



MTS

automation
components

HLINÍKOVÉ PROFILY BOSCH REXROTH

Príslušenstvo

výdava



Od roku 1996 pomáhame firmám inovovať výrobu pomocou moderných a inteligentných technológií.

Takých, ktoré umožňujú vyrábať technologicky najnáročnejšie produkty. Popritom zefektívňujú výrobné procesy, šetria ľuďom čas a uľahčujú im život.

Naším cieľom sú kvalitné výrobky, spokojní ľudia a dobré prostredie v priemyselnej výrobe.

Prostriedkom sú naša odbornosť a skúsenosti, férové vzťahy a starostlivo vybrané spoľahlivé technológie.

Chceme ukázať, že je možné úspešne podnikáť aj férovo, ľudsky a s pevnými hodnotami. Že spoločnosť z Oravy môže byť kľúčovým partnerom pre veľké firmy z celého sveta.

Vybavíme vašu výrobu osvedčenými komponentmi od našich dlhoročných partnerov.

Poradíme vám s ich výberom a aj s tým, ako vybrané komponenty do vašej linky čo najlepšie a cenovo najvýhodnejšie implementovať a využiť na maximum. Vieme sa postarať aj o celú vašu výrobu od A po Z.



Sme oficiálnym slovenským partnerom Bosch Rexroth

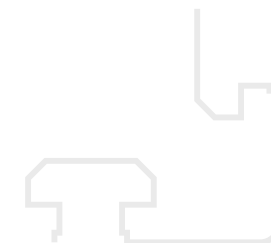
v oblasti automatizácie výroby. Spolu s nadviazaním partnerstva sme do nášho portfólia zaradili hliníkové profily Bosch Rexroth.

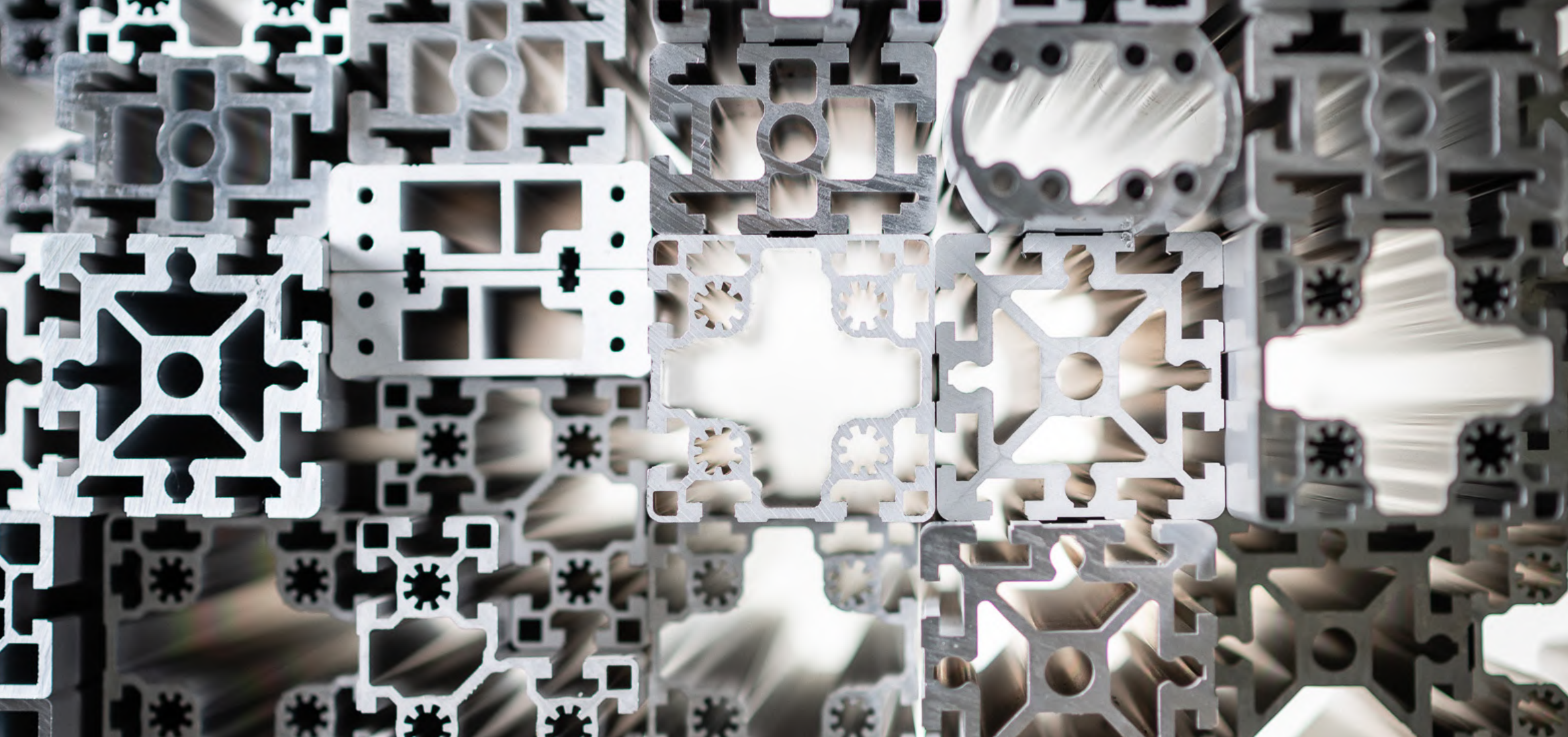
Tento stavebnicový systém sa stal vo viacerých priemyselných podnikoch medzinárodným štandardom nosných konštrukcií pre zariadenia, výrobné linky a stroje. V porovnaní s konkurenciou, hliníkové profily od Bosch Rexroth poskytujú širokú škálu príslušenstva. Profily majú viac rozmerových rád. Medzi nimi nájdete aj vzhľadové-designové profily s uzavretou drážkou.

Veľkou výhodou je kompatibilita dopravníkových systémov so stavebnicovým systémom. Bosch Rexroth má vo svojom portfóliu aj dopravníkové systémy, ktoré majú prispôbenú drážku (10 mm) dráhových profilov práve pre tieto konštrukčné profily.



Michal Bučka
produkový manažér





STAVEBNICOVÝ SYSTÉM HLINÍKOVÝCH PROFILOV BOSCH REXROTH

Hliníkové profily často tvoria kostru výrobných linky. Niektoré vytvárajú rámy a pracovné plochy, aby sa ľuďom dobre pracovalo. Iné v podobe krytov chránia vaše technológie a ľudské zdravie.

Všetky profily sú navzájom kompatibilné a poskladáte ich jednoducho ako stavebnicu. Radi vám dodáme kompletne hotové riešenie aj samostatné prvky.

Máme viac ako 140 typov hliníkových profilov Bosch Rexroth s drážkou 6, 8 a 10 mm – a k nim všetko príslušenstvo:

- Hliníkové profily
- Spojovacie prvky a príslušenstvo
- Rúrkový systém EcoShape
- Ochranné krytovanie
- Príslušenstvo

Sme slovenským partnerom Bosch Rexroth a sami s ich hliníkovými profilmi radi pracujeme. Páči sa nám...

- Jednoduchá projekcia
- Rýchla montáž
- Málo potrebných nástrojov
- Priestorová nenáročnosť
- Opakovane využiteľné komponenty
- Odolnosť proti korózii
- Flexibilná stavba a prestavba

OBSAH KATALÓGU

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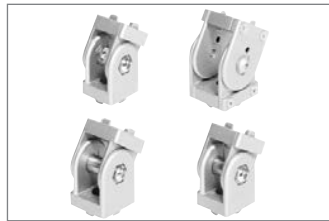
Kontakt 261



Joints



Joint 45x45 lockable
(p. 4-2)



Joints (p. 4-4)



Swivel bearing (p. 4-9)



Supporting arm joint
(p. 4-10)



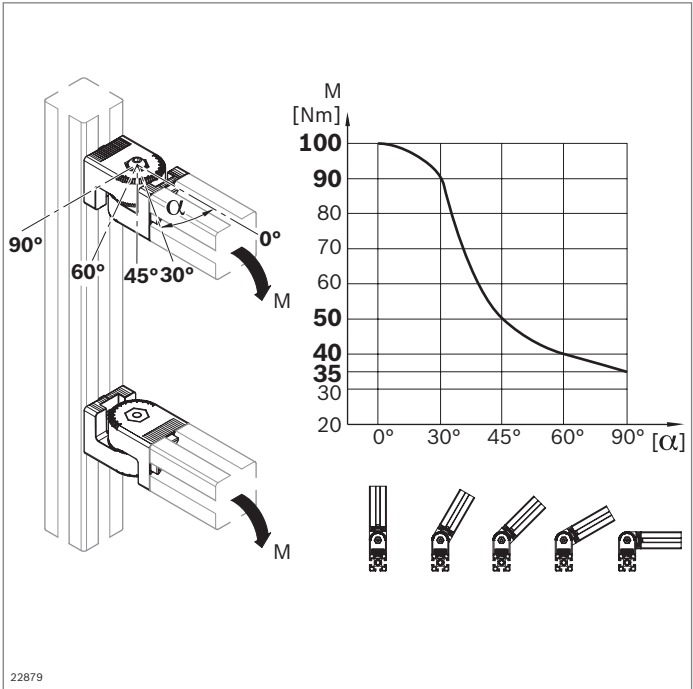
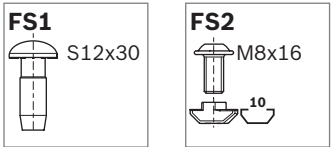
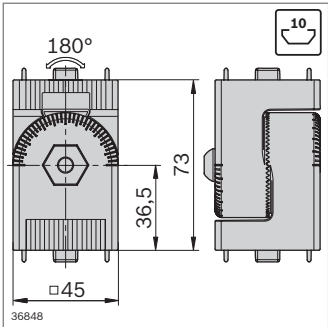
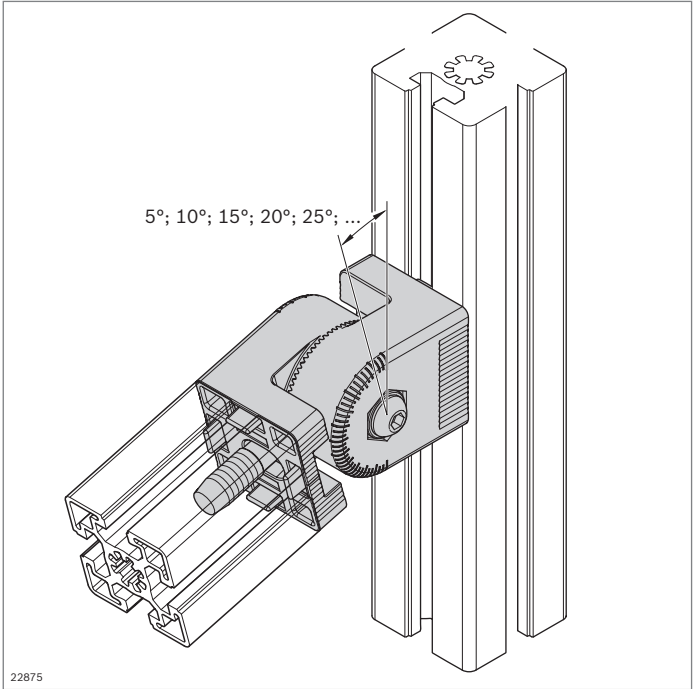
Bearing pedestal (p. 4-11)



Swivel mounting (p. 4-12)



Clamping lever, star knob
(p. 4-13)



Joint 45x45 lockable



- For adjustable or rigid profile connections
- For high loads up to 100 Nm in the swivel direction
- Form fit thanks to Hirth teething
- Swivel range 180°
- Easy adjustment in the 5° modular dimensions
- Marking with a 5° graduation for easy detection of the adjustment angle
- Clamping and convenient adjustment of joint using a clamping lever or screw
- Profile finishing:
Not required (self-cutting screw for end face to end face connections)
- Compatible with joint 45x45 and joint 45x45 support (p. 4-5)

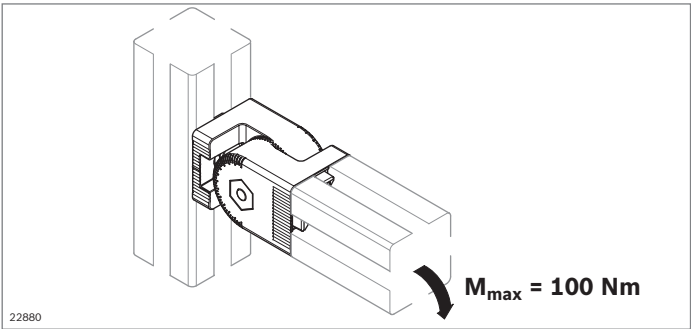
Joint 45x45 lockable	Slot	ESD	No.	FS
	10		3 842 546 564	2xFS1, 2xFS2

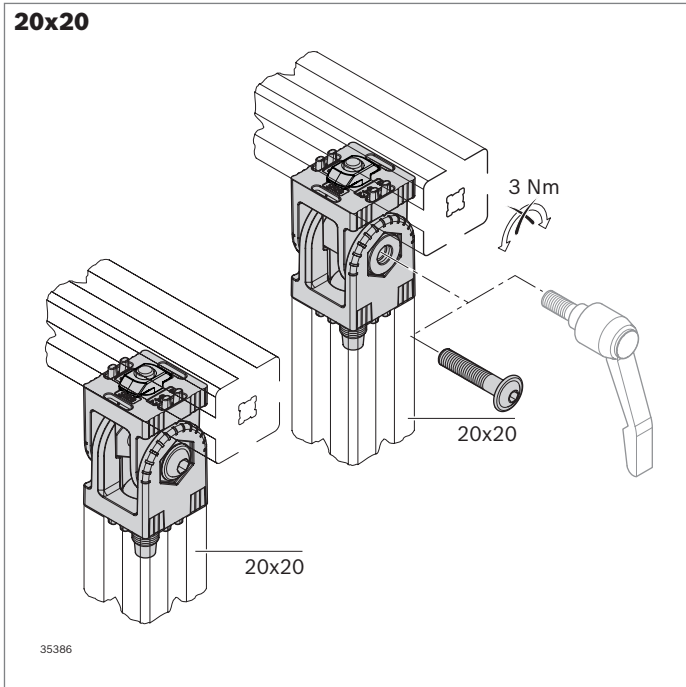
Material: Diecast zinc
Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)

Clamping lever M8x45	No.
For joint 45x45 lockable	3 842 538 607

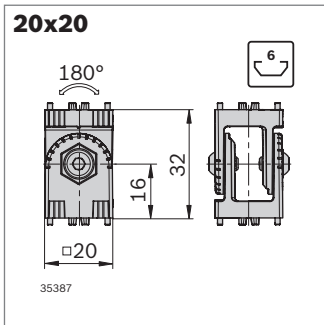
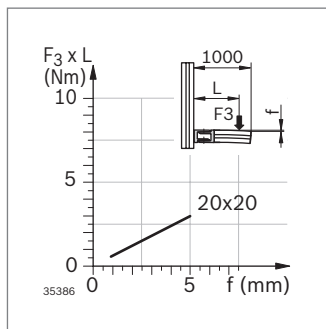
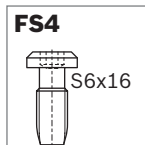
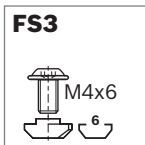
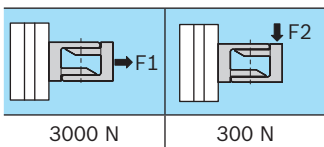
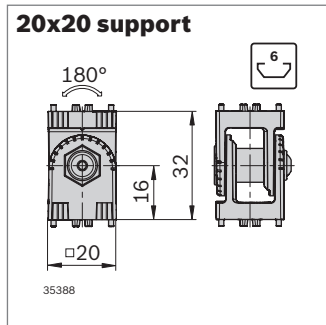
Material: Diecast zinc, black polymer coating



20x20

Joint 20x20

designLINE

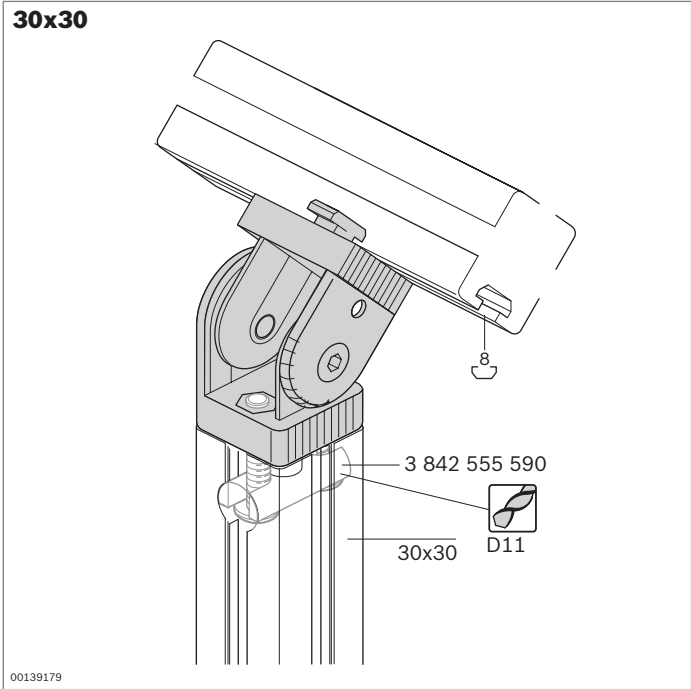
- For movable or rigid profile connections at any angle
- Swivel range 180°
- With a 15° graduation
- Clamping (3 Nm) and convenient adjustment of joint using a clamping lever (M4x20)
- *designLINE* version with special silver paint (RAL 9006) for an attractive, high-quality design
- Two different assembly versions (normal and support) available under the same order number

20x20

20x20 support


Joint 20x20	Slot	ESD	No.	FS
Standard	6		3 842 555 659	2xFS3, 2xFS4
designLINE	6		3 842 555 665	2xFS3, 2xFS4

Material: Standard: Diecast aluminum
designLINE: painted, RAL 9006
 Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)



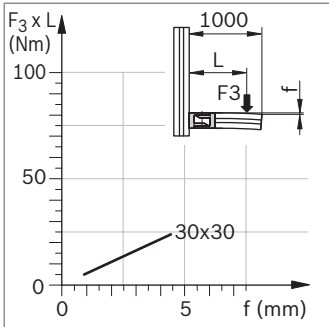
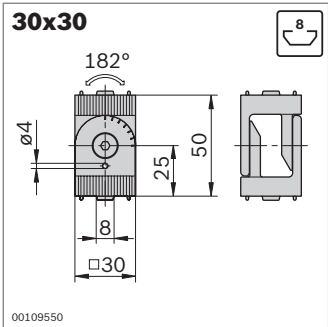
Joint 30x30



- For movable or rigid profile connections at any angle
- Swivel range 182°
- With a 15° graduation
- Locking by clamping (5 Nm) or fixing with pins (15 Nm)
- *designLINE* version with special silver paint (RAL 9006) for an attractive, high-quality design
- Profile finishing:
Through-hole D11 for end face profile connections

Required accessories:

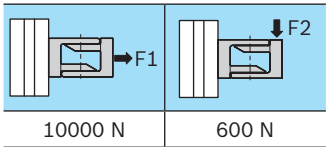
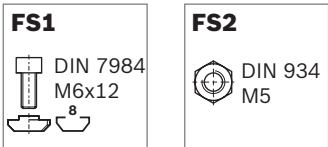
Bolt connector D11 for end face connections

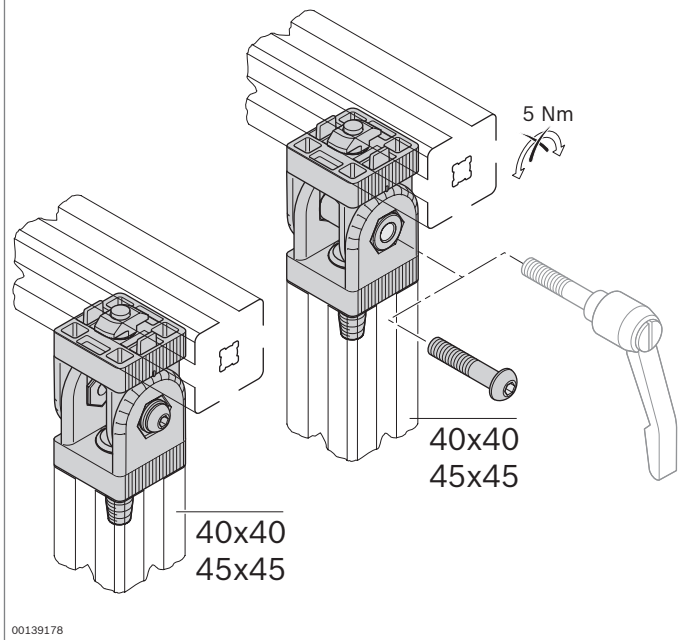


Joint 30x30	Slot	ESD	No.	FS
Standard	8		3 842 502 683	2xFS1, 4xFS2
designLINE	8		3 842 538 683	2xFS1, 4xFS2

Material: Standard: Diecast zinc
designLINE: painted, RAL 9006
 Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)



40x40, 45x45


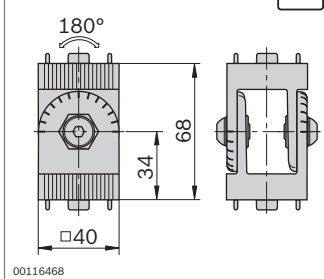
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**Join 40x40, 40x40 support,
45x45, 45x45 support**

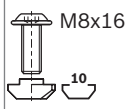
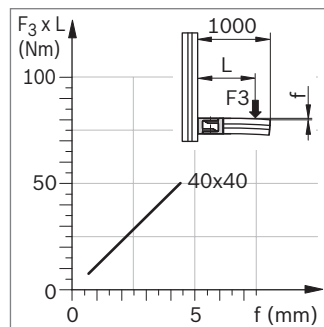
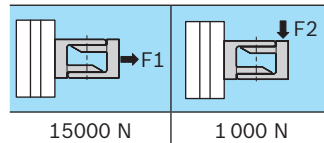
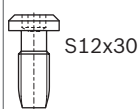
designLINE

- For movable or rigid profile connections at any angle
- Swivel range 180°
- With a 15° graduation
- Clamping and convenient adjustment of “support” joint using a clamping lever (5 Nm)
- *designLINE* version with special silver paint (RAL 9006) for an attractive, high-quality design

4

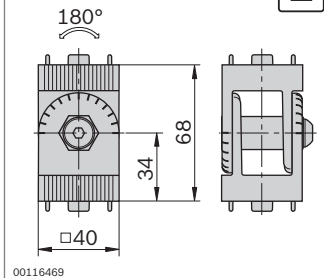
40x40


00116468

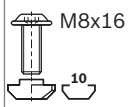
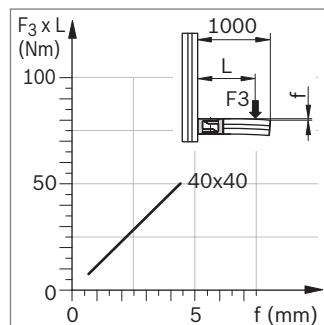
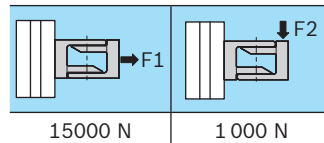
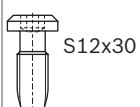
FS3

FS4


Joint 40x40	Slot	ESD	No.	FS
Standard	10		3 842 543 401	2xFS3, 2xFS4
designLINE	10		3 842 538 684	2xFS3, 2xFS4

Material: Standard: Diecast aluminum
designLINE: painted, RAL 9006
 Fastening material: Steel; galvanized
 Scope of delivery: Incl. fastening material (FS)

40x40 support


00116469

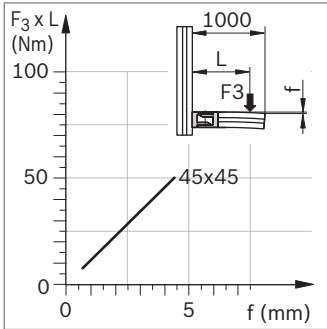
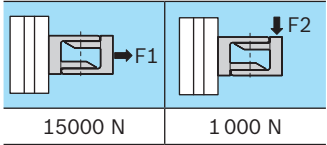
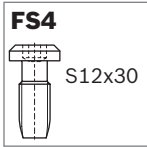
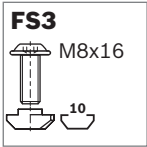
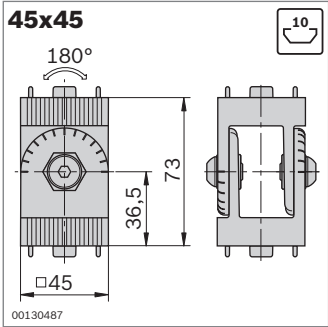
FS3

FS4


Joint 40x40 support	Slot	ESD	No.	FS
Standard	10		3 842 543 402	2xFS3, 2xFS4
designLINE	10		3 842 538 685	2xFS3, 2xFS4

Material: Standard: Diecast aluminum
designLINE: painted, RAL 9006
 Fastening material: Steel; galvanized
 Scope of delivery: Incl. fastening material (FS)

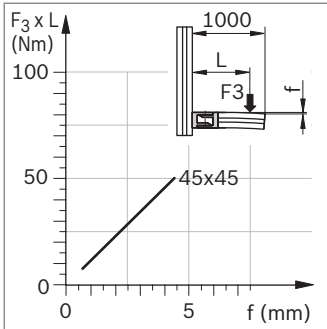
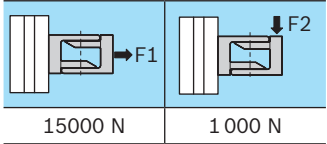
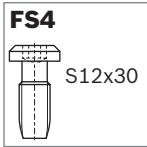
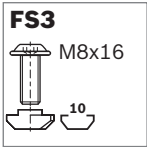
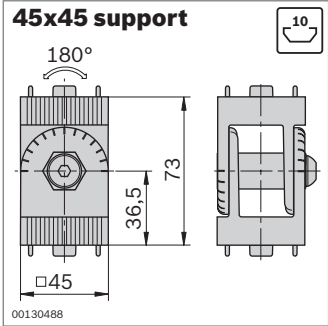
Clamping lever M8x40	No.
For joint 40x40 support	3 842 516 847

Material: Diecast zinc, black polymer coating



Joint 45x45	Slot	ESD	No.	FS
Standard	10		3 842 543 403	2xFS3, 2xFS4
<i>designLINE</i>	10		3 842 538 686	2xFS3, 2xFS4

Material: Standard: Diecast aluminum
designLINE: painted, RAL 9006
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)

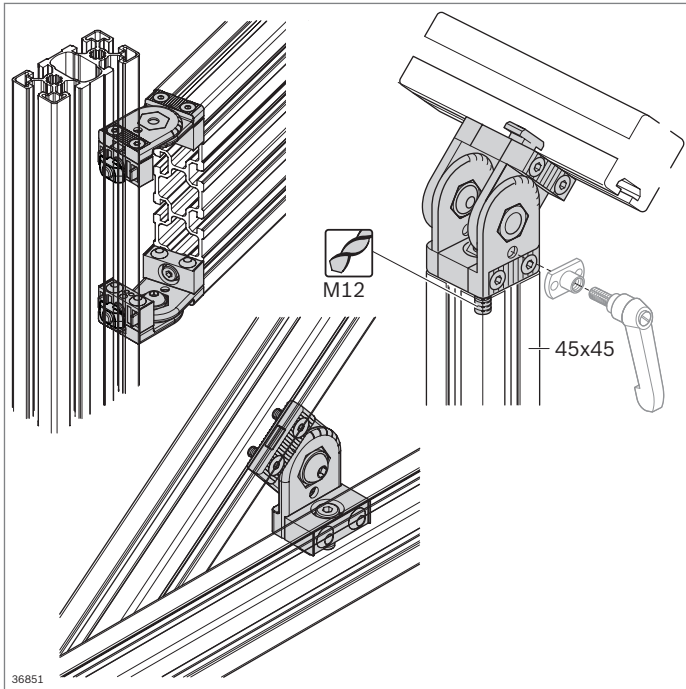


Joint 45x45 support	Slot	ESD	No.	FS
Standard	10		3 842 543 404	2xFS3, 2xFS4
<i>designLINE</i>	10		3 842 538 687	2xFS3, 2xFS4

Material: Standard: Diecast aluminum
designLINE: painted, RAL 9006
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)

Clamping lever M8x45	No.
For joint 45x45 support	3 842 538 607

Material: Diecast zinc, black polymer coating

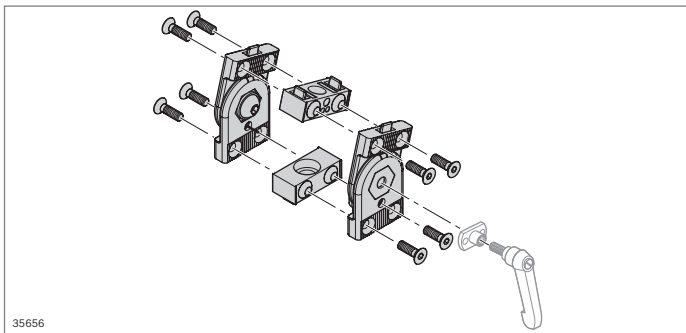


Joint 45x45



- For movable or rigid profile connections at any angle
- Swivel range 182°
- With a 15° graduation

4

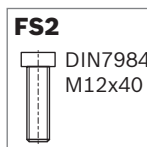
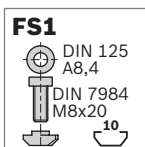
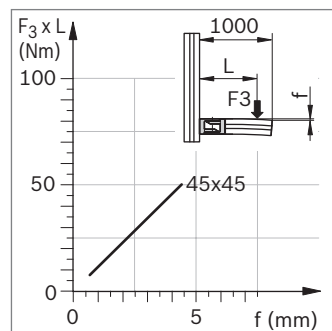
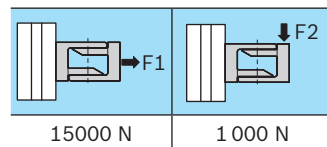
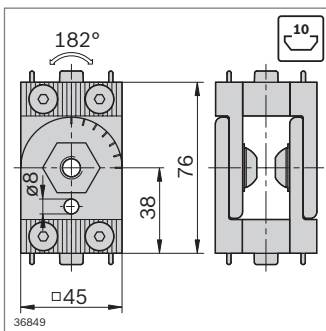


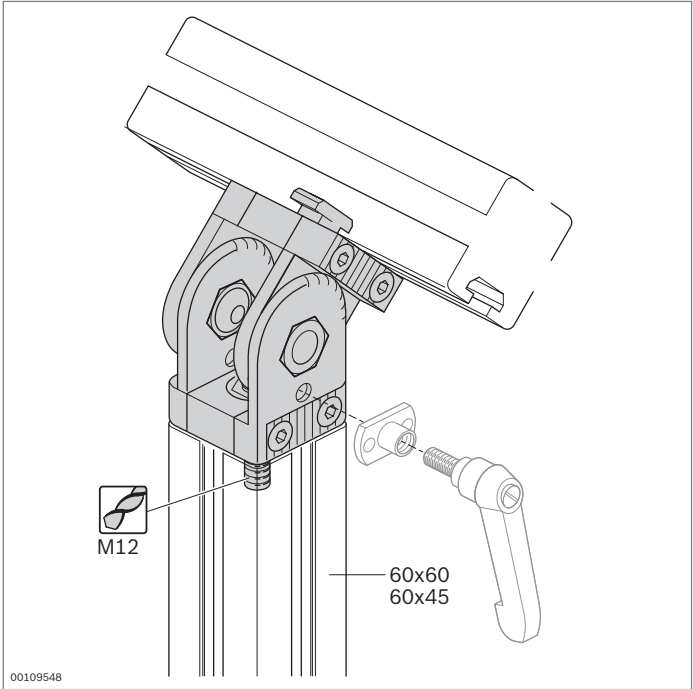
Joint 45x45	Slot ESD No.	FS
Standard	10 3 842 502 684	2xFS1, 2xFS2

Material: Standard: Diecast zinc
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)

Clamping lever M5x10	ESD No.
For joint 45x45	3 842 505 144

Material: Diecast zinc, black polymer coating

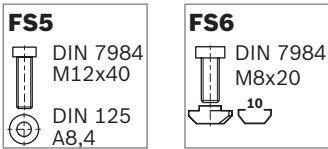
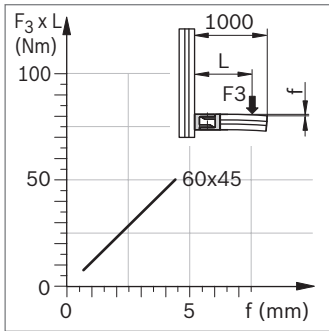
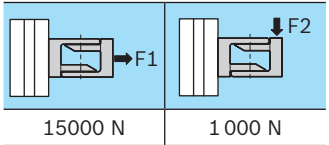
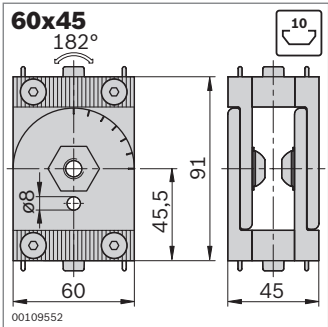




Joint 60x45, 60x60



- For movable or rigid profile connections at any angle
- Swivel range 182°
- With a 15° graduation
- Locking by clamping (5 Nm) or fixing with pins (15 Nm)
- The joint can be adjusted using a clamping lever
- *designLINE* version with special silver paint (RAL 9006)
- Profile finishing:
Thread (M12) in central bore for end connection



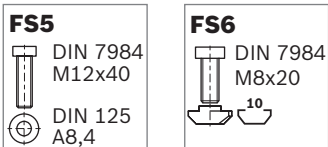
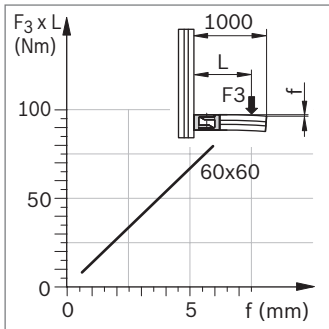
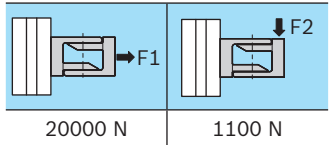
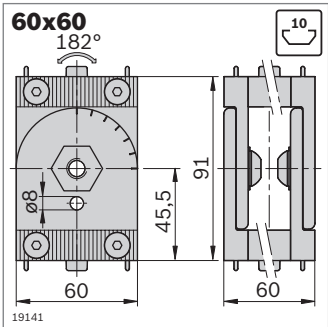
Joint 60x45	Slot	ESD	No.	FS
Standard	10		3 842 502 688	2xFS5, 2xFS6
<i>designLINE</i>	10		3 842 539 799	2xFS5, 2xFS6

Material: Standard: Diecast zinc
designLINE: painted, RAL 9006
Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)

Clamping lever M5x10	No.
For joint 60x45	3 842 505 144

Material: Diecast zinc, black polymer coating



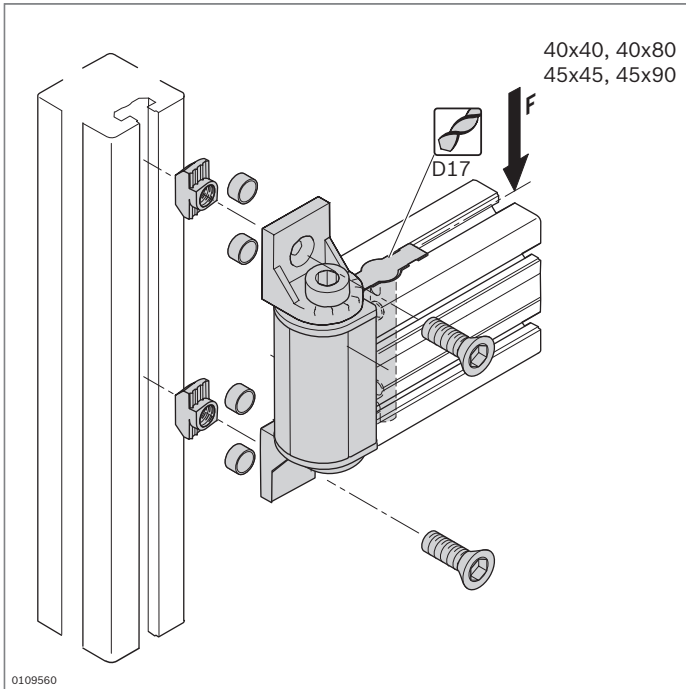
Joint 60x60	Slot	ESD	No.	FS
Standard	10		3 842 502 687	2xFS5, 2xFS6
<i>designLINE</i>	10		3 842 539 800	2xFS5, 2xFS6

Material: Standard: Diecast zinc
designLINE: painted, RAL 9006
Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)

Clamping lever M5x10	No.
For joint 60x60	3 842 505 144

Material: Diecast zinc, black polymer coating



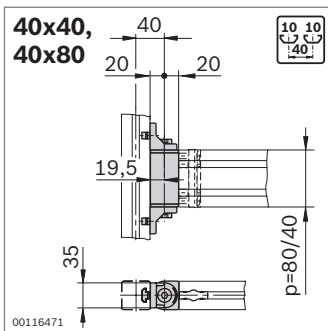
Swivel bearing



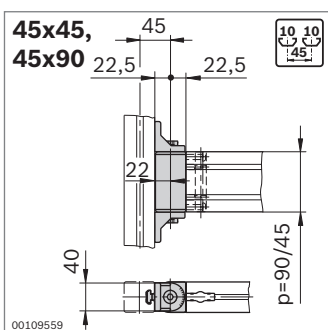
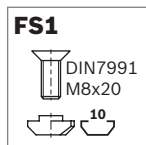
designLINE

- Suitable for swiveling right-angled profile connections, e.g. for constructing supporting arms or doors
- *designLINE* version with special silver paint (RAL 9006) for an attractive, high-quality design
- Profile finishing:
Through-hole D17

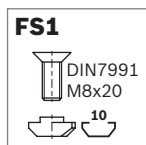
4



Profile	
40x40	40
40x80	130



Profile	
45x45	50
45x90	150



Swivel bearing		p (mm)	ESD	No.	FS
40x40	Standard	40		3 842 554 404	2xFS1
	<i>designLINE</i>	40		3 842 554 412	2xFS1
40x80	Standard	80		3 842 554 406	2xFS1
	<i>designLINE</i>	80		3 842 554 414	2xFS1

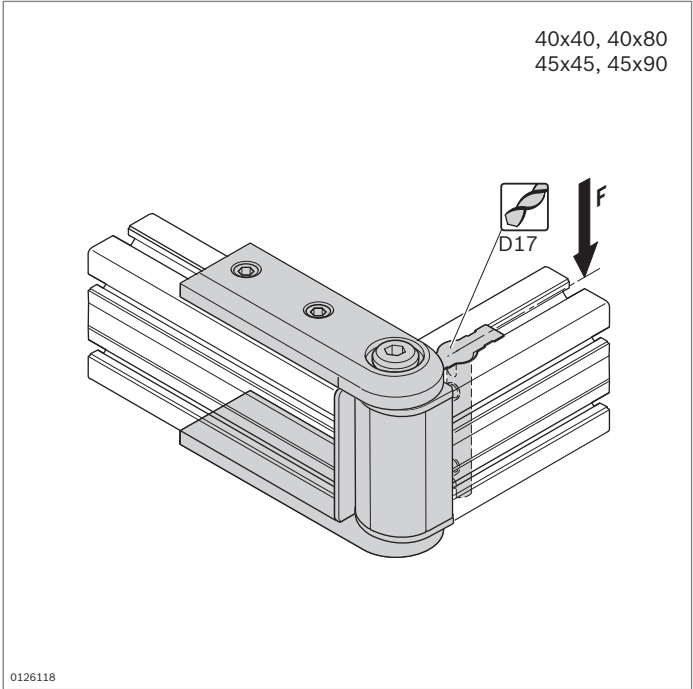
Material: Standard: Diecast aluminum
designLINE: painted (RAL 9006)
Fastening material: Steel; galvanized
Cover cap: PP; gray

Scope of delivery: Incl. cover caps, bolt connectors, fastening material (FS)

Swivel bearing		p (mm)	ESD	No.	FS
45x45	Standard	45		3 842 554 408	2xFS1
	<i>designLINE</i>	45		3 842 554 416	2xFS1
45x90	Standard	90		3 842 554 410	2xFS1
	<i>designLINE</i>	90		3 842 554 418	2xFS1

Material: Standard: Diecast zinc
designLINE: painted (RAL 9006)
Fastening material: Steel; galvanized
Cover cap: PP; gray

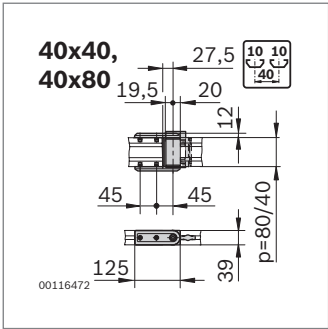
Scope of delivery: Incl. cover caps, bolt connectors, fastening material (FS)



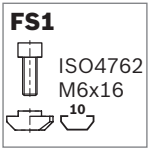
Supporting arm joint



- Suitable for swiveling end connections, e.g. for the construction of supporting arms
- *designLINE* version with special silver paint (RAL 9006) for an attractive, high-quality design
- Profile finishing:
Through-hole D17



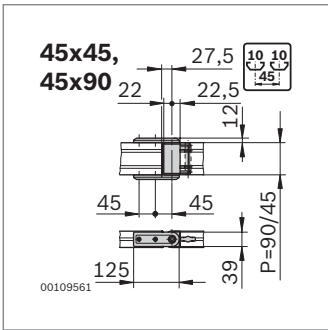
Profile	
	 $M_{max} = F \times L \text{ (Nm)}$
40x40	40
40x80	130



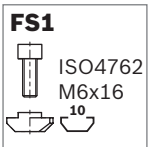
Supporting arm joint	p (mm)	ESD	No.	FS
40x40 Standard	40		3 842 554 420	4xFS1
40x40 <i>designLINE</i>	40		3 842 554 428	4xFS1
40x80 Standard	80		3 842 554 422	4xFS1
40x80 <i>designLINE</i>	80		3 842 554 430	4xFS1

