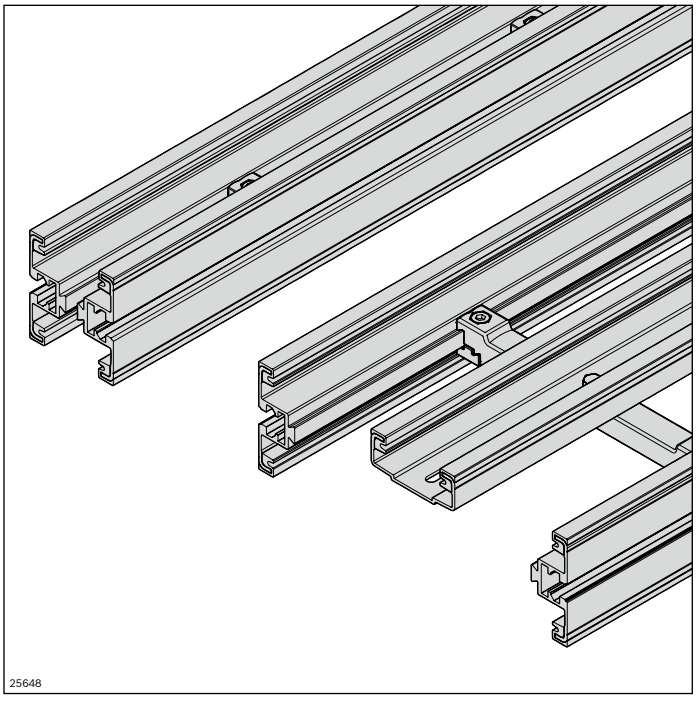
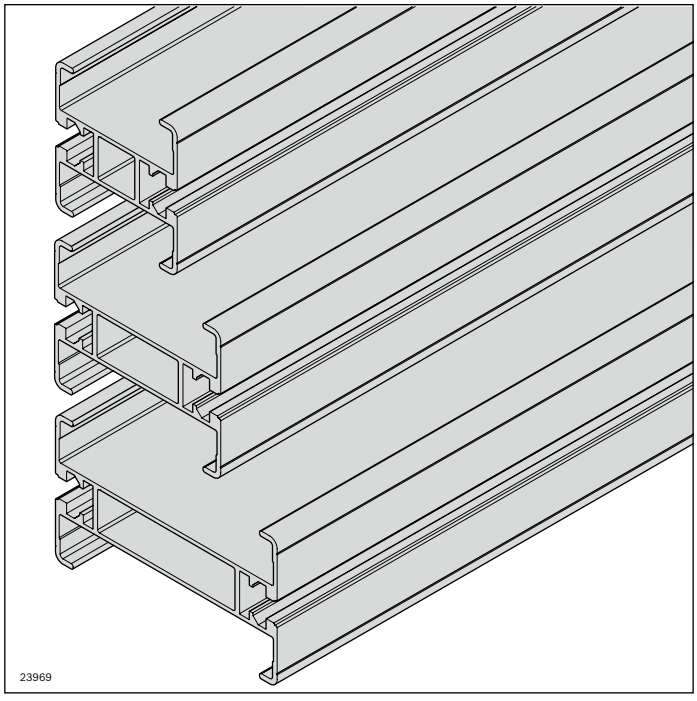
Sections AL



- Fixing of slide rails without rivets or the need to machine the track bearing surfaces
- Optimized sliding characteristics and FDA-compliant materials for the slide rail
- One slide rail cross-section for all sizes
- Connection technology with plug-through screws
- Few screwed connections
- Easy to clean thanks to ample draining surfaces
- One profile cross-section for open construction in all sizes
- Closed profile in the sizes 65, 90, 120
- Use of a support profile from size 160

Simple assembly of sections thanks to smart connection technology

Section profile AL closed



The section profile is the supporting element for the construction of straight conveyor sections and allows for the attachment of all required components.

– Size: 65, 90, 120

- Slot on the inside for attaching main components such as drive/return unit, curves, etc.
- Slot on the outside for fastening lateral guides, supports, or other accessories
- If necessary, lateral mounting of the slide rails with centering grooves as drill guide
- Special constructions can be attached quickly and simply with components from the modular aluminum framing system through the 10 mm outside slot.

Required accessories:

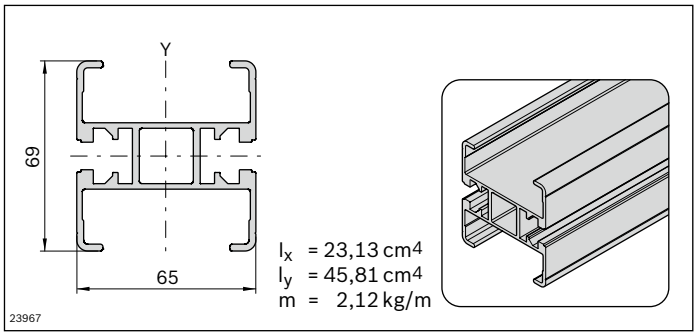
– Slide rail, see page 56
– Profile connector, see p. 60

Optional accessories:

