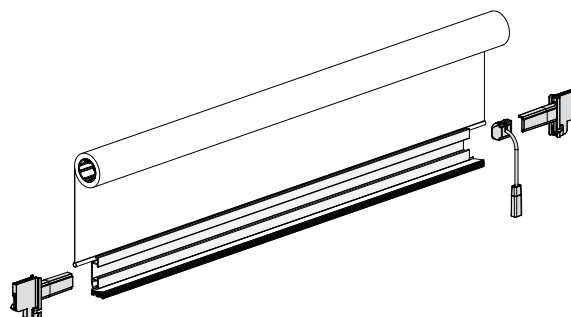
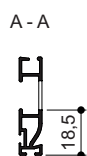
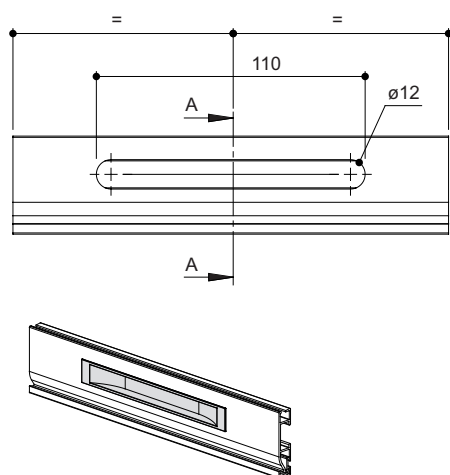
Assembly insect roller screen moscita

The rough number of rotations for pre-tensioning the spring mechanics can be obtained from the table below (deviations are possible).

Attention

Be especially careful when working with the spring shafts in order to avoid injuries! The ratchet is an aid to facilitate the installation. Do not tension the shaft prior to the installation. Pre-tensioned shafts must not be transported or left lying about.

Height [mm]	Width [mm]							
	600	800	1000	1200	1400	1600	1800	2000
1800	16	17	18	19	20	22	24	24
2500		20	22	22	24	24	26	26

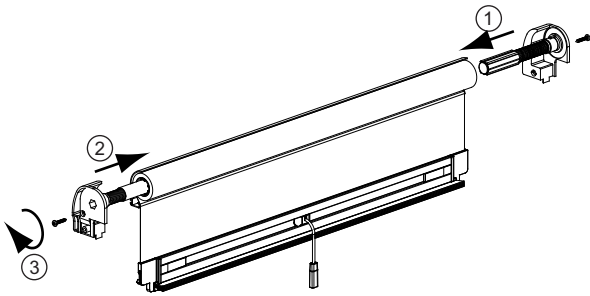


Mill the end rod according to sketch out and insert the **inset type handle** for the operation from both sides (optional) into the long hole

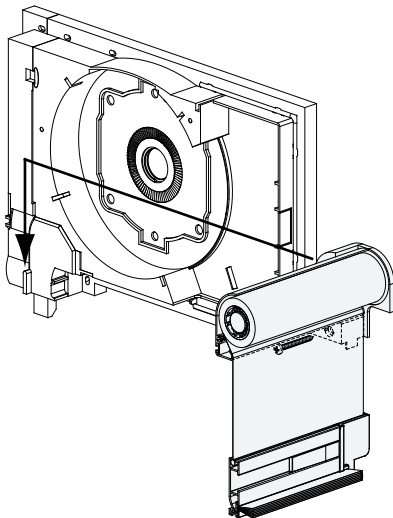
Insert brushes, pull cord and insect screen into the **end rod**, attach end pieces to the end rod. Installation moscita inside: Brush towards the inside; moscita outside: Brush faces towards the bottom

Assembly instructions

Assembly insect roller screen *moscita*

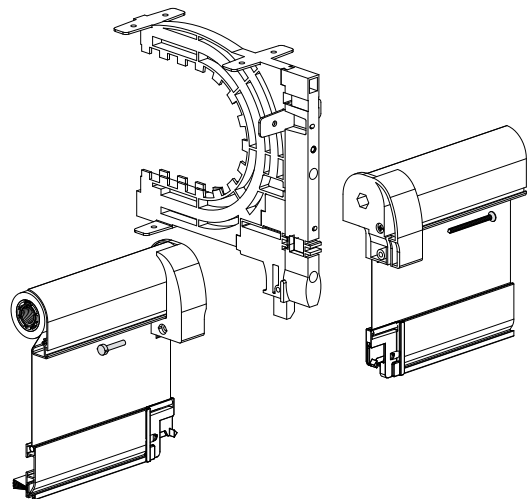


Assembly **moscita RvU, RvI and RvA**: Insert the end piece on the right side with the brake into the insect screen shaft and screw it onto the cassette. Insert the end piece on the left side with the spring mechanics into the insect screen shaft and pre-tension the spring mechanics by turning the end piece. Screw the right end piece onto the cassette. Hook the screen into the guide notch.