Material: Standard: Diecast zinc
designLINE: painted (RAL 9006)
Cover cap: PP, signal gray
Fastening material: Steel; galvanized

Scope of delivery: Incl. cover caps, bolt connectors, fastening material (FS)



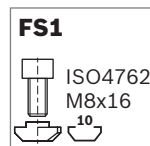
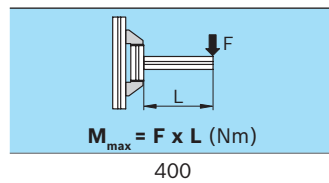
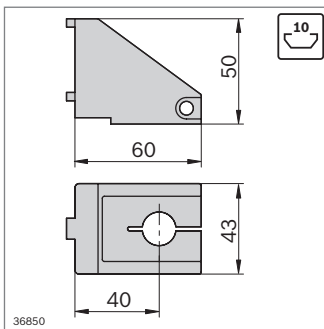
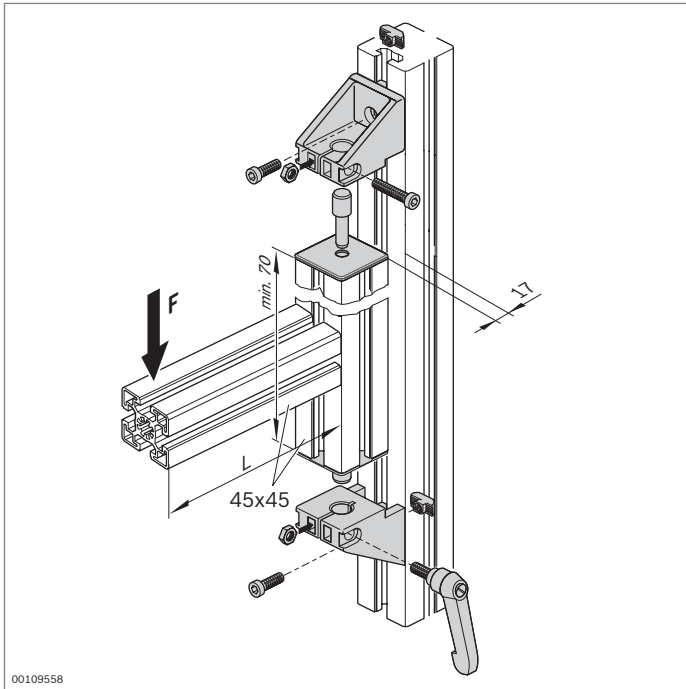
Profile	
	 $M_{max} = F \times L \text{ (Nm)}$
45x45	50
45x90	150



Supporting arm joint	p (mm)	ESD	No.	FS
45x45 Standard	45		3 842 554 424	4xFS1
45x45 <i>designLINE</i>	45		3 842 554 432	4xFS1
45x90 Standard	90		3 842 554 426	4xFS1
45x90 <i>designLINE</i>	90		3 842 554 434	4xFS1

Material: Standard: Diecast zinc
designLINE: painted (RAL 9006)
Cover cap: PP, signal gray
Fastening material: Steel; galvanized

Scope of delivery: Incl. cover caps, bolt connectors, fastening material (FS)



Bearing pedestal



designLINE

- Bearing pedestal for heavy constructions which have to be swiveled
- *designLINE* version with special silver paint (RAL 9006) for an attractive, high-quality design

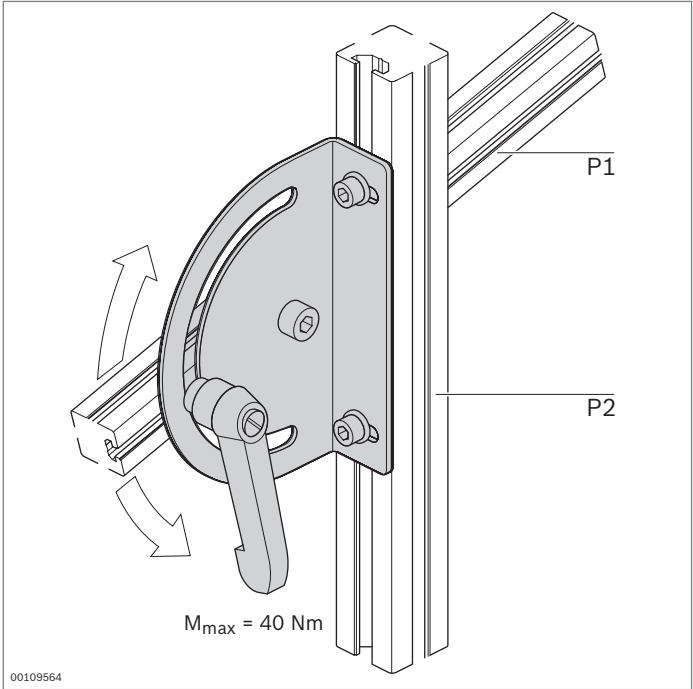
Bearing pedestal	Slot	No.	FS
Standard	10	3 842 547 868	2xFS1
<i>designLINE</i>	10	3 842 547 869	2xFS1

Material:

Standard: Diecast zinc
designLINE: painted (RAL 9006)
 Fastening material: Steel; galvanized
 Clamping lever handle: Diecast zinc;
 black plastic coated
 Cover cap: PP, signal gray

Scope of delivery:

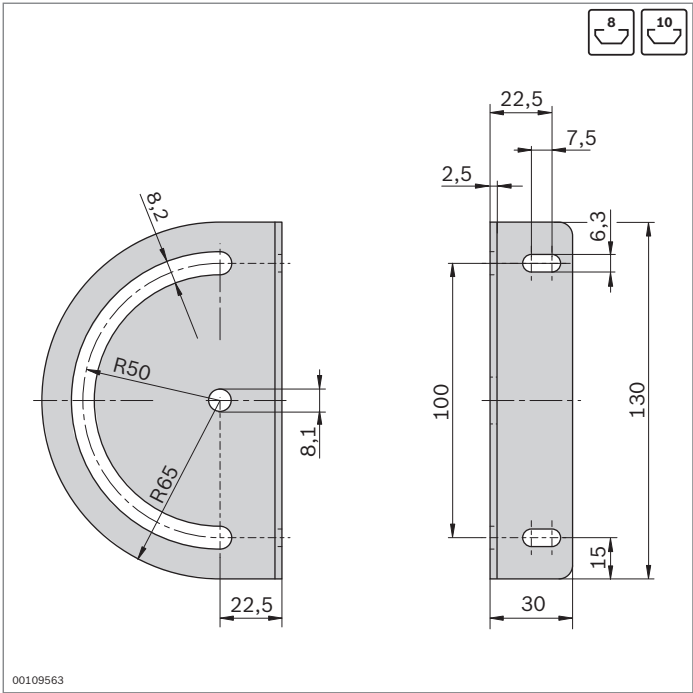
Incl. fastening material (FS), 2 x cover cap,
 2 x bolt, clamping lever (and additional standard
 parts for clamping the bearing pedestal)



Swivel mounting 180°



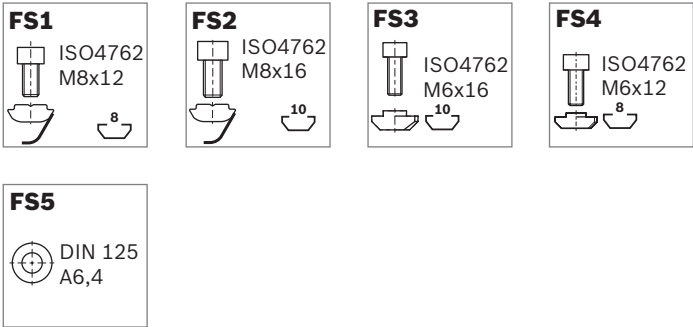
- Swivel mounting for shelves, etc. which need to be positioned at an angle of $\pm 90^\circ$

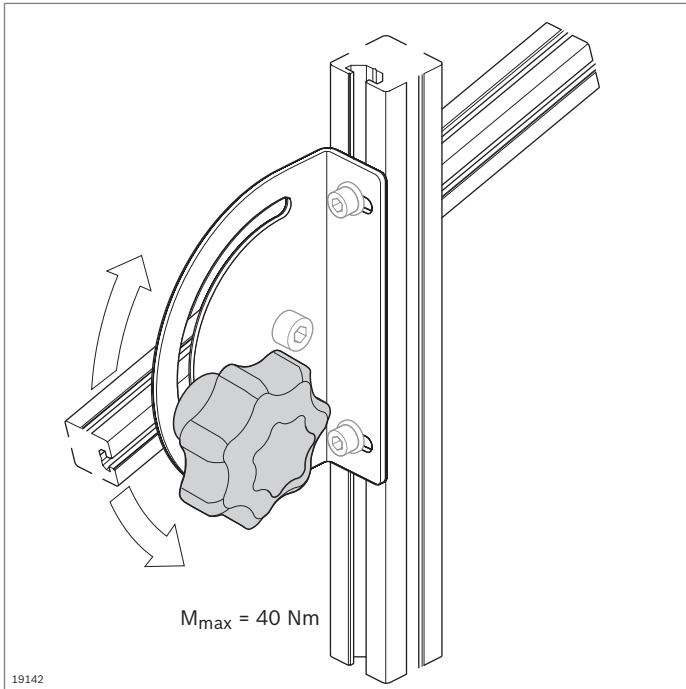


Swivel mounting 180°	P1 / P2	ESD	No.	FS
	8 / 8	⚠	3 842 538 275	FS1
	8 / 10			2xFS3
				2xFS4
				2xFS5
	10 / 8	⚠	3 842 538 276	FS2
	10 / 10			2xFS3
				2xFS4
				2xFS5

Material: Swivel mounting: Steel; galvanized
Clamping lever: Diecast zinc; black plastic coated

Scope of delivery: Incl. fastening material (FS), clamping lever with disk and swivel-in sliding block with spring





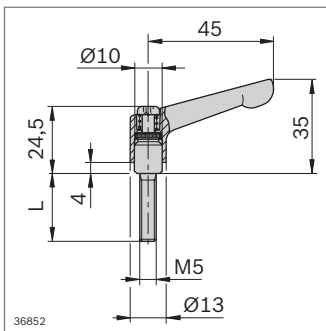
Clamping lever, star knob



- Clamping elements for adjustable connections

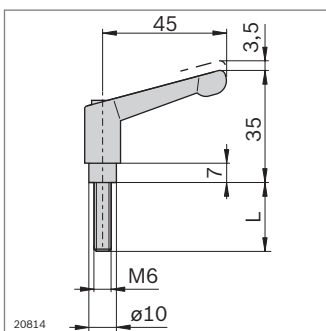
Accessories:

- Screws and sliding blocks; see fastening material (p. 4-12)



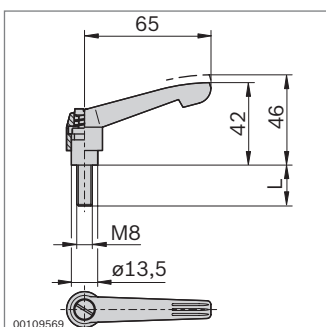
Clamping lever M5	L (mm)	No.
	10	3 842 505 144

Material: Clamping lever: Diecast zinc; black plastic coated
Screws: Steel; bronzed



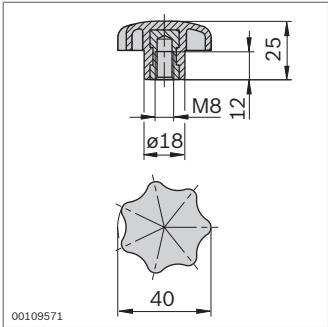
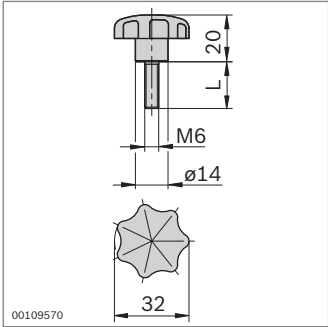
Clamping lever M6	L (mm)	No.
	25	3 842 528 540
	40	3 842 528 539

Material: Clamping lever: Diecast zinc; black plastic coated
Screws: Steel; galvanized and black chrome-plated



Clamping lever M8	L (mm)	No.
	12	3 842 516 845
	16	3 842 522 124
	20	3 842 516 846
	40	3 842 516 847
	45	3 842 538 607
	55	3 842 516 848

Material: Clamping lever: Diecast zinc; black plastic coated
Steel parts: galvanized, strength class 5.8



Star knob M6	L (mm)	No.
	15	3 842 516 849
	20	3 842 516 850

Material: Star knob: PA; black
Steel parts: galvanized, strength class 5.8

Star knob M8	No.
	3 842 516 851

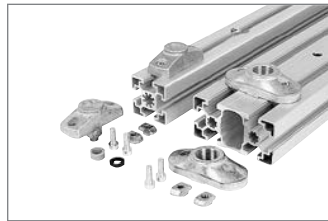
Material: Star knob: PA; black
Steel parts: galvanized, strength class 5.8

Air-supply elements

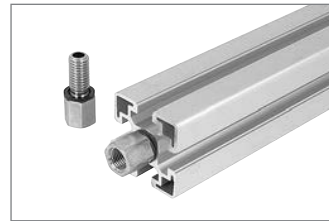
5



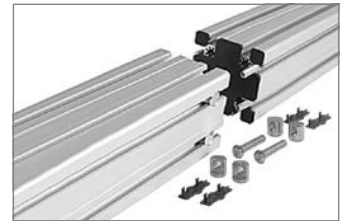
Flanged plate (p. 5-3)



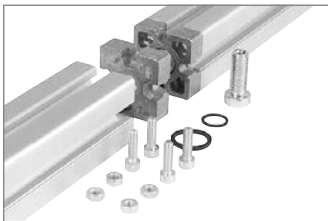
Connection piece (p. 5-4)



Connection screw fitting
M12-1/4" (p. 5-4)



Longitudinal end connector
(p. 5-5)

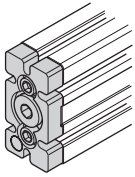


Longitudinal end connector
45 Pneu (p. 5-6)



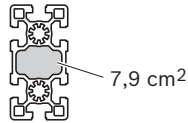
T-connector 45 Pneu
(p. 5-6)

45x90
(p. 2-43)



19584

45x90

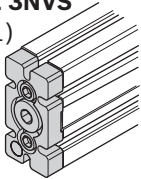


00109732

Air-supply elements

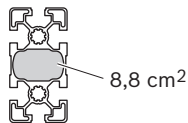
- Rexroth **strut profiles** can be used as compressed-air lines and reservoirs. The hollow chambers or central holes are used
- **Flanged plate** for end closing of profiles (p. 5-3)
- Compressed-air intake or discharge at the flanged plate, **connection piece**, or **connection screw fitting** (p. 5-4)
- Air-tight connecting of profiles with **longitudinal end connectors or T-connectors** (p. 5-6, 5-5)
- The use of the heavy-duty profiles is preferable in the case of more demanding leak-tightness requirements (e.g. for underwater applications)

45x90L
45x90L 2N
45x90L 3NVS
(p. 2-41)



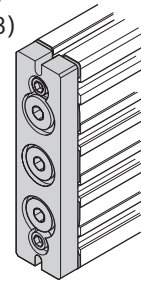
19585

45x90L



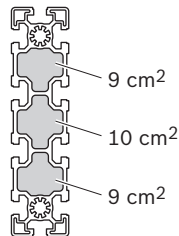
00109731

45x180
(p. 2-43)



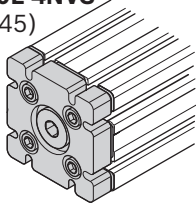
19586

45x180



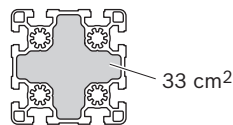
00109733

90x90L
90x90L 4N
90x90L 4NVS
(p. 2-45)



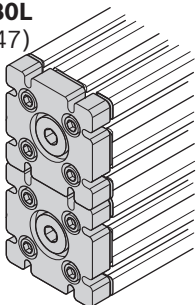
19587

90x90L



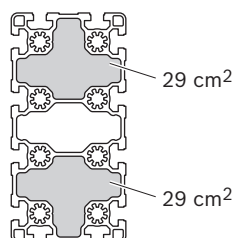
00109730

90x180L
(p. 2-47)

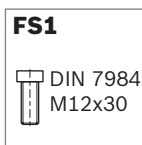
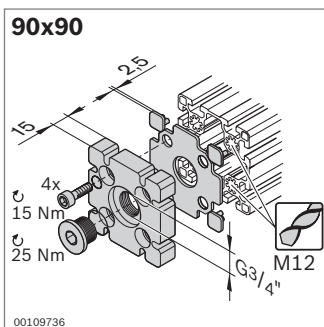
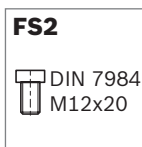
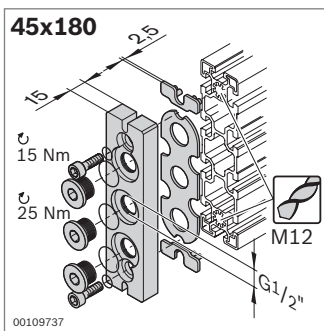
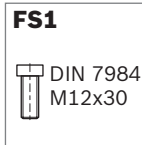
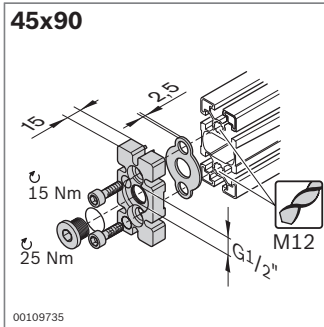
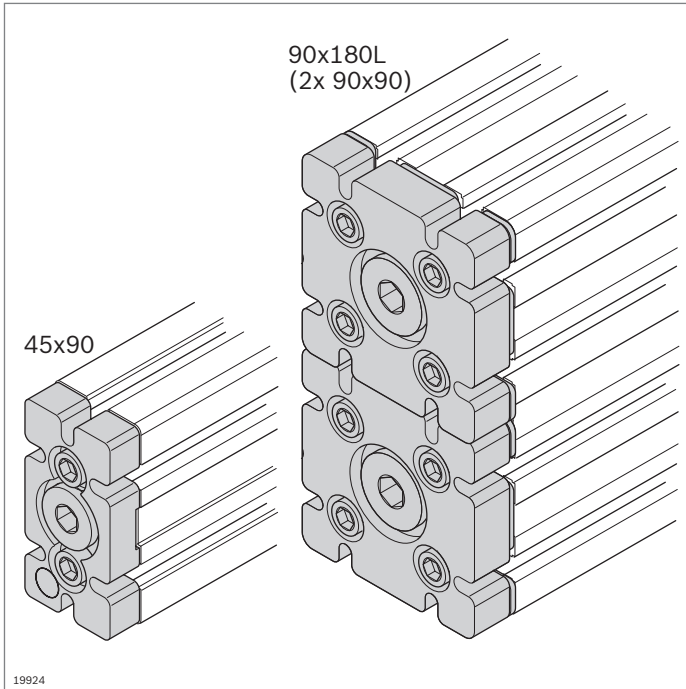


19588

90x180L



00109734



Flanged plate



- For sealing the ends of the hollow chambers. This enables the profiles to be used as a compressed-air line
- For compressed-air introduction or removal when screw plugs are replaced by pneumatic screw fittings
- Profile finishing: M12 thread cutting in the central holes
- For a maximum pressure ($p_{\max}$) of 8 bar

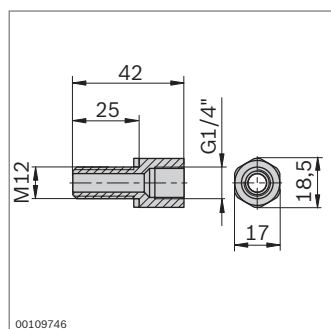
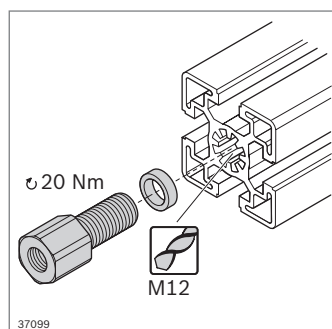
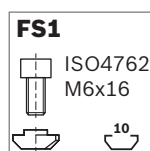
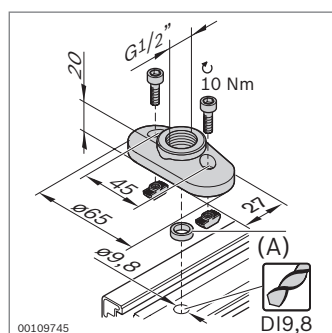
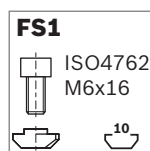
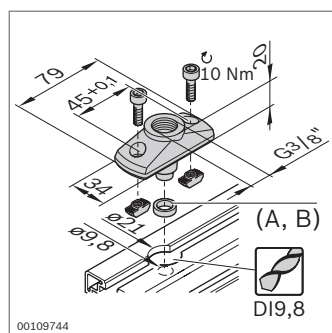
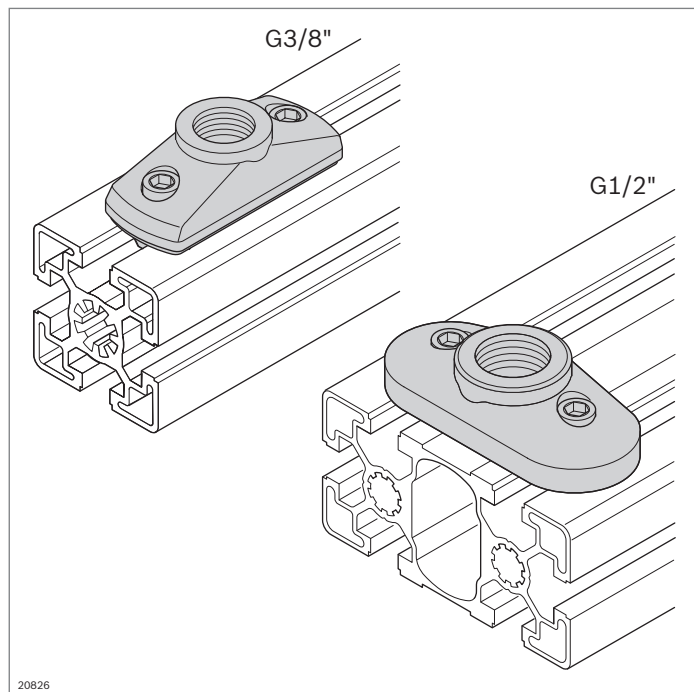
5

Flanged plate	No.	FS
45x90	3 842 523 097	2xFS1
Material:	Flanged plate: Diecast aluminum Seal: NBR Fastening material: Steel; galvanized	
Scope of delivery:	Incl. fastening material (FS), screw plug, seals	

Flanged plate	No.	FS
45x180	2 3 842 535 721	2xFS2
Material:	Flanged plate: Aluminum Seal: NBR Fastening material: Steel; galvanized	
Scope of delivery:	Incl. fastening material (FS), 2 x spacer, 3 x screw plug, seals	

Flanged plate	No.	FS
90x90	3 842 523 098	4xFS1
Material:	Flanged plate: Diecast aluminum Seal: NBR Fastening material: Steel; galvanized	
Scope of delivery:	Incl. fastening material (FS), 4 x spacer, screw plug, seals	

Notice: Only suitable for light profiles 90x90L and 90x180L.



Connection piece
Connection screw fitting M12-1/4"



Connection piece

- ▶ For compressed-air intake or discharge at any point on the profile
- ▶ G3/8" for connection at central profile bore
- ▶ G1/2" for connection at hollow chamber
- ▶ Suitable for light and standard profiles
 - Profile finishing: Blind hole DI9.8; blind hole $\varnothing 21$ mm (drilling jig **3 842 528 574**, p. 14-3)
- ▶ For a maximum pressure (p_{max}) of 8 bar

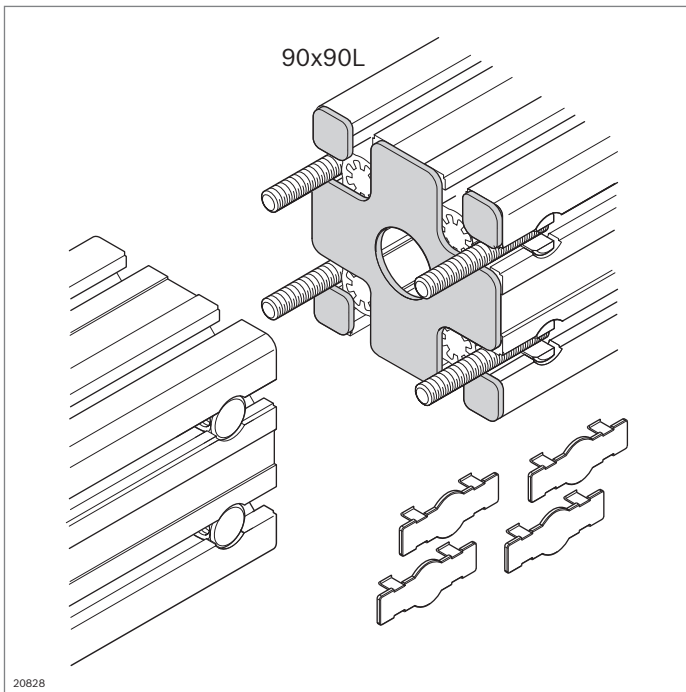
Connection piece		No.	FS
G3/8"		3 842 523 092	2xFS1
Material:	Connection piece: Diecast aluminum		
	Seal: NBR		
Scope of delivery:	Incl. fastening material, seals (A, B)		
Accessories:	Seals A, B (p. 5-6)		

Connection piece		No.	FS
G1/2"		3 842 352 085	2xFS1
Material:	Connection piece: Diecast zinc Seal: NBR		
Scope of delivery:	Incl. fastening material, seal (A)		
Accessories:	Seal A (p. 5-6)		

Connection screw fitting M12-1/4"

- ▶ For screw fitting in central profile bore
- ▶ Profile finishing: M12
- ▶ For a maximum pressure ($p_{\max}$) of 8 bar

Connection screw fitting			No.
M12-1/4"		10	3 842 535 719
Material:	Connection screw fitting: Steel; galvanized Seal: PVC; hard		
Scope of delivery:	Incl. Seal		



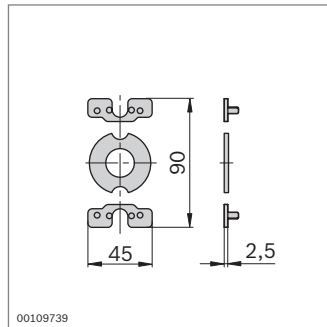
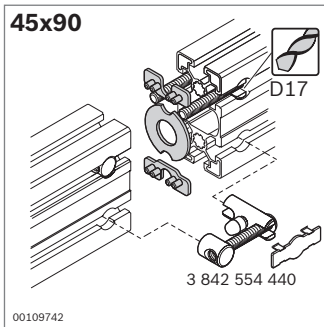
Longitudinal end connection



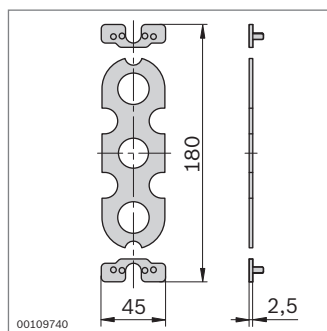
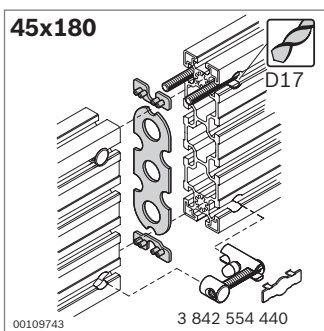
- Seal for end-to-end connection of profiles carrying compressed air
- Profile finishing: Through-hole D17 (45x90, 45x180); blind hole LF (90x90L)
- For a maximum pressure ($p_{\max}$) of 8 bar

Required accessories:

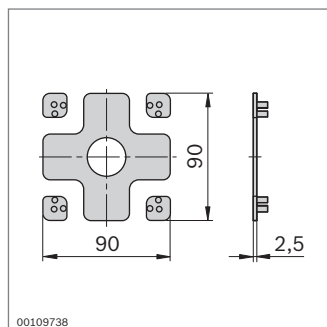
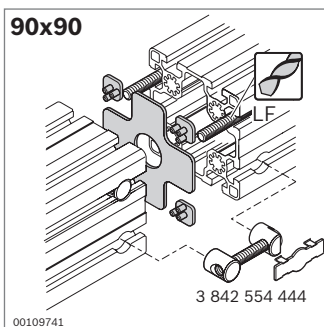
Longitudinal end connector for profile connection (p. 3-59)



Longitudinal end connection	No.
45x90	3 842 508 087
Material:	Seal: PUR Spacer: PA
Scope of delivery:	Seal, 2 x spacer

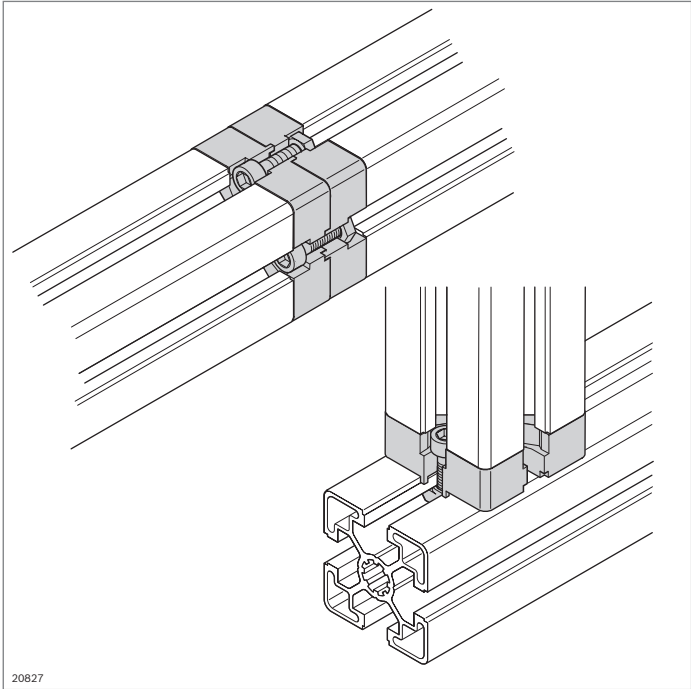


Longitudinal end connection	No.
45x180	3 842 508 088
Material:	Seal: NBR Spacer: PA
Scope of delivery:	Seal, 2 x spacer



Longitudinal end connection	No.
90x90	3 842 510 145
Material:	Seal: NBR Spacer: PA
Scope of delivery:	Seal, 4 x spacer

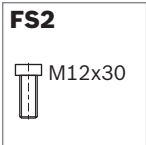
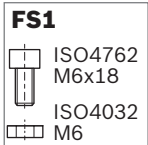
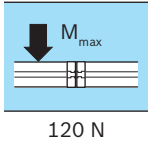
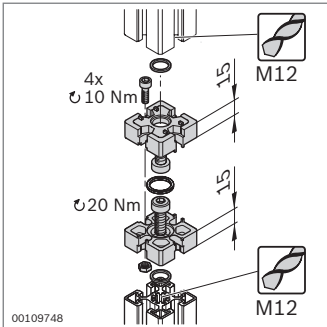
Notice: Only suitable for light profile 90x90L.



Longitudinal end connector 45 Pneu
T-connector 45 Pneu, seal



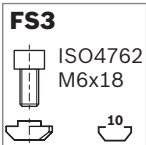
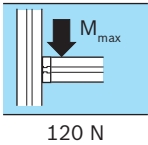
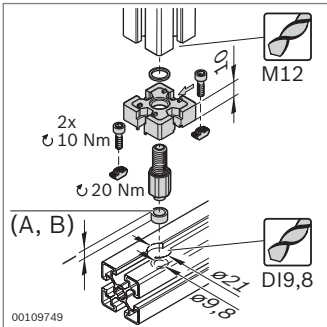
- ▶ Longitudinal end connector 45 Pneu for end face mechanical and pneumatic connections of two 45x45 or 45x45L profiles for using the central hole as a compressed-air line
- ▶ T-connector 45 Pneu for the mechanical and pneumatic connection of two 45x45 or 45x45L profiles at under a 90° angle for using the central hole as a compressed-air line
- ▶ Profile finishing: M12 in central hole; blind hole DI9.8; blind hole ø21 mm (drilling jig **3 842 528 574**, p. 14-3)
- ▶ For a maximum pressure (p_{max}) of 8 bar



Longitudinal end connector	No.	FS
45 Pneu	3 842 523 094	4xFS1, 2xFS2

Material: Longitudinal end connector: Diecast aluminum
Seal: NBR

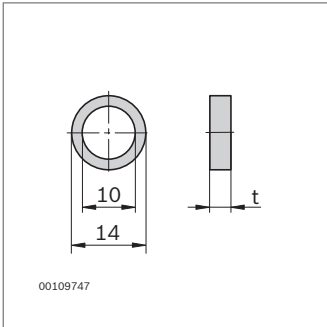
Scope of delivery: Incl. fastening material, sealing rings



T-connector	No.	FS
45 Pneu	3 842 523 093	2xFS3

Material: T-connector: Diecast aluminum
Seal: NBR

Scope of delivery: Incl. fastening material, seals **(A, B)** for standard and light profiles



- ▶ Seal for connection piece and T-connector

Seal	t (mm)	No.
A For standard profiles	4 10	3 842 503 242
B For light profiles	7 10	3 842 523 102

Material: NBR

Feet and wheels

6



Modular leveling feet
(p. 6-2)



Leveling foot, foot,
damping ring (p. 6-4)



Plate (p. 6-6)



Base plate, steel (p. 6-8)



Base plate (p. 6-10)



Base plate (p. 6-11)



Foot (p. 6-12)



Foot, stainless steel
(p. 6-14)



Double wheel (p. 6-16)



Wheel (p. 6-17)



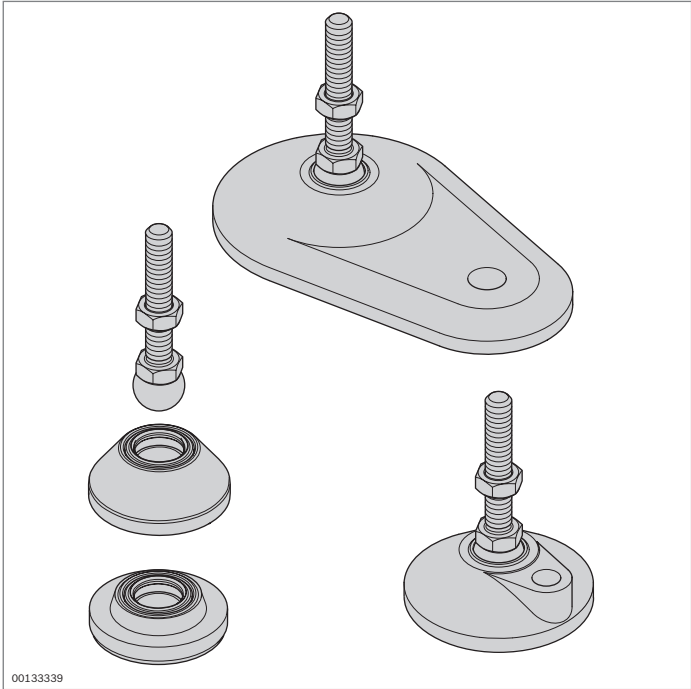
Heavy-duty wheel (p. 6-20)



Lifting wheel (p. 6-22)



Roller with mounting flange
(p. 6-24)

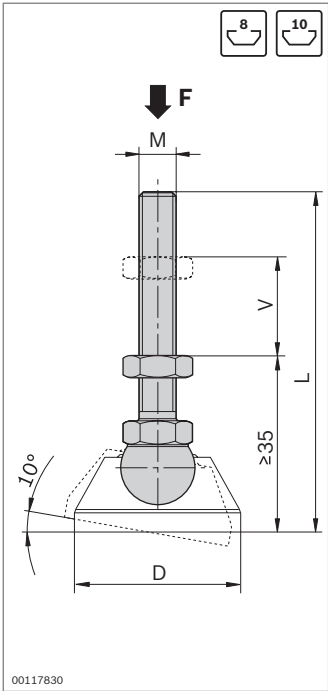


Modular leveling feet

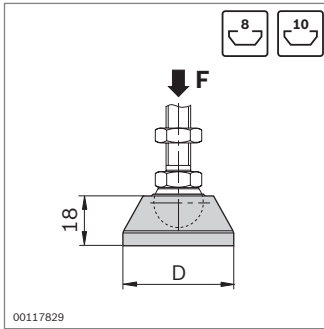


- Leveling feet for compensating irregularities in the floor up to 10°
 - Modular system, various combinations possible
 - Spindles and base plates can be combined as desired
 - Base plates with screw hole for simple screw fitting to the floor
- The damping plate prevents the transfer of vibrations and allows a defined conduction of voltages via a set of grounding components (p. 17-2)
- Profile finishing: Thread M in central hole

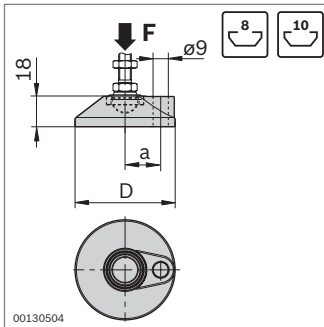
Accessories: Bearing ring (p. 6-16)



Spindle	F (N)	M	L (mm)	V (mm)	ESD	No.
Stainless steel	10000	M8	75	20		20 3 842 536 811
	20000	M12	85	30		20 3 842 536 812
	20000	M12	145	80		20 3 842 537 223
	20000	M12	200	135		20 3 842 537 225
	30000	M16	85	20		20 3 842 537 227
	30000	M16	145	80		20 3 842 537 229
	30000	M16	200	135		20 3 842 537 231
	30000	M16	200	135		20 3 842 537 232
Steel; galvanized	10000	M8	75	20		20 3 842 537 220
	20000	M12	85	30		20 3 842 537 222
	20000	M12	145	80		20 3 842 537 224
	20000	M12	200	135		20 3 842 537 226
	30000	M16	85	20		20 3 842 537 228
	30000	M16	145	80		20 3 842 537 230
	30000	M16	200	135		20 3 842 537 232
	30000	M16	200	135		20 3 842 537 232

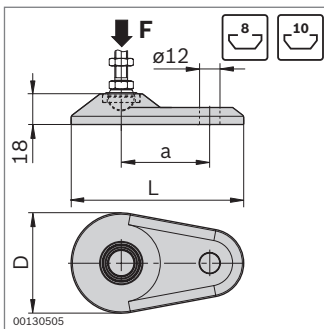


Base plate	F (N)	D (mm)	ESD	No.
Stainless steel	20000	29		20 3 842 536 694
	30000	39		20 3 842 536 695
	30000	44		20 3 842 536 696
	30000	59		20 3 842 538 673
	30000	79		20 3 842 537 206
Diecast zinc, black powder coating	20000	29		20 3 842 538 674
	30000	39		20 3 842 538 675
	30000	44		20 3 842 538 676
	30000	59		20 3 842 538 677
	30000	79		20 3 842 538 678
PA; black	5000	29		20 3 842 538 832
	9000	39		20 3 842 538 833
	9000	44		20 3 842 538 834
	9000	59		20 3 842 538 835
	9000	79		20 3 842 538 836



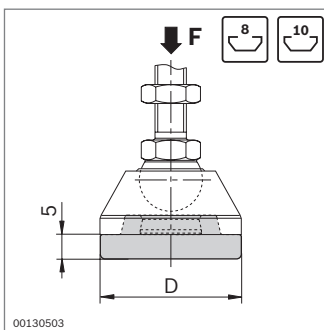
Base plate with screw hole	F (N)	D (mm)	a (mm)	No.
	30000	59	21	20 3 842 538 932
	30000	79	31	20 3 842 538 934

Material: Diecast zinc, black powder coating



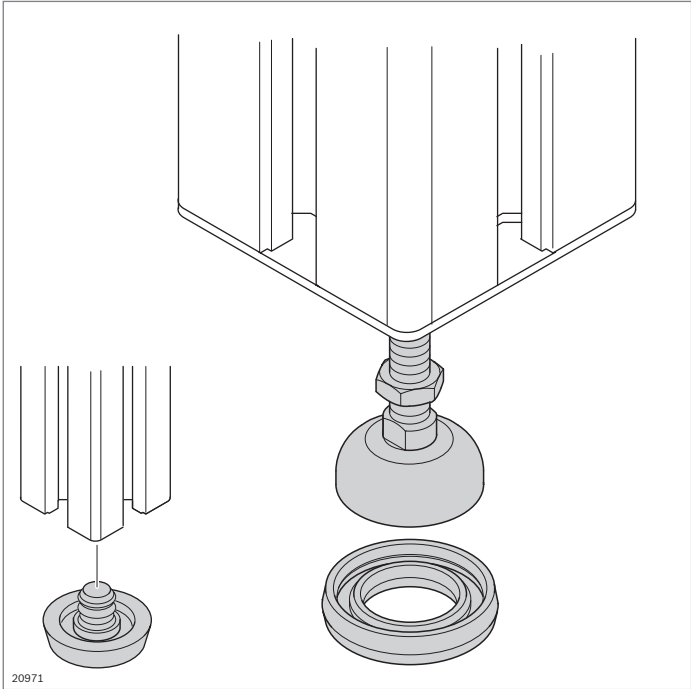
Oval base plate with screw hole	F (N)	D (mm)	a (mm)	L (mm)	No.
	30000	59	52	100	20 3 842 538 679
	30000	79	65	130	20 3 842 538 680

Material: Diecast zinc, black powder coating



Damping plate	F (N)	D (mm)	No.
	1100	29	20 3 842 538 555
	1600	39	20 3 842 538 556
	2000	44	20 3 842 538 557
	2500	59	20 3 842 538 558
	2800	79	20 3 842 538 559