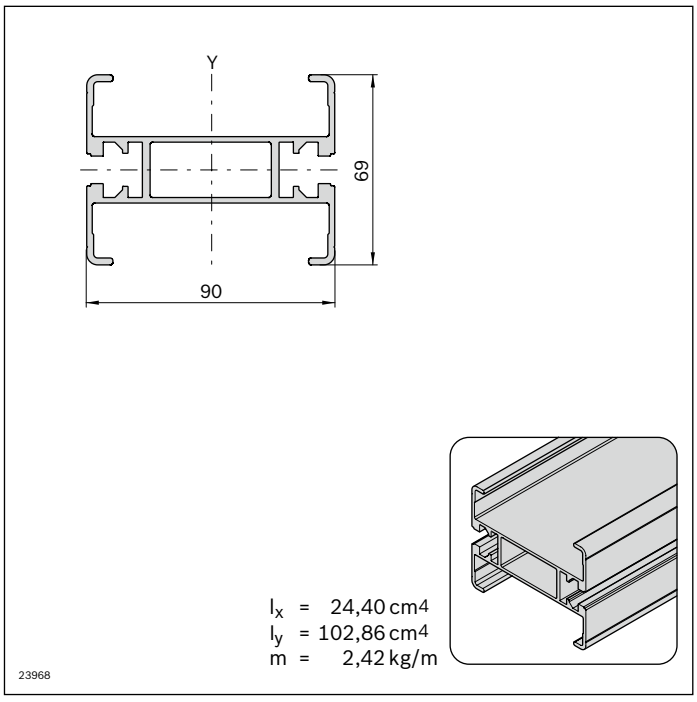
Cover profile, see p. 62

Material:

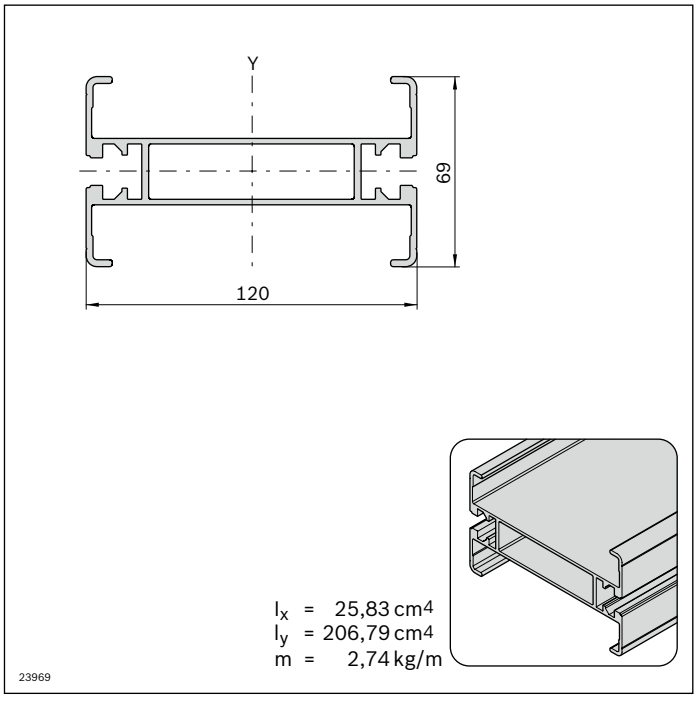
Aluminum; natural, anodized



Section profile VF*plus* 65 AL	L (mm)	No.
12 pcs	6070	**3 842 546 643**
1 pcs	50 ... 6000	**3 842 996 022/L**

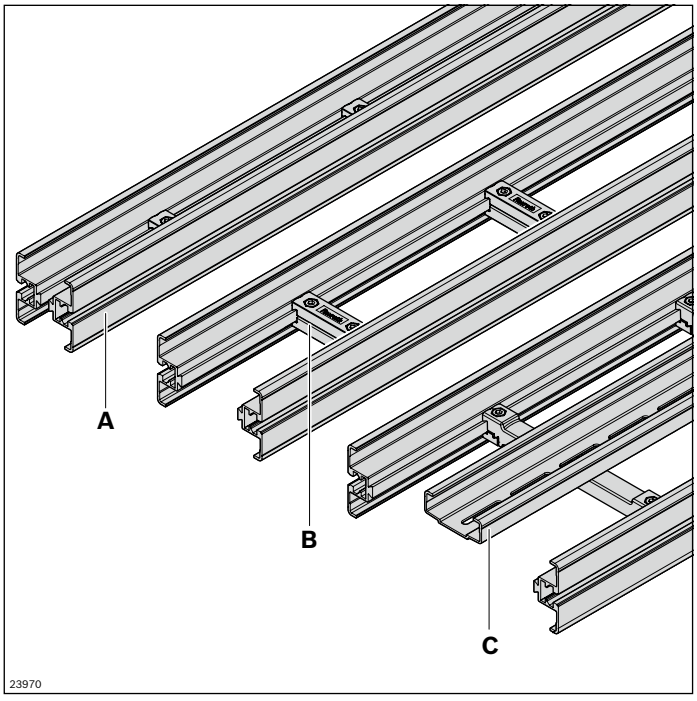


Section profile VF*plus* 90 AL	L (mm)	No.
12 pcs	6070	**3 842 546 644**
1 pcs	50 ... 6000	**3 842 996 023/L**



Section profile VF*plus* 120 AL	L (mm)	No.
6 pcs	6070	**3 842 546 645**
1 pcs	50 ... 6000	**3 842 996 024/L**

Section profile AL open
Cross connector AL
Support profile AL



The open construction of the section profile (**A**) allows dirt or foreign particles to be removed directly.
Two open section profiles, linked by cross connectors, are needed to construct a conveyor section. A support profile is necessary for sizes 160 and over.
– Same profile cross-section across all sizes (65-320)

The cross connector (**B**) is the connection of two profile halves to make an open section profile. Using cross connectors of different lengths determines the size.