Installation **moscita RvU and RvI**: The end pieces of the roller blind are inserted in the area of the entries via the guides and screwed into the side cover.

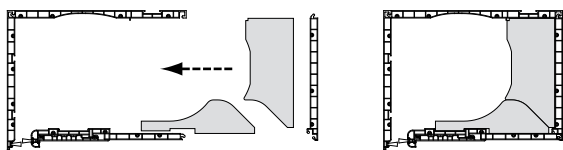
Installation **moscita RvA**: The end pieces of the roller screen are stuck over the guidings of the side cover adapters and screwed.



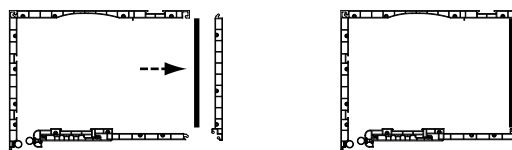
In case of a splitting, the end pieces are screwed down by means of a screw and the installation dowel included in the drive set.

Assembly instructions

Heat and noise insulation

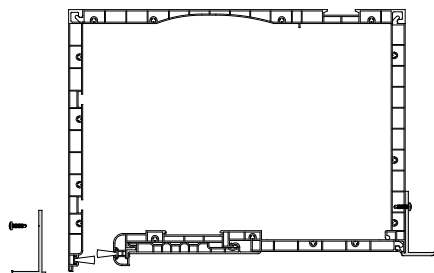


Thermal insulation of the box by inserting the insulation profile (thermal insulation kit) in the roller shutter box.

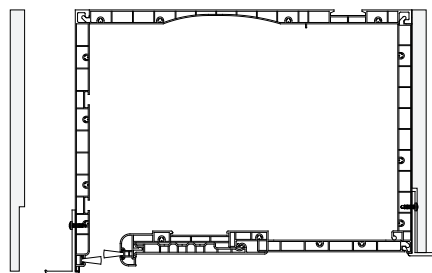


Sound insulation of the box by glueing the sound insulation foil onto the rear top board and by replacing the sealing brushes with sealing profiles.

Plaster base



Screw or rivet the **plaster base profile** to the rear top board (not with RvI) or to the front top board (aluminium front top board) as necessary.



Recess the **plaster base** in the area of the plaster base profile (approx. 35x3mm) and glue it to the top board of the box. Secure the plaster flange by means of wing panel and screw if necessary.

Explanation of the pictograms

General

The following symbols will assist you with the installation or use and require a safety-conscious conduct:



Attention!

This symbol indicates instructions that, if disregarded, can put the user in danger.



Attention!

This symbol indicates instructions that, if disregarded, can potentially result in damage to the product.



This symbol indicates instructions for use or helpful information.



This symbol requires you to act.



Attention!

This symbol indicates a risk of injury or danger to life due to an electric shock.



This symbol indicates parts of the product, for which you will find important information in these installation instructions.



Attention!

This symbol indicates possible risk of injury by crushing.



This symbol indicates the cleaning of the product.



This symbol indicates the maintenance and repair of the product.

Safety instructions



These installation instructions refer to prefabricated elements, that (1) for 100% are made from parts, which are defined by us, and (2) which are made in manufacturing processes, which are defined by us too; in all other cases we do not provide any guarantee!

The safety instructions as well as the appropriate instructions must be read carefully before installation and use. In case of non-observance of the directions and information given in these instructions and in case of improper installation and operation or unintended use, the manufacturer shall not accept any warranty claims concerning any damage to the product. In these cases, the liability for consequential damage to any parts or persons is ruled out as well.



- Follow the described installation steps and pay attention to recommendations and notes.
- Keep these instructions in a safe place.
- All installation and removal works, as well as maintenance and repair works are only allowed to be carried out by authorised and qualified specialist staff.
- If switching, automatic or radio control devices are used to operate the units, the information given in the enclosed instructions of the manufacturer must be observed.
- During operation do not put your hand into or touch movable parts.
- Ensure that clothing or body parts cannot get caught on the unit.
- Observe the regulations for prevention of accidents of the employer's liability insurance association!
- Before operation check the unit for visible damage. If the unit is damaged, it should not be used; please consult authorized specialist staff immediately.
- Risk of injury and accident due to the weight of the product!
- Take safety measures against the danger of squashing, especially when operating the unit with automatic devices.
- Place the operating switch within sight of the unit, but not near any of the moving parts.
- Never let children play with the unit.