Material: PUR; black



Leveling foot, foot, Damping ring



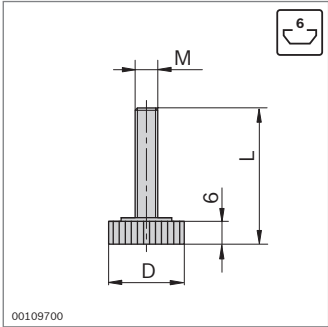
Leveling foot

- For compensating irregularities in the floor up to 5°
- Fully assembled spindle and base plate
- Profile finishing: Threading in central hole

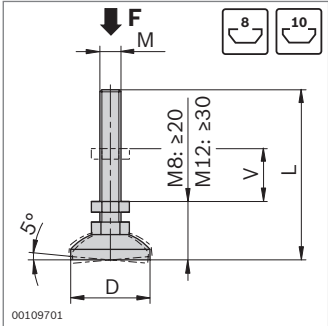
Damping ring

- The electrically insulating damping ring prevents the transfer of vibrations and allows a defined conduction of voltages via a set of grounding components (p. 17-2)

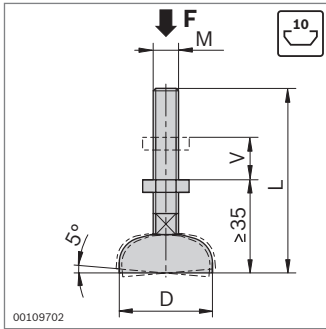
Optional accessories:
Bearing ring (p. 6-16), for when cover caps with a hole are used



Leveling foot	M	D (mm)	L (mm)	No.
	M6	20	41	3 842 518 743
Material:	Steel/plastic			

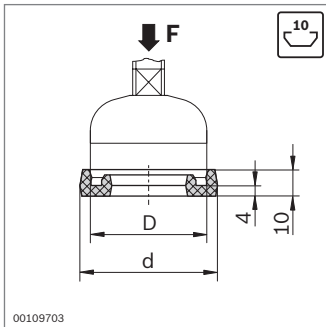


Leveling foot	F (N)	M	D (mm)	L (mm)	V (mm)	ESD	No.
	5000	M8	30	65	15		3 842 502 257
	8000	M12	30	72	14		3 842 529 025
Material:	Steel; galvanized						



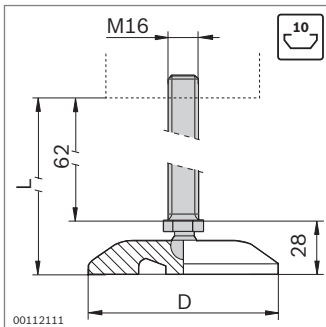
Leveling foot	F (N)	M	D (mm)	L (mm)	V (mm)	ESD	No.
	10000	M12	44	85	30		20 3 842 352 061
	20000	M16	44	145	80		20 3 842 311 956
	10000	M12	44	160	80		20 3 842 536 470
	20000	M16	44	200	135		20 3 842 554 149
	10000	M12	58	85	30		20 3 842 511 893
	20000	M16	90	85	20		20 3 842 311 950
	20000	M16	90	145	80		20 3 842 311 951
	20000	M16	90	200	135		20 3 842 527 186

Material: Steel; galvanized



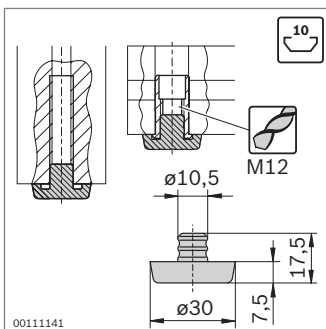
Damping ring	F (N)	D (mm)	d (mm)	No.
	1600	30	39	20 3 842 529 024
	2000	44	52	20 3 842 521 817
	2500	58	66	20 3 842 522 301
	3000	90	98	20 3 842 522 303

Material: PUR; natural, hardness: shore A 70-80



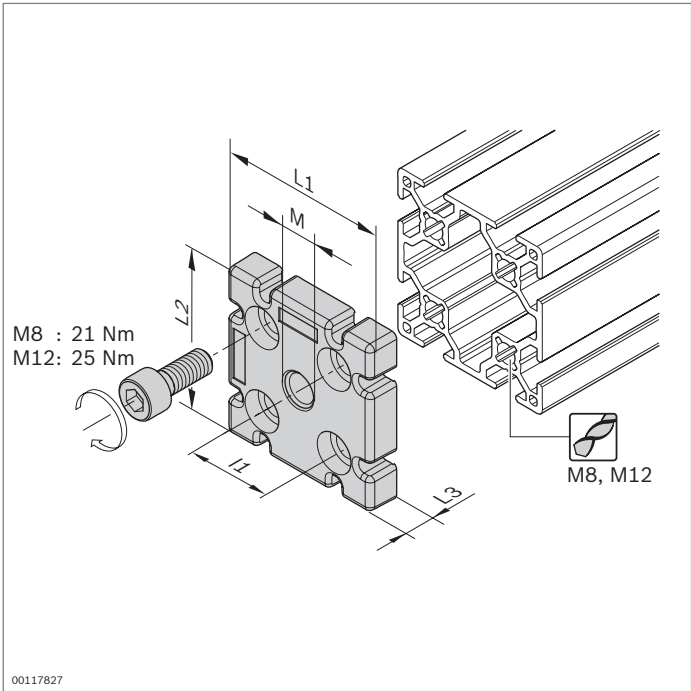
Leveling foot	M	D (mm)	L (mm)	V (mm)	No.
	M16	80	95	62	1 3 842 533 310

Material: Spindle: Stainless steel
Base plate: PA



Foot	No.
	100 3 842 514 568

Material: TPE; black



Plate



- For fastening leveling feet in profiles without a central hole
- For use as an end connector or T-connector
- Profile finishing: Tapping of thread in the central hole

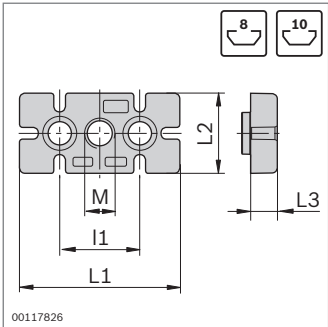


Plate	F (N)	M	L1 (mm)	I1 (mm)	L2 (mm)	L3 (mm)	No.	FS
30x60	8000	M12	60	30	30	11	3 842 536 560	2xFS1
40x80	10000	M12	80	40	40	15	3 842 536 562	2xFS2
45x90	20000	M16	90	45	45	15	3 842 536 564	2xFS2

Material: Plate: Diecast aluminum
Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)

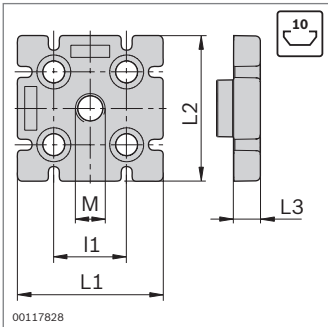
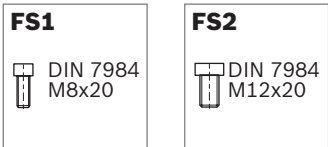
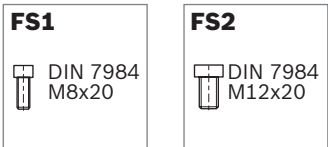
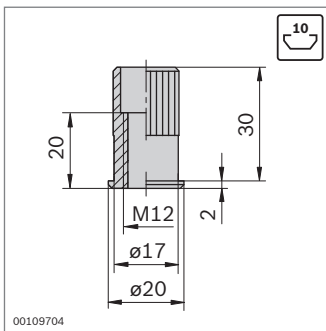
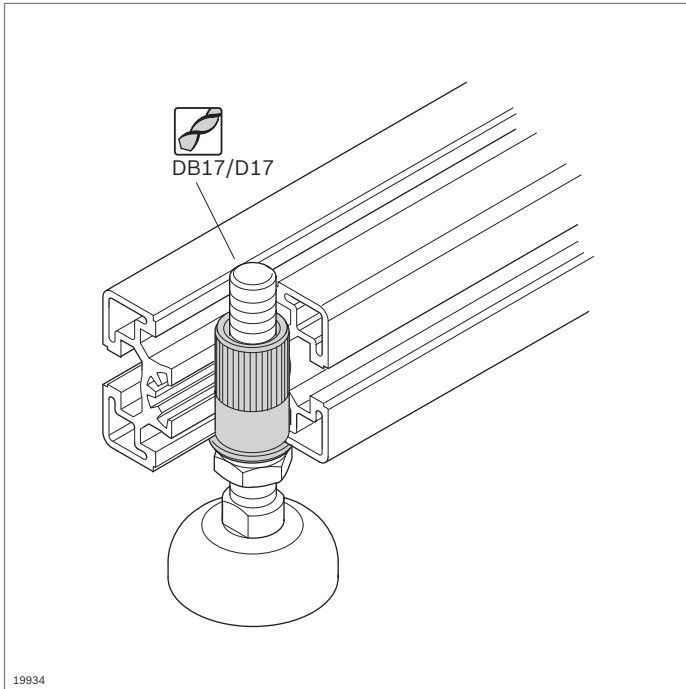


Plate	F (N)	M	L1 (mm)	I1 (mm)	L2 (mm)	L3 (mm)	No.	FS
60x60 8N	10000	M12	60	30	60	11	3 842 536 566	4xFS1
80x80L	10000	M12	80	40	80	15	3 842 529 416	4xFS2
90x90L	20000	M16	90	45	90	15	3 842 511 352	4xFS2
100x100L	20000	M16	100	50	100	15	3 842 529 417	4xFS2

Material: Plate: Diecast aluminum
Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)





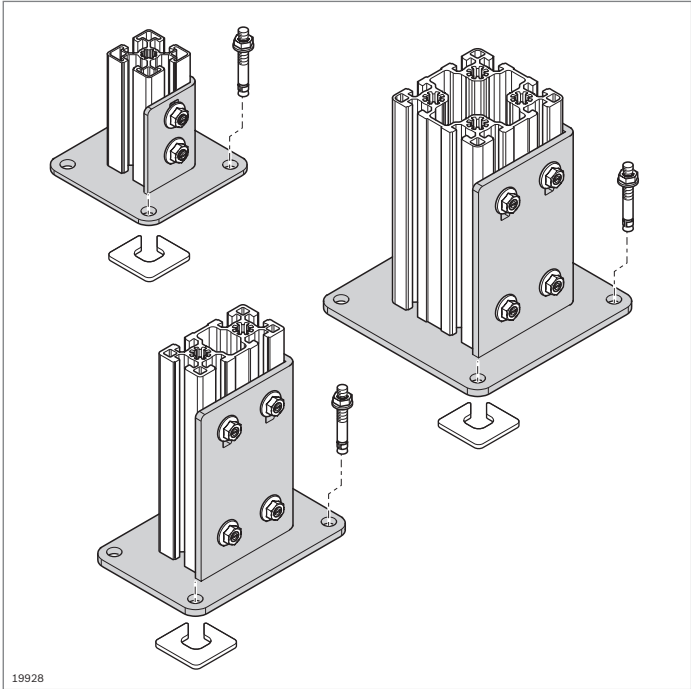
Threaded sleeve

- For fastening leveling feet at an angle to the longitudinal profile direction
- Profile finishing:
 - Drilling of blind hole DB17
 - Through-hole D17

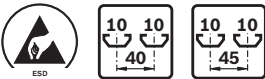
6

Threaded sleeve	No.
	3 842 504 790

Material: Steel; galvanized



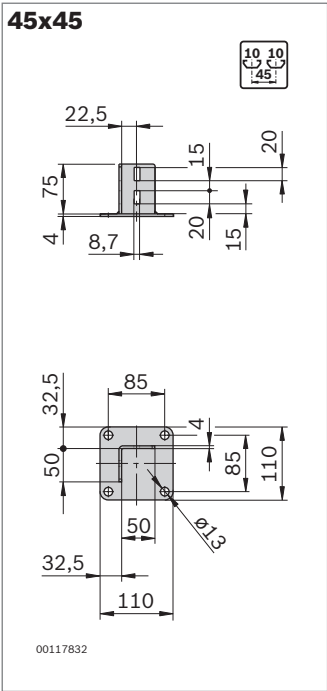
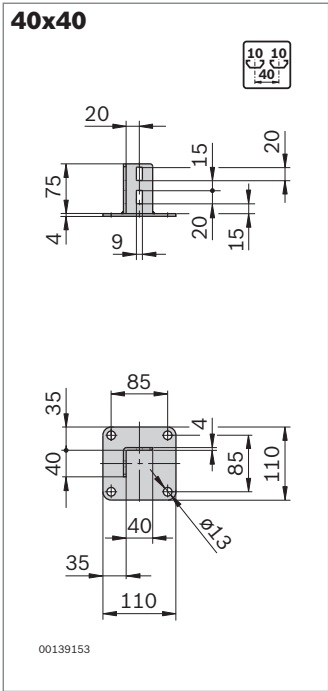
Base plate, steel



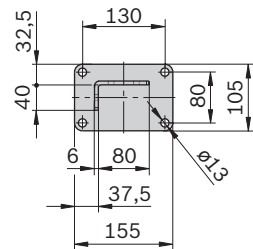
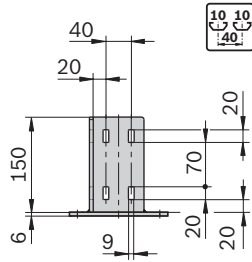
- Used in construction for supporting separating and protective walls
- Profile finishing: Not required

Accessories:

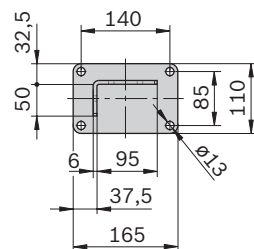
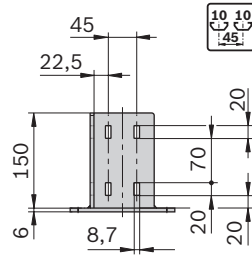
- T-bolt M8x20, 10 mm slot (p. 3-6)
- Flange nut M8 (p. 3-6)
- Floor dowel **3 842 526 561** (p. 6-12)
- Washer (p. 6-13)



Base plate, steel	ESD	No.
40x40		3 842 542 667
45x45		3 842 536 581
Material:	Steel; galvanized	

40x80

00139154

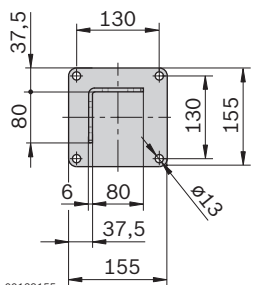
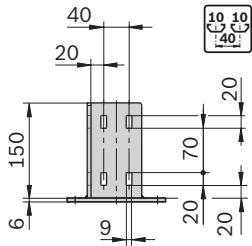
45x90

00117834

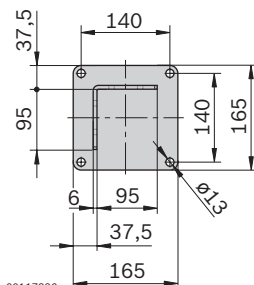
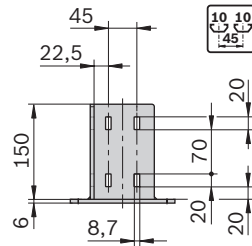
Base plate, steel**ESD No.****40x80****3 842 542 668****45x90****3 842 536 207**

Material:

Steel; galvanized

80x80

00139155

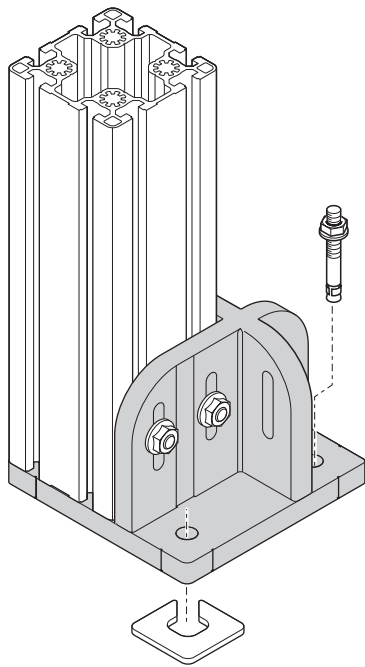
90x90

00117836

Base plate, steel**ESD No.****80x80****3 842 542 669****90x90****3 842 536 746**

Material:

Steel; galvanized

120x120
150x150

19929

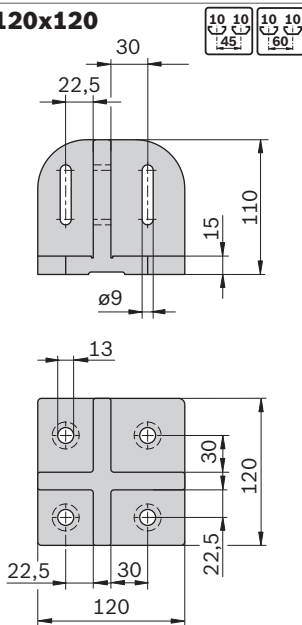
Base plate 120x120, 150x150

- For flush mounting of supports. No danger of tripping!
- Markings arranged at the center of the profile for precise alignment
- Anchoring with floor dowel

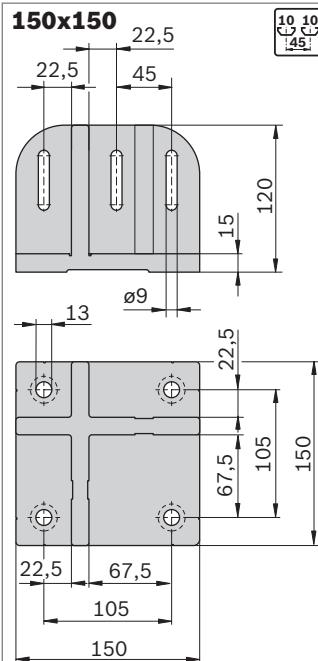
Required accessories:

- T-bolt M8x30 **3 842 528 721** (p. 3-6)
- Flange nut M8 **3 842 345 081** (p. 3-6)
- Floor dowel **3 842 526 561** (p. 6-12)
- Washer (p. 6-13)

6

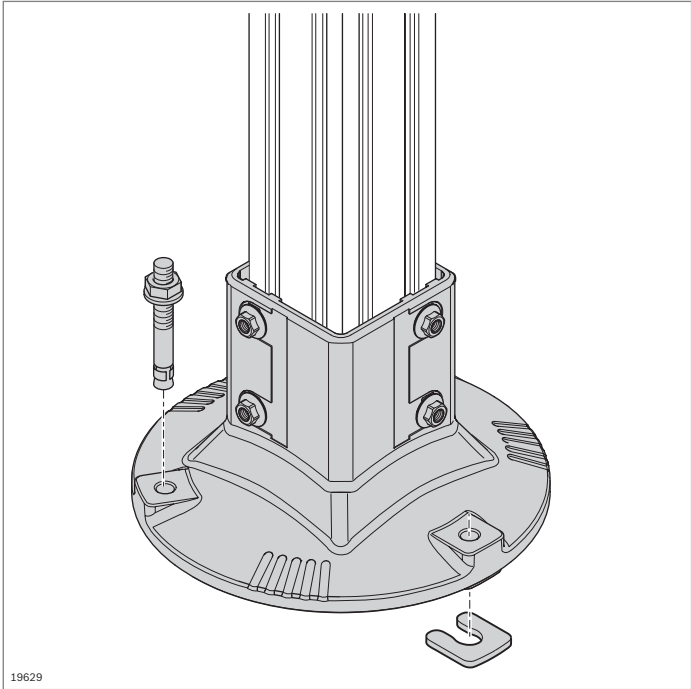
120x120

00109708

150x150

00109711

Base plate	ESD	No.
120x120		3 842 527 553
150x150		3 842 524 469
Material:	Diecast aluminum	



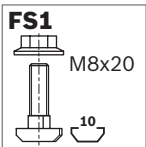
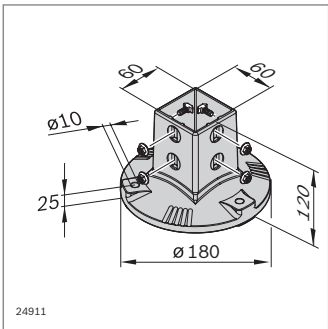
Foot
Floor dowel, washer

Foot

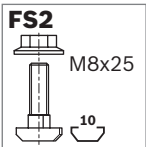
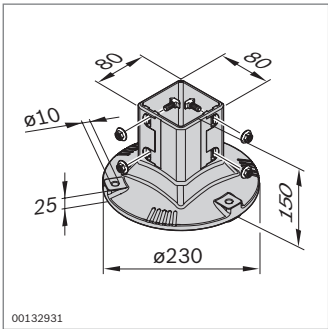
- For constructing supports made of 80x80L and 60x60 profiles
- Large standing surface for high stability
- Easy cleaning thanks to few horizontal surfaces
- Open on the inside to enable draining of liquids
- Stop as depth limit for profile (removable)

Required accessories:

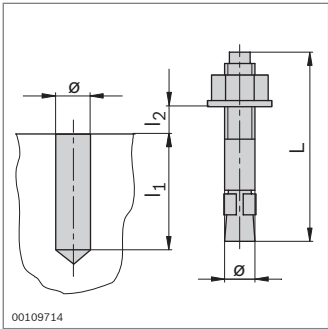
- Floor dowel **3 842 540 668**
- Washer **3 842 546 717** or **3 842 546 718**



Foot AL	No.	FS
60x60	1 3 842 544 875	4xFS1
Material: Aluminum, silver coating (RAL 9006)		
Fastening material: Steel; galvanized		
Scope of delivery: Incl. Fastening material (FS1)		



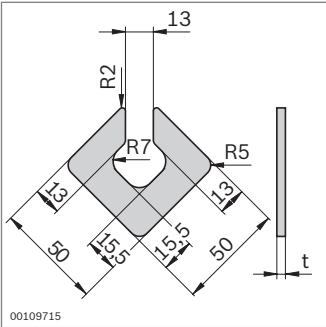
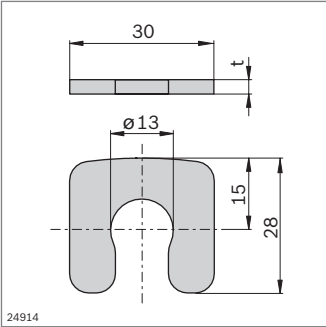
Foot	No.	FS
80x80	1 3 842 540 173	4xFS2
Material: Aluminum, silver coating (RAL 9006)		
Fastening material: Steel; galvanized		
Scope of delivery: Incl. Fastening material (FS1)		



Floor dowel

- For anchoring the base plates

Floor dowel	ø	L	I ₁	I _{2 max}	No.
	(mm)	(mm)	(mm)	(mm)	
	8	80	65	15	100 3 842 526 560
	10	90	70	15	100 3 842 526 561
	8	95	65	30	100 3 842 540 668
Material: Steel; galvanized					



Washer

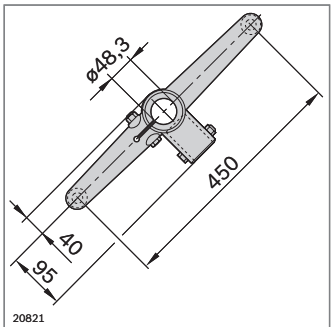
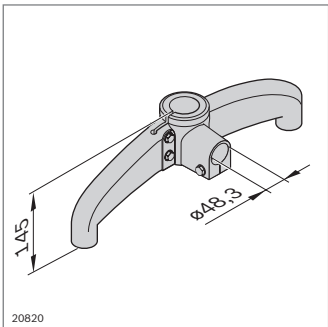
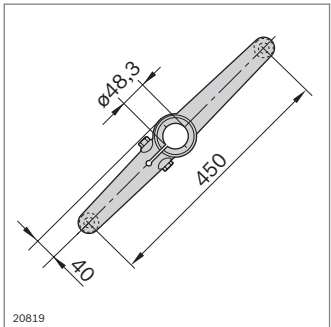
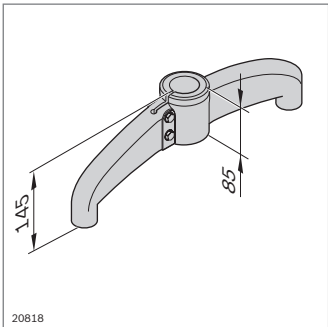
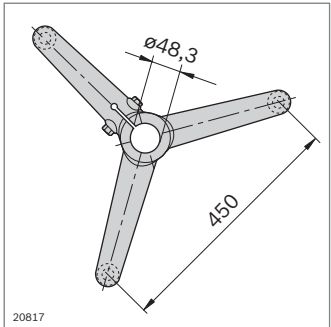
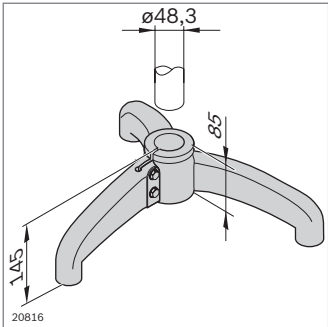
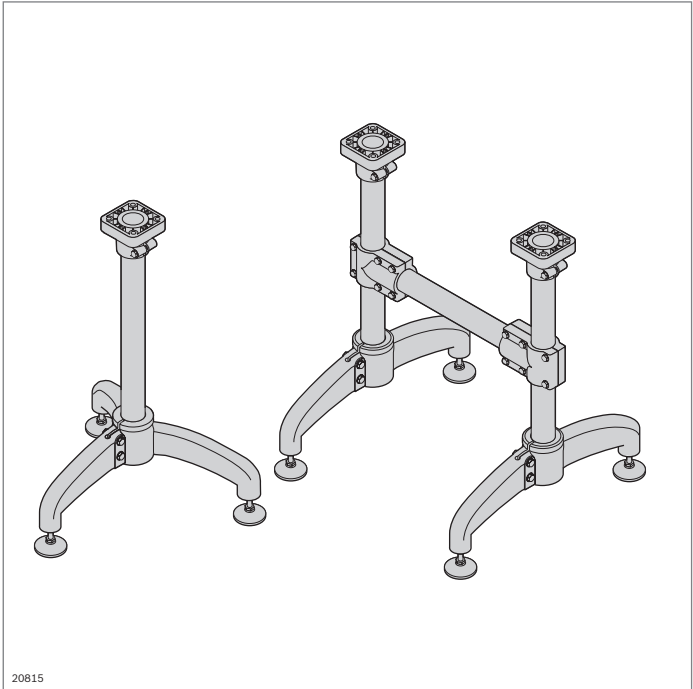
► For leveling in case of uneven flooring

Washer	t (mm)	No.
for round feet	1 100	3 842 546 717
	3 100	3 842 546 718

Material: Steel; stainless

Washer	t (mm)	No.
for square feet	1 100	3 842 528 189
	4 100	3 842 528 191

Material: Steel; stainless



Foot, stainless steel

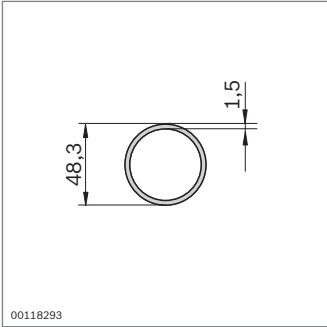
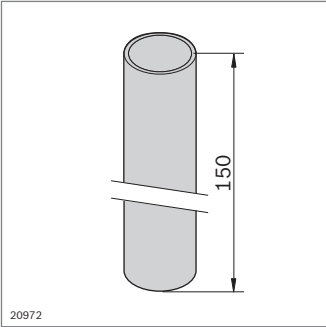
- Components for constructing feet and frames using the stainless steel tube D 48.3
- Tube fastened by clamping
- Spindle thread M16

Optional accessories:
Leveling foot **3 842 533 310** (p. 6-5)

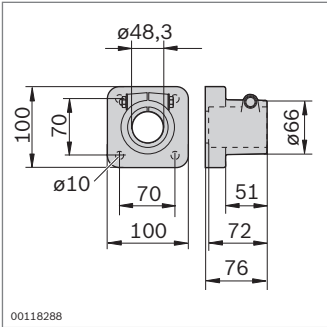
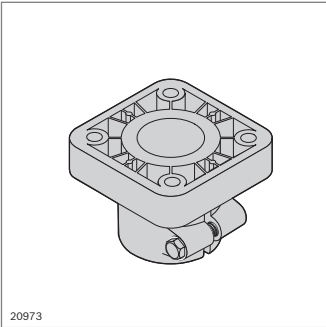
Foot	No.
Tripod	3 842 533 307
Material:	Foot: Stainless steel Fastening material: Stainless steel

Foot	No.
Bipod	3 842 533 308
Material:	Foot: Stainless steel Fastening material: Stainless steel

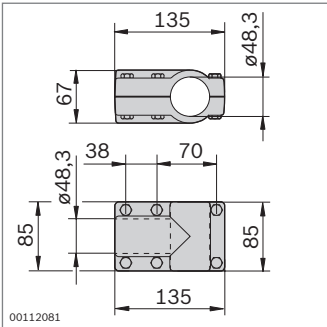
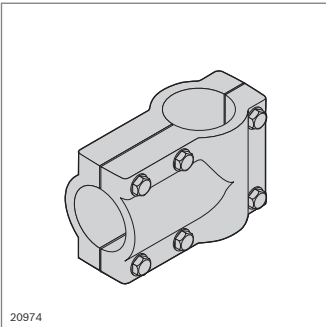
Foot	No.
Bipod with flange	3 842 533 309
Material:	Foot: Stainless steel Fastening material: Stainless steel



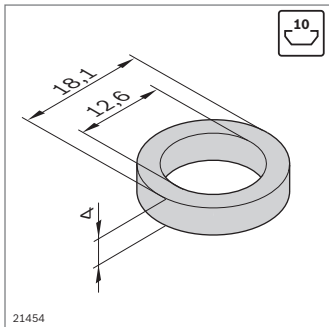
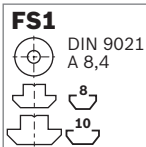
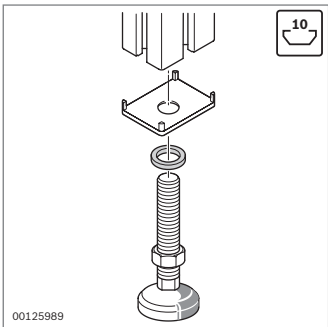
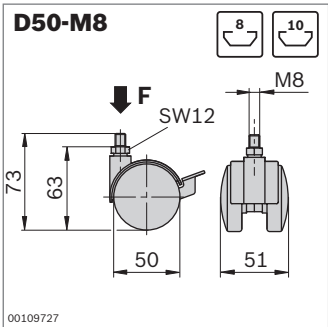
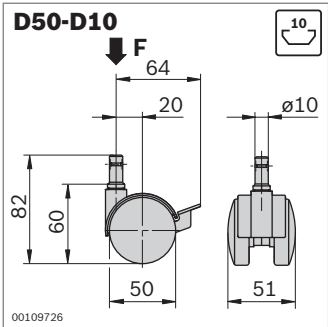
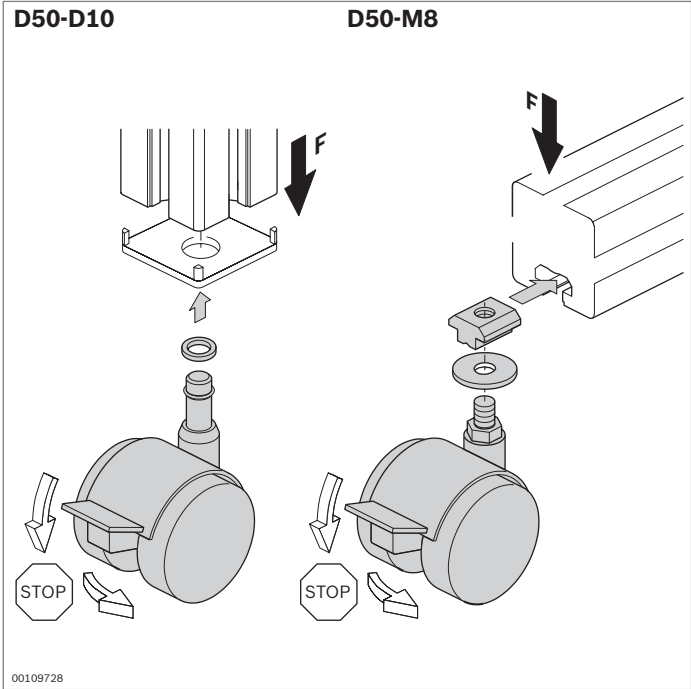
Tube D 48.3		L (mm)	No.
1 pc		200 ... 3000	3 842 993 308 / L
6 pcs		3000	3 842 533 901
Material:		Stainless steel	



Flange		No.
		3 842 533 305
Material:		Flange: PA Fastening material: Stainless steel



Cross connector		No.
		3 842 533 306
Material:		PA Fastening material, adjustment screw: Stainless steel



Double wheel



- ▶ Attractive double wheel for light applications
- ▶ Made of oil-resistant material
- ▶ Braked double wheel
- ▶ Double wheel D50-D10 for insertion in the central hole with a diameter of 10 mm
- ▶ Double wheel D50-M8 for bolting in the profile slot

Double wheel	F (N)	ESD	No.
D50-D10	400	4	3 842 515 457
	400	4 ¹⁾	3 842 515 459

¹⁾ Conduction resistance $\leq 10^6 \Omega$
 Material: Housing, wheel, lock: PA; black
 Running surface: PU (not with ESD version)
 Fastening material: Steel; galvanized

Double wheel	F (N)	ESD	No.	FS
D50-M8	400	4	3 842 535 669	FS1
	400	4 ¹⁾	3 842 535 670	FS1

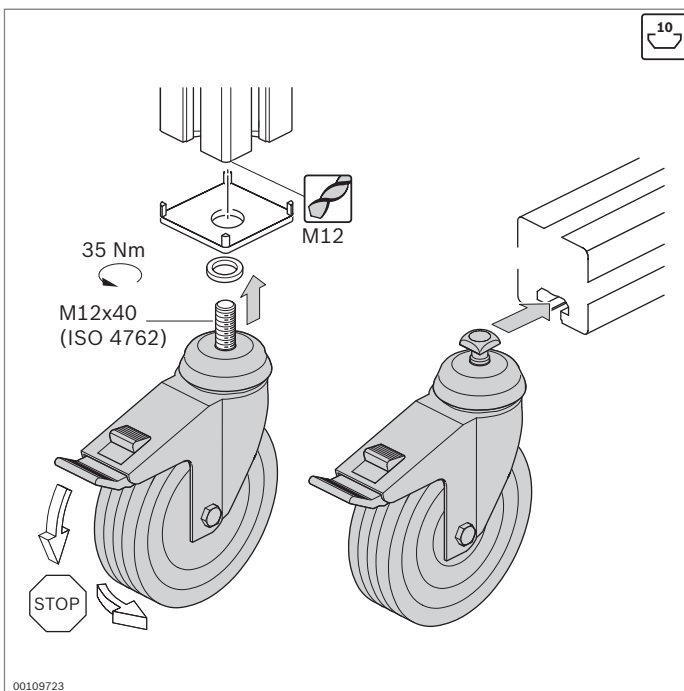
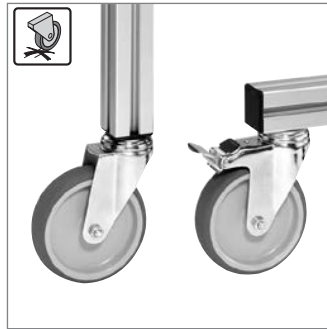
¹⁾ Conduction resistance $\leq 10^6 \Omega$
 Material: Housing, wheel, lock: PA; black
 Running surface: PU (not with ESD version)
 Fastening material: Steel; galvanized

Bearing ring

- ▶ For cover caps with hole in the sizes 40x40, 45x45, 50x50 and 60x60
- ▶ For M12 threads
- ▶ To protect the cover caps when tightening accessories

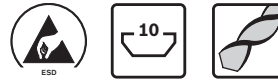
Bearing ring	No.
	100 3 842 555 653

Material: Diecast zinc



00109723

Wheel



- Impressive versatility
- Wheels with excellent running properties
- Available as a castor wheel with lock, a castor wheel, and a trestle roller



Especially gentle on floors



Resistant to oil, suitable for workshop floors



Suitable for use in clean rooms.

Conductive material version in accordance with DIN EN 61340-5-1; conduction resistance 10^3 to $10^8 \Omega$



Rubber running surface made of solid rubber with good deformation elasticity. No permanent flattening of the wheel due to it traveling over edges or not being moved for long periods



Suitable for ESD-sensitive areas.