From size 160, a support profile (**C**) is required. The support profile is fastened to the existing cross connectors.

AL open section profile (A)
- Slot on the inside for attaching main components such as drive/return unit, curves, etc.
- A 10 mm outside slot for simple fastening of lateral guides, leg sets, or components from the modular aluminum framing system
- If necessary, lateral mounting of the slide rails with centering grooves as drill guide

Required accessories:
A: Cross connector, see p. 54; slide rail, see p. 56; profile connector, see p. 60; support profile from size 160, see p. 55

Optional accessories:
A: Cover profile, see p. 62

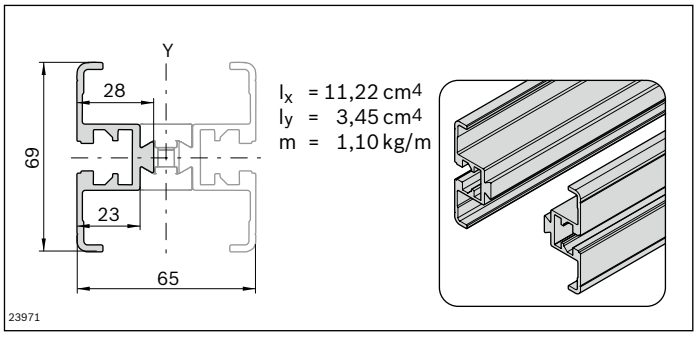
Cross connector AL (B)
- Cross connector with mounting option for support profile

Support profile AL (C)
- Elongated holes at regular intervals for fastening

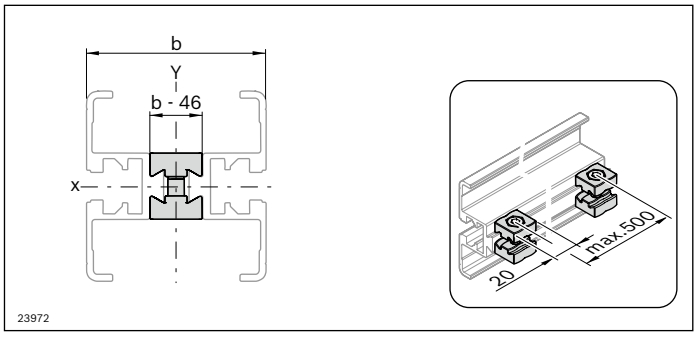
Scope of delivery:
B: Complete, incl. screw for attaching the support profile

Condition on delivery:
A, B: Not assembled

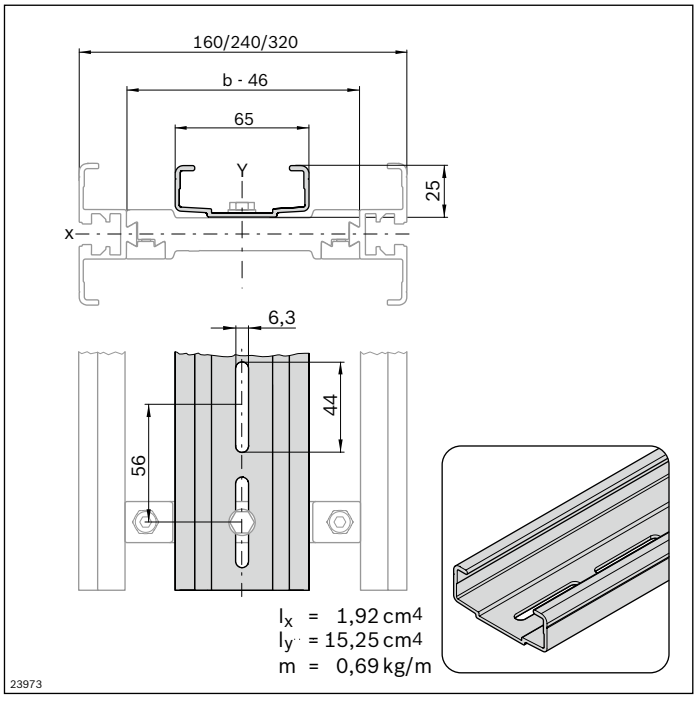
Material:
– **A**, **C:** Aluminum; natural, anodized
– **B:** Aluminum, die-cast



Section profile VF*plus* AL open	**L** (mm)	**No.**
12 pcs	6070	**3 842 546 647**
2 pcs	3000	**3 842 546 670**
1 pcs	50 ... 6000	**3 842 996 026/L**