A sun protection device with electric drive cannot be retracted without current. We therefore recommend the use of an emergency power generating unit or a motor with an emergency crank handle, especially in regions with frequent power failures.



If the curtain of the selected element has more than 20 kg, an additional fixing device has to be provided for the box.

Safety instructions



Danger of suffocation!

Ensure that the foil cannot get into the hands of children. Keep the foil in a safe place.



ATTENTION!

For children / adults a lowered roller shutter is **no protection against a fall out of the window!**



Attention! Risk of injury or danger to life due to an electric shock!

- Set-up, examination, commissioning and error correction of the unit must only be performed by authorised or trained expert staff (as per VDE 0100).
- Switch off the current to the connecting lines when working at the unit. There is danger to life! Take safety precautions against unintentional switching on!
- Check the electrical wires regularly for damage. Do not use the unit if any damage is found.
- Our electrically driven units are in accordance with the regulations for power plants acc. to VDE 0100. We cannot guarantee for the operational reliability of the unit with non-approved modifications.
- White motor cables are not UV-resistant and must therefore be routed in empty conduits, cable ducts, or similar.
- The enclosed installation instructions of the electrical devices supplied must be observed.



Units with motor drive:

The drives used are operated with a voltage of AC 230V/50Hz. Please check the power supply provided by your utility company before connecting. Any other voltage can destroy the drives.



Units with crank handle drive:

Fold the crank handle only into the specified direction. Operate the unit steadily, avoid using force. Do not continue to raise or lower the roller shutter curtain, when the limit stop is reached. The limit stops protect your units.



Units with crank handle drive and lift tape:

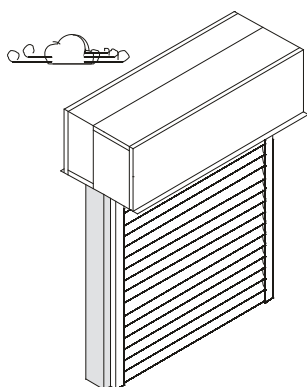
Fold the crank handle only into the specified direction. Operate the unit steadily, avoid using force. Do not continue to raise or lower the roller shutter curtain, when the limit stop is reached. The limit stops protect your units.



Formation of condensation water:

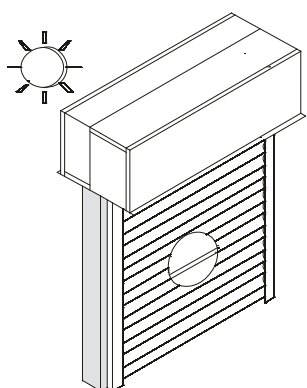
Do not let the window tilted for extended periods of time, when the roller shutter curtain is lowered. Otherwise condensation water will form on the blind. If the outside temperatures are below the freezing point, this will lead to the formation of ice.

Safety instructions



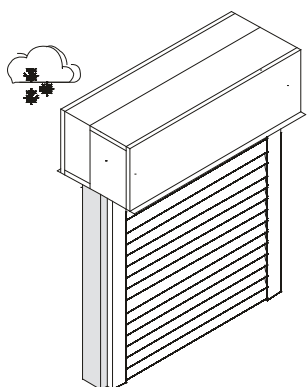
Operation of the roller shutter in case of storm:

During strong winds close the window or pull the roller shutter to the upper end position. Take care, that no draught can arise, even during your absence. If the window is open, the closed roller shutter cannot withstand all wind loads. The given wind class is only guaranteed with a closed window.



Operation of the roller shutter in case of very high temperatures:

On hot summer days a heat build-up can occur behind closed roller shutter curtains – distortion of plastic profiles (reaching the dimensional stability under heat \triangle heat distortion temperature by Vicat). In order to prevent damage, the blinds must be opened so far that all light gaps are opened. Due to rear ventilation, the distortion of the plastic profiles (roller shutter curtains) is reduced!



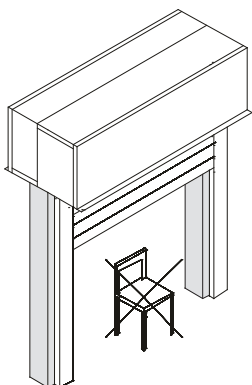
Operation of the roller shutter in case of frost:

In case of frost the roller shutter can freeze shut. Avoid using force to operate the roller shutter and do not use it, if there is snow or ice in the guide rails. Do not operate the roller shutter if it is frozen solid. Switch automatic control devices off, if there is a risk of freezing.