Conductive material version in accordance with DIN EN 61340-5-1; conduction resistance $\leq 10^6 \Omega$

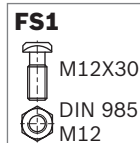
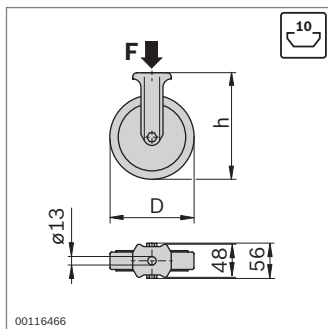
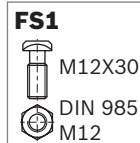
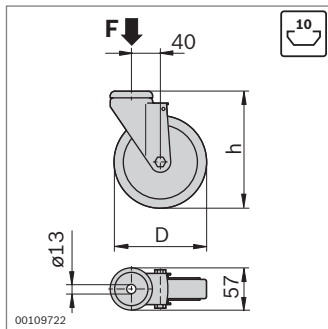
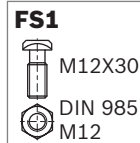
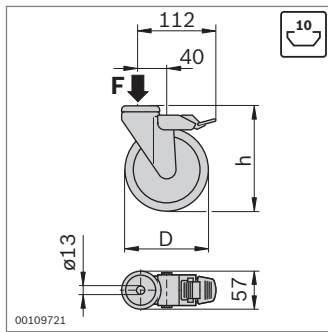
- Mounting of all wheel in the profile slot or central hole (accessories required)
- Profile finishing: Thread cutting M12 for assembly in central hole

Required accessories:

- Screw M12x40 (ISO 4762) for mounting in central hole ($\curvearrowright$ 35 Nm)
- Bearing ring if cover cap with hole is used (p. 6-16)

Wheel selection guide

				
Tread	Thermoplastic rubber	Polyamide 6	Solid rubber	Polyurethane
ESD	yes / no (either possible)	no	yes	yes
Tread hardness	 85° shore A	 70° shore D	 80° shore A	 94° shore A
Temperature resistance	 -20 °C ... +60 °C	 -25 °C ... 80 °C	 -20 °C ... +60 °C	 -20 °C ... +60 °C
Rolling resistance	 very good	 outstanding	 good	 very good
Travel noise	 good	 satisfactory	 very good	 good
Floor protection	 good	 satisfactory	 very good	 good
Deformation elasticity Tread	 satisfactory	 adequate	 very good	 good
Tread color	gray	black	black	gray
Makes no track marks	yes	yes	no	yes



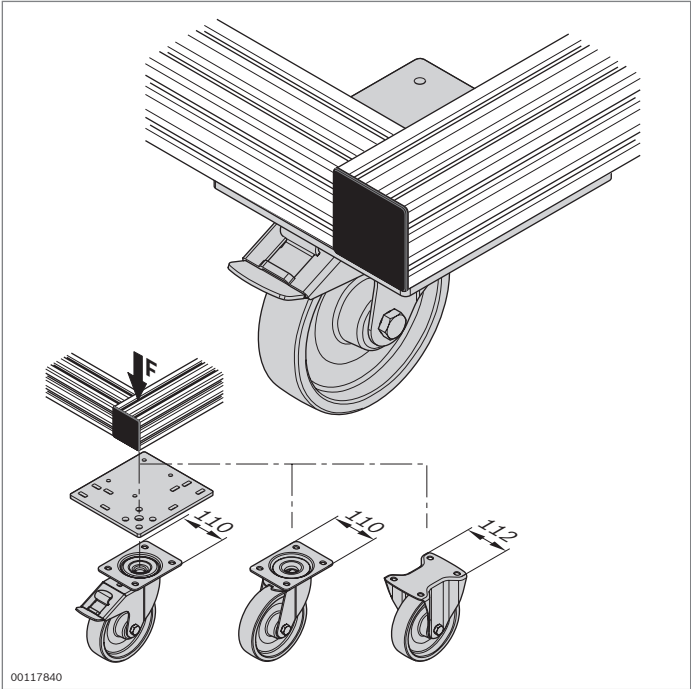
- Castor wheel with lock: Lock prevents the wheel from rolling or turning

Castor wheel with lock	F (N)	D (mm)	h (mm)	ESD	No.	FS
	900	80	108		3 842 541 226	FS1
	1100	125	158		3 842 541 228	FS1
	900	80	108		3 842 541 230	FS1
	1100	125	158		3 842 541 232	FS1
	1100	125	158		3 842 515 367	FS1
	1000	125	158		3 842 524 499	FS1
	600	80	108		3 842 547 836	FS1
	800	125	158		3 842 547 838	FS1

Castor wheel	F (N)	D (mm)	h (mm)	ESD	No.	FS
	900	80	108		3 842 541 234	FS1
	1100	125	158		3 842 541 236	FS1
	900	80	108		3 842 541 238	FS1
	1100	125	158		3 842 541 240	FS1
	1100	125	158		3 842 515 366	FS1
	1000	125	158		3 842 524 500	FS1
	600	80	108		3 842 547 835	FS1
	800	125	158		3 842 547 837	FS1

Trestle roller	F (N)	D (mm)	h (mm)	ESD	No.	FS
	900	80	108		3 842 541 242	FS1
	1100	125	158		3 842 541 244	FS1
	600	80	108		3 842 547 839	FS1
	800	125	158		3 842 547 840	FS1

Material:		Thermoplastic rubber
		Reinforced PA
		Gray PU, housing: Steel, chrome-plated
		Solid rubber
		Conductive, conduction resistance $\leq 10^6 \Omega$



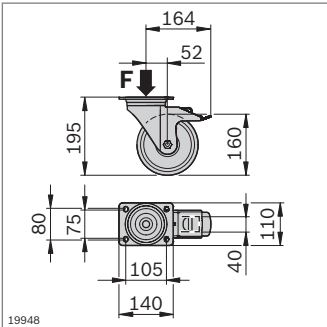
Heavy-duty wheel



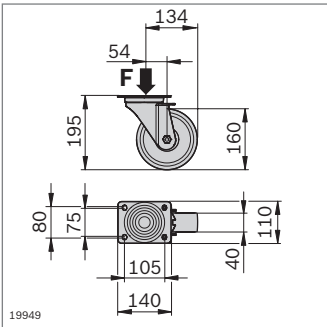
- Heavy-duty wheel with mounting flange
- Available as a castor wheel with lock, a castor wheel, and a trestle roller
- Heavy-duty, particularly suited for workshop applications
- Wheels with excellent running properties

Required accessories:

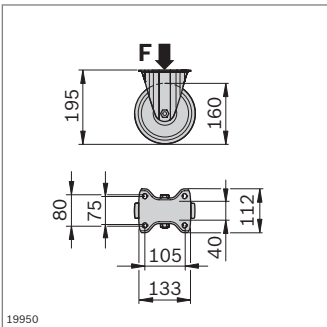
- Screw M10x16 (ISO 4762), washer ISO 7089-10, lock washer 10FSt for fastening to the screw-on plate
- T-bolt, flange nut, central bolt M12 or S12 for fastening the screw-on plate to the profile frame



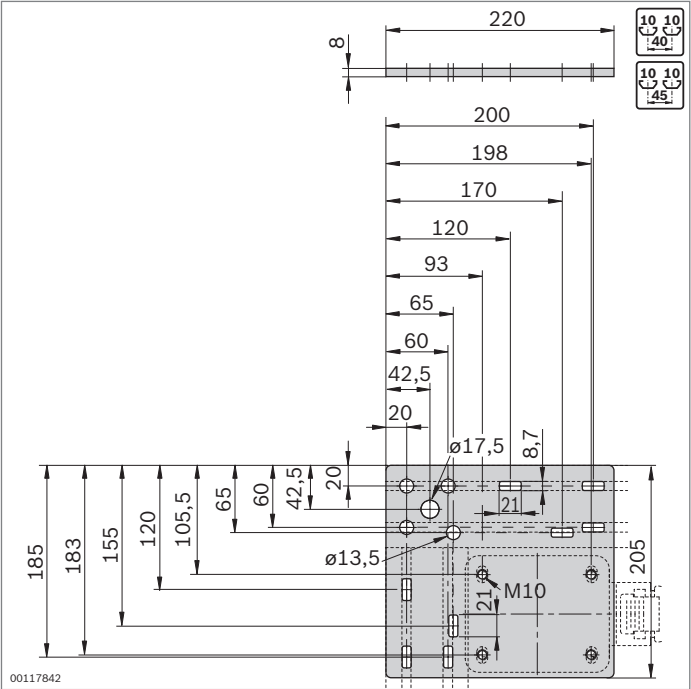
Castor wheel with lock		F (N)	No.
		3000	3 842 536 736
Material:	Housing: Steel; galvanized Wheel: TPU		



Castor wheel		F (N)	No.
		3000	3 842 536 737
Material:	Housing: Steel; galvanized Wheel: TPU		



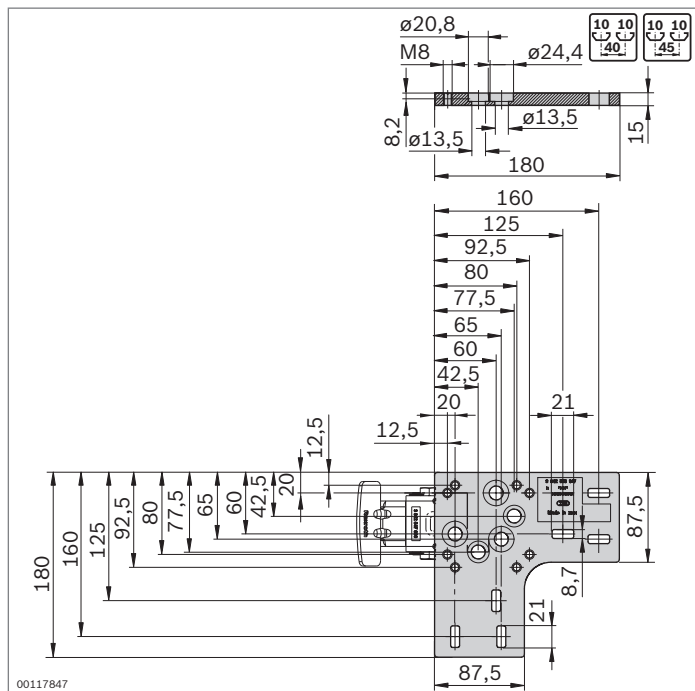
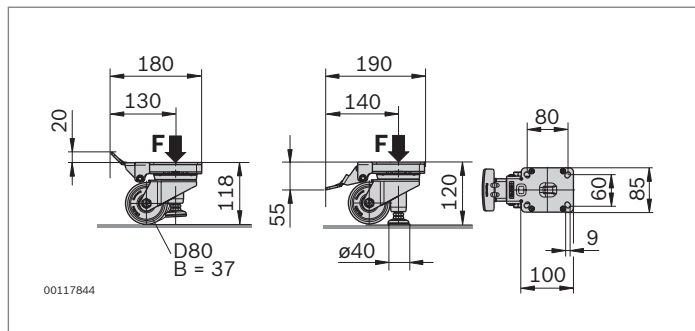
Trestle roller		F (N)	No.
		3000	3 842 536 738
Material:	Housing: Steel; galvanized Wheel: TPU		



- Screw-on plate for attachment to 40 mm or 45 mm profiles

Screw-on plate	No.
4	3 842 536 701

Material: Steel; galvanized

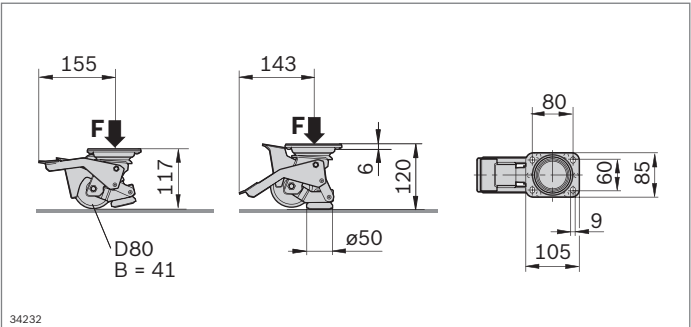
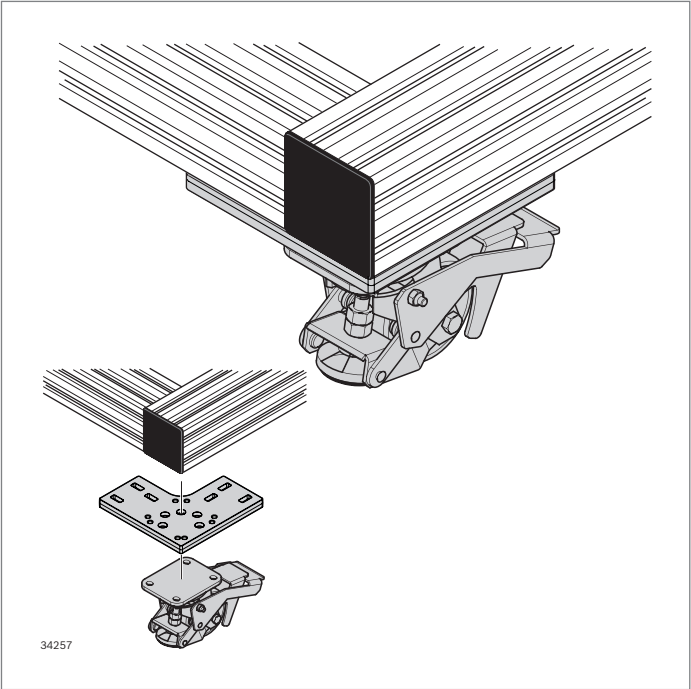


10

- ▶ Screw M8x35 (ISO 4762), washer 8 (DIN EN ISO 7089), locking washer 8 FSt for attaching to the screw-on plate
- ▶ T-bolt M8x30 (p. 3-6), flange nut M8 (p. 3-6), central bolt M12 or S12 (p. 3-41) for fastening to the screw-on plate on the profile frame

Material:	Wheel: PA6, natural white Housing: Steel; galvanized Base plate: Rubber, gray
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Material:	Diecast aluminum
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Lifting wheel - rotatable pedal



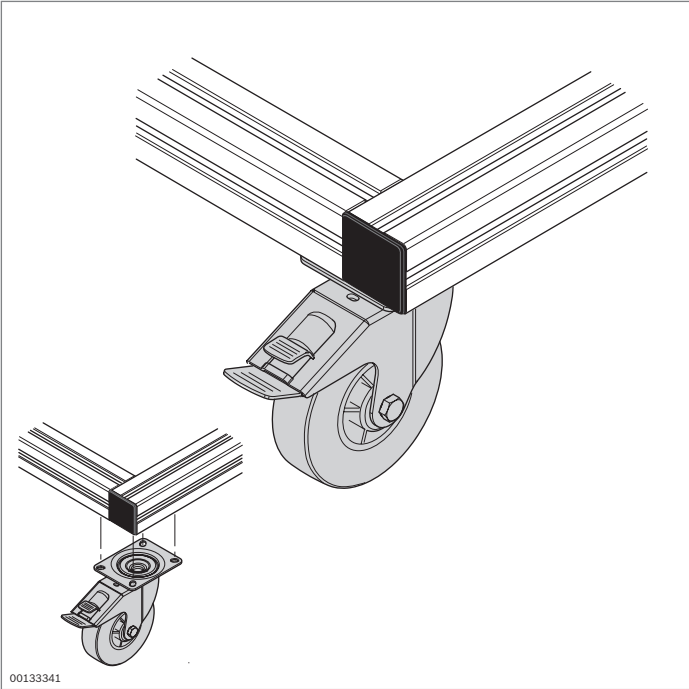
- Steerable lifting wheel
- The wheel turns into a stable base simply by engaging the stop lever
- The locking lever moves with the wheel
- The locking lever can be moved under the frame if necessary

Required accessories:

- Screw M8x20 (ISO 4762), washer 8 (DIN EN ISO 7089), locking washer 8 FSt for attaching to the screw-on plate
- Screw-on plate 3 842 553 967 (p. 6-22)
- Flange head screw similar to ISO 7380-2 10.9 M8x25, however, Torx 40 (tightening torque 25 Nm), T-nut 10 M8 (p. 3-4), central bolt M12 or S12 (p. 3-41) for fastening the screw-on plate at the profile frame

Lifting wheel	F (N)	No.
Rotatable pedal	2000	3 842 555 610

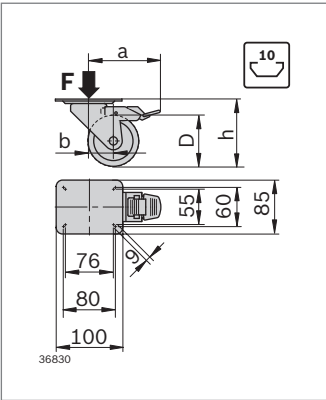
Material: Wheel: PA6, natural white
Housing: Steel; galvanized
Base plate: PA; rubber black



Roller with mounting flange

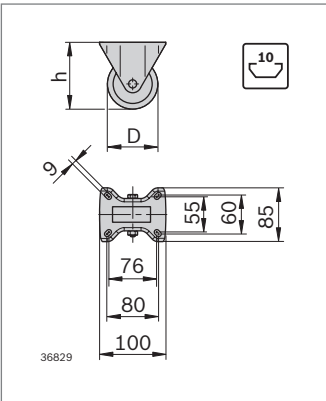


- Robust rollers with mounting flange
- Excellent running properties, particularly suitable for workshop floors
- Available as a castor wheel with lock and as a trestle roller
- Castor wheel with lock: Lock prevents the wheel from rolling or turning



Castor wheel	F (N)	D (mm)	h (mm)	a (mm)	b (mm)	No.
	600	100	125	113	36±2	3 842 259 790
	900	125	150	123	40±2	3 842 259 791

Material: Wheel: Solid rubber
Rims: Polypropylene
Housing: Sheet steel; galvanized



Trestle roller	F (N)	D (mm)	h (mm)	No.
	600	100	125	3 842 259 792
	900	125	150	3 842 259 793

Material: Wheel: Solid rubber
Rims: Polypropylene
Housing: Sheet steel; galvanized

FS1

 ISO 4762

 M8x16

 8-FSt

 DIN 125, 8,4

 M8

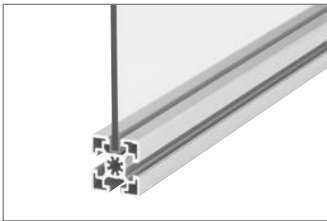


- For castor and trestle roller

Mounting kit	No.	FS
	3 842 259 794	3xFS1

Mounting of panel elements

7



Mounting rim profile
(p. 7-2)



Mounting rim profile
cleanroom (p. 7-3)



Protective pane profile, PVC
(p. 7-4)



Protective pane profile for
cleanroom (p. 7-5)



Variofix block (p. 7-6)
Variofix block S (p. 7-7)



Bracket S (p. 7-8)



Retainer ring (p. 7-9)



Screw bar profile (p. 7-10)



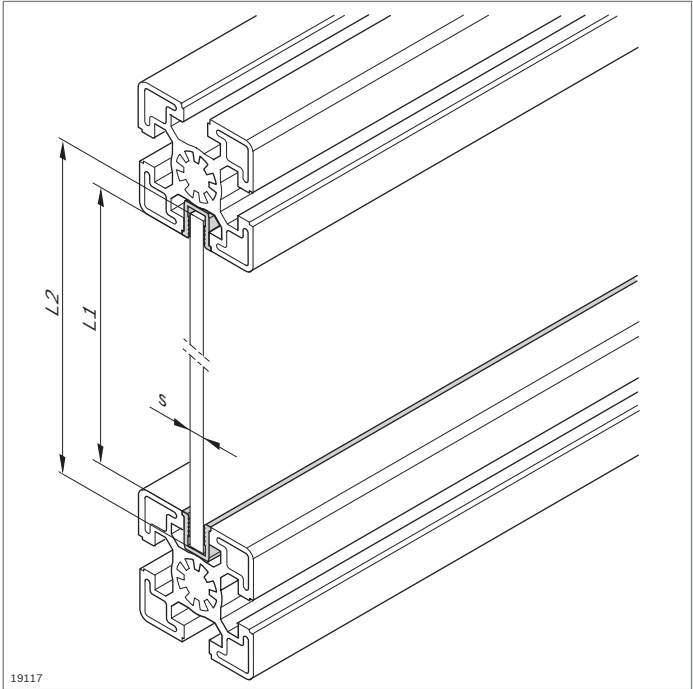
Potential equalizer
(p. 7-11)



Protective grille profile
(p. 7-12)



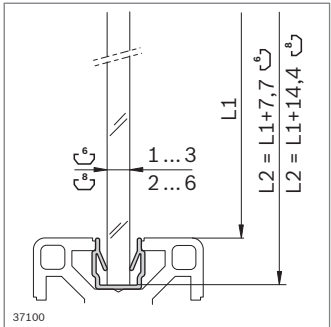
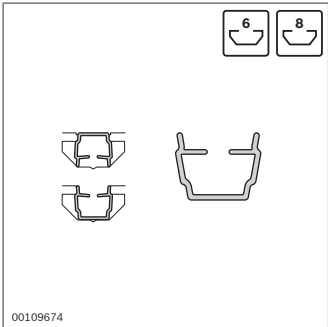
Clamp bushing (p. 7-13)



Mounting rim profile

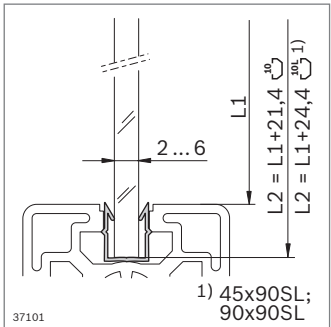
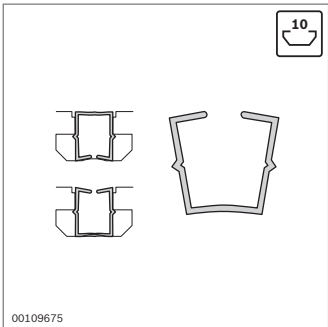


- For the play-free mounting of panel elements in the profile slot
- For panel elements up to 6 mm thick
- Installation during frame assembly
- Mounting rim profile PP can also be used as a cover profile



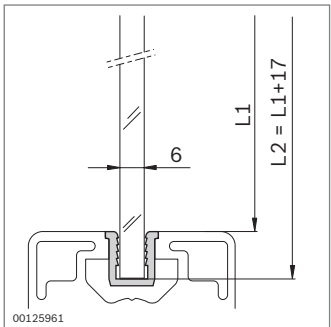
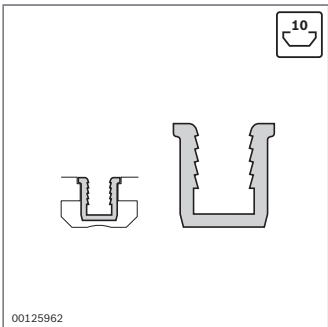
Mounting rim profile	Slot	s (mm)	L (mm)	No.
	6	1 ... 3	2000	3 842 555 272
	8	2 ... 6	2000	3 842 555 274

Material: PP; signal gray RAL 7004



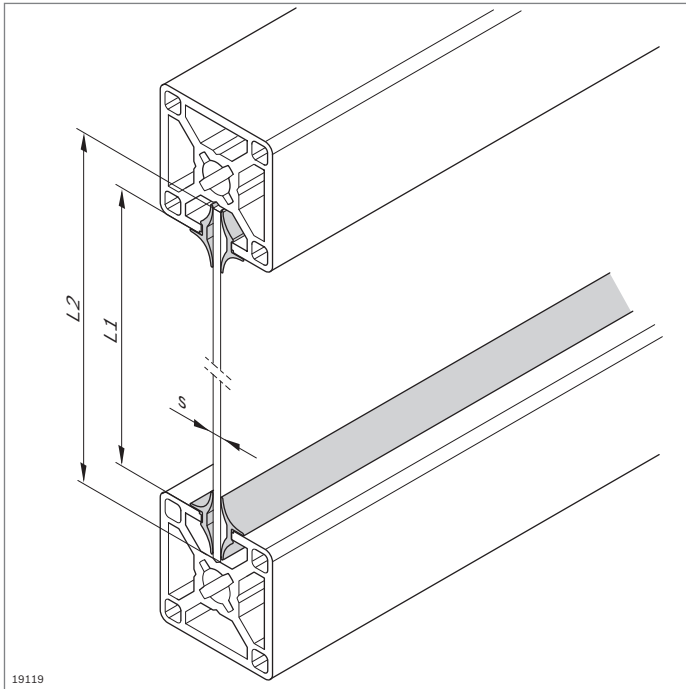
Mounting rim profile	Slot	s (mm)	L (mm)	No.
	10	2 ... 6	2000	3 842 555 276

Material: PP; signal gray RAL 7004



Mounting rim profile	Slot	s (mm)	L (mm)	No.
	10	6	2000	3 842 555 270

Material: PE; signal gray RAL 7004

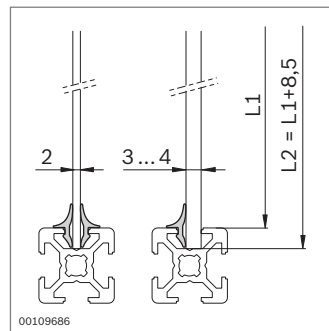
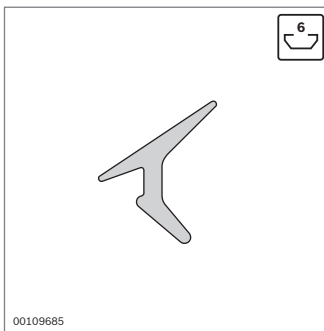


Mounting rim profile, cleanroom



- For the play-free mounting of panel elements in the profile slot
- For panel elements with a thickness of 2 ... 8 mm
- For use on one or two sides of the mounting rim profile, depending on the panel element thickness
- Installation during profile frame assembly
- Can be used under cleanroom conditions
- Checked for emission of volatile organic substances at room temperature, 50 °C and 120 °C, Report No. BO 9903-160

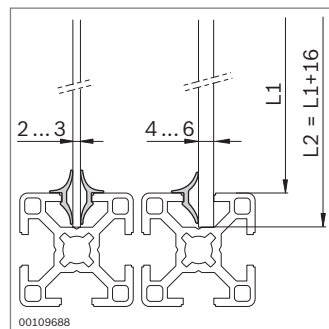
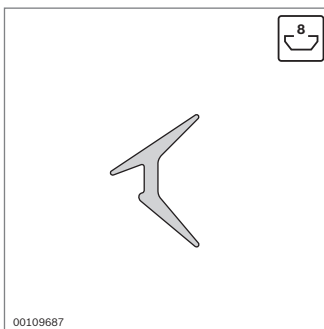
7



Mounting rim profile, Clean Slot s (mm) L (mm) No.

6	2 ... 4	10000	3 842 523 493
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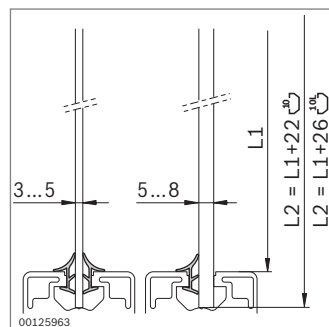
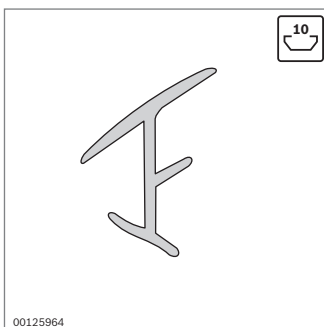
Material: TPE, light gray RAL 7035



Mounting rim profile, Clean Slot s (mm) L (mm) No.

8	2 ... 6	10000	3 842 523 494
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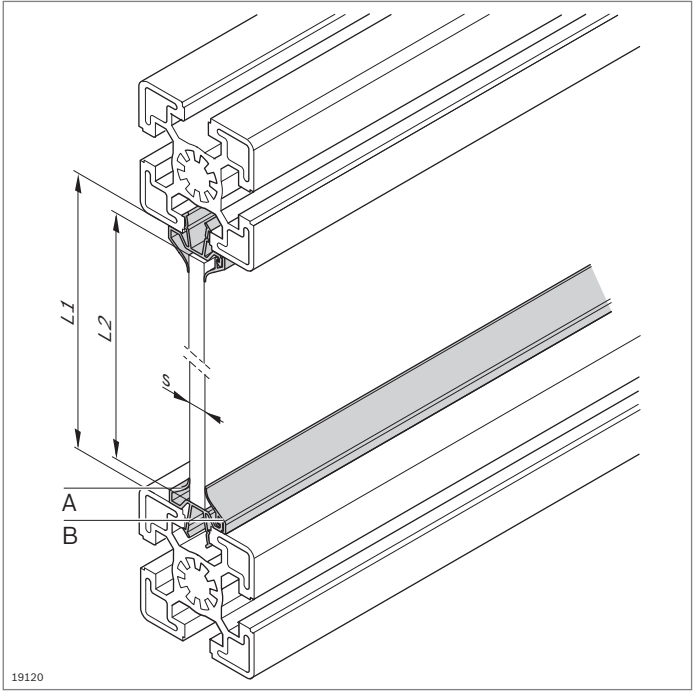
Material: TPE, light gray RAL 7035



Mounting rim profile, Clean Slot s (mm) L (mm) No.

10	3 ... 8	10000	3 842 555 282
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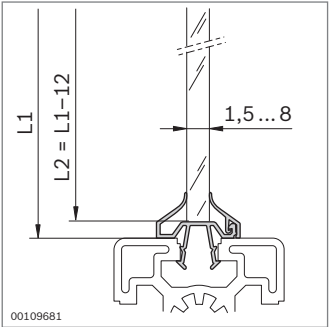
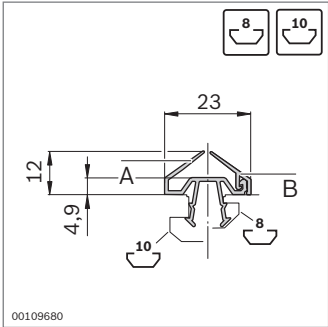
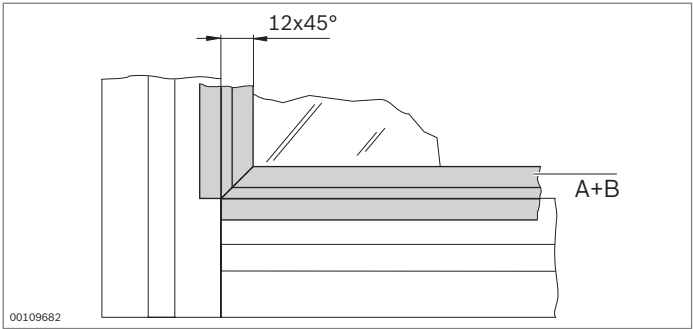
Material: TPE; signal gray RAL 7004



Protective pane profile PVC

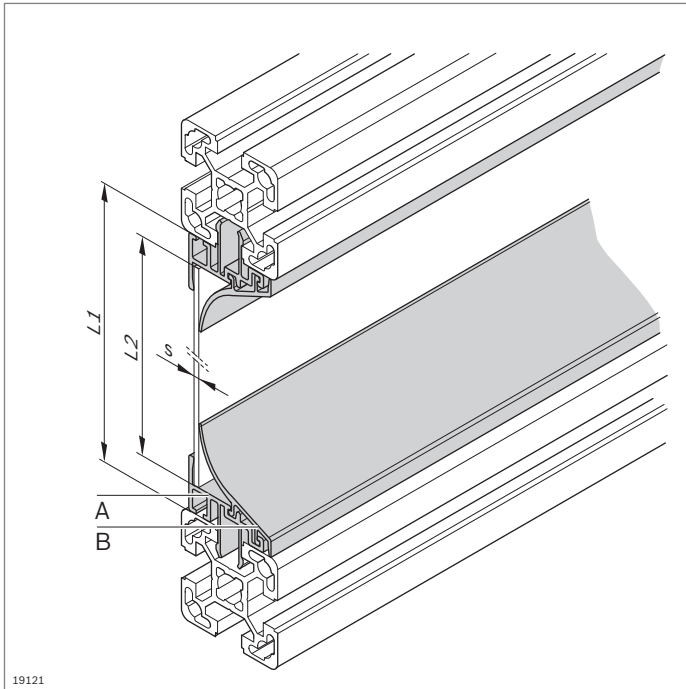


- For the play-free mounting of panel elements
- For panel elements with a thickness of 1.5 ... 8 mm
- For subsequent installation in closed frame constructions
- Installation of panel elements at center of slot
- The protective pane profile consists of the basic profile **(A)** and the clip strip **(B)**
- With lip seals to protect the working space from splashing liquids

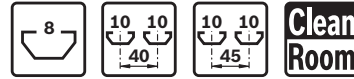


Protective pane profile PVC	Slot	s (mm)	L (mm)		No.
A Basic profile	8, 10	1.5 ... 8	2000	10	3 842 555 284
B Clip strip	8, 10	1.5 ... 8	2000	10	3 842 555 286

Material: PVC; signal gray RAL 7004

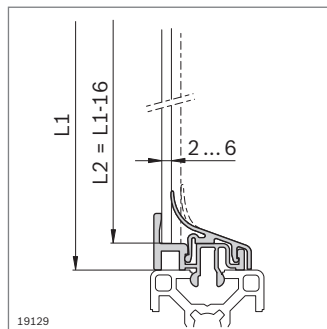
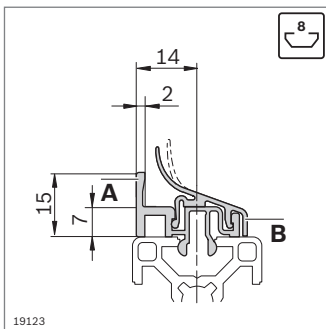


Protective pane profile cleanroom



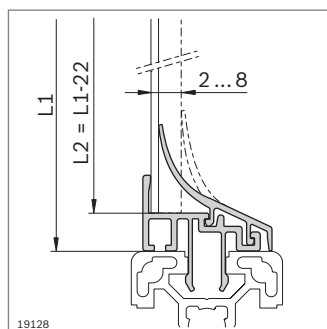
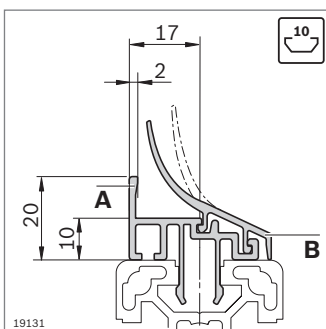
- For the play-free mounting of panel elements
- For panel elements with a thickness of 2 ... 8 mm
- For subsequent installation in closed frame constructions
- Installation of panel elements flush with the profile edge
- The protective pane profile consists of the basic profile (**A**) and the clip-on strip (**B**). Both profiles are required for proper functioning.
- Can be used under cleanroom conditions
- Checked for emission of volatile organic substances at room temperature, 50 °C and 120 °C, Report No. BO 9903-161

7



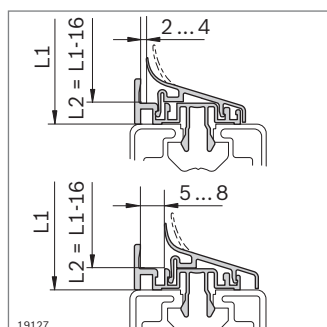
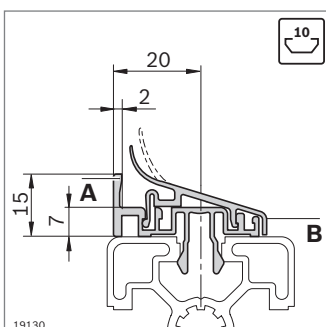
Protective pane profile	Slot	s (mm)	L (mm)	No.
A Basic profile	8	2 ... 6	2000 10	3 842 524 025
B Clip strip	8	2 ... 6	2000 10	3 842 555 288

Material: Basic profile: Aluminum; anodized
Clip strip: PP/TPE; signal gray RAL 7004



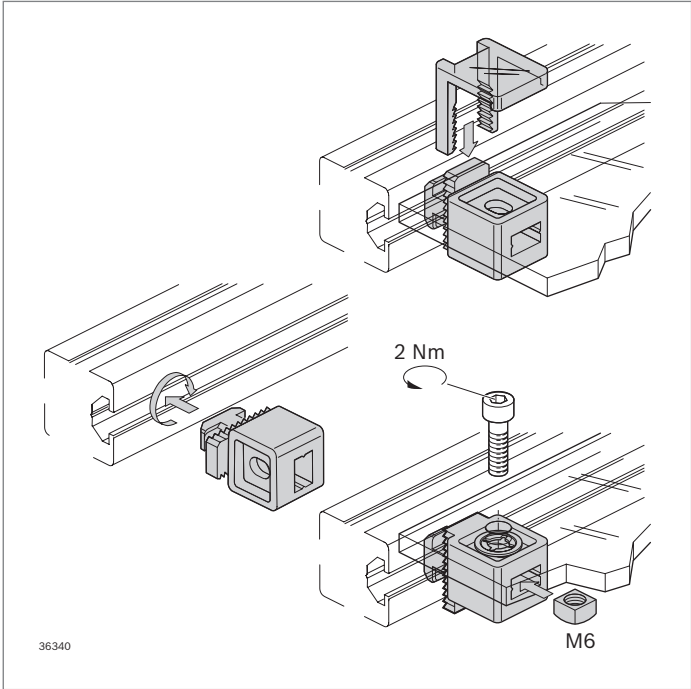
Protective pane profile	Slot	s (mm)	L (mm)	No.
A Basic profile	10	2 ... 8	2000 10	3 842 529 761
B Clip strip	10	2 ... 8	2000 10	3 842 555 292

Material: Basic profile: Aluminum; anodized
Clip strip: PP/TPE; signal gray RAL 7004



Protective pane profile	Slot	s (mm)	L (mm)	No.
A Basic profile	10	2 ... 8	2000 10	3 842 524 027
B Clip strip	10	2 ... 8	2000 10	3 842 555 290

Material: Basic profile: Aluminum; anodized
Clip strip: PP/TPE; signal gray RAL 7004



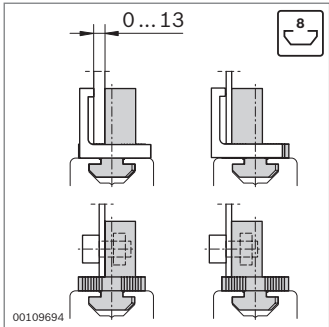
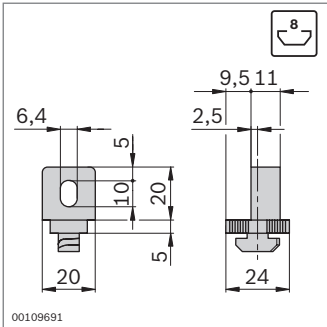
Variofix block



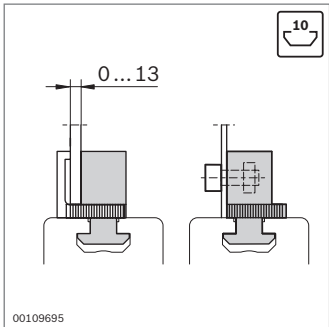
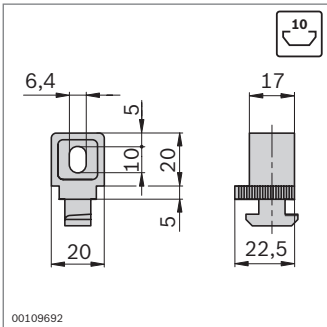
- ▶ For panel elements up to 13 mm thick
- ▶ For subsequent installation in closed frame constructions
- ▶ Asymmetrical form enables fastening of panel elements in two different positions
- ▶ Clamping via snap-in clip or screw fitting with square nut M6 (included in scope of delivery) and screw
- ▶ Retainer ring for connecting the screw to the panel element (Machinery Directive 2006/42/EC)

Accessories:

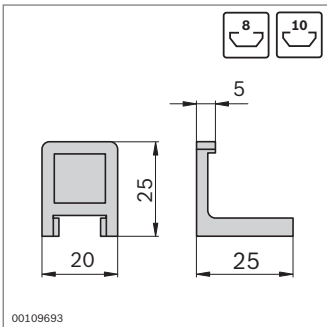
- ▶ Variofix remover (p. 14-6)
- ▶ Screw for fitting with square nut



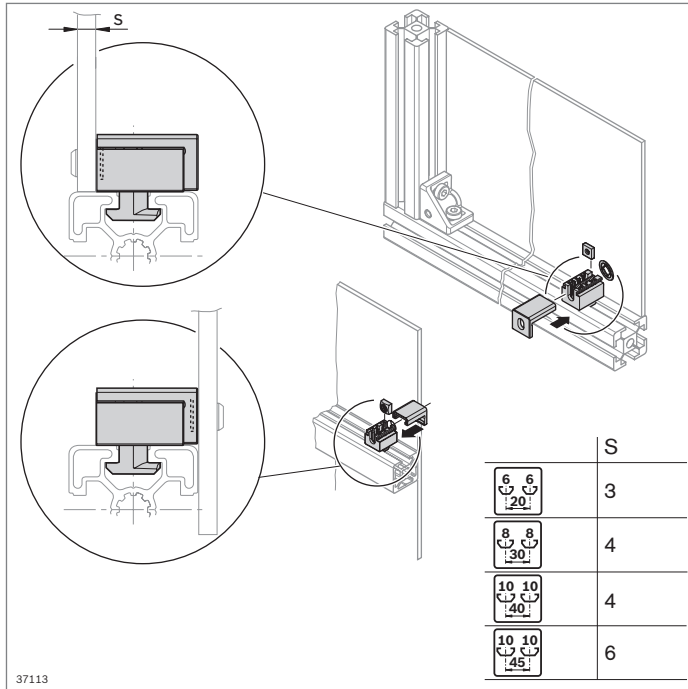
Variofix block	Slot	No.
	8 10	3 842 548 832
Material:	PP; signal gray RAL 7004	
	Square nut: Steel; galvanized	
Scope of delivery:	Incl. square nut	



Variofix block	Slot	No.
	10 10	3 842 548 834
Material:	PP; signal gray RAL 7004	
	Square nut: Steel; galvanized	
Scope of delivery:	Incl. square nut M6, retainer ring M6	



Snap-in clip	No.
	10 3 842 184 738
Material:	PA; colorless



37113

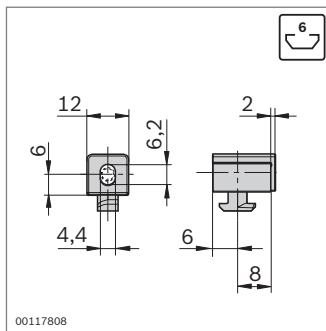
Variofix block S



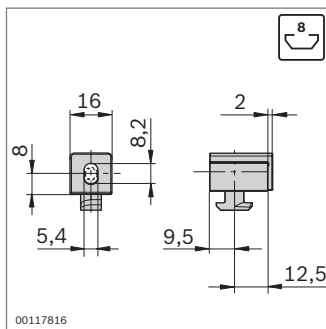
- For virtually gap-free panel element mounting
- For subsequent installation in closed frame constructions
- The asymmetrical design and cover cap enable variable mounting positions for the panel elements: flush with the profile edge or situated in front of the profile
- Retainer ring for connecting the screw to the panel element (Machinery Directive 2006/42/EC)

Required accessories:

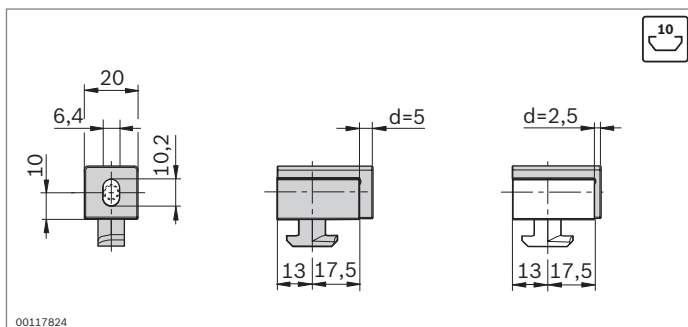
Screw for fastening the panel element



00117808



00117816



00117824

Variofix block S	Slot	No.
	6	10

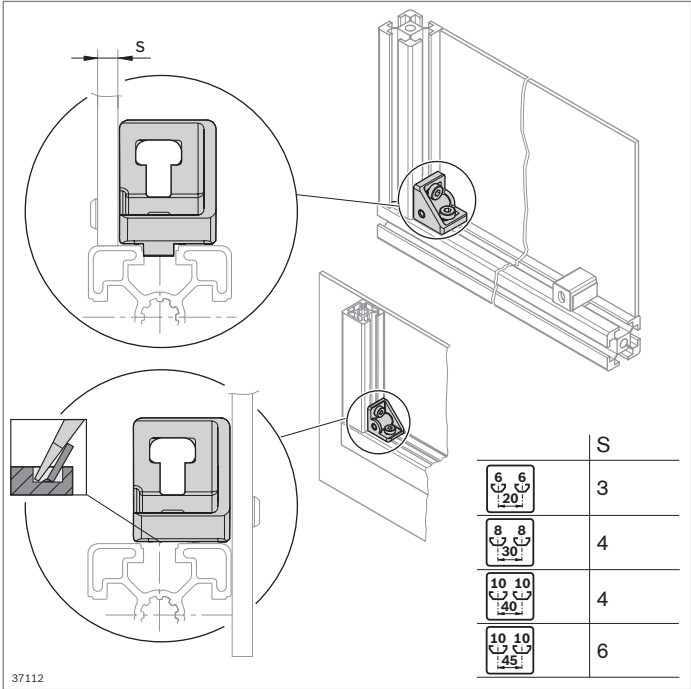
Material: PP; signal gray RAL 7004
Square nut: Steel; galvanized
Scope of delivery: Incl. square nut M4, cap

Variofix block S	Slot	No.
	8	10

Material: PP; signal gray RAL 7004
Square nut: Steel; galvanized
Scope of delivery: Incl. square nut M5, cap, retainer ring

Variofix block S	Slot	No.
	10	10

Material: PP; signal gray RAL 7004
Square nut: Steel; galvanized
Scope of delivery: Incl. square nut M5, 2 x cap (d = 2.5 mm; d = 5 mm), retainer ring

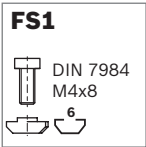
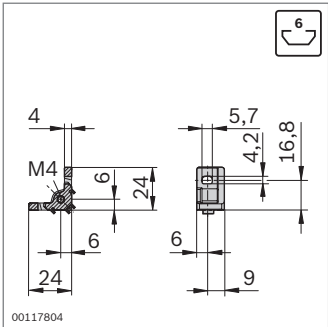


Bracket S

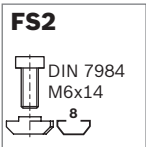
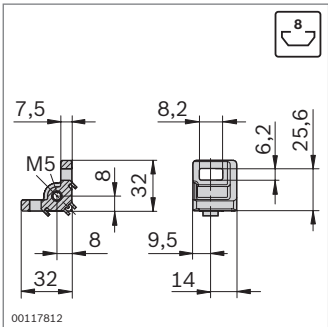


- ▶ Bracket with thread for virtually gap-free mounting of panel elements
- ▶ For subsequent installation in closed frame constructions
- ▶ Panel elements can be mounted in different positions: flush with the profile edge or situated in front of the profile (by breaking off the centering lug)

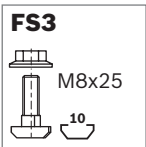
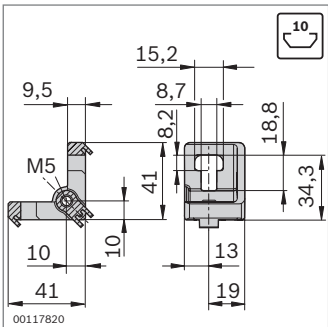
- Required accessories:
- Screw for fastening the panel element
- Optional accessories:
- ▶ Variofix block S (p. 7-7)
 - ▶ Retainer ring (p. 7-9)