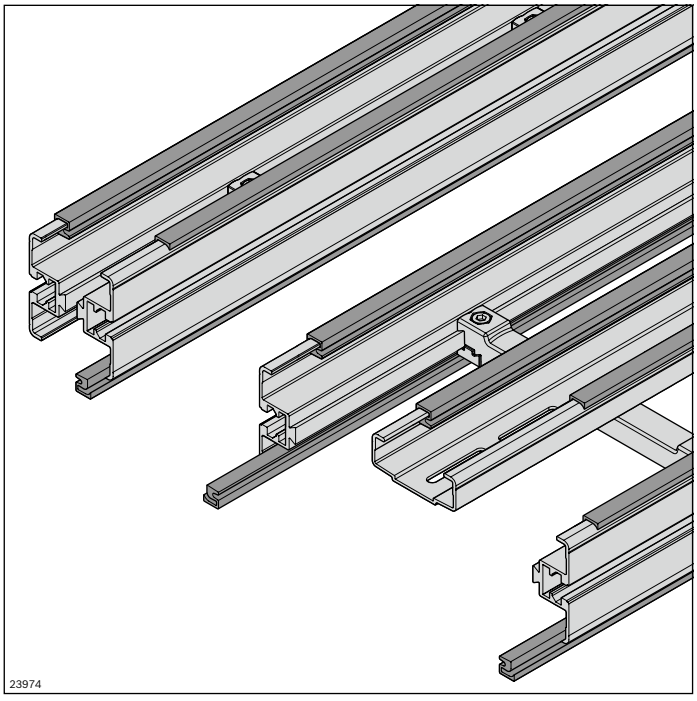


Cross connector AL	**b** (mm)		**No.**
VF*plus* 65	65	10	**3 842 546 672**
VF*plus* 90	90	10	**3 842 546 673**
VF*plus* 120	120	10	**3 842 546 674**
VF*plus* 160	160	10	**3 842 546 675**
VF*plus* 240	240	10	**3 842 546 676**
VF*plus* 320	320	10	**3 842 546 677**



Support profile VF*plus* AL	**L** (mm)	**No.**
12 pcs	6070	**3 842 546 705**
1 pcs	3000	**3 842 547 904**
1 pcs	75 ... 6000	**3 842 996 028/L**

Slide rail



- Easy assembly - simply clip onto the section profile
- Secured against axial shifting with lateral screw fittings
- Gliding surface machining: not required
- Material
  - Premium, Advanced slide rails: FDA CFR 21
  - with Basic slide rail: EU 10/2011, FDA CFR 21
- One cross-section for all AL and STS section profiles

Required accessories:
- Slide rail assembly tool, see page 264
- Sheet metal screw 2.9x9.5 DIN 7982; DIN EN ISO 7050 see page 57
  1 screw for each slide rail section

Material:
PE-UHMW

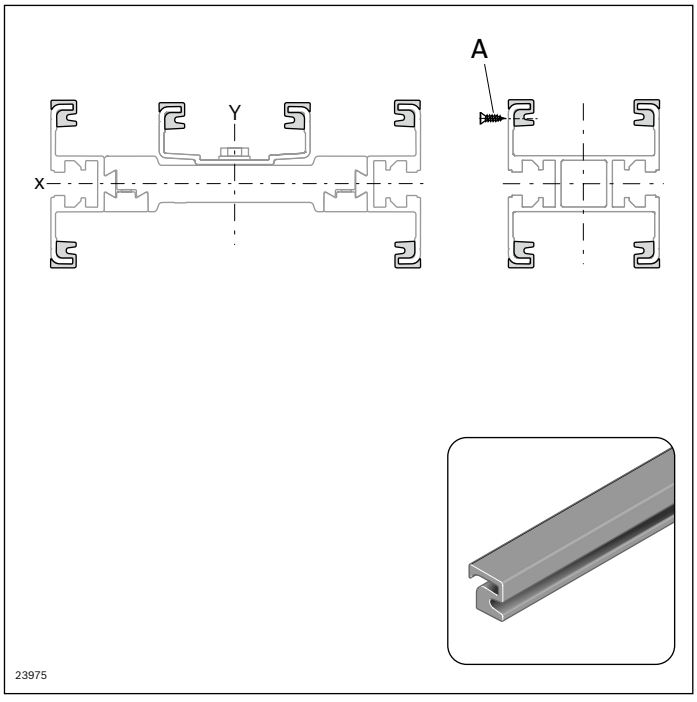
The slide rail is clipped into the section profile and guides the conveyor chain.
Lateral securing means the gliding surface does not need to be machined. Abrasion and noise levels are thus reduced to a minimum.

Three slide rails with different main areas of application are available:
- Basic: straight sections and curve wheels, v_{max} 60 m/min
- Advanced: Sections with sliding curves, v_{max} 60 m/min, cleanroom
- Premium: Sections with sliding curves, v_{max} 100 m/min, cleanroom

For the selection of slides rails, see the “Technical data” chapter on page 278. See also ESD slide rails on page 178 and steel slide rail on page 58.

Extend the slide rail over the component interfaces to ensure minimum wear and noise emissions. Interruptions to the profile or component connection must be avoided. If an interruption is necessary after 10 m, the slide rail must be attached laterally with a sheet metal screw (**A**).

Note: After the sliding curves, an interruption is provided as an expansion joint in the inner curve area.