Formation of condensation water: Do not let the window tilted for extended periods of time, when the roller shutter curtain is lowered.

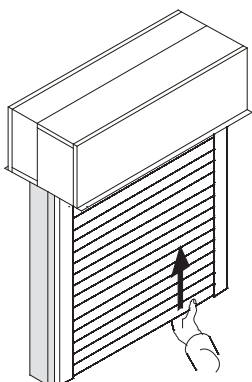
Condensation water can form on the roller shutter curtain and turn to ice when outside temperatures drop below the freezing point

Safety instructions



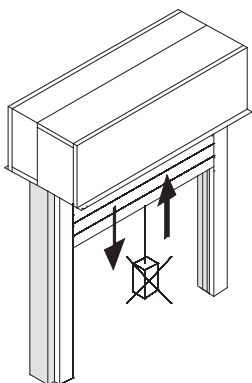
Range of movement of the roller shutter:

Please make sure that no obstacles block the guide rails of the roller shutter.



Incorrect operation:

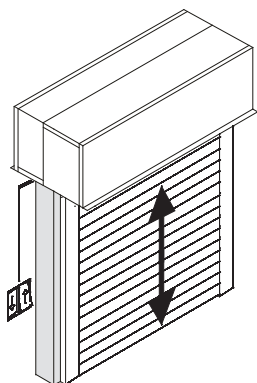
Never push up the blind or pull it down, this could cause malfunctions. Do not put your hand between movable parts.



Using the product for the wrong purpose:

Use the unit solely for the given purpose. Any wrong use can endanger the user and result in damage to the product. Do not overload the roller shutter, e.g. with additional weights. If the product is used for a different purpose, the right to claim under guarantee is forfeited.

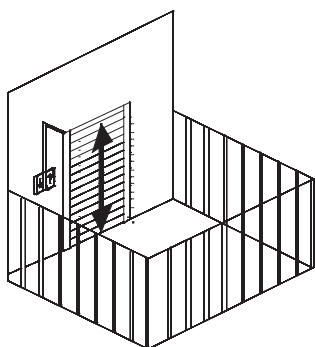
Safety instructions



Accessibility of the operating devices:

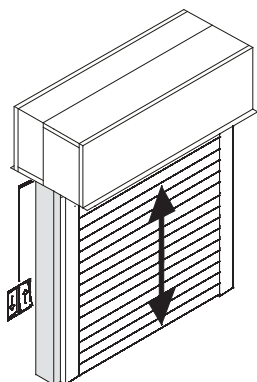
Place the operating switch within sight of the unit, but not near any of the moving parts. Never let children play with the operating devices such as hand-held radio transmitter, switches or automatic devices. There is danger of squashing, especially when operating the unit with automatic devices.

Fix the operating switch at a point where the disabled also have access.



Automatic roller shutters in front of balcony or terrace doors:

If there is a motor-driven roller shutter that is connected to an automatic control system in front of the only access to your balcony or your terrace, you could lock yourself out. Please switch off the automatic device, if you enter the balcony or the terrace.



Observe the motor runtime:

The motors used are not suitable for a non-stop operation. The integrated thermo protection switches the motor off after approx. 4 minutes. After approx. 10 to 15 minutes the product is ready for use again.

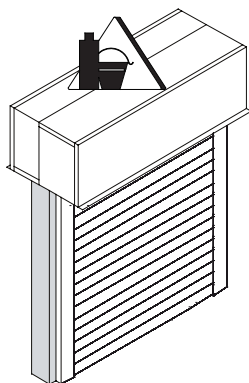
Installation Instructions

You will find detailed and updated installation instructions for the individual HELLA products in the download area on our homepage:
www.hella.info

Servicing, maintenance and repair



An unintentional switching on of units with motor drive is possible. Make sure that the automatic control device is switched off and that the current supply is interrupted during cleaning or maintenance work. If the unit is operated manually, the operating crank handle must be unhooked and kept in a safe place.



Cleaning:

As a sun protection device fixed outside, your units can get dirty in the course of time. This will not reduce the usability of your unit. The powder-coated parts will remain presentable for longer, if they are cleaned regularly with a soft woollen cloth.

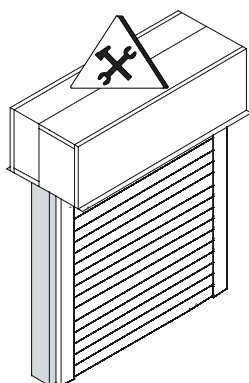


Do not use solvents, alcohol (rubbing alcohol) or scouring cleansing agents! Use a mild household cleaner and a soft cloth to wash down fingerprints and light grease- or oil patches. Rinse off with clear water and dry with a soft cloth.