Bracket S	Slot		No.	FS
20x20	6	20	3 842 536 489	
20x20 set	6	1	3 842 536 670	2xFS1
Material: Diecast aluminum				
Fastening material: Steel; galvanized				
Scope of delivery: Set incl. fastening material (FS)				



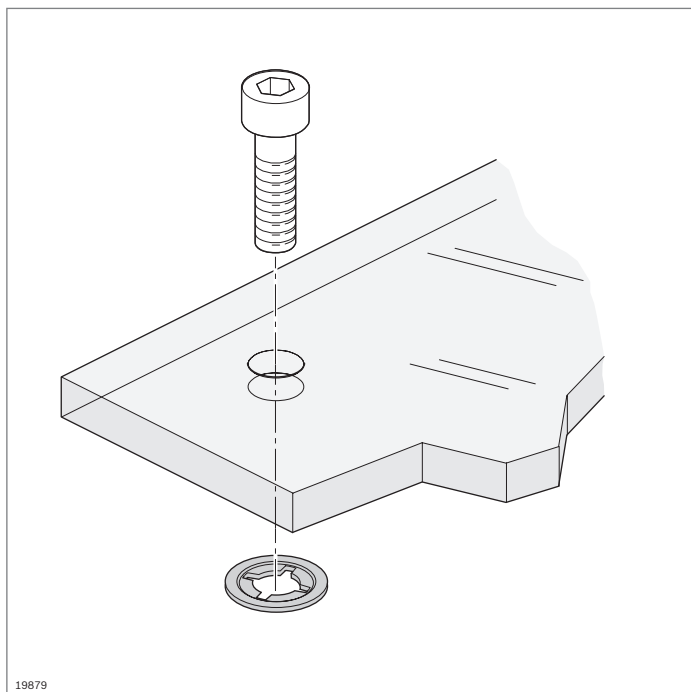
Bracket S	Slot		No.	FS
30x30	8	20	3 842 536 490	
30x30 set	8	1	3 842 536 671	2xFS2
Material: Diecast aluminum				
Fastening material: Steel; galvanized				
Scope of delivery: Set incl. fastening material (FS)				



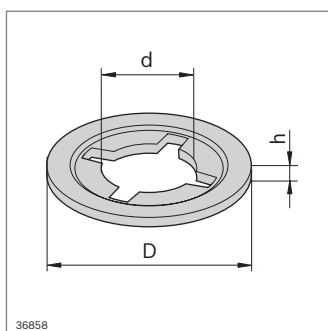
Bracket S	Slot		No.	FS
40/45	10	20	3 842 536 491	
40/45 set	10	1	3 842 536 672	2xFS3
Material: Diecast aluminum				
Fastening material: Steel; galvanized				
Scope of delivery: Set incl. fastening material (FS)				

Retainer ring

- Secures the fastening screw to the panel element
- For use with all Variofix blocks, but not for the S bracket
- Can be retrofitted
- For various thread sizes



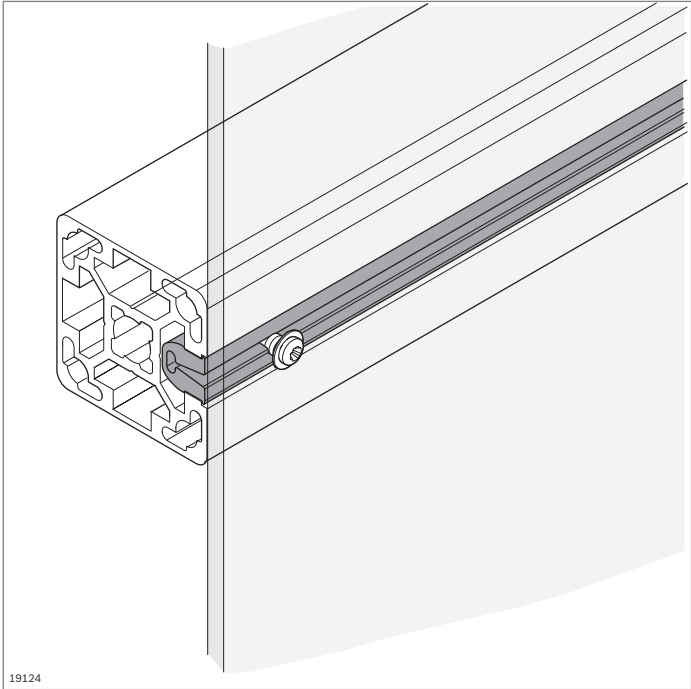
19879



36858

Retainer ring	D (mm)	d (mm)	h (mm)	 No.
M4	9.0	3.4	1.0	100 3 842 542 328
M5	10.0	4.5	1.0	100 3 842 542 329
M6	12.5	5.5	1.5	100 3 842 542 330

Material: PA; black



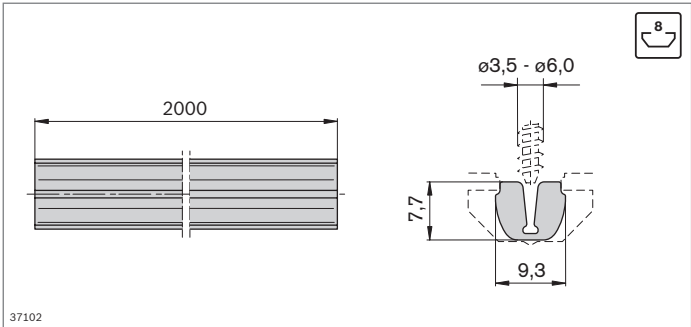
Screw bar profile



- Screw bar profile for fastening panel elements using commercially available sheet metal screws
- Clipping the screw bar profile into the profile slot
- Low-cost connection element

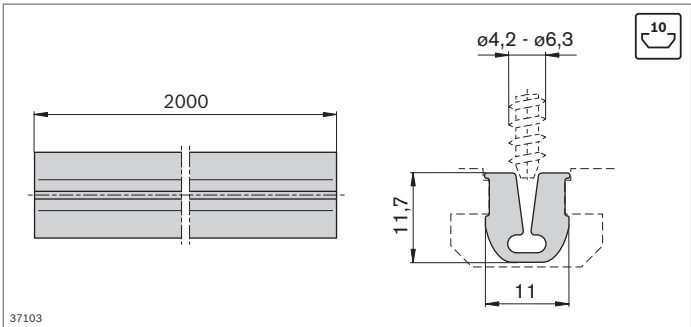
Required accessories:

Sheet metal screws for fastening panel elements



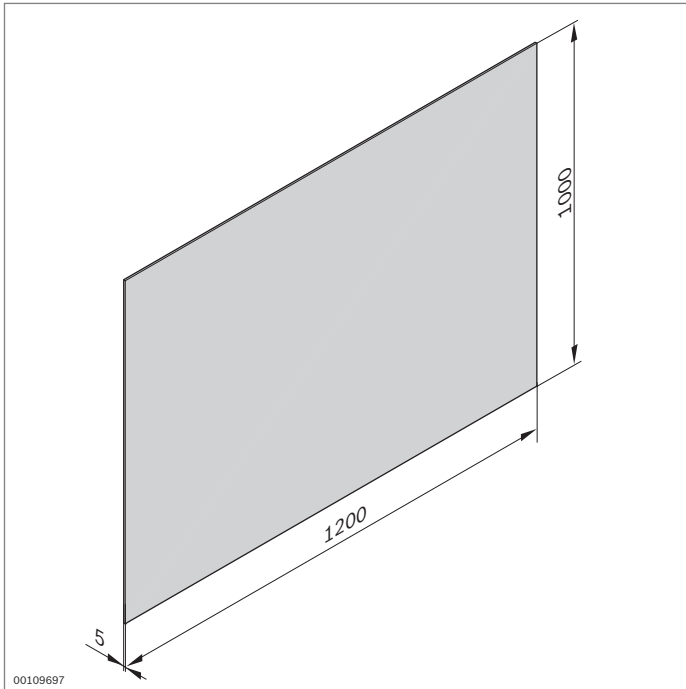
Screw bar profile	Slot	L (mm)	No.
	8	2000	3 842 555 550

Material: PVC; signal gray RAL 7004



Screw bar profile	Slot	L (mm)	No.
	10	2000	3 842 555 552

Material: PVC; signal gray RAL 7004



Universal plate



- For the construction of trays, material shuttles, or privacy shields on tables or frames

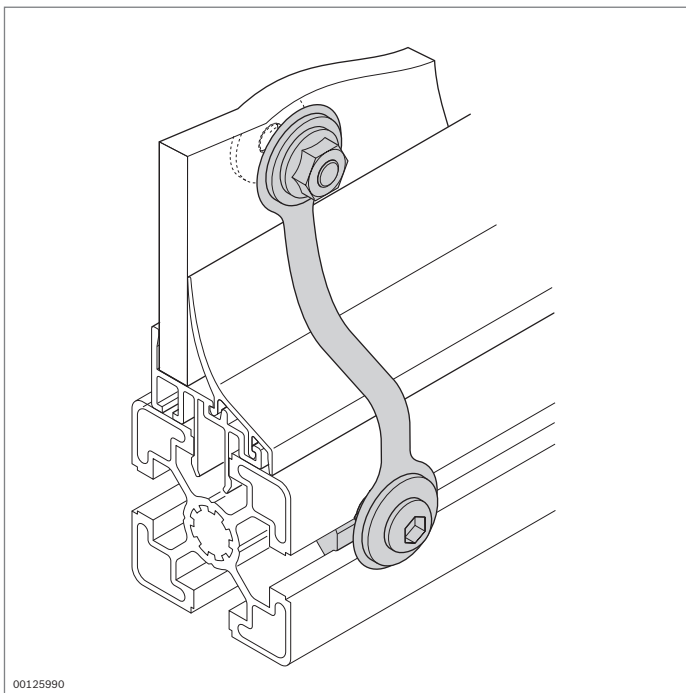
Accessories:

Frame profile, mounting of panel elements

Universal plate	ESD	No.
PP		3 842 516 837
SB		3 842 516 838

Material: PP: gray, smooth on one side, grained on the other
SB: black, smooth on both sides

7



Potential equalizer

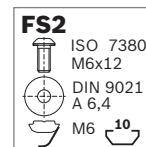
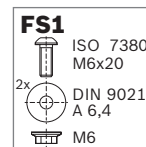


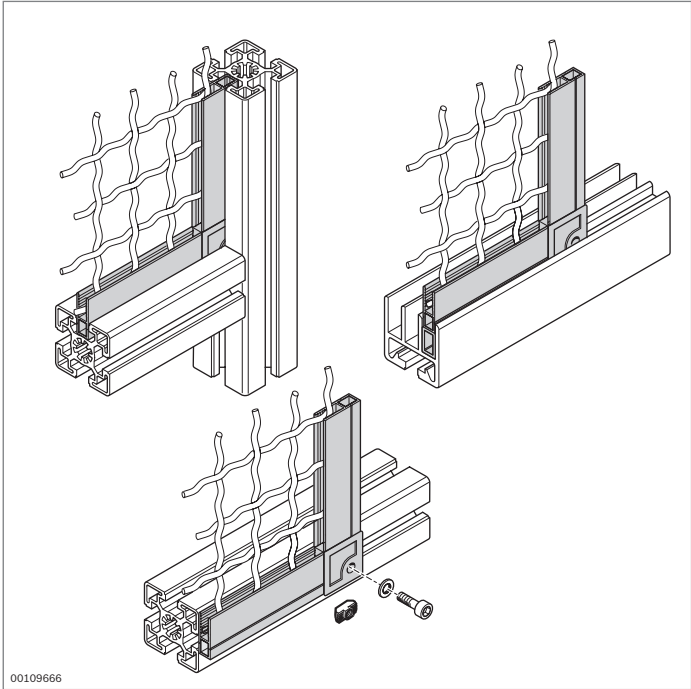
- Potential equalizer for creating electrostatic conduction between panel elements and strut profiles

Potential equalizer	ESD	No.	FS
		10 3 842 536 148	FS1, FS2

Material: Strip: Steel, stainless
Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)





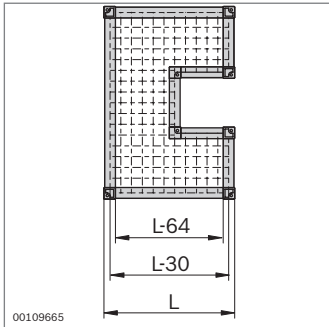
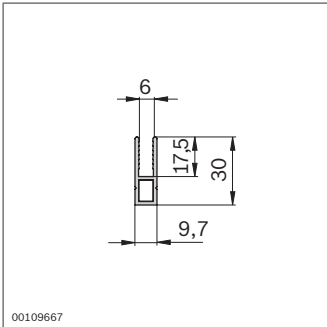
Protective grille profile



- For constructing frames for woven wire grilles or panel elements
- For woven wire grilles with a wire diameter up to 3.1 mm
- For panel elements up to 6 mm thick
- Screw fitting of frame to the outside of strut profiles (subsequent installation)
- Insertion of frame into the slot of a strut profile or a sliding door profile Al 45
- Corner pieces for inner and outer corners

Optional accessories:

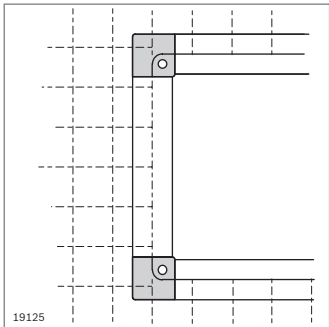
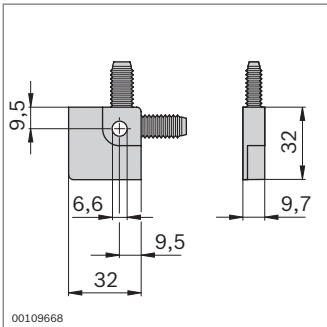
- T-nut M6 (p. 3-4)
- Screw M6



Protective grille profile	L (mm)	No.
	3000 ¹⁾	20 3 842 305 766

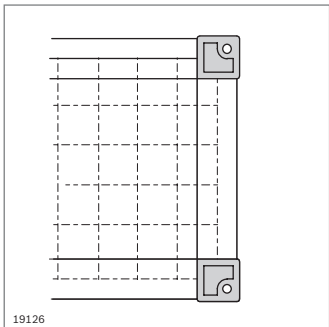
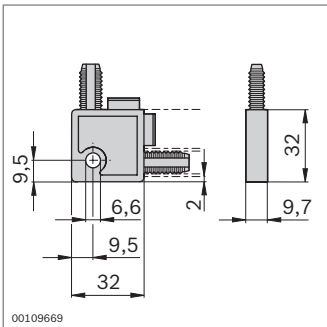
¹⁾ Due to the (anodic oxidation) contact points produced in the manufacturing process, supplied in profile length of 3100 mm

Material: Aluminum, black anodized



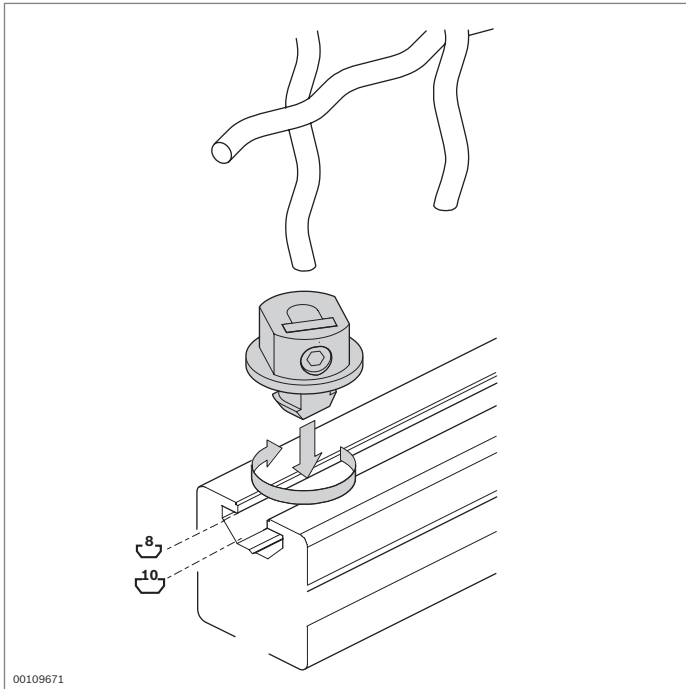
Inner corner piece	No.
	20 3 842 305 768

Material: PA; black



Outer corner piece	No.
	20 3 842 305 767

Material: PA; black

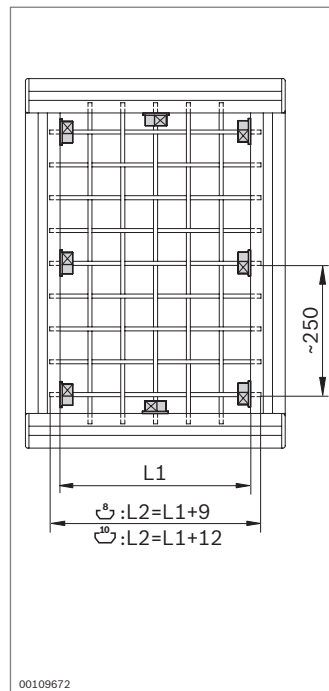
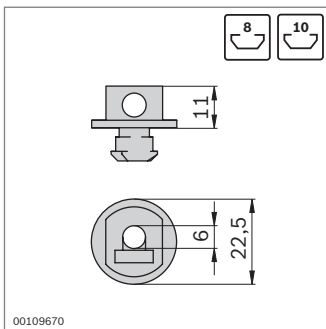


Clamp bushing



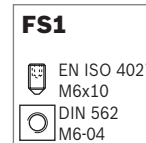
- For fastening woven wire grilles in the profile slot
- For woven wire grilles with a wire diameter up to 3.1 mm
- Suitable for 8 mm and 10 mm slots
- Low-cost connection element
- Rattle-free mounting

7



Clamp bushing	Slot	No.	FS
	8, 10	100	3 842 515 244 FS1

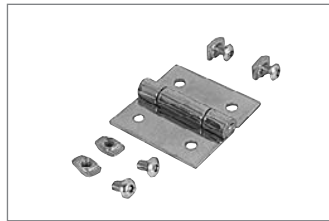
Material: Diecast zinc
Fastening material: Steel; galvanized



Doors and fittings



Hinge profile (p. 8-3)



Hinge (p. 8-4)



Hinge, plastic (p. 8-5)



Hinge, aluminum (p. 8-6)



LIFTOFF hinge (p. 8-7)



Hinge, removable (p. 8-8)



Hinge, adjustable (p. 8-9)



Folding door element
(p. 8-10)



Door lock for swing and
sliding doors
(p. 8-11, 8-15)



Door lock (p. 8-12)



Door lock for EcoSafe
sliding doors (p. 8-13)



Door lock for swing doors
(p. 8-14, 8-17)



Mortise lock for swing doors (p. 8-21)



Bow-type handle (p. 8-23)



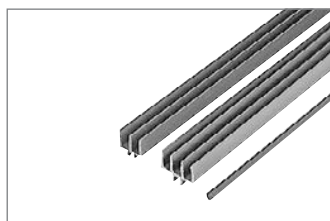
Safety handle (p. 8-24)



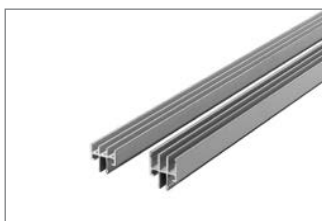
Sealing strip (p. 8-25)
Sealing profile (p. 8-26)



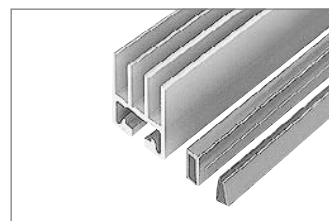
Slider (p. 8-27)



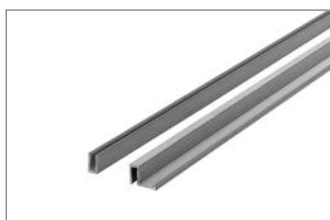
Sliding door profile PVC (p. 8-28)



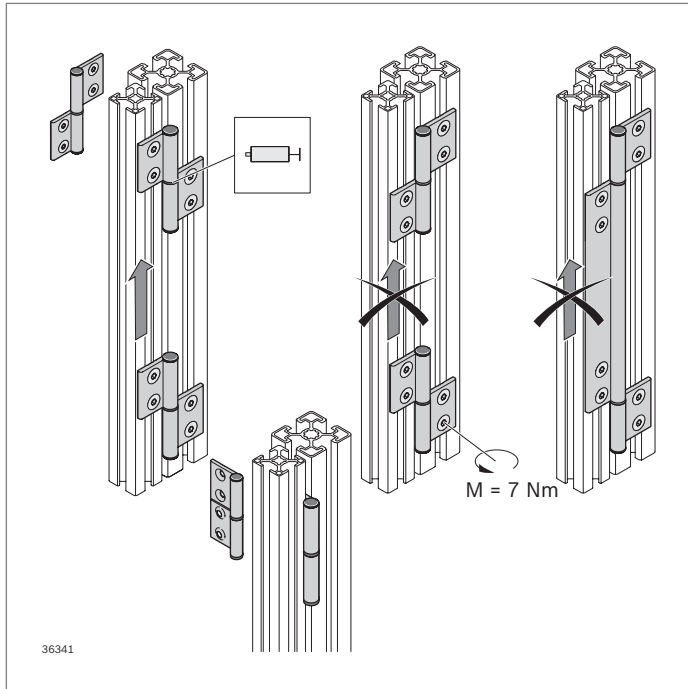
Sliding door profile Al Clip (p. 8-29)



Sliding door profile Al 45 (p. 8-30)



Edge protector, door handle profile (p. 8-32)



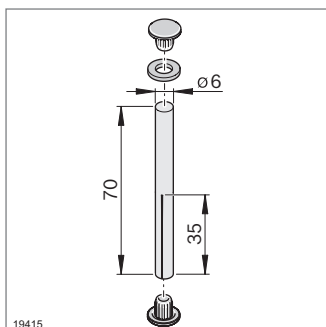
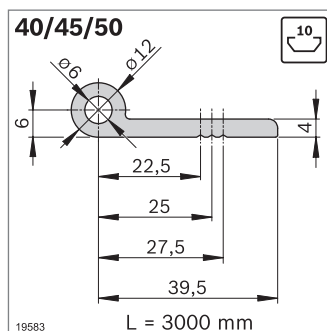
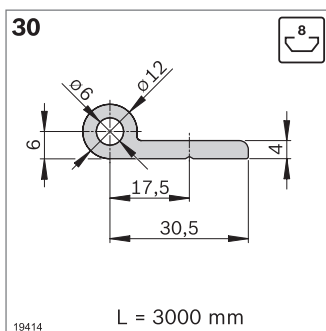
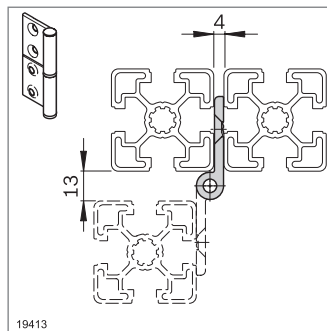
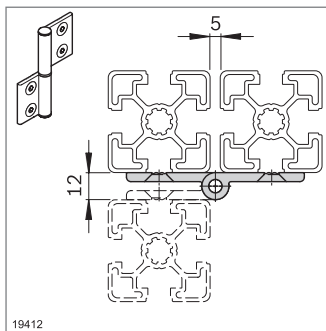
Hinge profile



- For self-assembly of hinges or hinge bands
- Possible to use as a non-transparent hinge band to fully cover the door gap
- Hinge profiles for slot dimensions 30 and 40/45/50 can also be combined for maximum flexibility
- For doors with profile frames or doors made of solid panel elements
- Assembly on exterior or interior
- Assembly as removable and non-removable hinges
- Opening to the right and left
- Centering slots as a drill guide for mounting bores
- Required finishing:
 - Cut the hinge halves to length
 - Drill holes for fixing

Required accessories:

- Hinge pins
- T-nut M6 (p. 3-4)
- Screw ISO 10642 M6x12 (8 mm slot)
- screw ISO 10642 M6x16 (10 mm slot)



Hinge profile	L (mm)	No.
30	3000 ¹⁾	10 3 842 543 371
40/45/50	3000 ¹⁾	10 3 842 543 372

¹⁾ Due to the (anodic oxidation) contact points produced in the manufacturing process, supplied in profile length of 3100 mm

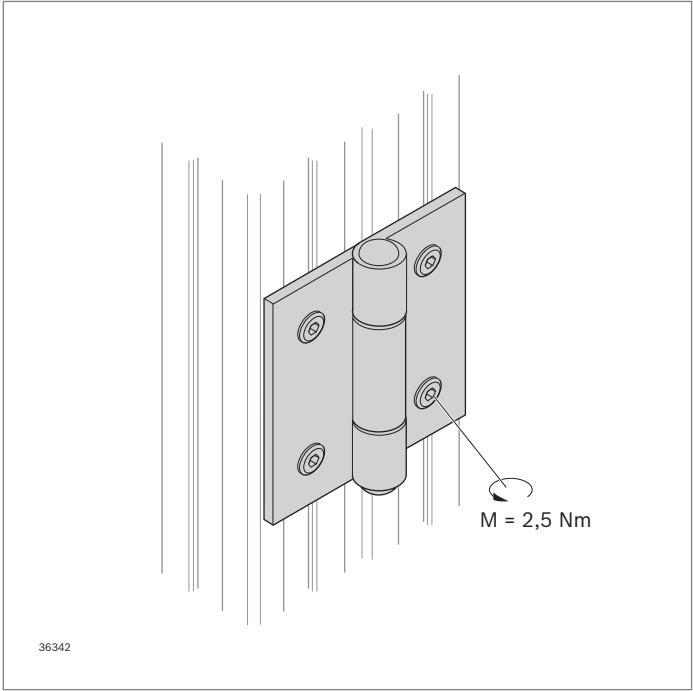
Material: Aluminum; anodized

Slot	
8	300 N
10	300 N

Hinge pins	No.
	10 3 842 544 661

Material: Grooved pin: Steel; galvanized
Washer, cover cap: TPE

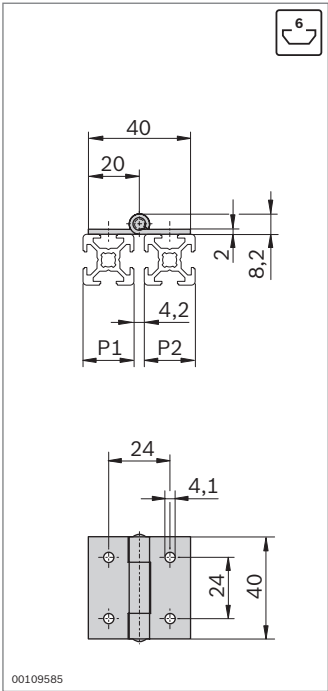
Scope of delivery: Incl. grooved pin, 2 x cover cap, washer



Hinge



- ▶ Assembly possible on solid panel elements
- ▶ For small doors and flaps
- ▶ Steel hinge for profiles with 6 mm slot

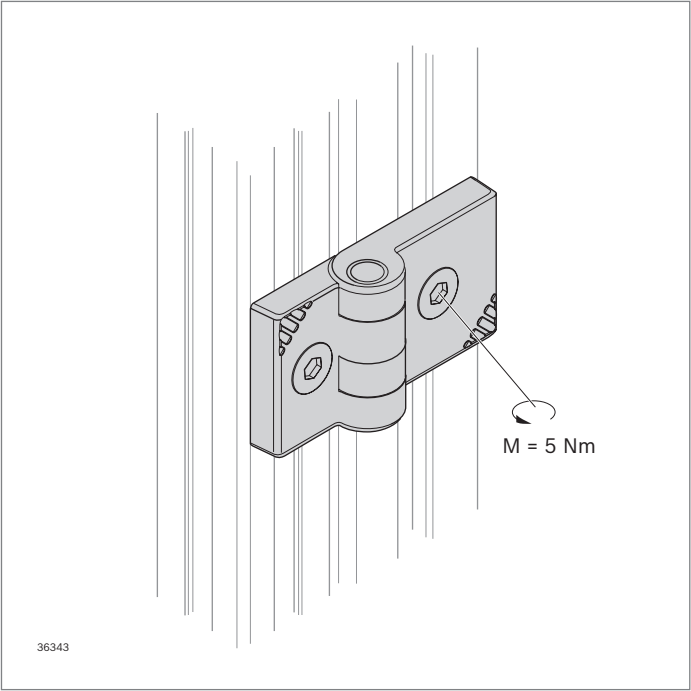


Slot	
6	300 N

FS1

ISO 7380
M4x6

Hinge	P1 (mm)	P2 (mm)	ESD	No.	FS
	20	20		2 3 842 535 684	4xFS1
Material: Steel; stainless Fastening material: Steel; galvanized Scope of delivery: Incl. fastening material (FS)					

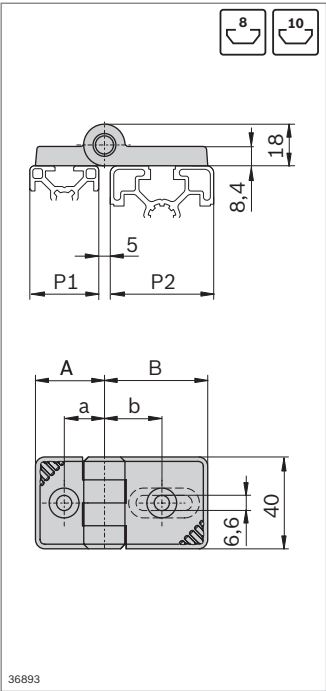


Hinge, plastic



- ▶ Plastic hinge for profiles with 8 mm or 10 mm slot
- ▶ Assembly possible on solid panel elements
- ▶ Centering bolts for easing mounting and as an anti-torsion element

8



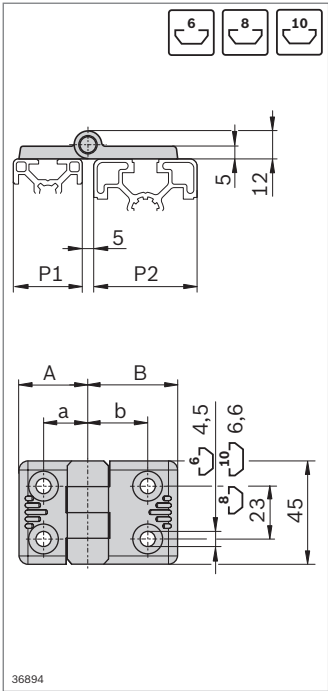
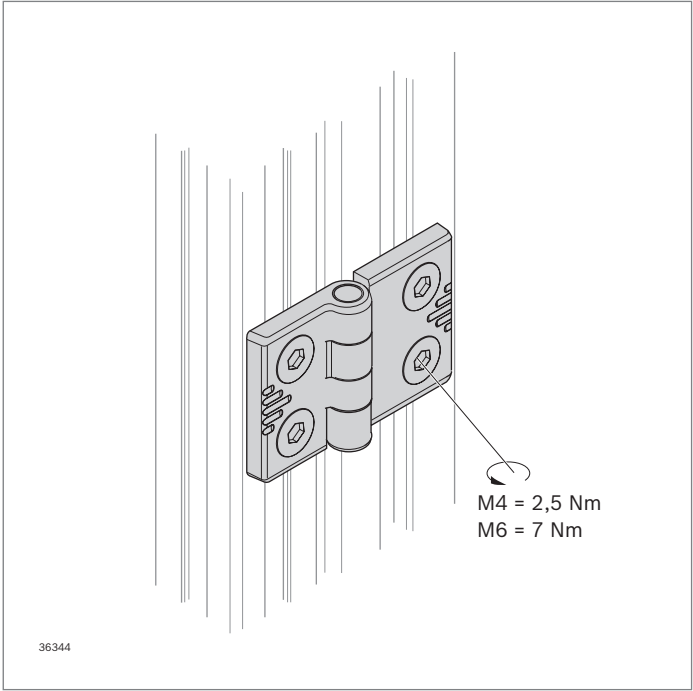
Slot	
8	150 N
10	150 N

FS1	FS2
DIN7991 M6x16	DIN7991 M6x18

Hinge, plastic	P1 (mm)	P2 (mm)		No.	FS
	30	30	2	3 842 554 458	2xFS1
	30	40/50	2	3 842 554 460	1xFS1, 1xFS2
	30	45	2	3 842 554 462	1xFS1, 1xFS2
	30	60	2	3 842 554 464	1xFS1, 1xFS2
	40/50	40/50	2	3 842 554 466	2xFS2
	45	45	2	3 842 554 468	2xFS2
	45	60	2	3 842 554 470	2xFS2
	60	60	2	3 842 554 472	2xFS2

Material: PA; signal gray
Hinge axle: Steel; galvanized
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)

P1/P2 (mm)	A/B (mm)	a/b (mm)
30	30	17.5
40	39	22.5
45	45	25.0
50	39	27.5
60	60	32.5



P1/P2 (mm)	A/B (mm)	a/b (mm)
20	20	12.5
30	28	17.5
40	37	22.5
45	40	25.0

Slot

6	300 N
8	300 N
10	300 N

FS1

DIN7991
M4x8

FS2

DIN7991
M6x12

FS3

DIN7991
M6x16

Hinge, aluminum



- ▶ Aluminum hinge for all slot systems
- ▶ Assembly possible on solid panel elements
- ▶ High-quality version
- ▶ Conductive version
- ▶ Suitable for use under cleanroom conditions thanks to wear-resistant guide bushings

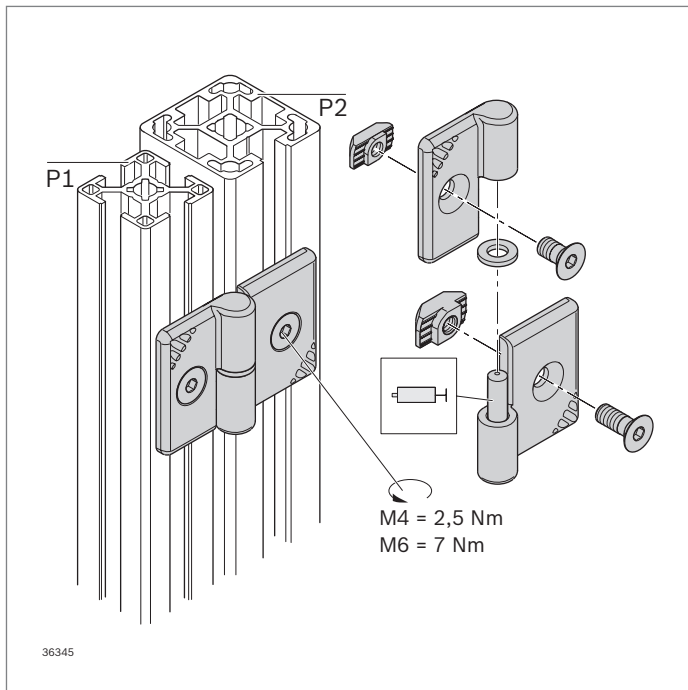
Hinge, aluminum	P1 (mm)	P2 (mm)	ESD	No.	FS
	20	20		2 3 842 544 525	4xFS1
	20	30		2 3 842 544 526	2xFS1, 2xFS2
	30	30		2 3 842 544 527	4xFS2
	30	40		2 3 842 544 528	2xFS2, 2xFS3
	30	45		2 3 842 544 529	2xFS2, 2xFS3
	40	40		2 3 842 544 530	4xFS3
	45	45		2 3 842 544 531	4xFS3

Material: Diecast aluminum; nickel-plated
Fastening material: Steel; galvanized

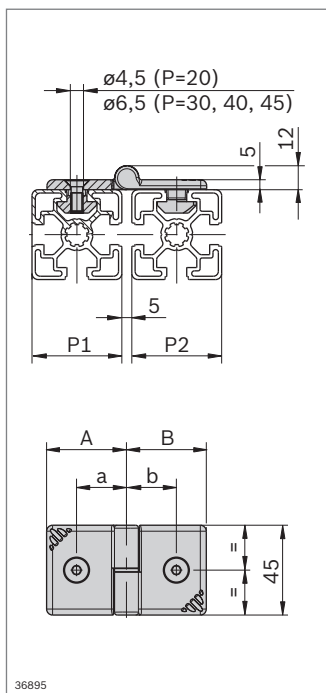
Scope of delivery: Incl. fastening material (FS)

Fraunhofer
TESTED
DEVICE

Report No. BO 9903-159

**LIFTOFF hinge***designLINE*

- Removable compact hinge, opening to the right or left
- designLINE version with special silver paint (RAL 9006) for an attractive, high-quality design
- Centering lugs as an assembly aid and anti-torsion element

8

Slot	
6	300 N
8	300 N
10	300 N

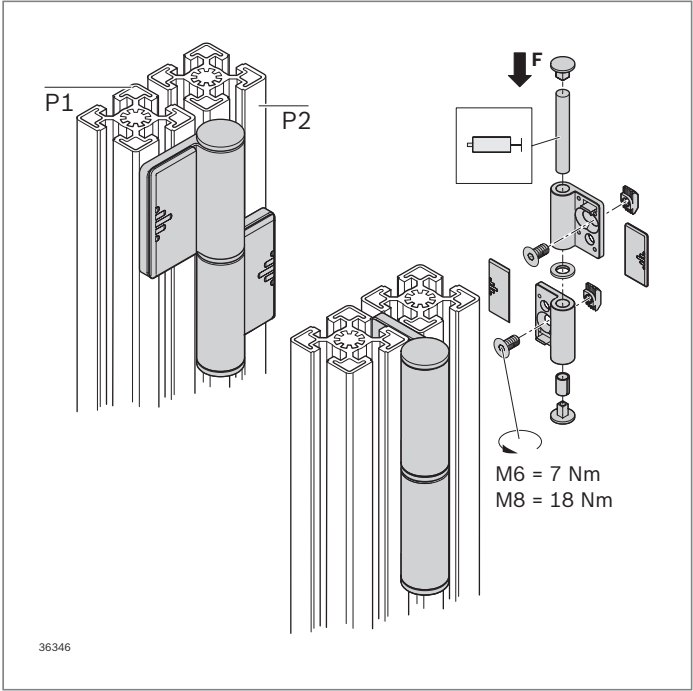
FS1**FS2****FS3****FS4**

LIFTOFF hinge	P1 (mm)	P2 (mm)		No.	FS
right 	20	20	2	3 842 543 334	2xFS1, FS4
	20	30	2	3 842 543 333	FS1, FS2, FS4
	30	30	2	3 842 543 332	2xFS2, FS4
	30	40	2	3 842 543 331	FS2, FS3, FS4
	30	45	2	3 842 543 330	FS2, FS3, FS4
	40	40	2	3 842 543 329	2xFS3, FS4
left 	45	45	2	3 842 543 328	2xFS3, FS4
	20	20	2	3 842 543 327	2xFS1, FS4
	20	30	2	3 842 543 326	FS1, FS2, FS4
	30	30	2	3 842 543 325	2xFS2, FS4
	30	40	2	3 842 543 324	FS2, FS3, FS4
	30	45	2	3 842 543 323	FS2, FS3, FS4
	40	40	2	3 842 543 322	2xFS3, FS4
	45	45	2	3 842 543 321	2xFS3, FS4

Material: Hinge: Diecast aluminum, painted
 Fastening material: Steel; galvanized
 Grooved pin: Steel; galvanized
 Washer: PA

Scope of delivery: Incl. fastening material (FS)

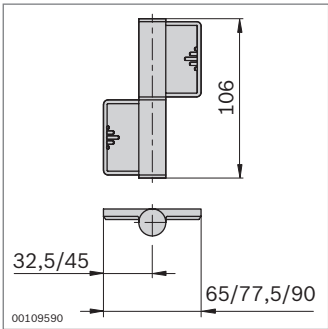
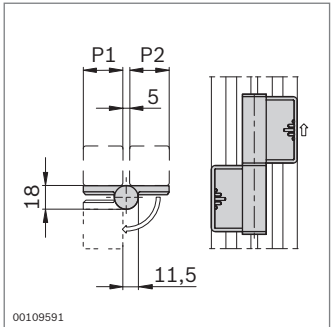
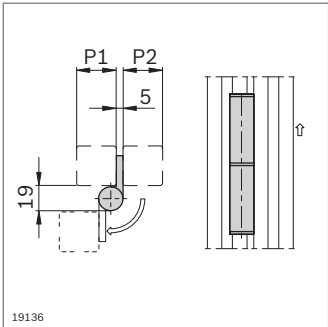
P1/P2 (mm)	A/B (mm)	a/b (mm)
20	20	12.5
30	28	17.5
40	37	22.5
45	40	25.0



Hinge, removable



- For constructing large, heavy doors
- Removable
- For left and right stop
- Externally mounted: Opening angle approx. 180°
- Internally mounted: Prevents unauthorized removal, e.g. for safety devices



Slot	
8	300 N
10	300 N

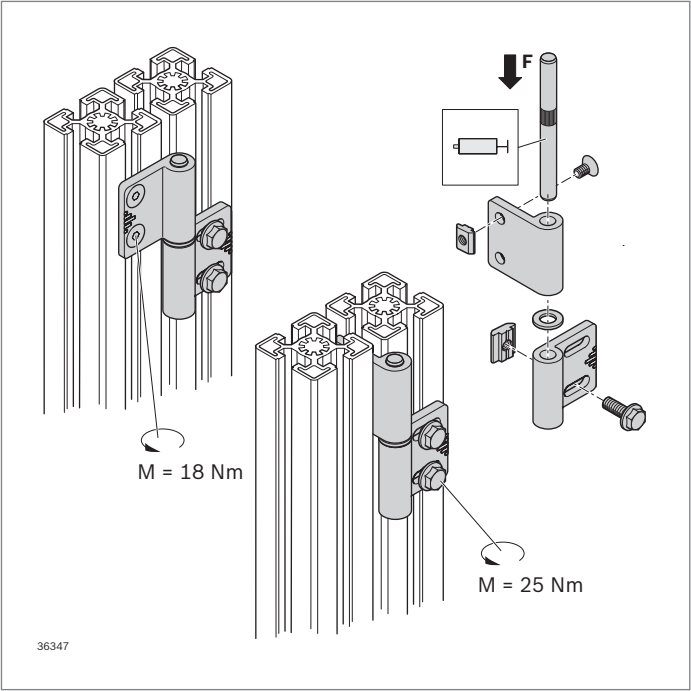
FS1	FS2
DIN7991 M6x12	DIN7991 M8x16

Hinge, removable	P1 (mm)	P2 (mm)		No.	FS
	30	30	2	3 842 555 572	2xFS1
	30	45	2	3 842 555 574	1xFS1,
	30 ¹⁾	60			1xFS2
	45	45	2	3 842 555 576	2xFS2
	45 ¹⁾	60			
	60 ¹⁾	60			