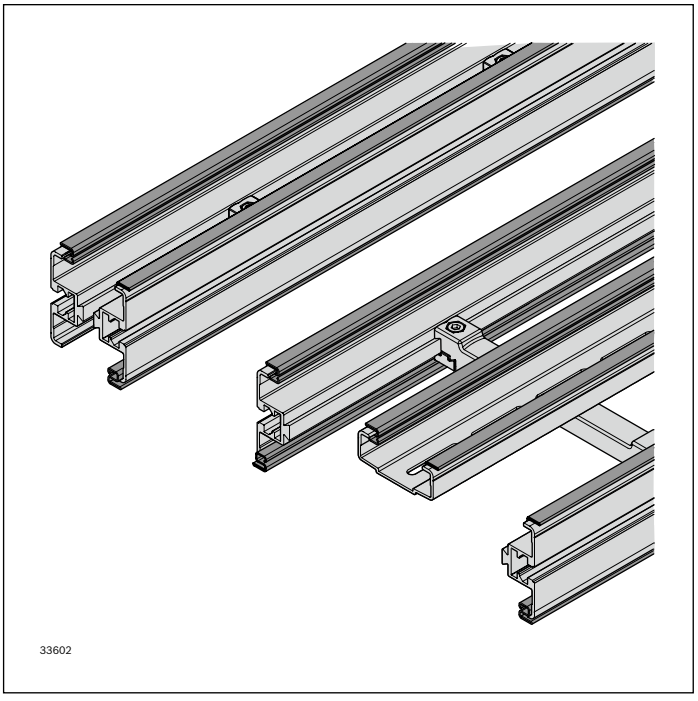


Slide rail VF*plus*	**Color**	**L** (mm)		**No.**
Premium	gray	30000	1	**3 842 546 116**
Advanced	white	30000	1	**3 842 549 727**
Basic	blue	30000	1	**3 842 549 730**

See also ESD slide rail, see page 178
and steel slide rail, see page 58.

Sheet metal screw		**No.**
A	100	**3 842 547 908**

Steel slide rail



The steel slide rail is suitable for use in abrasive ambient conditions (reduced service life of the conveyor chain). It is clipped in to the section profile and fixed in place at the side via a pop rivet.
The side fixing reduces the friction and the noise level to a minimum. The steel slide rail butt joints are merely chamfered. The Advanced slide rail is used in the lower run of the curve wheels.

- Steel slide rail straight section (**A**)
- Steel slide rail curve wheels (**B**) 90°, 180°; other angles on request
- Dry, wet and abrasive environment
- Size:
  - Straight section: all track widths
  - Curve wheel 65-90; 120 on request
- Not suitable for use in horizontal sliding curves
- Only Advanced or Premium slide rails can be used in vertical curves

- ▶ Easy assembly - simply clip onto the section profile
- ▶ Secured against axial shifting via lateral fixing
- ▶ Gliding surface machining: not required
- ▶ One cross-section for all AL and STS section profiles

Required accessories:
- Pop rivet D3x8 mm, see page 59
- Number of rivets:
  Straight slide rail section: 1 rivet
  90° curve: 3 rivets
  180° curve: 6 rivets

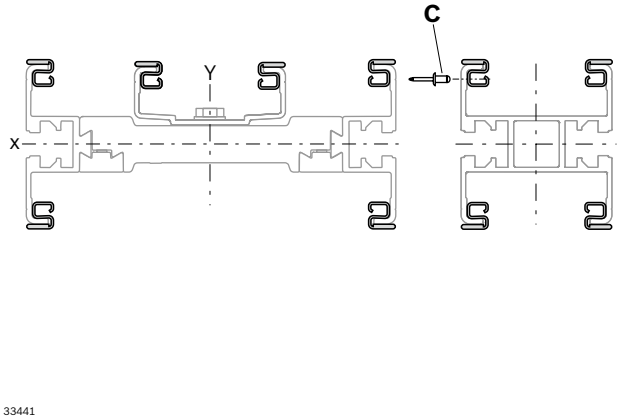
Material:
Stainless steel

Note: Ensure gap-free assembly (without expansion joint), as foreign bodies could otherwise get trapped in the gap and damage the chain.

Note: Non-destructive dismantling of the steel slide rail is not possible. A target separation point of the system must therefore be defined before assembly. Overlap the steel slide rail by 10 ... 15 mm on the section profile separation point. This ensures that it is still possible to pull apart the two parts.

Extend the steel slide rail over the component interfaces to ensure minimum wear and reduced noise emissions. Interruptions directly on the profile or component connection must be avoided.

A



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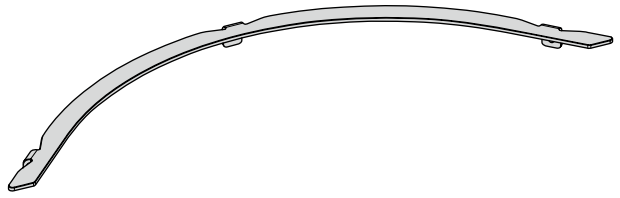
Slide rail VF*plus* steel	**L** (mm)		**No.**
A Straight section	3000	1	**3 842 552 970**