Never press the profiles sharply, there is risk of snapping. Never use a high-pressure cleaner. There is a risk that the surface of the profiles is affected by the pressure and the heat.

Remove regularly dirt or objects from the guide rails.



Maintenance:

All inspection and maintenance works must be carried out by a specialised company from HELLA or a HELLA partner. Regularly check the electrical wires of motor driven units for damage. Check the mechanical parts of your roller shutter for visible damage. After exceptional events such as storm, hail, sleet, maloperation or the like, the unit must be checked for noticeable damage prior to operating it. If the unit is damaged, it must not be used; consult authorized specialist staff immediately. It is recommended to have the unit maintained by specialist staff on an annual basis. This way wear is detected at an early stage and damage to the unit is prevented.

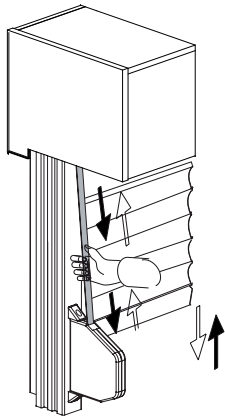


Repair:

Improper repair works may cause both risk of injury to persons or damage to the units.

Repair works must be carried out by a HELLA specialist company or a partner company of HELLA. Only use original spare parts from HELLA.

Operating guidelines



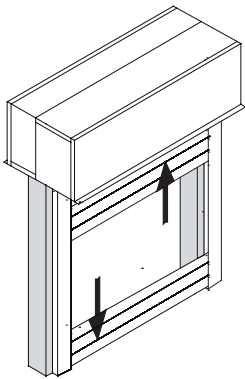
Lift tape:

Open/close shutters by pulling on the lift tape. Pull the lift tape steadily and vertically downwards or upwards out of the take-up reel box.

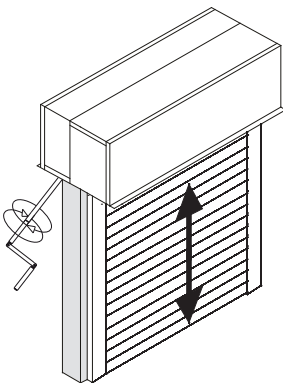


The lateral deflection of the lift tape results in an augmented wear. The lift tape can be damaged. This may cause malfunctions.

The lift tape is wrapped automatically in the wrapper. Ease the lift tape towards the top, never let it loose.



Operate the lift tape slowly in the last third during opening. The roller shutter should not be allowed to smash into the top. Operate the lift tape slowly in the last third during closing. Avoid any jerky operation.



Crank handle drive:

Opening/closing the roller shutter curtain by turning the crank rod.

Slow down the turning motion of the crank handle before the roller shutter curtain is opened completely. Slow down the turning motion of the crank handle before the blind is closed completely.



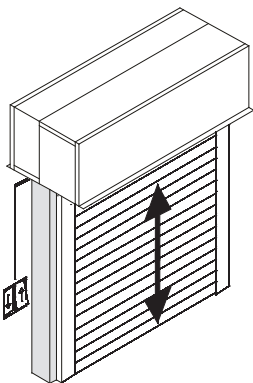
Avoid excessive bending of the crank rod. This results in stiffness and augmented wear.

The roller shutter curtain should not be allowed to smash into the top.

Do not carry on turning the crank handle with force when the roller shutter curtain is completely opened. If the roller shutter is completely closed, do not carry on turning the crank handle into the downwards direction, as soon as you notice a resistance.



Elements with a crank handle drive have a crank handle freewheel in the lower stop to protect the unit.



Motor drive:

By operating a switch, a hand-held radio transmitter or an automatic device, the roller shutter moves "Up or Down". The end points of the drive are adjusted ex works. Please observe the enclosed instructions of the manufacturer of the drive, if any modification is required.

The roller shutter stops by releasing a touch contact switch or - if a locking pushbutton is used - by pushing the counter or stop button.



Please refer to the enclosed instructions of the manufacturer for operating possibilities via control devices.

PRODUCT PORTFOLIO



Outdoor blinds & exterior venetian blinds



Roller shutters



Awnings

Over-glass and under-glass awnings



Pergolas



Vertical awnings



Interior blinds



Insect screens



Solutions for building shells



Control devices



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Assembly sets | TOP MINI plus

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Subject to modifications.