¹⁾ Not suitable for installing on inner side

Material: Hinge: Diecast zinc
 Cover cap: PP, signal gray
 Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS), 2 x cover cap



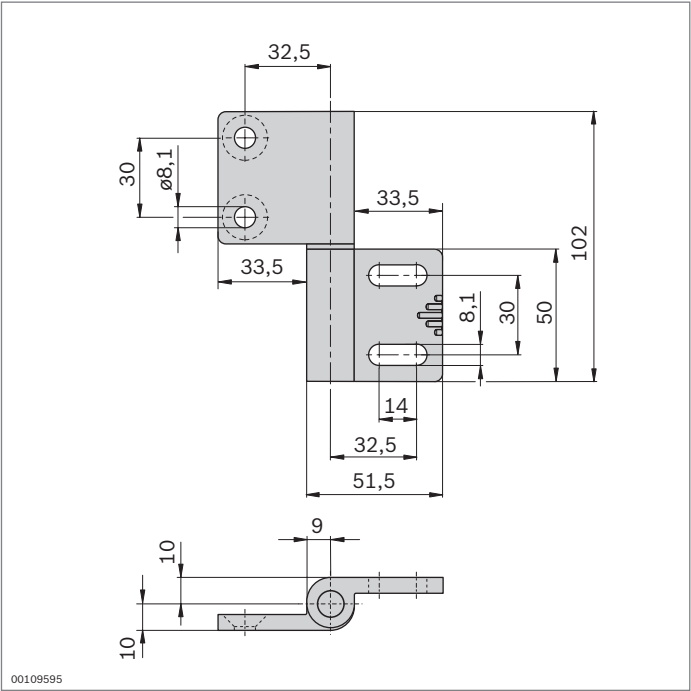
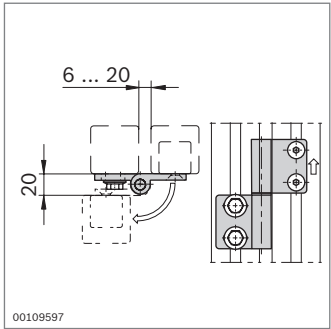
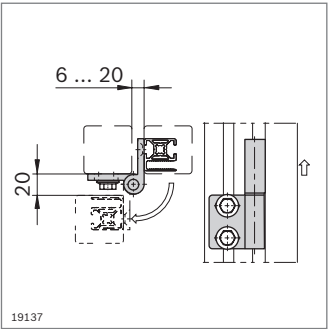
Hinge, adjustable



- For constructing large, heavy doors
- Adjustable for compensating clearance tolerances
- Removable
- For left and right stop
- Opening angle approx. 180°

Accessories:

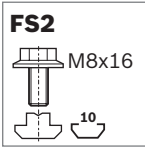
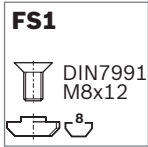
T-nut slot 10, M8 (p. 3-4) for fixing a door with 10 mm slot

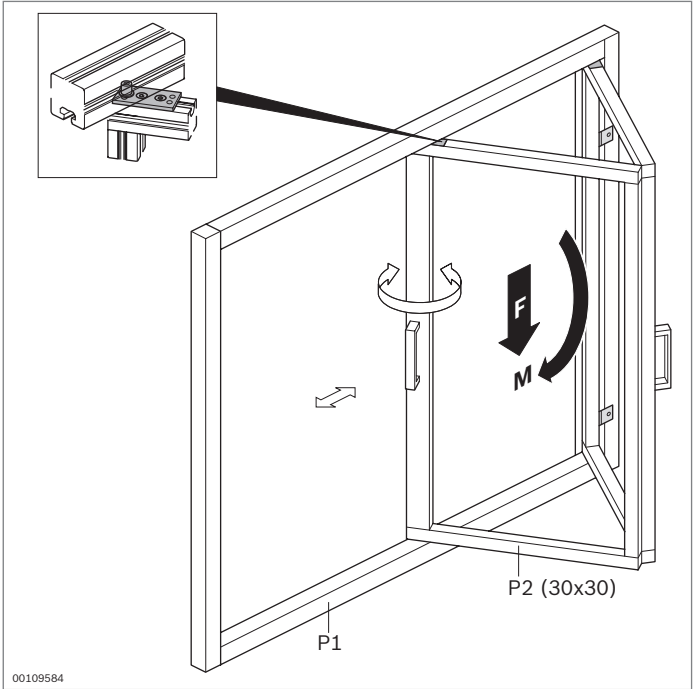


Hinge, adjustable	No.	FS
	2 3 842 544 562	2xFS1, 2xFS2

Material: Diecast aluminum
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)

Slot	
8	300 N
10	300 N

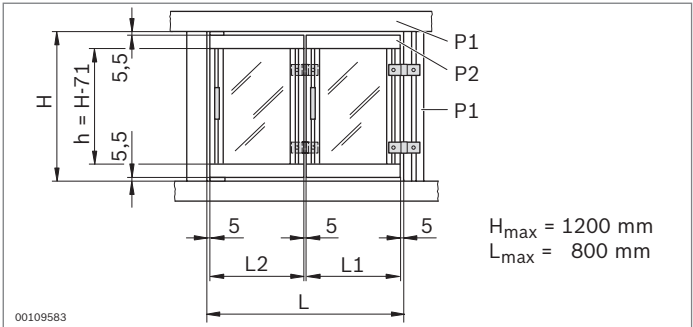




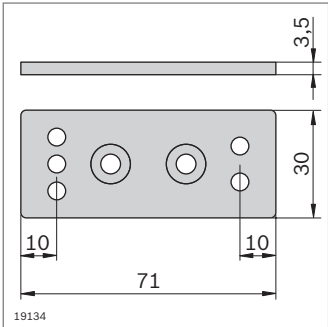
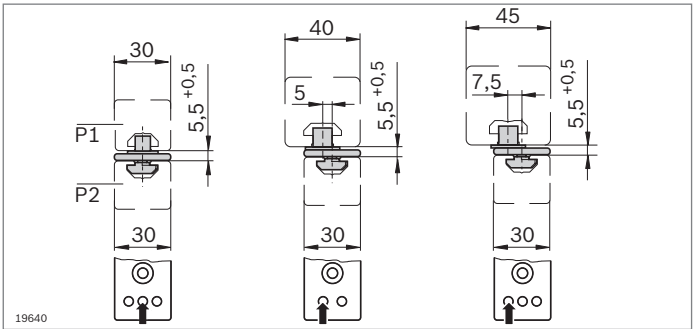
Folding door element



- For a simultaneous swinging and sliding action on folding doors made of 30 mm profiles
- Extremely long service life (approx. 50,000 actuations)
- Suitable for frames made of profiles with 8 mm and 10 mm slot
- The frame and door profile are always flush (the guide ring position depends on the thickness of the frame profile)



P2 (mm)	P1 (mm)	L1 (mm)	L2 (mm)
30X30	45x45	0,5L - 29.5	0,5L + 14.5
	40x40	0,5L - 28.3	0,5L + 13.3
	30x30	0,5L - 25.8	0,5L + 10.8

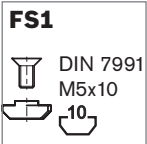


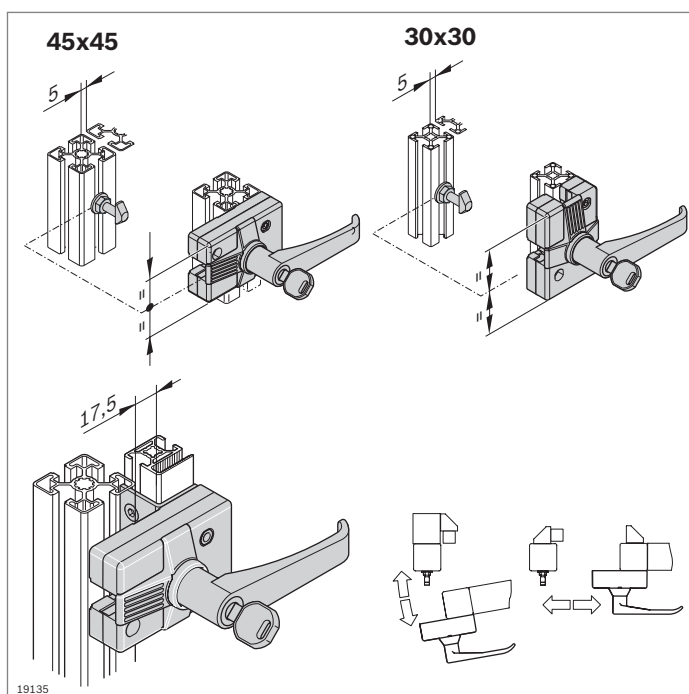
Slot	F_{max}	M_{max}
8	120 N	20 Nm
10	120 N	20 Nm

Folding door element	No.	FS
	3 842 516 715 2xFS1	

Material: Folding door element: Diecast zinc
Guide ring: PA; black
Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)



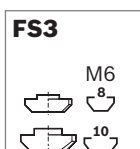
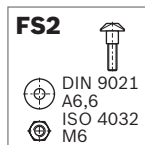
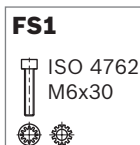
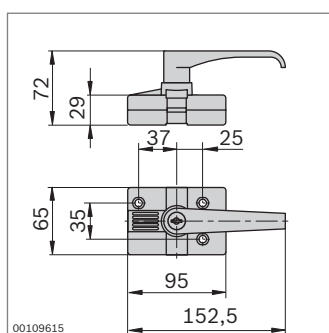


Door lock for swing and sliding doors



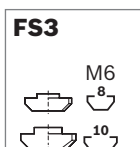
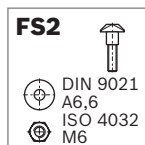
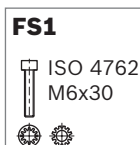
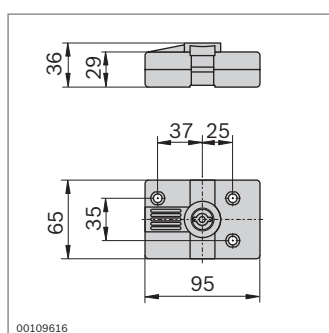
- Opening to the right and left
- Suitable for profiles 45x45 and 30x30
- “Standard locking” variant with random key selection (each lock has a different key)
- “Uniform locking” variant always has the same key
- Version with door handle or as two-way lock

Accessories:
Adapter plate



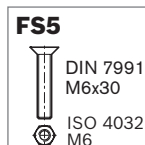
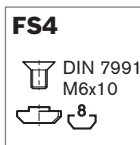
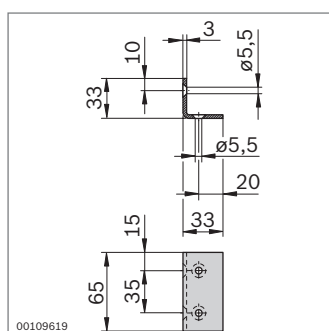
Door lock	No.	FS
Standard locking	30x30, 45x45	3 842 525 821 2xFS1, 1xFS2, 3xFS3
Uniform locking	30x30, 45x45	3 842 525 822 2xFS1, 1xFS2, 3xFS3

Material: Housing: Diecast aluminum
Door handle: PA; black
Fastening material: Steel; galvanized
Scope of delivery: Incl. 3 keys, fastening material (FS)



Door lock	No.	FS
	30x30, 45x45	3 842 525 823 2xFS1, FS2, 3xFS3

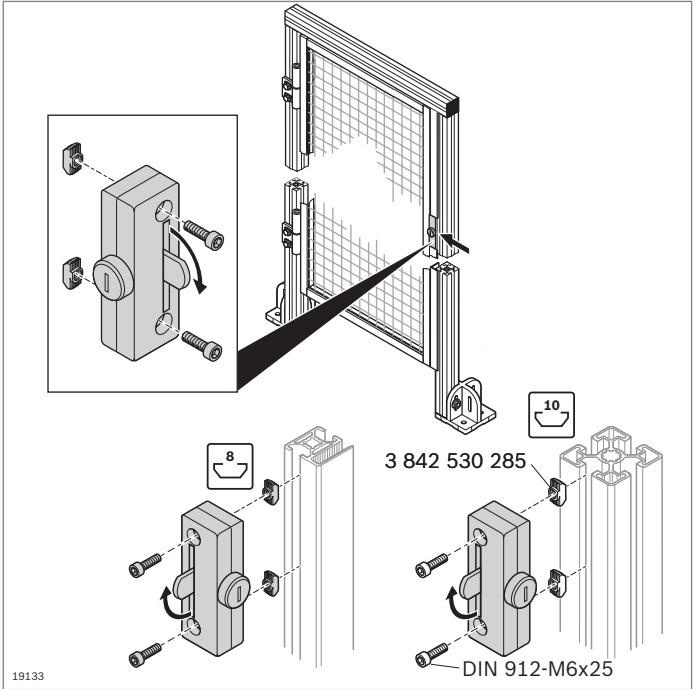
Material: Diecast aluminum
Fastening material: Steel; galvanized
Scope of delivery: Incl. 1 x two-way key, fastening material (FS)



- Adapter plate for mounting the door lock on an EcoSafe protective frame (p. 10-6)

Adapter plate	No.	FS
	3 842 523 243	2xFS4, 2xFS5

Material: Steel; galvanized
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)



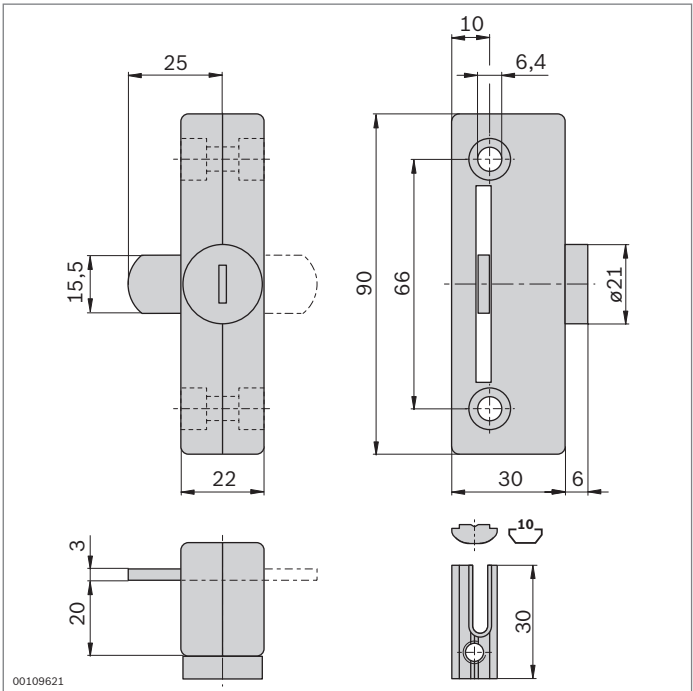
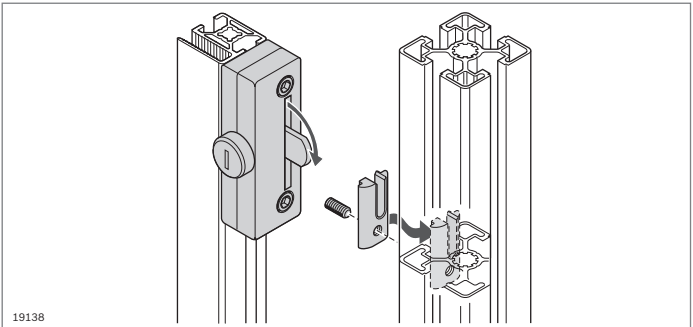
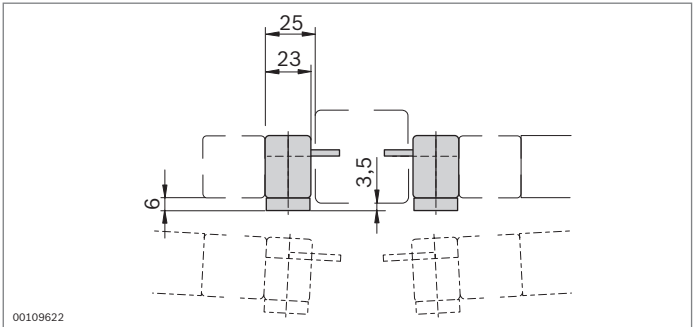
Door lock



- Opening to the right and left
- For frame profile 30x30 WG (EcoSafe protective fence system); incl. fastening material
- “Standard locking” variant with random key selection (each lock has a different key)
- “Uniform locking” variant always has the same key

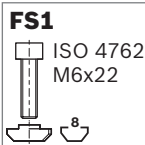
Accessories for mounting on profile with 10 mm slot:

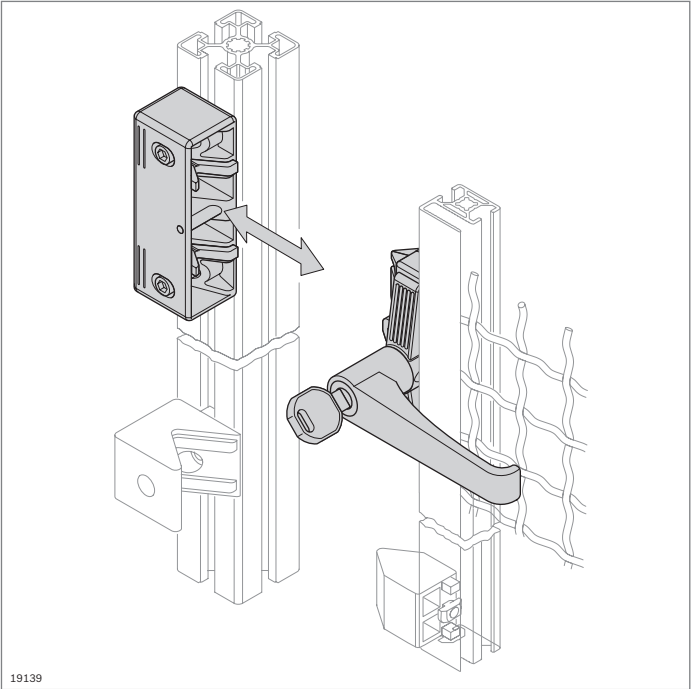
- 2 x T-nut M6, **3 842 530 285** (p. 3-4)
- 2 x screw DIN 912-M6x25



Door lock	No.	FS
Standard locking	3 842 522 479	2xFS1, 1xFS2
Uniform locking	3 842 523 320	2xFS1, 1xFS2

Material: Diecast zinc
Fastening material: Steel; galvanized
Scope of delivery: Incl. 3 keys, fastening material (FS)





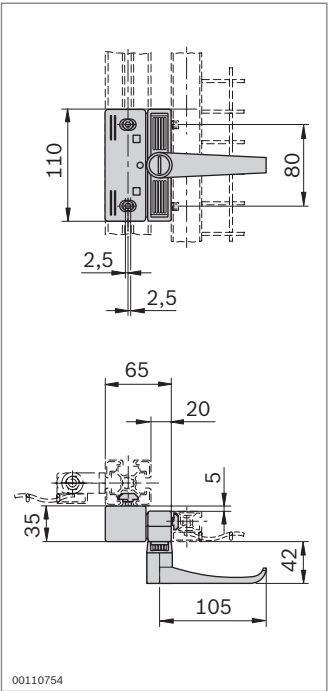
Door lock for EcoSafe sliding doors



- Opening to the right and left
- “Standard locking” variant with random key selection (each lock has a different key)
- “Uniform locking” variant always has the same key

Optional accessories:

Stop kit for cushioned closing of the doors (p. 12-5)



FS1

DIN 7984
M6x40

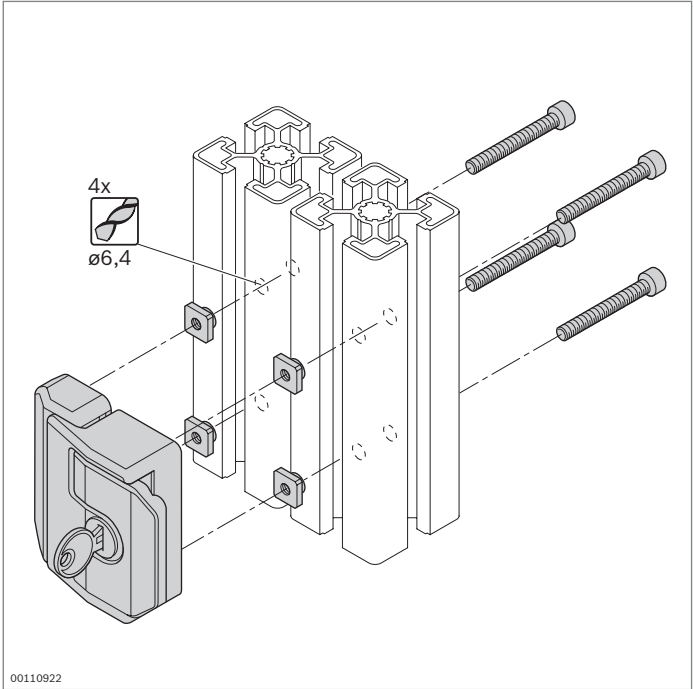
FS2

DIN 912
M6x12

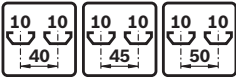
Door lock for sliding doors	No.	FS
Standard locking	3 842 525 946	2xFS1, 2xFS2
Uniform locking	3 842 525 947	2xFS1, 2xFS2

Material: Housing: Diecast aluminum
 Door handle: PA; black
 Cover cap: PA6
 Fastening material: Steel; galvanized

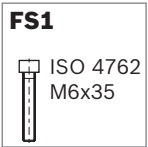
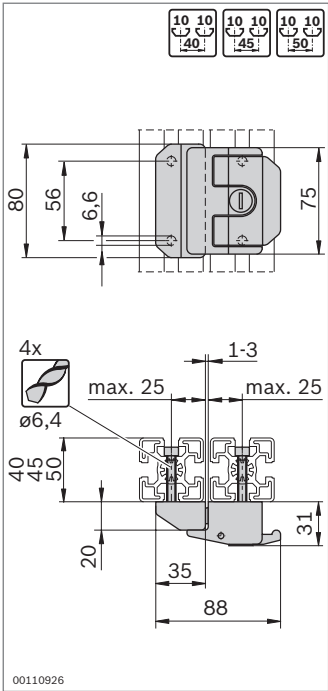
Scope of delivery: Incl. 3 keys, fastening material (FS)



Door lock for swing doors

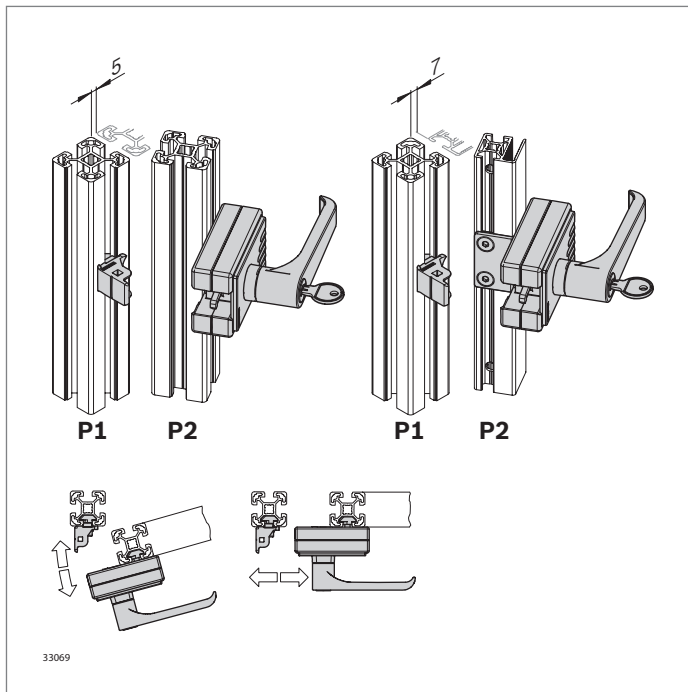


- Opening to the right and left
- Self-locking mechanism in the closed position
- Smooth closing
- Ergonomically designed folding handle for opening
- “Standard locking” variant with random key selection (each lock has a different key)
- “Uniform locking” variant always has the same key
- Profile finishing: Drill hole D6.4



Door lock	No.	FS
Standard locking	3 842 530 353	4xFS1, 4xFS2, 4xFS3, 4xFS4
Uniform locking	3 842 530 352	4xFS1, 4xFS2, 4xFS3, 4xFS4

Material: Diecast zinc; black powder-coated
Fastening material: Steel; galvanized
Scope of delivery: Incl. 2 keys, fastening material (FS)



Door lock “Multi-use” for swing and sliding doors

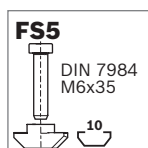
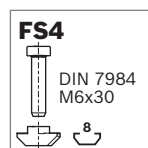
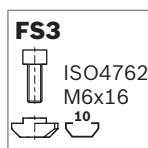
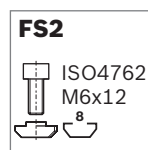
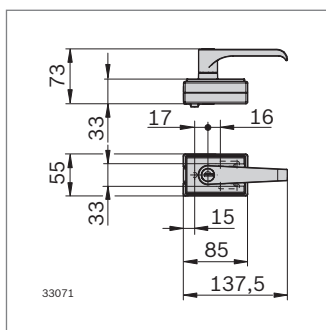


- ▶ Opening to the right and left
- ▶ For numerous profile combinations
- ▶ “Standard locking” variant with random key selection (each lock has a different key)
- ▶ “Uniform locking” variant always has the same key
- ▶ Version with door handle or as two-way lock
- ▶ Covered fastening screws
- ▶ Differing gap measurements for doors <400 mm with modular dimensions up to 45 mm and < 600 mm for modular dimensions of 50 mm (see assembly instructions **3 842 554 184**)
- ▶ Without profile finishing

Optional accessories:

Adapter plate for connecting to a WG40 or WG30 woven wire grille profile (p. 10-9)

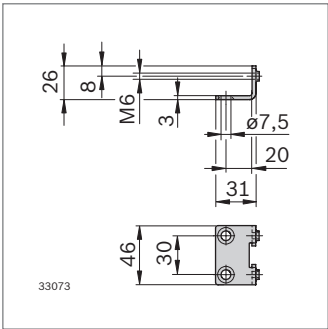
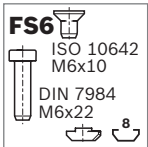
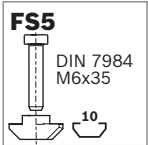
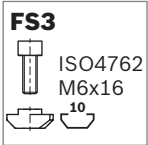
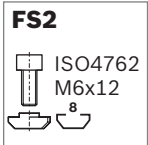
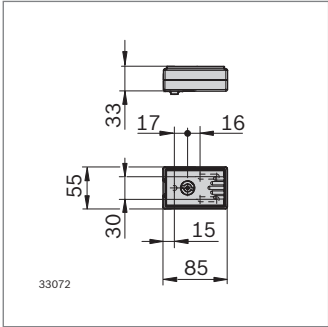
P1	P2	P2	P2	P2	P2
30	WG30/40	30	–	–	–
40	WG30/40	30	40	–	–
45	WG30/40	30	40	45	–
50	WG30/40	30	40	45	50
60	WG30/40	30	40	–	–



Door lock “Multi-use” for swing and sliding doors	No.	FS
Standard locking	3 842 548 971	3xFS1, FS2, FS3, 2xFS4, 2xFS5
Uniform locking	3 842 548 970	3xFS1, FS2, FS3, 2xFS4, 2xFS5

Material: Housing: Diecast zinc
Door handle: PA6, black
Cover: PP; signal gray RAL 7004
Fastening material: Steel; galvanized

Scope of delivery: Incl. 3 keys, fastening material (FS)



Door lock “Multi-use” for swing and sliding doors	No.	FS
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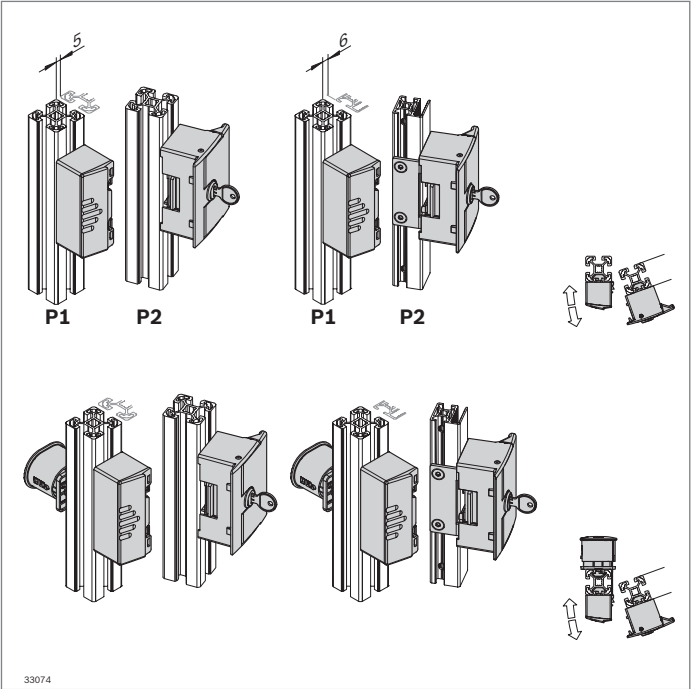
Two-way lock	3 842 548 965	3xFS1, FS2, FS3, 2xFS4, 2xFS5
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Material:	Housing: Diecast zinc Cover: PP; signal gray RAL 7004 fastening material: Steel; galvanized
Scope of delivery:	Incl. 1x two-way key, fastening material

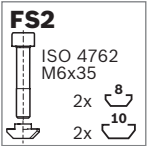
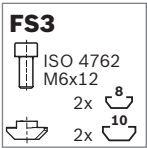
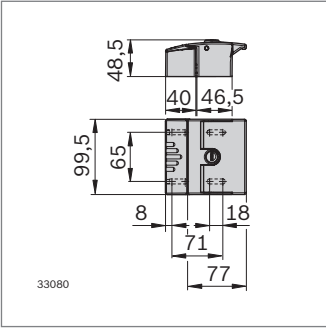
Adapter plate	No.	FS
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EcoSafe	3 842 548 969	2xFS6
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Material:	Steel; galvanized Fastening material: Steel; galvanized
Scope of delivery:	Incl. Fastening material



P1	P2	P2	P2	P2	P2
30	WG30/40	30	–	–	–
40	WG30/40	30	40	–	–
45	WG30/40	30	40	45	–
50	WG30/40	30	40	45	50
60	WG30/40	–	40	45	50



Door lock “Compact” for swing doors



- Opening to the right and left
- For numerous profile combinations
- “Standard locking” variant with random key selection (each lock has a different key)
- “Uniform locking” variant always has the same key
- Covered fastening screws
- Installation of an emergency opening mechanism for unlocking from inside in emergency possible (Gap measurements according to assembly instructions **3 842 554 192**)
- Without profile finishing

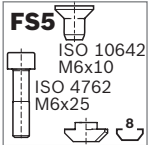
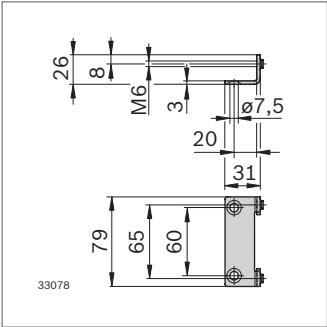
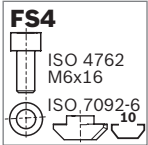
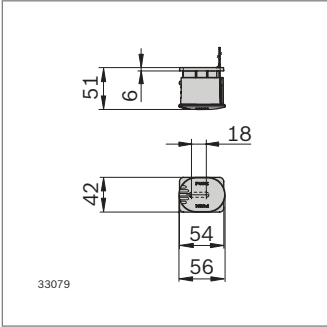
Optional accessories:

- Adapter plate for connecting to a WG40 or WG30 woven wire grille profile (p. 10-9)
- Emergency opening mechanism (p. 8-18)

Door lock “Compact” for swing doors	No.	FS
Standard locking	3 842 553 640	4xFS1, 2xFS2, 2xFS3
Uniform locking	3 842 553 639	4xFS1, 2xFS2, 2xFS3

Material: Housing: Diecast aluminum
Cover: PP; signal gray RAL 7004 fastening material: Steel; galvanized

Scope of delivery: Incl. 2 keys, fastening material



- For emergency opening of the door lock “Compact” from the inside in its locked state

Emergency unlocking	No.	FS
Compact	3 842 554 134	FS4

Material:	Steel; galvanized Pushbutton: PA6; red RAL 3020 Fastener: PA6; RAL 7004 Fastening material: Steel; galvanized
Scope of delivery:	Incl. Fastening material

Adapter plate	No.	FS
EcoSafe	3 842 554 136	2xFS5

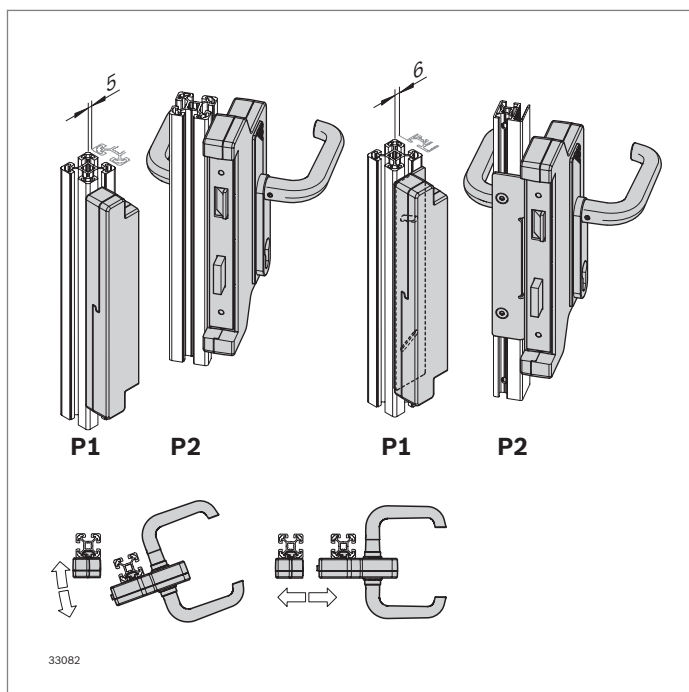
Material:	Steel; galvanized Fastening material: Steel; galvanized
Scope of delivery:	Incl. Fastening material

Chamber lock for swing and sliding doors

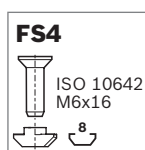
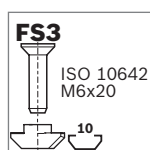
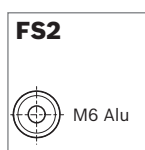
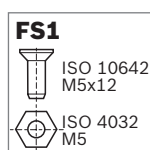
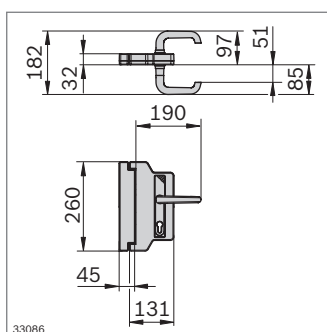
- Opening to the right and left
- For numerous profile combinations
- For installation of a standard lock cylinder (not included in the scope of delivery)
- Version with door handle, can be opened from inside and outside
- Without profile finishing
- Covered fastening screws

Optional accessories:

- Adapter plate for connecting to a WG40 or WG30 woven wire grille profile (p. 10-9)
- Lock cylinder (p. 8-20)

8

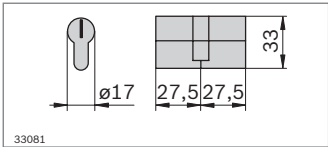
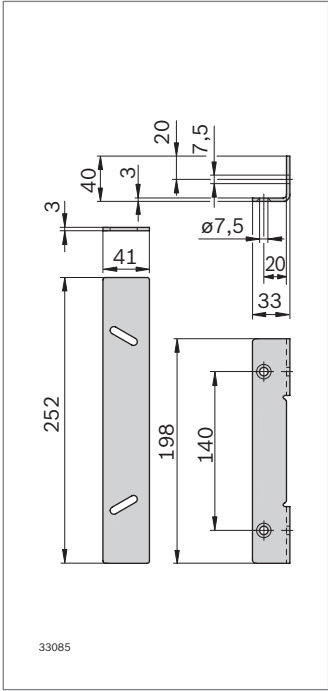
P1	P2	P2	P2	P2	P2
30	WG30/40	30	–	–	–
40	WG30/40	30	40	–	–
45	WG30/40	30	40	45	–
50	WG30/40	30	40	45	50
60	WG30/40	30	40	45	50



Chamber lock	No.	FS
Sliding door	3 842 554 151	4xFS1, 4xFS2, 4xFS3, 2xFS4
Swing door	3 842 554 150	4xFS1, 4xFS2, 4xFS3, 2xFS4

Material: Housing: PA6 signal gray (RAL7004)
 Door handle: Aluminum; anodized
 Fastening material: Steel; galvanized
 Washer: Aluminum

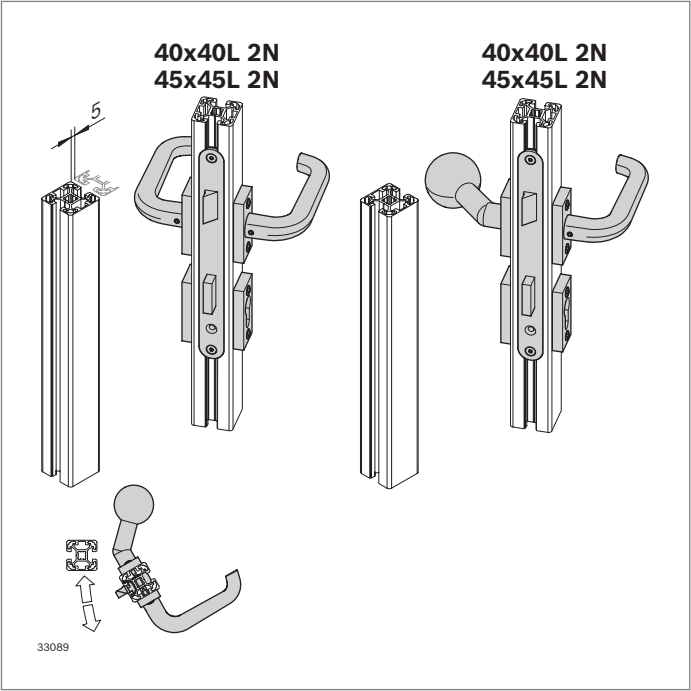
Scope of delivery: Incl. Fastening material



Adapter plate	No.	FS
Chamber lock	3 842 554 152	2xFS5

Material: Steel; galvanized
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material

- Conventional lock cylinder 27.5/27.5 is not included in the scope of delivery.