Pop rivet		**No.**
C	100	**3 842 557 004**

B



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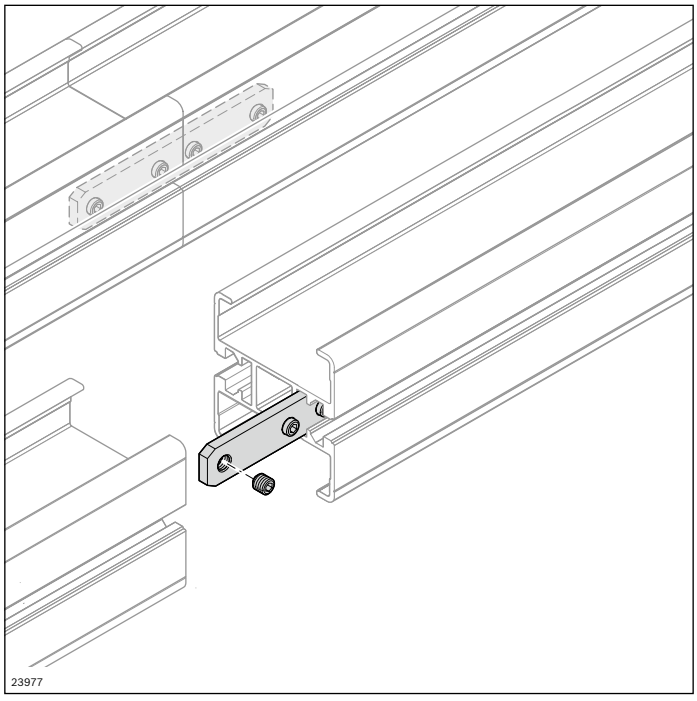
Steel slide rail; curve wheel VF*plus* 65		**No.**
B Steel 90°	1	**3 842 552 972**
B Steel 180°	1	**3 842 552 973**

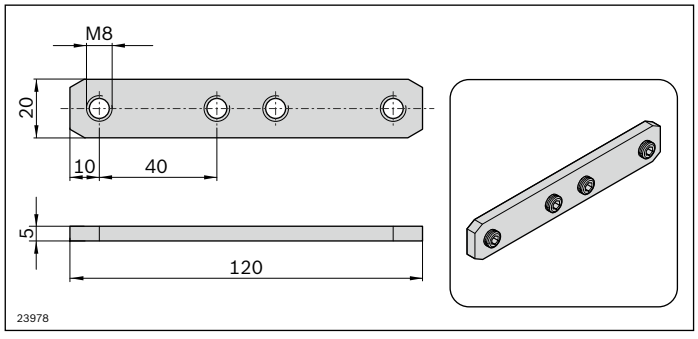
Steel slide rail; curve wheel VF*plus* 90		**No.**
B Steel 90°	1	**3 842 552 974**
B Steel 180°	1	**3 842 552 975**

Pop rivet		**No.**
C	100	**3 842 557 004**

Profile connector AL



Two profile connectors are used to connect the end faces of the section profiles. The profile connector is fixed in the interior slot, so that the slot on the outside is available for all kinds of superstructures.



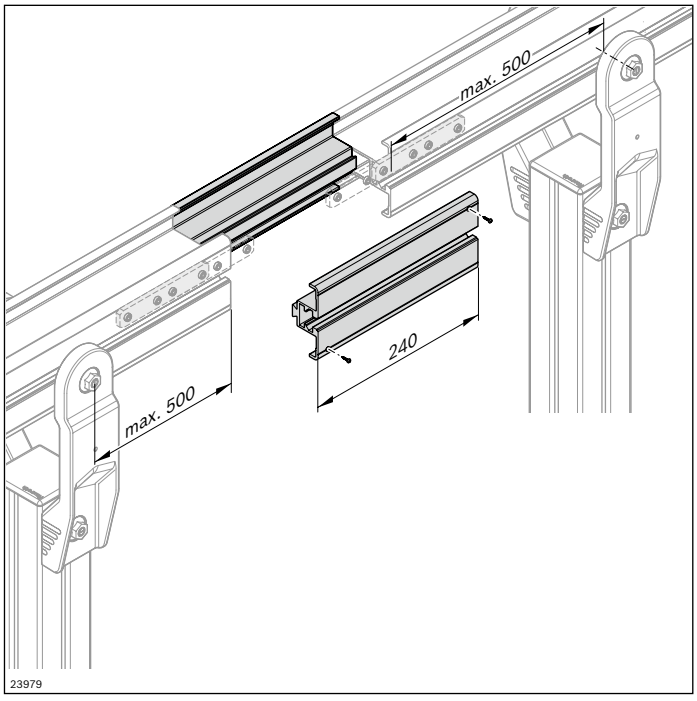
Profile connector VF*plus* AL		No.
	10	**3 842 530 277**

Scope of delivery:
Complete

Material:
steel; galvanized

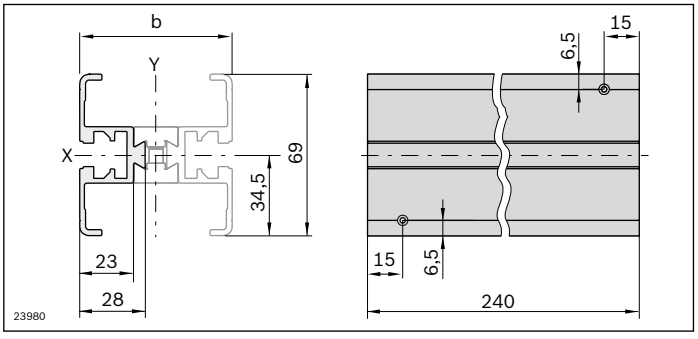
Condition on delivery:
Screws pre-assembled and secured

Assembly module AL



The assembly module is used for inserting and closing or opening the chain. It can be installed at any point on the conveyor section that is easy to access in operation. The assembly module is intended for sections with drives without a chain bag (e.g. wedge conveyor, curve wheel drive).
For attachment options, see matrix on page 289

- Max. distance from the nearest leg sets on both sides is 500 mm
- The support profile with slide rail is not interrupted in the assembly module, enhancing smooth running
- Slide rail interruption is only required on the side to be opened