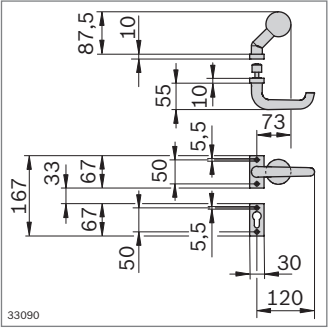
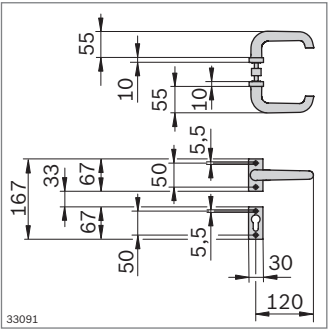
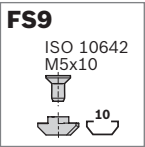
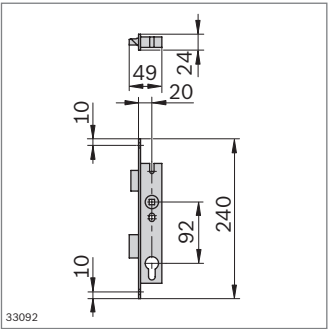
Mortise lock for swing doors



- For installation in 40x40L 2N or 45x45L 2N profiles
- For installation of a standard lock cylinder (not included in the scope of delivery)
- Robust design
- Door handle in the variants: Handle/handle, handle/knob
- Milled/drilled profile finishing
- Profile finishing can be ordered over Quick&Easy

Accessories:

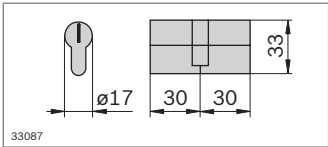
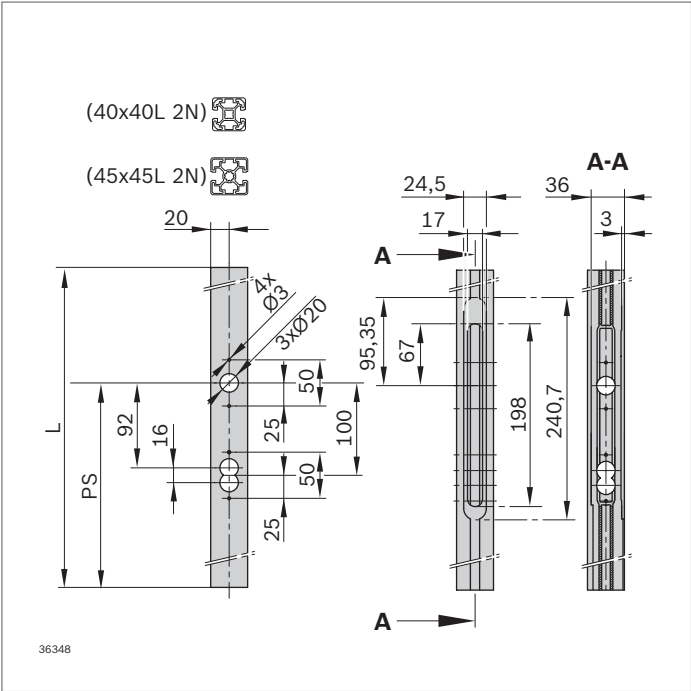
- Handle/handle
- Handle/knob
- Lock cylinder (p. 8-22)



Mortise lock	No.	FS
	3 842 553 638	2xFS9
Material:	Steel	
	Fastening material: Steel; galvanized	
Scope of delivery:	Incl. Fastening material	

Handle/handle	No.	FS
	3 842 553 631	8x FS10
Material:	Aluminum; anodized	
	Fastening material: Steel; galvanized	
Scope of delivery:	Incl. Fastening material	

Handle/knob	No.	FS
	3 842 553 630	8x FS10
Material:	Aluminum; anodized	
	Fastening material: Steel; galvanized	
Scope of delivery:	Incl. Fastening material	

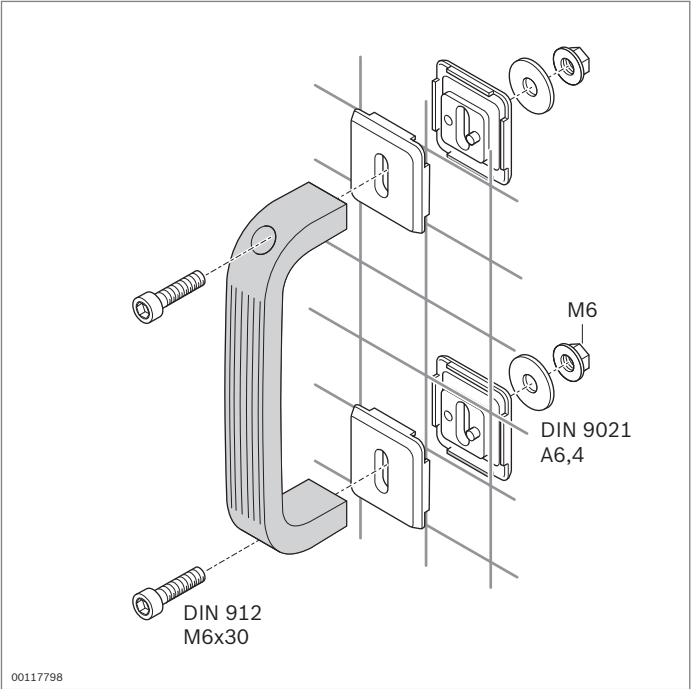


- Dimensional drawing of the profile finishing for mortise lock
- Finishing type “LM” (Lock Milling)
- Can be ordered over Quick&Easy

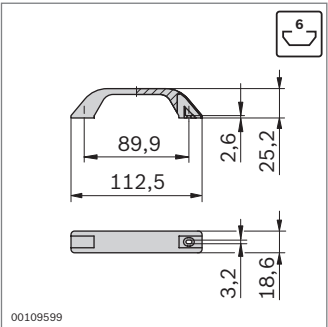
Strut profile	No.	Finishing type	Parameter
40x40L 2N	3 842 993 720	LM	PS, L
45x45L 2N	3 842 993 739	LM	PS, L

Parameter input – example: 3842993739 L=1800; [B=LM;PS=1100]

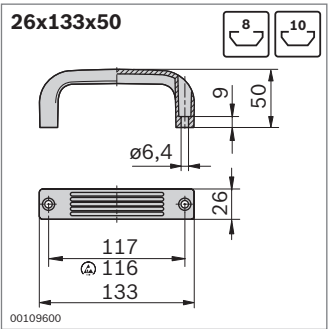
- Conventional lock cylinder 30/30 is not included in the scope of delivery



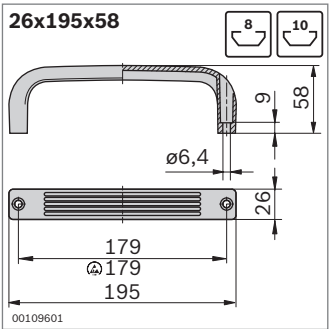
00117798



00109599



00109600



00109601

Bow-type handle



Bow-type handle

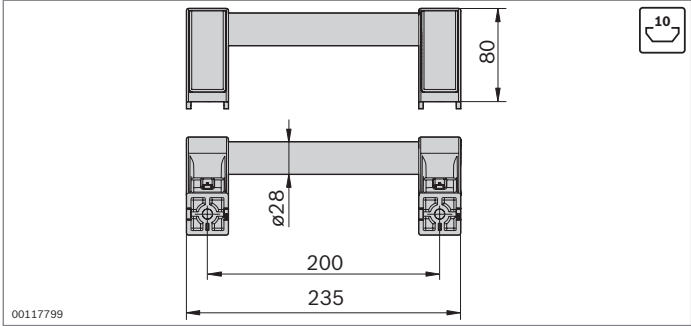
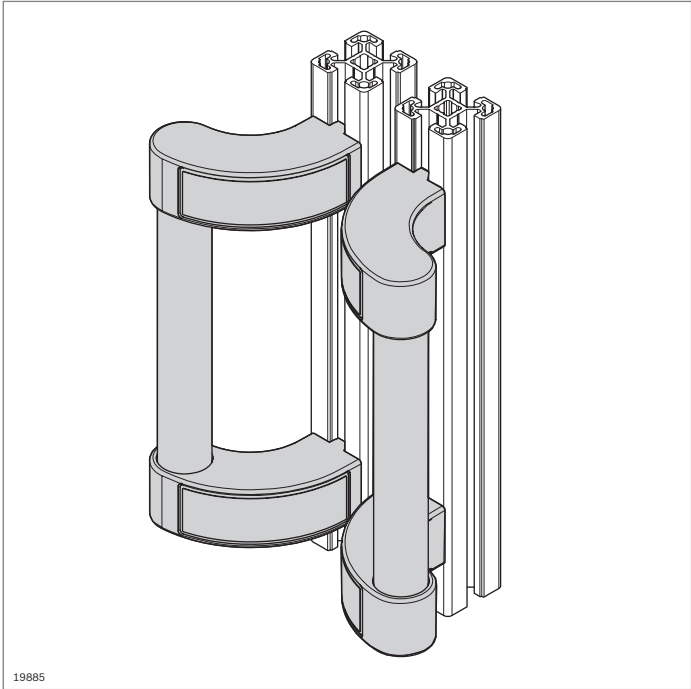
- ▶ Robust construction equipped to withstand strong forces
- ▶ Fastening in the profile slot or on a woven wire grille with the clamping element
- ▶ Suitable for use in ESD-protected environments

Optional accessories:

- ▶ Clamping element for mounting on woven wire grille (p. 10-19)
- ▶ T-nut (p. 3-4)

Bow-type handle	Color	ESD	No.
	Signal gray RAL 7004	10	3 842 554 716
	Black	10	3 842 518 738
Material:	PA		

Bow-type handle	Color	ESD	No.
26x133x50	Signal gray RAL 7004	10	3 842 554 718
	Black	10	3 842 525 481
26x195x58	Signal gray RAL 7004	10	3 842 554 720
	Black	10	3 842 525 767
Material:	PA		

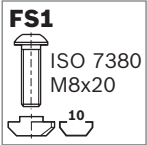


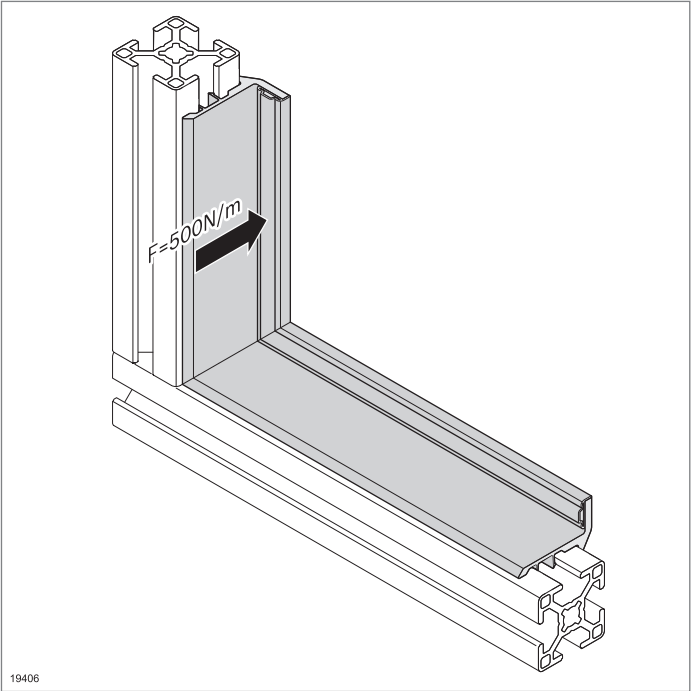
Safety handle



- Prevents injuries caused by catching of body parts when closing sliding doors
- Suitable for sliding or swing doors
- The length of the handle can be varied by changing the tube D28

Safety handle	No.	FS
	3 842 555 564 2xFS1	
Material:	Round tube D28: Aluminum; anodized Holder: PA; signal gray RAL 7004	
Scope of delivery:	Incl. fastening material (FS)	

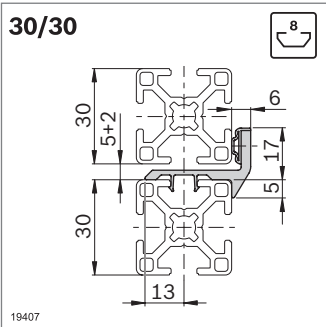




Sealing strip

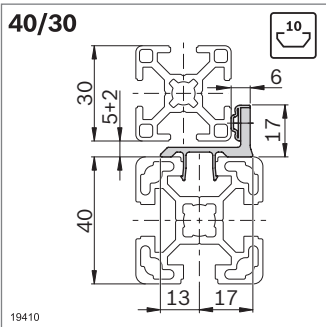


- For sealing doors (width > 500 mm) with an elastic lip seal
- Can be clipped into the slot
- Non-transparent elastic lip seal covers the door gap
- Stop for swing doors (impact force: 500 N/m)
- For flush-closing doors



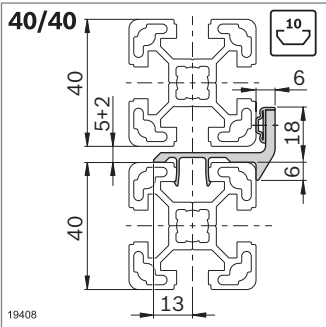
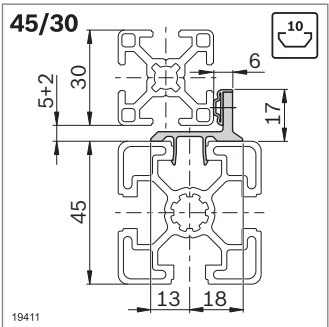
Sealing strip	L (mm)		No.
30/30	3000	10	3 842 555 554

Material: PVC/TPE; signal gray RAL 7004



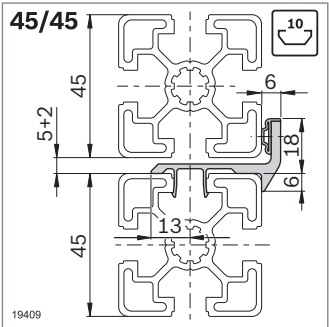
Sealing strip	L (mm)		No.
40/30	3000	10	3 842 555 562
45/30	3000	10	3 842 555 560

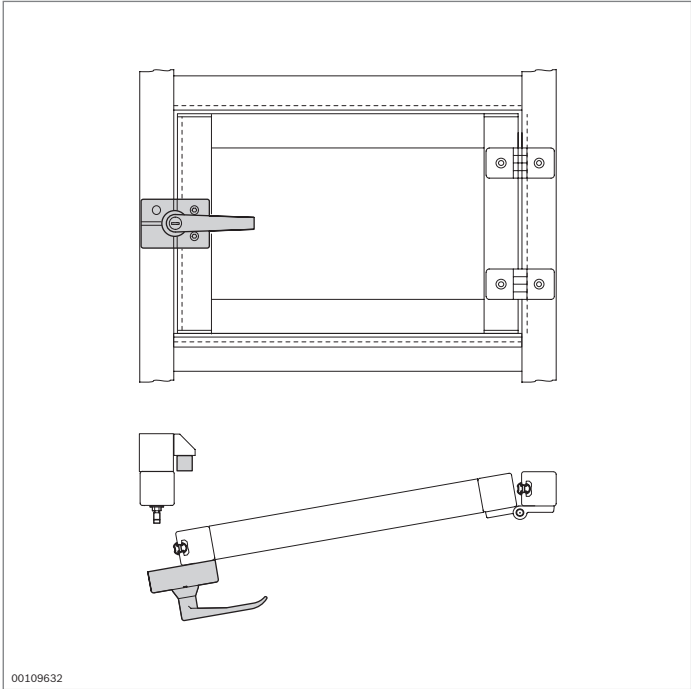
Material: PVC/TPE; signal gray RAL 7004



Sealing strip	L (mm)		No.
40/40	3000	10	3 842 555 558
45/45	3000	10	3 842 555 556

Material: PVC/TPE; signal gray RAL 7004

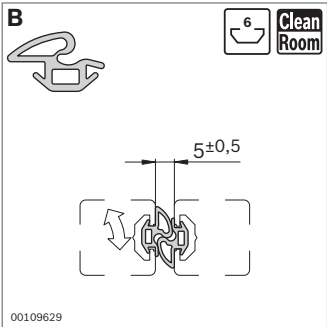
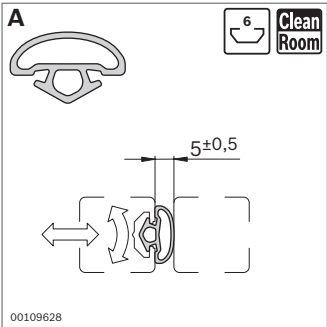




Sealing profile



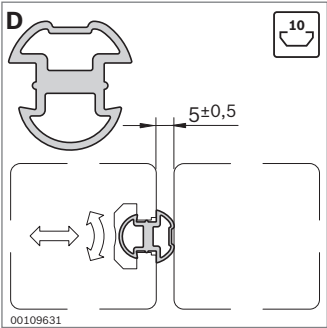
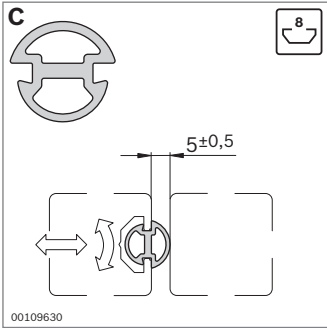
- For sliding and swing doors
- Prevents particles from entering or escaping



- Suitable for use in cleanroom environments
- Two-piece seal (**B**) also performs a stop function.

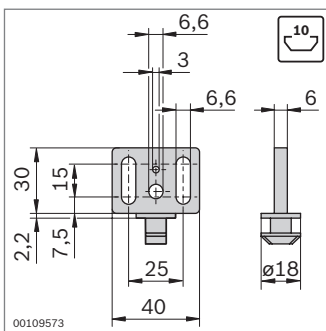
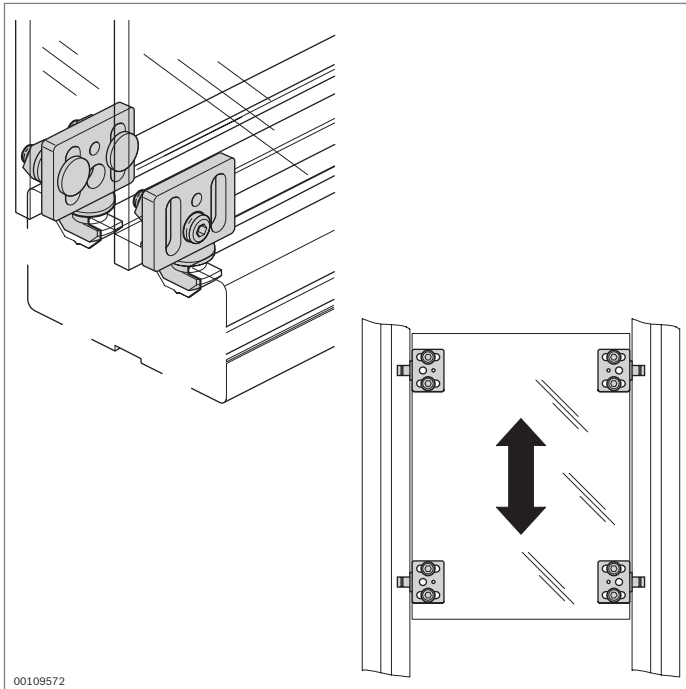
Sealing profile	Slot	L (mm)	No.
A	6	10000	3 842 524 623
B	6	10000	3 842 524 622

Material: TPE; light gray RAL 7035, hardness: 64° ±5 shore A



Sealing profile	Slot	L (mm)	No.
C	8	10000	3 842 516 598
D	10	10000	3 842 518 492

Material: NBR; black, hardness 60° shore A



Slider



- For constructing inexpensive sliding and lifting doors
- Good functional reliability

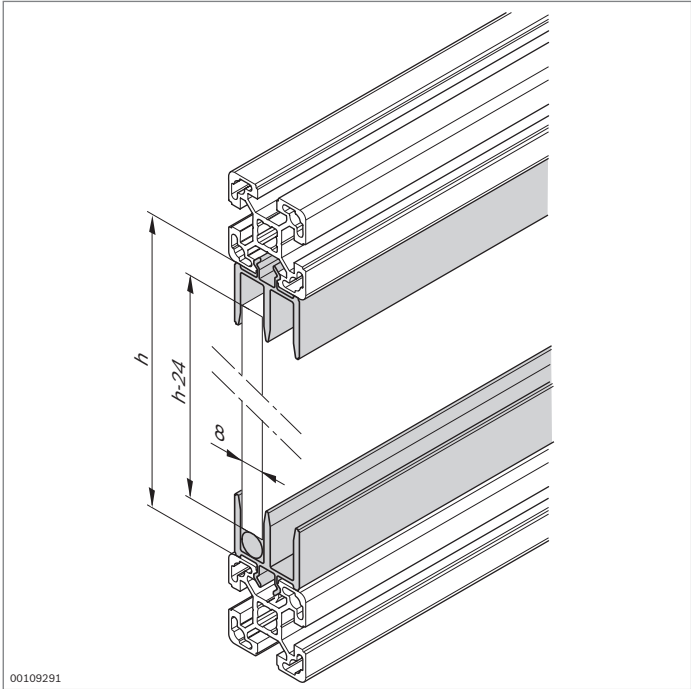
Slider



No.

10 **3 842 555 226**

Material: POM; signal gray RAL 7004



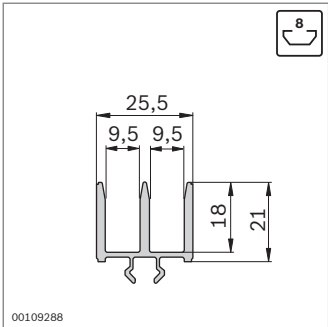
Sliding door profile, PVC



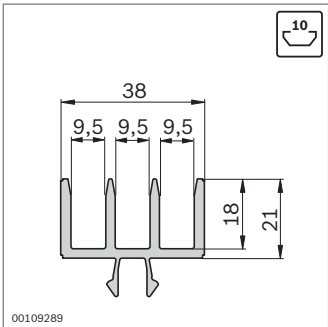
- ▶ Can be clipped into the supporting frame made of strut profiles
- ▶ Round bar to minimize the displacement force required
- ▶ For panel elements of a thickness of 8 mm
- ▶ Insertion of the panel element into closed frame

Optional accessories:

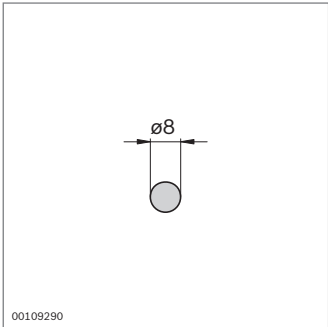
- ▶ Edge protector (p. 8-32)
- ▶ Door handle profile (p. 8-32)
- ▶ Bow-type handle (p. 8-23)



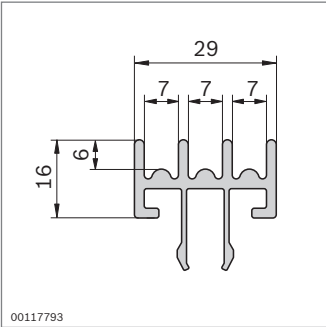
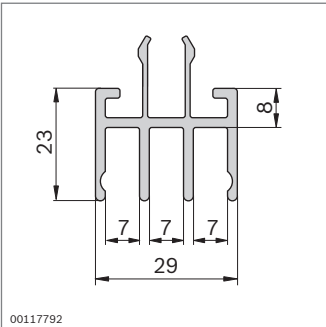
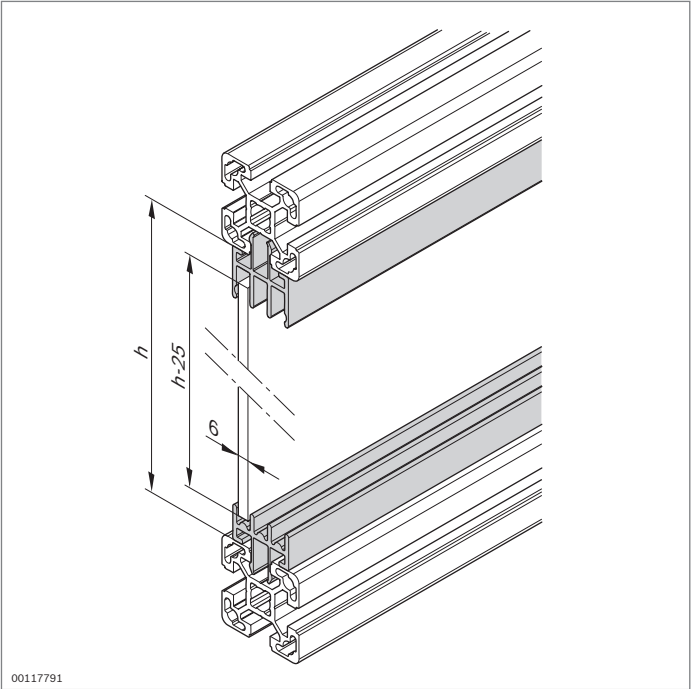
Sliding door profile, PVC	Slot	L (mm)		No.
	8	2000	10	3 842 555 262
Material: PVC; signal gray RAL 7004				



Sliding door profile, PVC	Slot	L (mm)		No.
	10	2000	10	3 842 555 260
Material: PVC; signal gray RAL 7004				



Round bar	L (mm)		No.
	2000	10	3 842 516 694
Material: POM; black			



Sliding door profile Al Clip

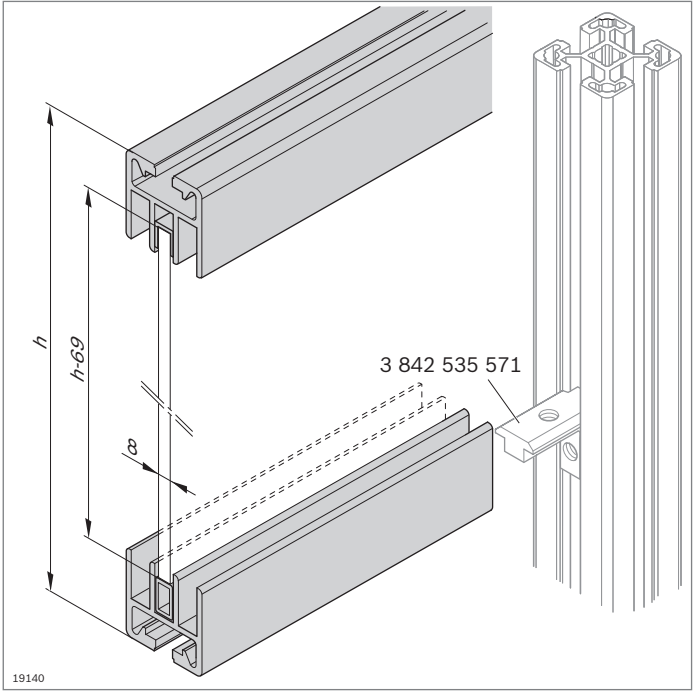


- ▶ Can be clipped into the supporting frame made of strut profiles
- ▶ Sliding door profile, bottom, with half-round floor contour to minimize the displacement force required
- ▶ For panel elements with a thickness of 5 or 6 mm
- ▶ Insertion of the panel element into closed frame

8

Sliding door profile, top		L (mm)	No.
1 pc		40 ... 3000	3 842 993 425 / L
 10 pcs		3000	3 842 536 531
Material:		Aluminum; anodized	

Sliding door profile, bottom		L (mm)	No.
1 pc		40 ... 3000	3 842 993 426 / L
 10 pcs		3000	3 842 536 532
Material:		Aluminum; anodized	



Sliding door profile AI 45
Cover cap, end piece

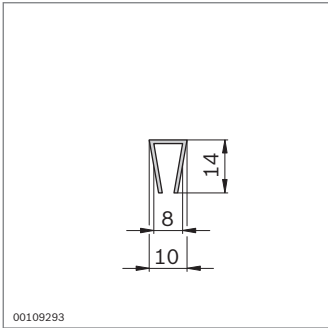
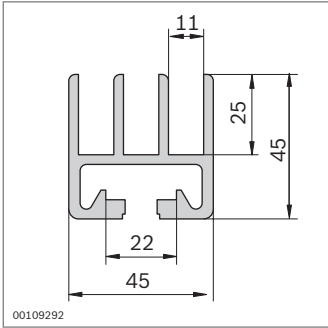


Sliding door profile AI 45

- ▶ Aluminum profile as a supporting construction element
- ▶ Installation using inner brackets between two vertical struts
- ▶ Glide profile to edge the upper part of the sliding door
- ▶ Insertion profile acts as a slide surface
- ▶ For panel elements of a thickness of 8 mm
- ▶ Insertion of the panel element into closed frame

Accessories:

- ▶ Cover cap (p. 8-31)
- ▶ End piece (p. 8-31)
- ▶ Inner bracket (p. 3-14), inner bracket R (p. 3-15)

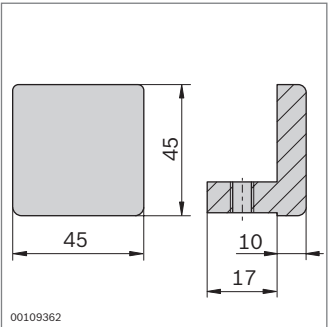
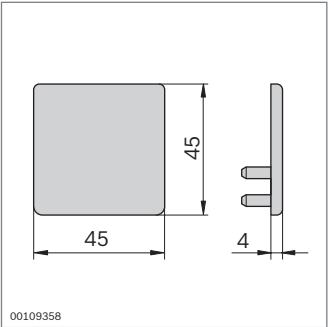
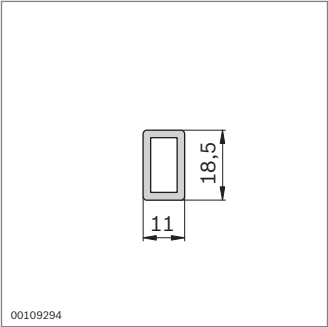


Sliding door profile		L (mm)	No.
1 pc		100 ... 6070	3 842 990 115 / L
1 pc	F1  F1	100 ... 6000	3 842 990 116 / L
 20 pcs		6070	3 842 557 943

Material: Aluminum; anodized

Glide profile	L (mm)		No.
	3000	10	3 842 554 724

Material: Hard PVC; signal gray RAL 7004



Insertion profile	L (mm)		No.
	3000	10	3 842 554 726
Material: PA; signal gray RAL 7004			

Cover cap

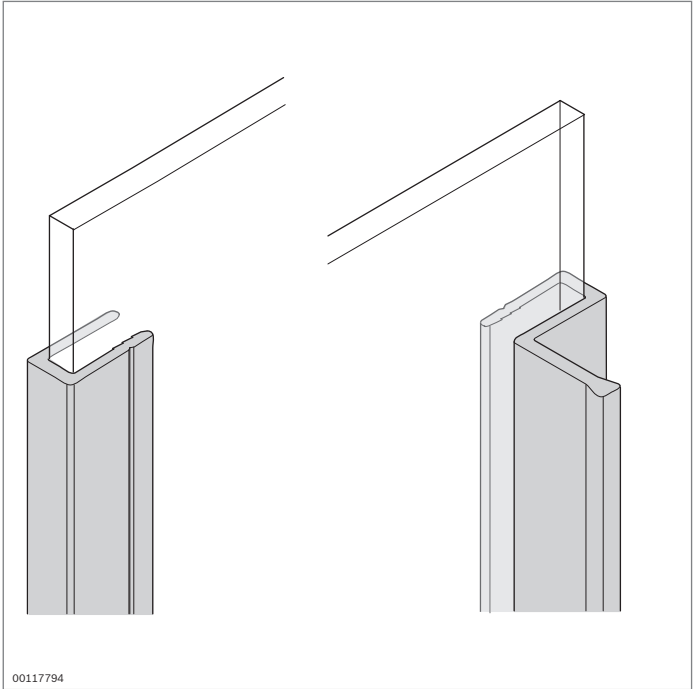
- As a design element and to prevent injuries

Cover cap	Color	ESD		No.
	Signal gray	20		3 842 551 662
Material: PP; signal gray RAL 7004				

End piece

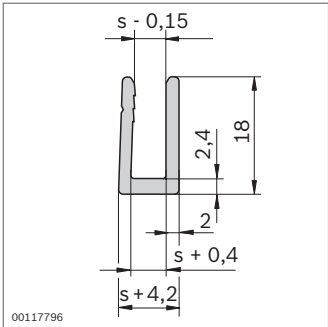
- For use as a stop for sliding elements
- Clamping with setscrew in the profile slot

End piece	ESD		No.	FS
		20	3 842 191 194	FS1
Material: Diecast aluminum				
Scope of delivery: Incl. fastening material (FS)				



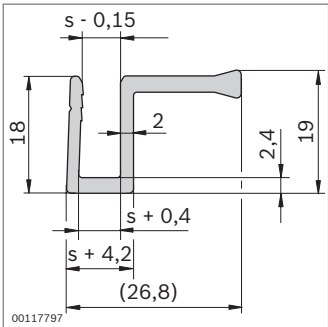
Edge protector
Door handle profile

- For reinforcing frameless panel elements on sliding doors
- Profile for s = 6 mm can also be used for 1/4 inch plates



Edge protector		s (mm)	L (mm)	No.
1 pc		5	40 ... 3000	3 842 993 429 / L
 10 pcs		5	3000	3 842 536 537
1 pc		6	40 ... 3000	3 842 993 430 / L
 10 pcs		6	3000	3 842 536 540

Material: Aluminum; anodized



Door handle profile		s (mm)	L (mm)	No.
1 pc		5	40 ... 3000	3 842 993 427 / L
 10 pcs		5	3000	3 842 536 533
1 pc		6	40 ... 3000	3 842 993 428 / L
 10 pcs		6	3000	3 842 536 536

Material: Aluminum; anodized

Installation elements



Cable duct PVC (p. 11-2)



Cable duct AL (p. 11-3)



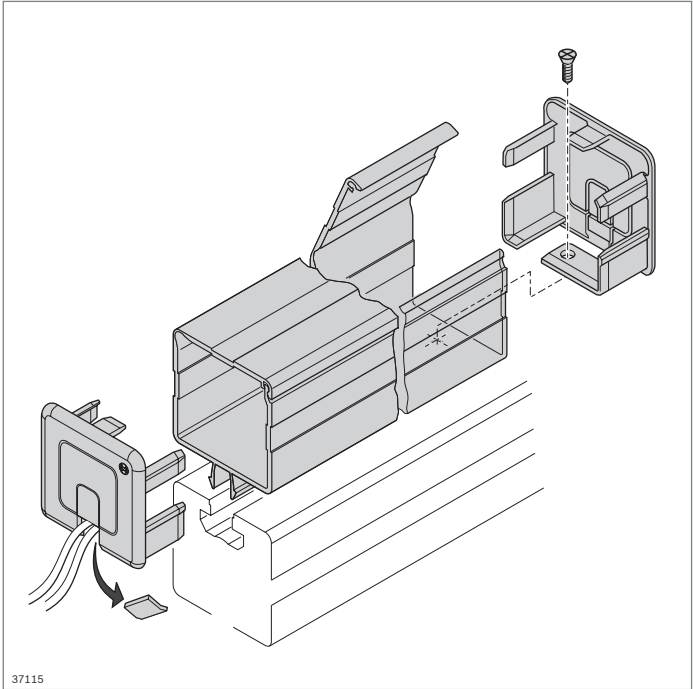
Cable bracket (p. 11-10)



Quick-lock (p. 11-11)

Electrical leads must be neatly laid. Because only if they have been installed in an orderly way can electrical faults be easily located and eliminated.

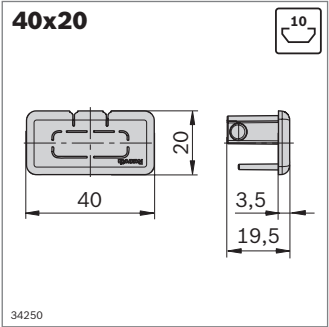
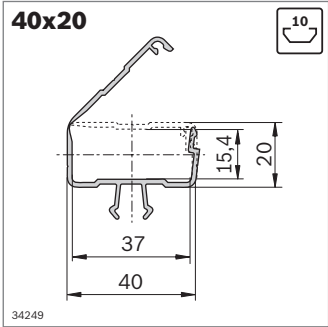
Cable ducts and cable brackets are therefore important elements in terms of maintenance-friendly electrical installation on all kinds of constructions made of basic mechanic elements.



Cable duct



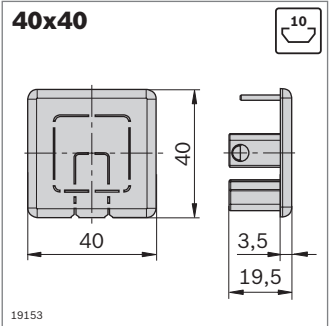
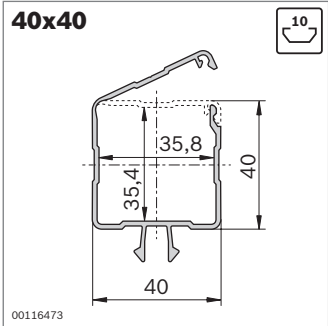
- Cable duct for routing electrical lines
- Captive cover
- Very easy to access
- Large usable volume
- Simple, fast assembly – just clips into the 10 mm slot
- Cover cap for sealing the cable duct with pre-punched holes for running cables through
- VDE certified
- An ESD-conductive connection made of plastic between the profile and the cable duct must be ensured by a suitable design solution, e.g. screw



	L (mm)	Color	ESD	No.
Cable duct 40x20	2000	Black		1 3 842 555 670
Cover cap 40x20		Black		10 3 842 555 671
Cable duct 40x20	2000	Signal gray		1 3 842 557 443
Cover cap 40x20		Signal gray		10 3 842 557 444

Material: Cable duct: PVC
Cover cap: PP

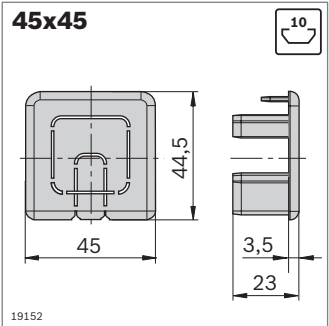
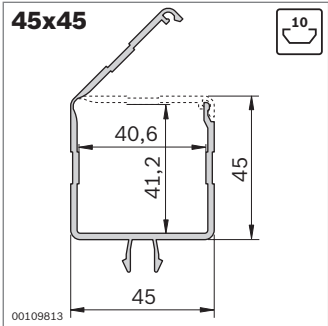
Scope of delivery: Cover cap incl. fastening screws



	L (mm)	Color	No.
Cable duct 40x40	2000	Black	1 3 842 532 363
Cover cap 40x40		Black	10 3 842 535 921

Material: Cable duct: PVC
Cover cap: PA

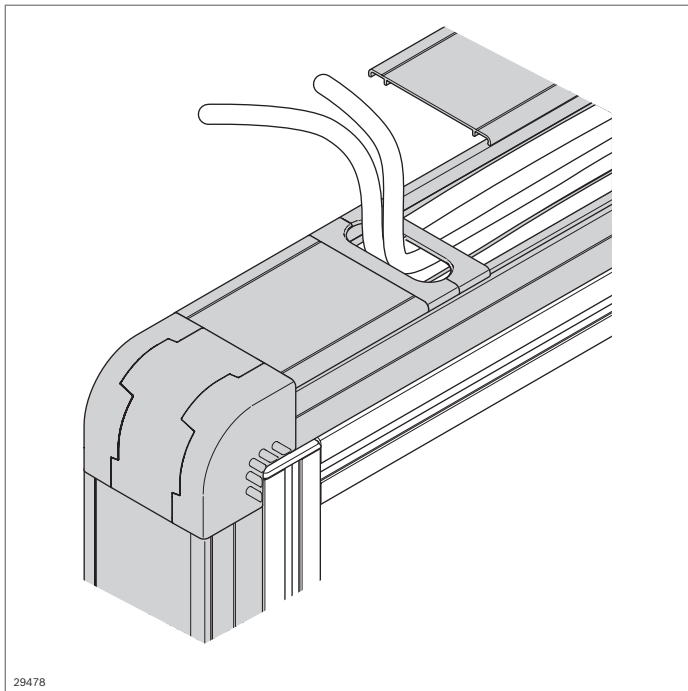
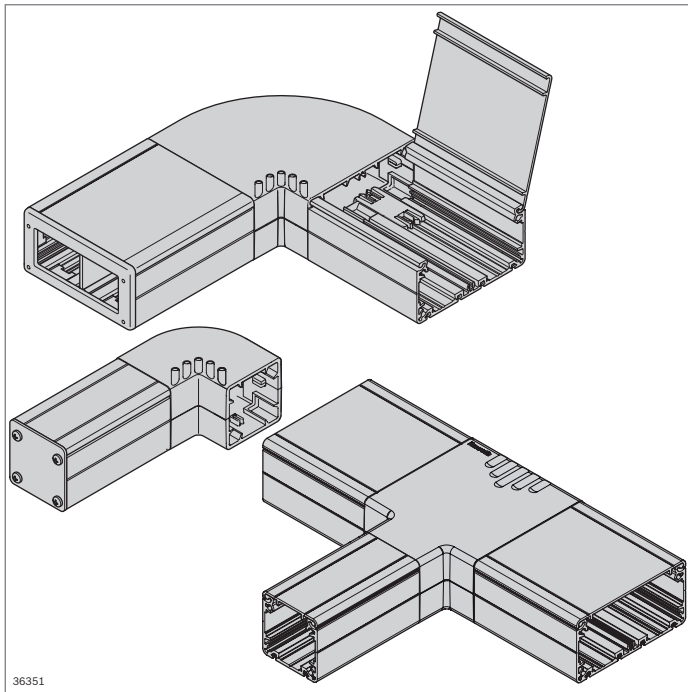
Scope of delivery: Cover cap incl. fastening screws



	L (mm)	Color	No.
Cable duct 45x45	2000	Black	1 3 842 523 014
Cover cap 45x45		Black	10 3 842 535 676

Material: Cable duct: PVC
Cover cap: PA

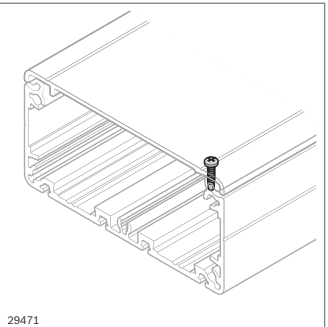
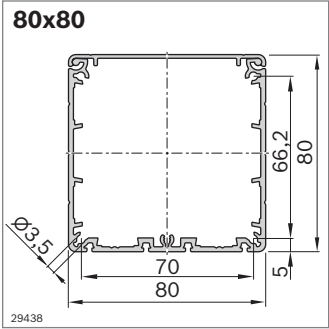
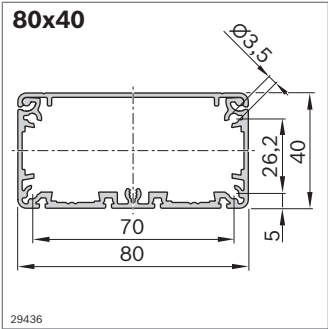
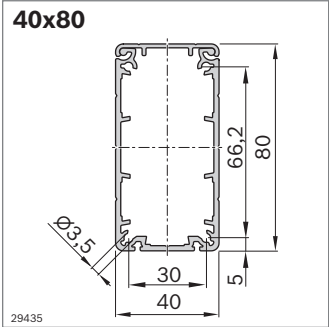
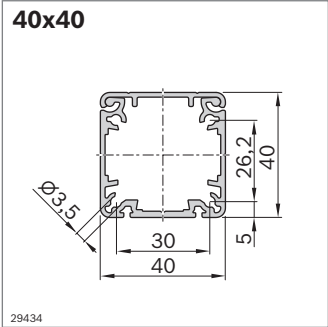
Scope of delivery: Cover cap incl. fastening screws



Aluminum cable duct



- ▶ Can be either clipped or screwed onto the support profile
- ▶ Sizes 40x40, 40x80, 80x40, 80x80
- ▶ Drilling aids for easy machining
- ▶ Dovetail attachment option
- ▶ Suitable for installing on profiles with modular dimensions of 40 and 45 mm
- ▶ Interior can be divided for routing different cable types (size 80x40 and 80x80)
- ▶ For connection of cable ducts via T-piece (p. 11-8)
- ▶ ESD-conductive
- ▶ High-quality, attractive external finish thanks to anodized duct surface and cover plate
- ▶ Edge protector for protecting the cables/lines from being damaged on rough edges
- ▶ PG screw fastenings possible in the side wall and cover plate (mechanical finishing)
- ▶ Fitting of sockets, switches etc. possible (mechanical finishing)
- ▶ Screw holes for secure fastening of the cover plate
- ▶ Cable duct cover can be screwed to the bearing/support structure
- ▶ VDE certified
- ▶ Compliant with DIN EN 50085-1 and 50085-2-1 standards



Aluminum cable duct

- Cable duct pre-assembled (cover and bearing/support structure)
- Usable length 3000 mm (delivered in 3100 mm lengths)
- Cover can be secured with a self-tapping screw