	L (mm)		**No.**
Assembly module VF*plus* AL		1	**3 842 547 899**
Slide rail VF*plus* Premium	30000	1	**3 842 546 116**
Slide rail VF*plus* Advanced	30000	1	**3 842 549 727**
Slide rail VF*plus* Basic	30000	1	**3 842 549 730**
Slide rail VF*plus* steel	3000	1	**3 842 552 970**
Slide rail VF*plus* ESD	30000	1	**3 842 557 000**

Required accessories:
Slide rail, see p. 56, 58, 178

Optional accessories:
Cover profile, see p. 62

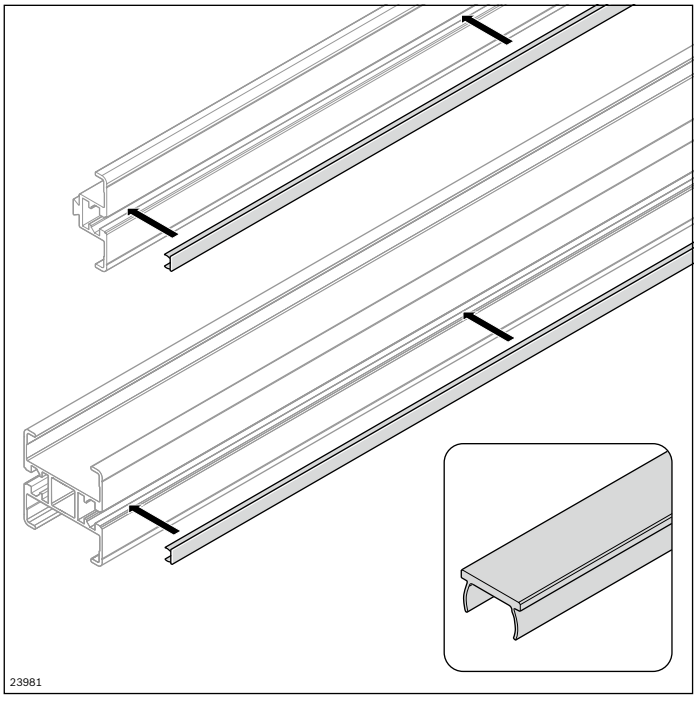
Scope of delivery:
Incl. 4 profile connectors and sheet-metal screws for fastening the slide rail

Condition on delivery:
In single parts

Material:

- Aluminum; natural, anodized
- Profile connector: steel; galvanized

Cover profile

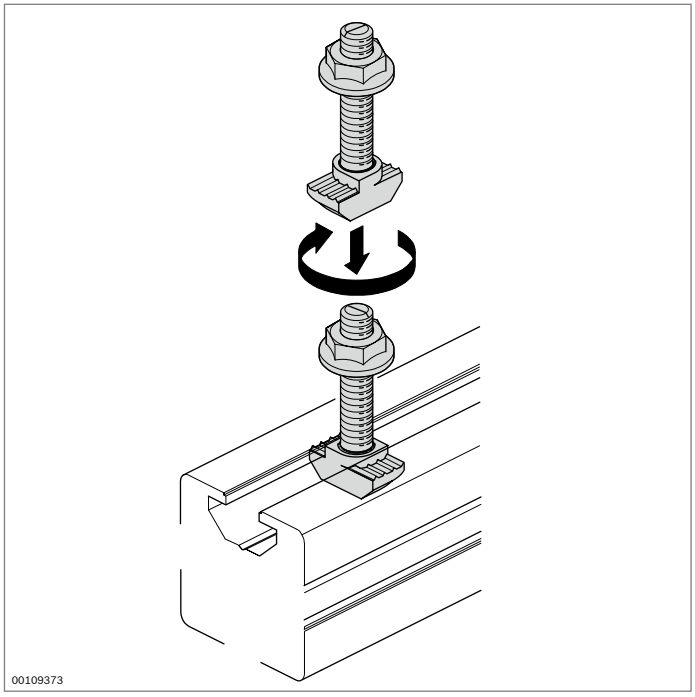


Material:
- AL: Aluminum; natural, anodized
- PVC: Hard PVC; colored

Cover profile to improve system design, to fix cables routed in the profile slot, and to protect the profile slot against contamination

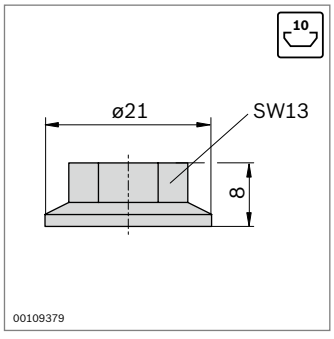
Cover profile		L (mm)		No.
 00109368	AL	2000	10	**3 842 523 258**
 19502	PVC			
	black	2000	10	**3 842 146 901**
	colorless	2000	10	**3 842 191 182**
	RAL 7035 (light gray)	2000	10	**3 842 518 367**
	RAL 3020 (red)	2000	10	**3 842 518 368**
	RAL 1023 (yellow)	2000	10	**3 842 518 369**
	RAL 5010 (blue)	2000	10	**3 842 538 955**
	RAL 2004 (orange)	2000	10	**3 842 538 957**

Flange nut
T-bolt

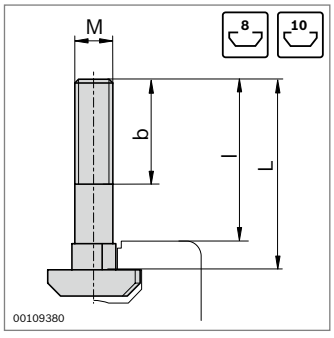


Fastening elements for mounting accessories on the profile slot
- Secure and conductive connection
- The notch at the end of the screw is used to detect the position and identify the correct positioning
- Profile finishing: not required

There is a selection of different mounting options in the MGE catalog.



Flange nut	Groove	M	ESD	No.
	10	M8		100 **3 842 345 081**
Material:	steel; galvanized			

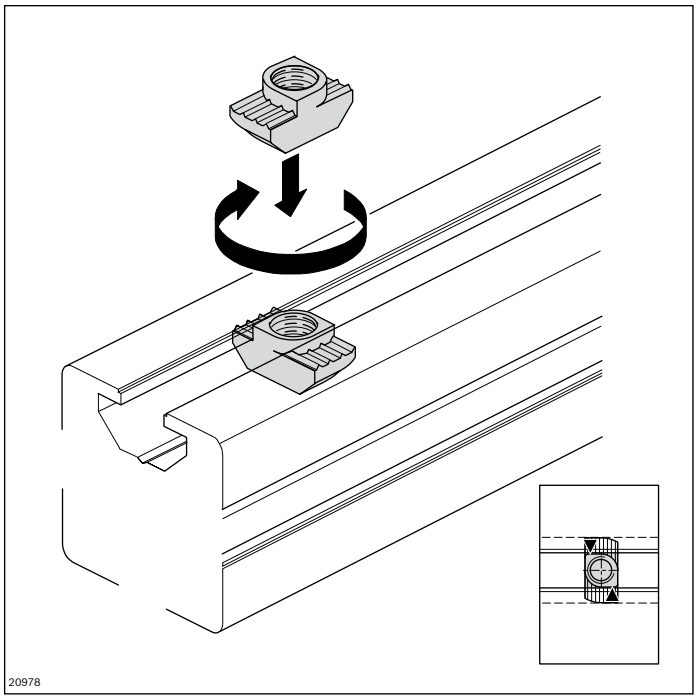


Groove	Fmax
10	6000 ... 18000 N[1)]

[1)] Dependent on the profile (see also “Technical data” in the MGE catalog)

T-bolt	Groove	MxL	b (mm)	l (mm)	ESD	No.
	10	M8x20	14	14		100 **3 842 528 715**
		M8x25	19	19		100 **3 842 528 718**
		M8x30	24	24		100 **3 842 528 721**
		M8x40	22	34		100 **3 842 528 724**
		M8x50	22	44		100 **3 842 528 727**
Material:	steel; galvanized					

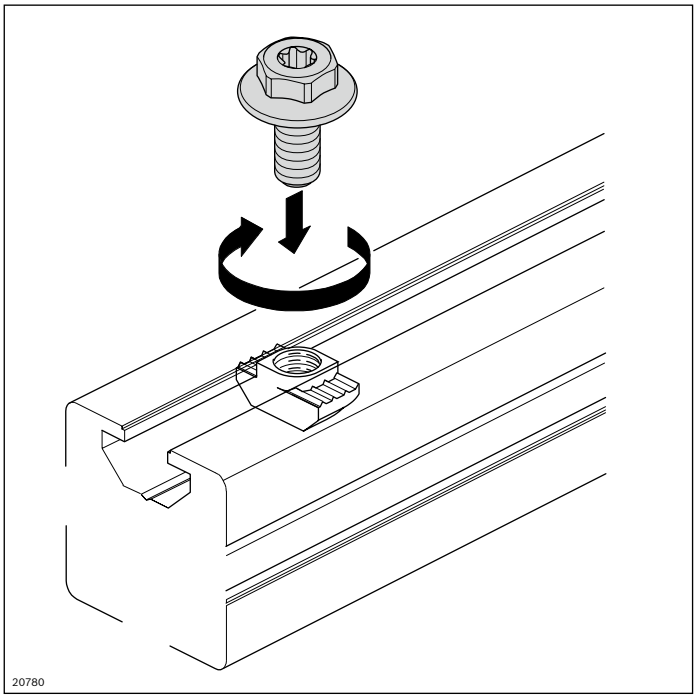
Collar screw
T-nut



Fastening elements for mounting accessories on the profile slot

- Standard element for secure, conductive connections
- Stop for correct positioning in the profile slot
- Profile finishing: not required

T-nut, 10 mm slot	Groove	M	ESD		No.
steel; galvanized	10	M4		100	**3 842 530 281**
		M5		100	**3 842 530 283**
		M6		100	**3 842 530 285**
		M8		100	**3 842 530 287**



- Collar screw with multi-function head for tightening with ring/open-end wrench (WS 13) or Torx screwdriver (T40)
- Machine tightening possible
- Preferably to be used for fastening brackets
- Quick and simple assembly
- Excellent force transmission via the wide flange
- With Polyfleck to secure the T-nut

Tools: Allen keys

Collar screw	M	L (mm)	ESD		No.
M8x18-SW13-T40[1)]	M8	18		100	**3 842 541 246**
M8x20-SW13-T40[2)]	M8	20		100	**3 842 541 409**

[1)] For 40/40 and 60/60 brackets

[2)] For all other brackets for 10 mm slot

Material: steel; galvanized