Optional accessories: Self-tapping screw **3 842 552 267**

Cable duct with AL cover plate		ESD	L (mm)	No.
1 pc	40x40		100 ... 3000	3 842 996 356/L
12 pcs	40x40		3000	3 842 552 268
1 pc	40x80		100 ... 3000	3 842 996 357/L
12 pcs	40x80		3000	3 842 552 270
1 pc	80x40		100 ... 3000	3 842 996 358/L
12 pcs	80x40		3000	3 842 552 273
1 pc	80x80		100 ... 3000	3 842 996 359/L
6 pcs	80x80		3000	3 842 552 275

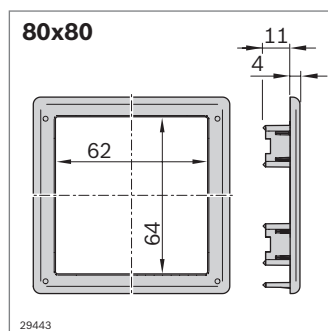
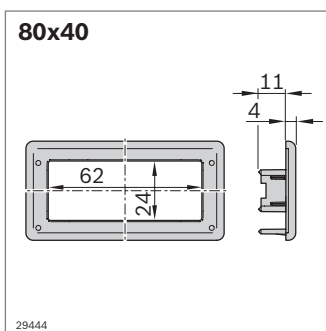
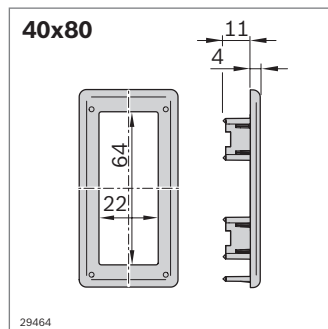
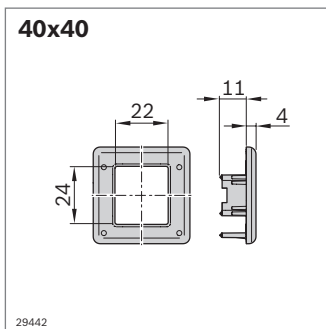
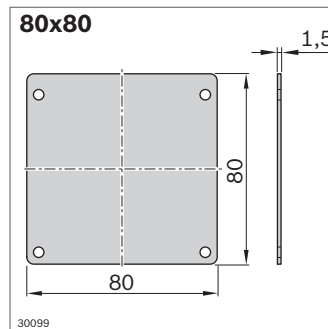
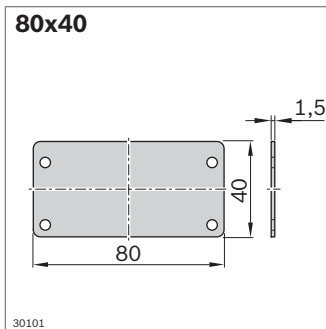
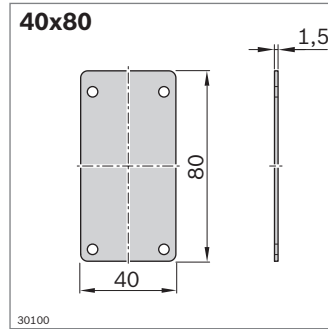
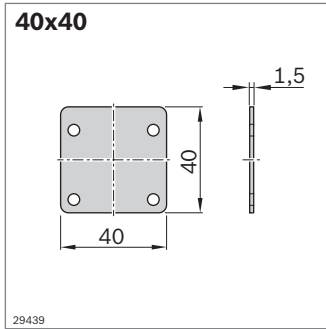
Material: Aluminum; anodized

Self-tapping screw

- For securing the cover plate on the cable duct
- Produces conductive connection between the cover plate and cable duct

Self-tapping screw	ESD		No.
Ze. Pi. 3.5x9.5		10	3 842 552 267

Material: Steel; galvanized



Cover plate

- Seals the end face of the cable duct
- Fastened securely with screws
- Openings for PG screw fastenings can be provided through mechanical finishing

Cover plate	ESD	No.
40x40	10	3 842 552 249
40x80	10	3 842 552 250
80x40	10	3 842 552 251
80x80	10	3 842 552 252

Material: Cover plate: Aluminum; anodized

Pressed edges: Aluminum, plain

Screw: Steel; galvanized

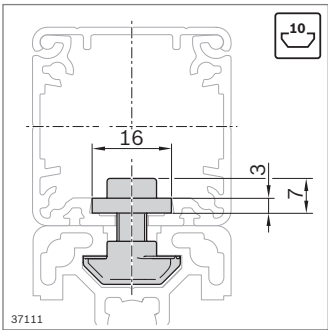
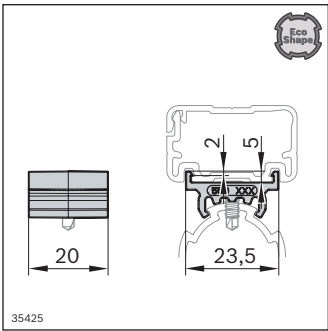
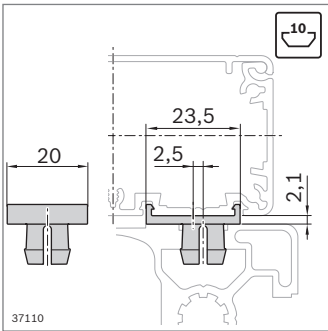
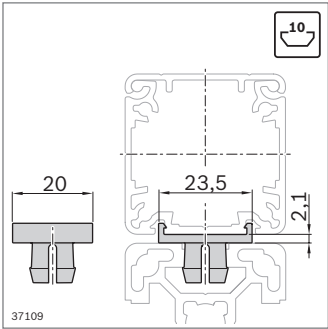
Scope of delivery: Cover plate incl. fastening screws

Edge protector

- Used to protect the cables if there is an end face cable outlet
- Can be pushed and also screwed into position
- Can be used to protect the cable at lateral outlets

Edge protector	No.
40x40	10 3 842 552 253
40x80	10 3 842 552 254
80x40	10 3 842 552 255
80x80	10 3 842 552 256

Material: PP; signal gray RAL 7004



Mounting base

- For machining-free mounting of the cable duct on the support profile
- Insulates the cable duct from the support profile
- “Symmetrical mounting base” design for central mounting of the cable duct on profiles with just one slot on the mounting side, and on multi-slot profiles with 40 mm modular dimension

Mounting base		No.
Symmetrical	10	3 842 552 247
Material: PA; signal gray RAL 7004		

- “Asymmetrical mounting base” design for central installation on profiles with multiple slots on the mounting side and 45 mm modular dimension

Mounting base		No.
Asymmetrical	10	3 842 552 248
Material: PA; signal gray RAL 7004		

- D28L mounting base also compatible with aluminum cable duct (p. 11-4)
- Additional stabilization of D28L mounting bases and establishing an ESD-compliant connection between profile and base can be realized using self-tapping screw (**3 842 552 267**)

Recommended accessories: Self-tapping screw

Mounting base	Color	ESD	No.
D28L	Signal gray	10	3 842 559 338
D28L	Black	10	3 842 559 337

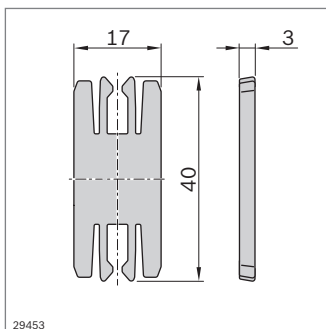
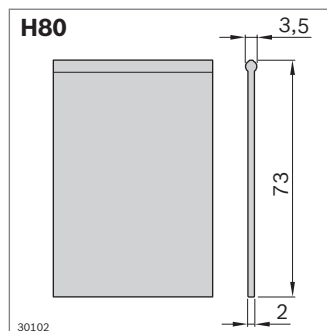
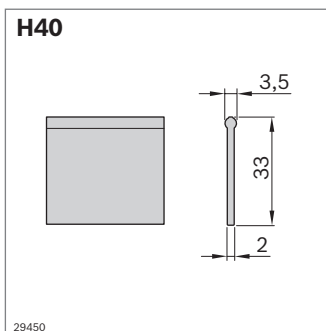
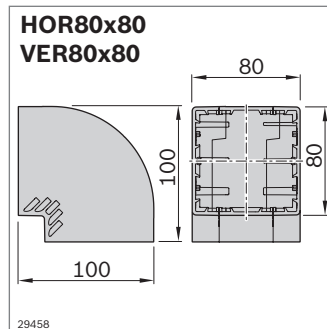
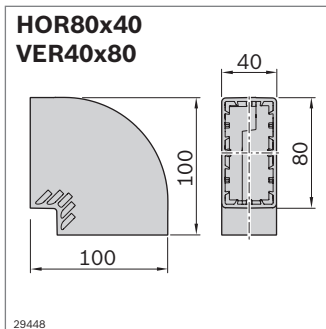
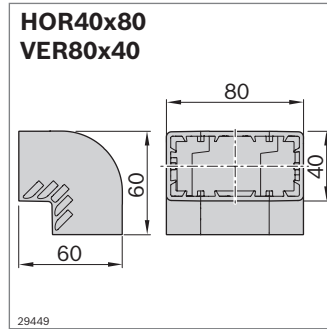
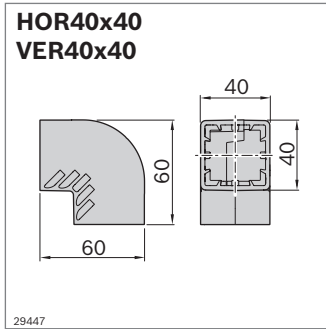
Material: PA

Mounting kit

- For screwing the cable duct to the support profile
- Secure force transmission without deformation of the mounting surface
- Cable duct has to be drilled (diameter: 6.4 mm)
- Recommendation: Insert every 500 mm

Mounting kit	ESD	No.
10	10	3 842 548 997
Material: Steel; galvanized		

Scope of delivery: Insert sheet; T-nut M6, 10 mm slot; screw M6x16



Curve

- ▶ 90° curve in horizontal and vertical direction
- ▶ Modular design
- ▶ Cable ducts connected together with push-in connection elements
- ▶ Cable ducts can be made conductive by using supplied potential equalizer line

Curve	ESD*)	No.
HOR40x40; VER40x40	1	3 842 552 257
HOR40x80; VER80x40	1	3 842 552 258
HOR80x40; VER40x80	1	3 842 552 259
HOR80x80; VER80x80	1	3 842 552 260

Material: PP; signal gray RAL 7004

Scope of delivery: Curve, connection elements, potential equalizer line

*) ESD: Plastic has no conductivity. Using a potential equalizer, 2 cable ducts can be connected in a conductive way (s. p. 11-9).

Dividing strip

- ▶ Divides the cable duct into 2 chambers for carrying different electric cables, e.g. electricity and data cables
- ▶ Push-in installation
- ▶ Bendable, so it can also be used on curves

Dividing strip	No.
H40 L=3000 mm	10 3 842 552 245
H80 L=3000 mm	10 3 842 552 246

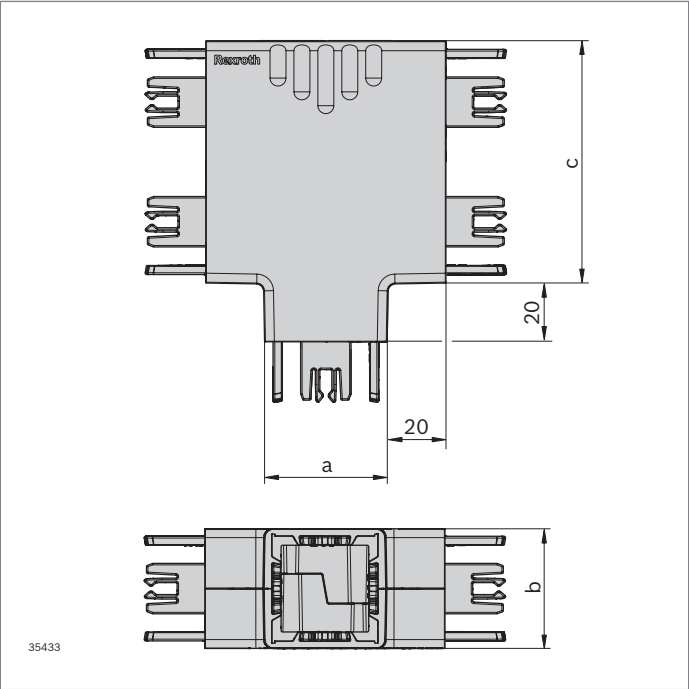
Material: PVC; signal gray RAL 7004

Connection element

- ▶ Extension of ends of cable ducts
- ▶ For connecting cable duct with curve
- ▶ ESD conductivity of both cable ducts can be established by using an overlapping cover and self-tapping screw (p. 11-4)

Connection element	No.
	10 3 842 552 240

Material: PA; signal gray RAL 7004



T-piece cable duct

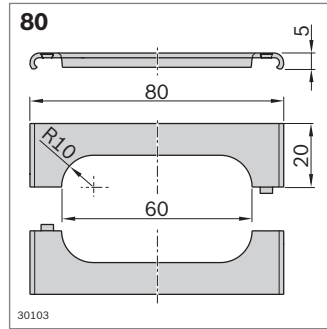
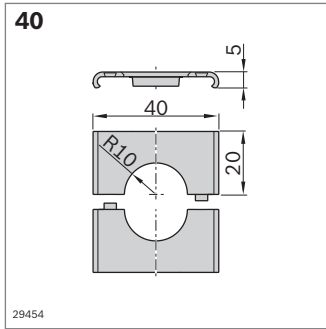
- ▶ Modular design
- ▶ Cable ducts connected together with push-in connection elements
- ▶ Cable ducts can be made conductive by using supplied potential equalizer line
- ▶ VDE certified

T-piece Cable duct	a (mm)	b (mm)	c (mm)	ESD*)	No.
40x40x40	40	40	40		3 842 558 644
40x40x80	40	40	80		3 842 558 646
40x80x40	40	80	40		3 842 558 648
40x80x80	40	80	80		3 842 558 650
80x40x40	80	40	40		3 842 558 651
80x40x80	80	40	80		3 842 558 652
80x80x40	80	80	40		3 842 558 653
80x80x80	80	80	80		3 842 558 654

Material: PP; signal gray RAL 7004

Scope of delivery: T-piece, connection elements,
potential equalizer line

ESD*: Plastic has no conductivity. Using a potential
equalizer, cable ducts can be connected
in a conductive way

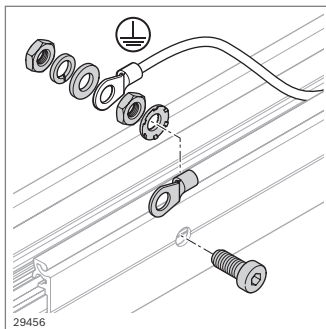


Cable hole

- For passing cables through within the cover

Cable hole		No.
40	10	3 842 553 973
80	10	3 842 553 974

Material: PP; signal gray RAL 7004



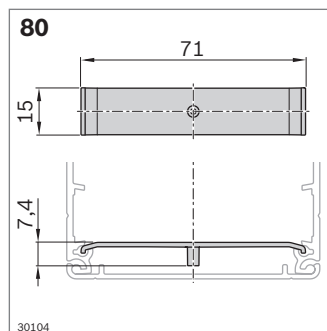
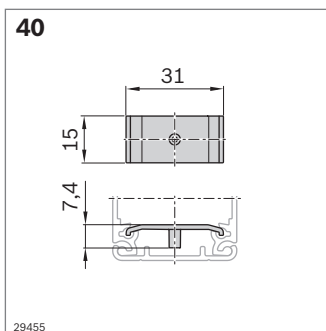
Potential equalizer

- DIN VDE 0100-410 compliant
- For connecting the cable duct to an earthed protective conductor

Potential equalizer		No.
10	10	3 842 552 263

Material: Steel; galvanized

Scope of delivery: Grounding wire not available

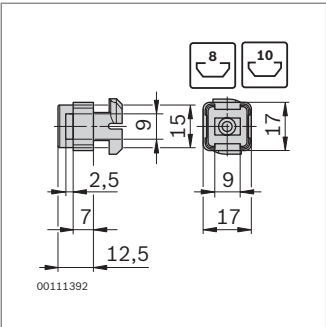
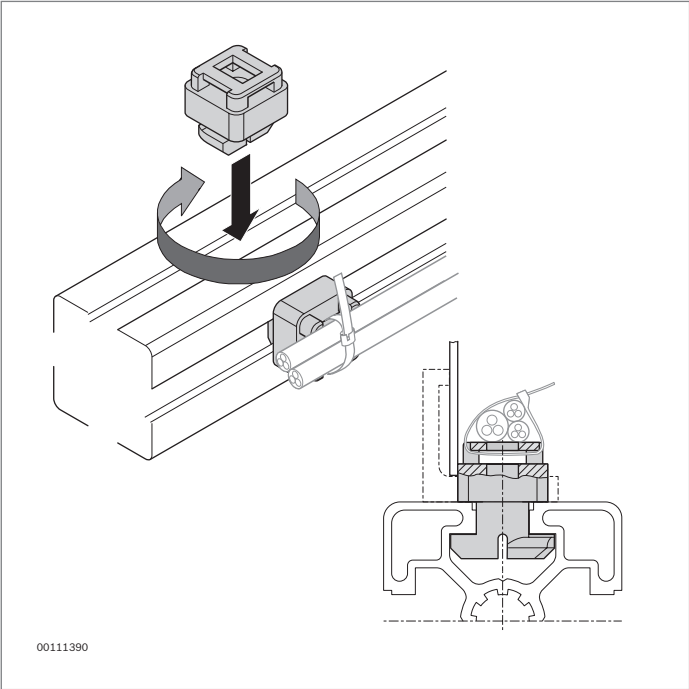


Cable holder

- For fixing the cable in the cable duct in the case of overhead mounting
- Recommendation: Insert every 200 mm

Cable holder		No.
40	10	3 842 552 265
80	10	3 842 552 266

Material: PA6; signal gray RAL 7004



Cable bracket

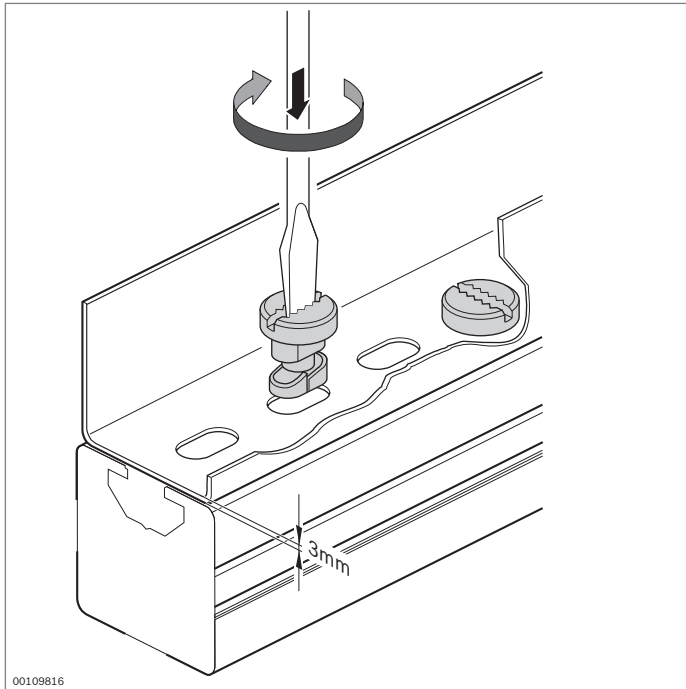


- Cable bracket for fastening individual cables with cable ties
- For use behind panels or screens
- Dimensioned to match the Variofix block for slot 10 mm

Required accessories:
Cable ties

Cable bracket	Slot		No.
	8	100	3 842 555 182
	10	100	3 842 555 180

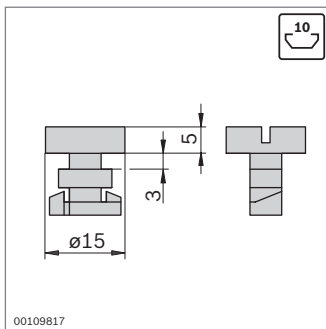
Material: PA; signal gray RAL 7004



Quick-lock



- Quick-lock for fastening standard commercially available cable ducts



Quick-lock	No.
Material: PA; black	100 3 842 146 920

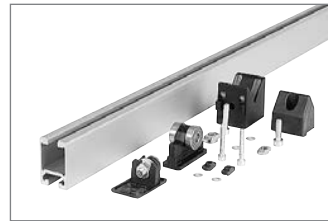
Elements for manual movement



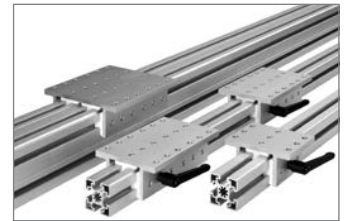
Slide hangers, snap hooks
(p. 12-2)



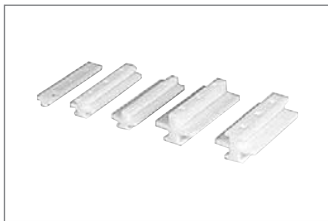
Sliders for panel element
(p. 12-3)



Components for sliding door
(p. 12-4)



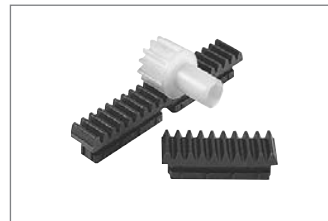
EcoSlide (p. 12-6)



Sliders for profiles (p. 12-13)



Support wheels (p. 12-17)



Rack, pinion (p. 12-18)



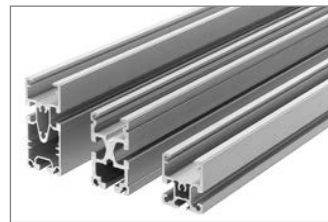
Conveyor track Lean
(p. 12-19)



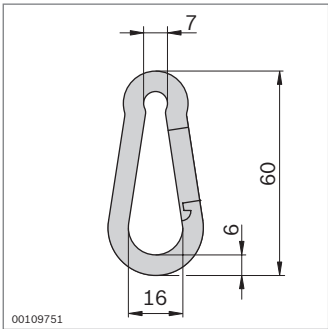
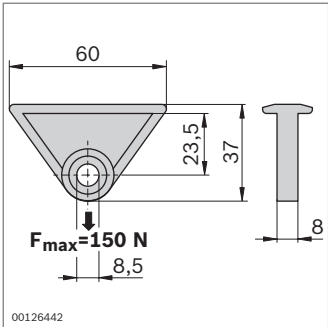
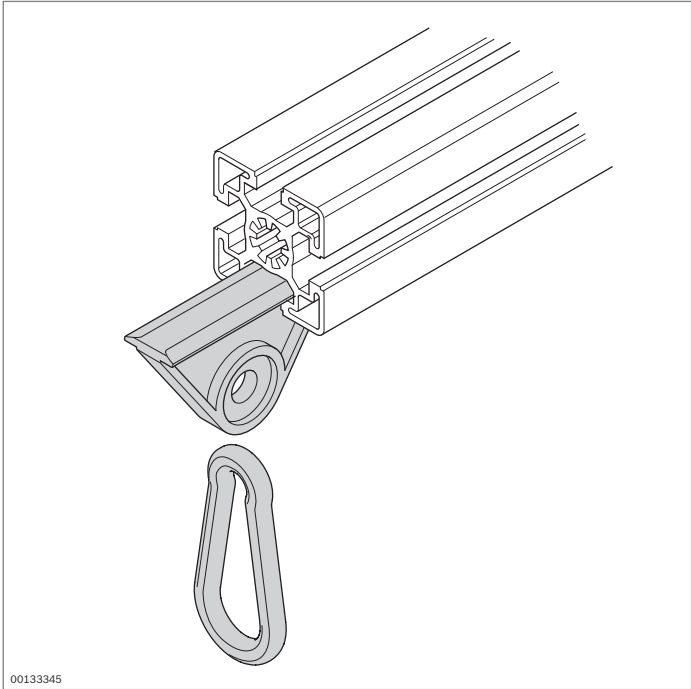
Conveyor track XLean
(p. 12-24)



Conveyor track EcoFlow
(p. 12-27)



Profiles for installing
conveyor media (p. 12-33)



Slide hanger Snap hook



Slide hanger

- ▶ Slide hanger as an inexpensive solution for sliding tool hangers
- ▶ Maximum load: 150 N
- ▶ Guide in the 10 mm profile slot
- ▶ Sliding block can be used as a stopper

Accessories: Sliding block as a stopper (see p. 3-7)

Snap hook

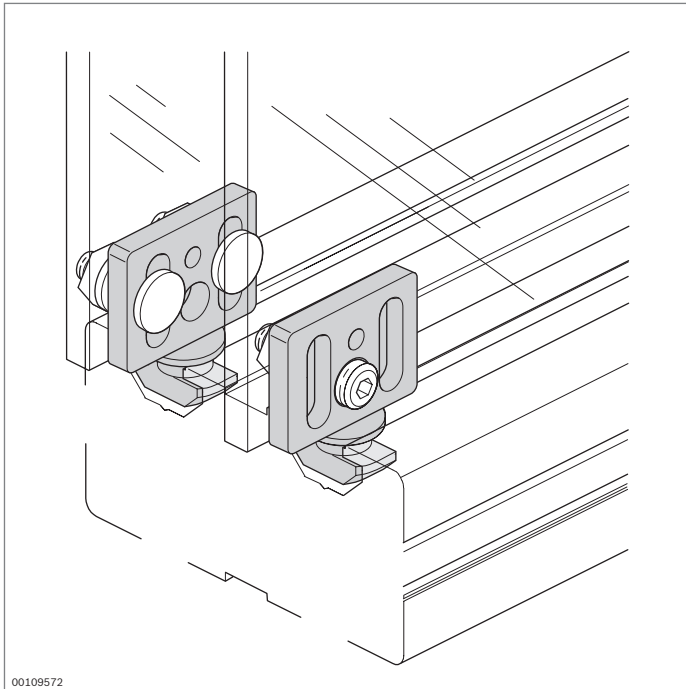
- ▶ Snap hook for fastening tools to the slide hanger:
 - Quick and easy to change

Slide hanger	No.
	3 842 218 953

Material: POM; natural

Snap hook	No.
	0 842 901 309

Material: Steel; galvanized



Slider for panel elements



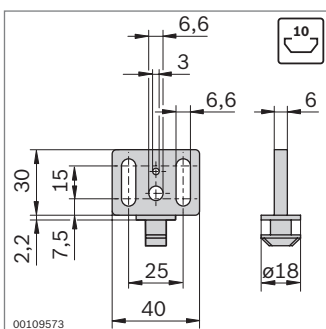
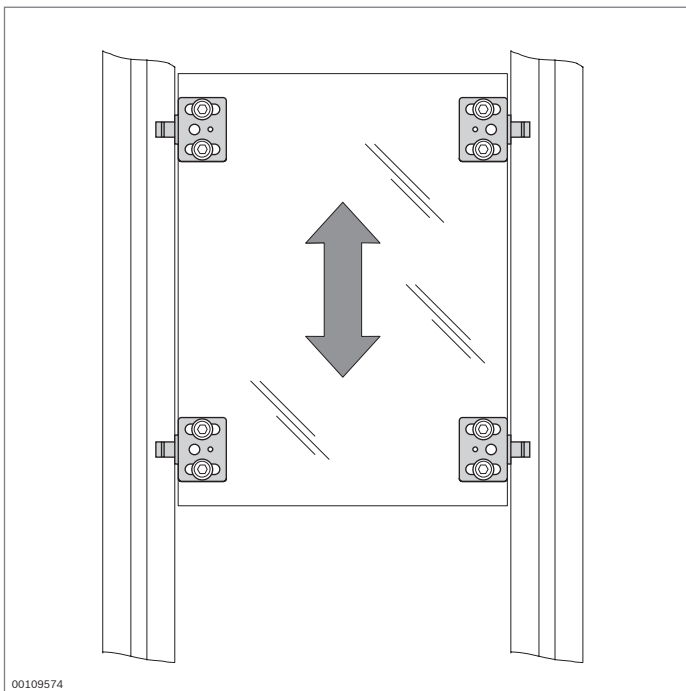
- For the construction of sliding and lifting doors
- Good functional reliability
- For any thickness of the panel element or aluminum profile frame

Required accessories:

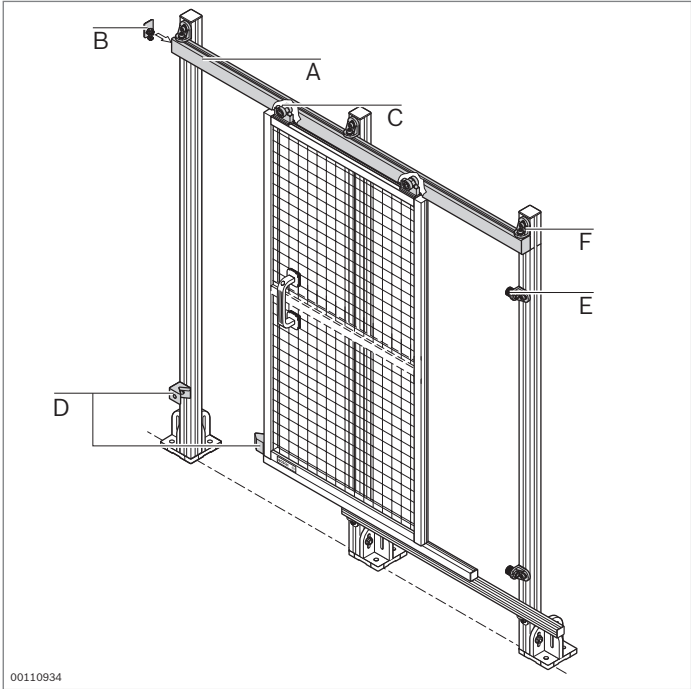
Screws and nuts/sliding blocks for fastening the panel elements

Optional accessories:

Counterbalance in the case of lifting doors (p. 9-2)



Slider	No.
10	3 842 555 226
Material:	POM; signal gray RAL 7004



Components for sliding door



- Components for constructing sliding doors of different dimensions

A

 $A = 4,4 \text{ cm}^2$

 $I_x = 10,3 \text{ cm}^4$

 $I_y = 5,6 \text{ cm}^4$

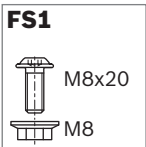
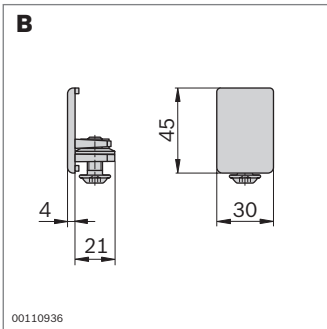
 $W_x = 4,2 \text{ cm}^3$

 $W_y = 3,7 \text{ cm}^3$

 $m = 1,2 \text{ kg/m}$

- Profile rail and trolley for movable mounting of parts, e.g. for use as a screwdriver hanger at work tables or for EcoSafe sliding doors (p. 10-14)

Profile rail 30x45C		L (mm)	No.
1 pc		50 ... 6070	3 842 992 946 / L
20 pcs		6070	3 842 557 950
Material:		Aluminum; anodized	

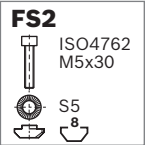
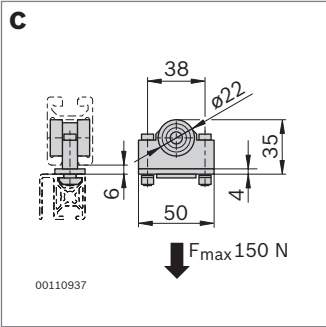


- Profile rail end piece for use for trolley as a cover cap with stop
- With screw protection

End piece 30x45C	Color	ESD		No.	FS
	Signal gray	20		3 842 554 710	FS1
	Black		20	3 842 554 711	FS1

Material: End piece: PA
Fastening material: Steel; galvanized

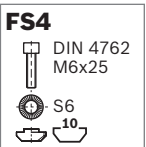
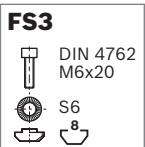
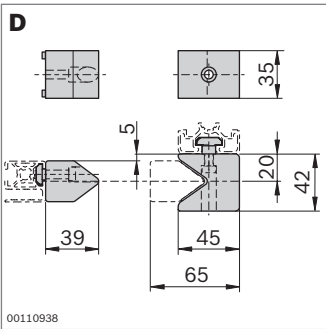
Scope of delivery: Incl. fastening material (FS)



- Trolley with dust-proof ball bearings for smooth sliding motion
- For fastening profiles with a 8 mm slot

Trolley	No.	FS
	3 842 524 153	2xFS2

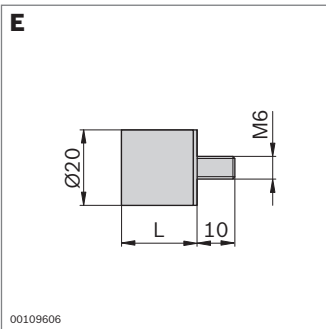
Material: PA; black / steel, galvanized
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)



- Stop kit for damped closing of the sliding door

Stop kit	No.	FS
	3 842 524 490	FS3, FS4

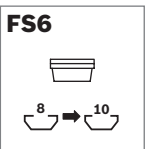
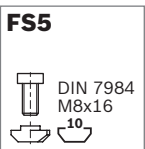
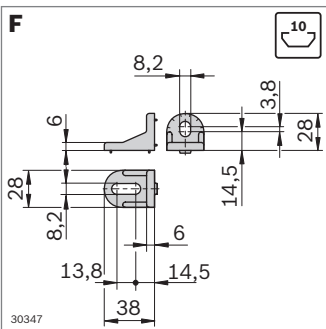
Material: PA; black
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)



- Bumper for a damped stop

Bumper	No.
	10 3 842 510 462

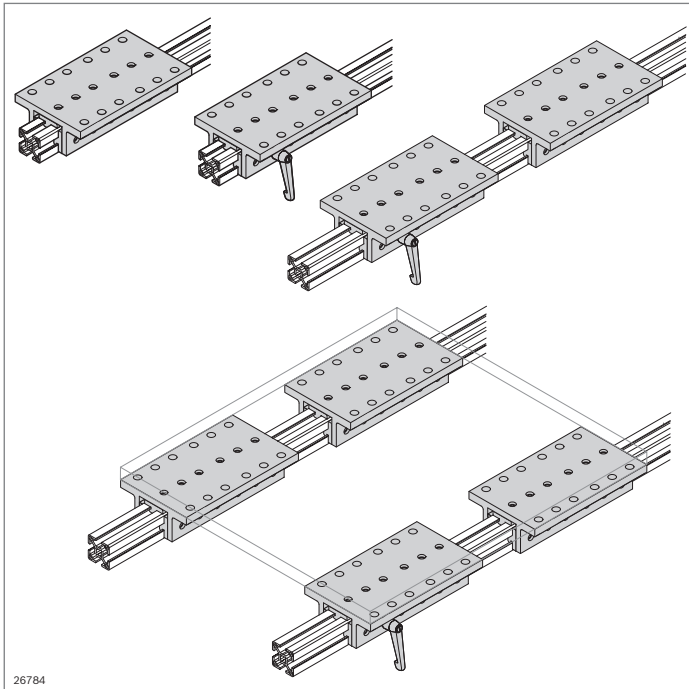
Material: Rubber; hardness 55° shore A
Accessories: Bracket set R28x38 for fastening to strut profiles with 10 mm slot



- Bracket for fastening the profile rail to strut profiles with 10 mm slot

Bracket	Slot	ESD	No.	FS
R28x38 Set (standard)	10 / 10		3 842 521 580	2xFS5, 4xFS6

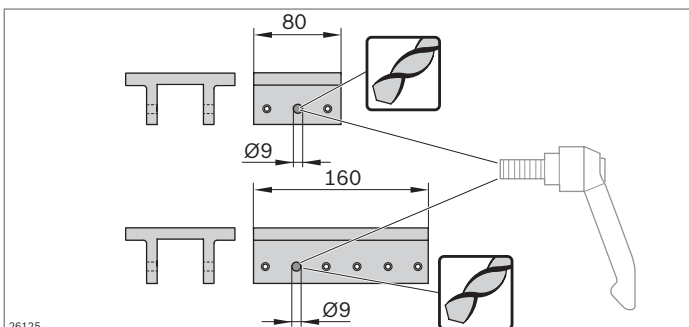
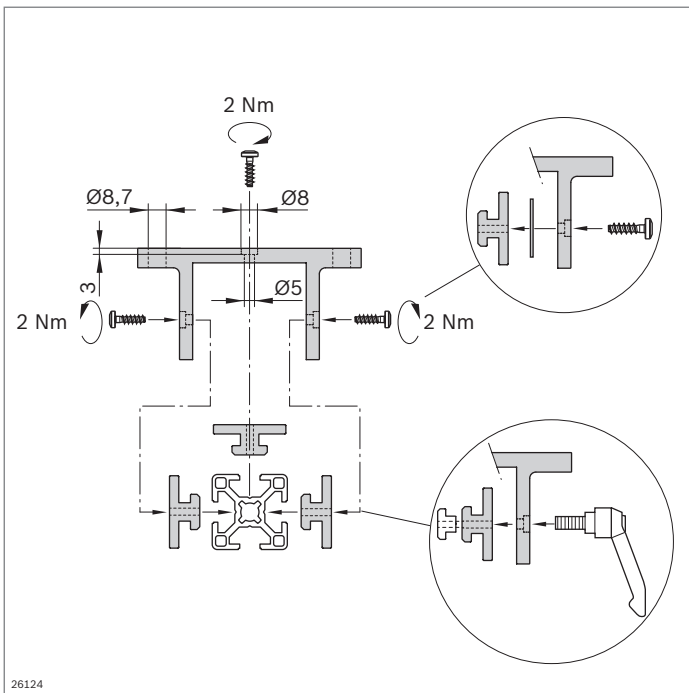
Material: Diecast zinc
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)



EcoSlide

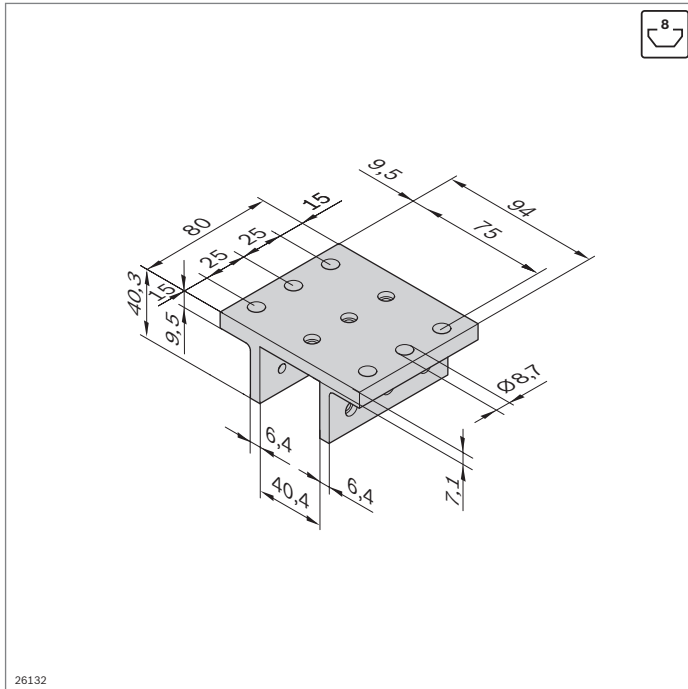


- Economical linear sliding carriage for horizontal applications
- Runs on sliders for maximal load capacity
- Slider with low moisture absorption, suitable for rough application conditions
- Available for profile widths of 30/45/60/90
- Clamping lever (optional) for arresting in any position
- Easy to assemble
- Spacer washer for tolerance adjustment (carriage/profile)

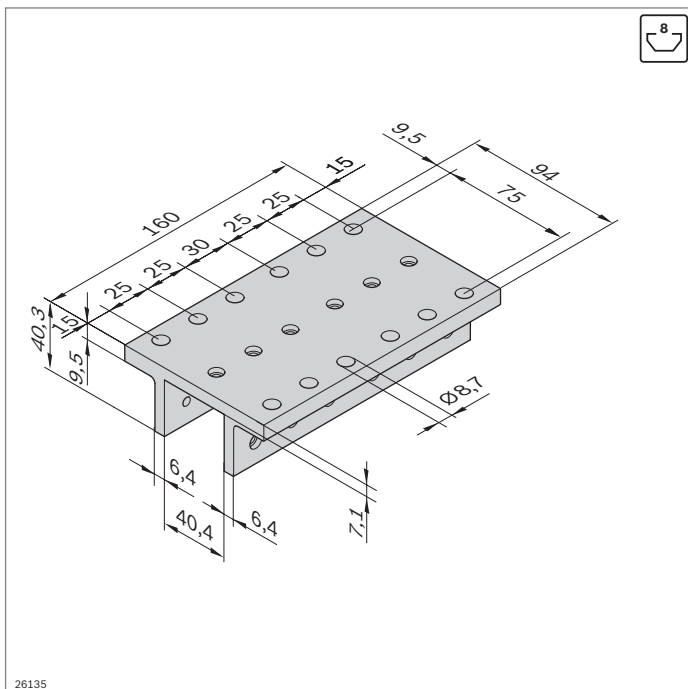


Machining tip

To install the clamping lever, the corresponding 9 mm hole must be drilled in the trolley.



750 N	325 N	10 Nm	150 Nm



1500 N	750 N	20 Nm	200 Nm

EcoSlide 30x30x80

- For use with profile width 30 mm
- Maximum sliding speed: 12 m/min

Trolley 30x30x80	No.
	1 8 981 535 476

Material: Aluminum; anodized

Accessories

	No.		Pcs	Pcs	Page
Slider, slot 8 mm flat	10 3 842 523 212		3	2	12-13
Slider, groove 8 mm flat lockable	1 3 842 552 423		—	1	12-11
Spacer washer Slot 8 mm	4 8 981 535 891		X ¹⁾	X ¹⁾	12-11
Screw W1451 - 3.5x14 - 10.9	10 3 842 552 421		9	8	12-12
Clamping lever, 20 mm	1 3 842 516 846		—	1	4-13
Sliding block Slot 8 mm; M8	100 3 842 514 931		—	1	3-7

¹⁾ If required

EcoSlide 30x30x160

- For use with profile width 30 mm
- Maximum sliding speed: 12 m/min

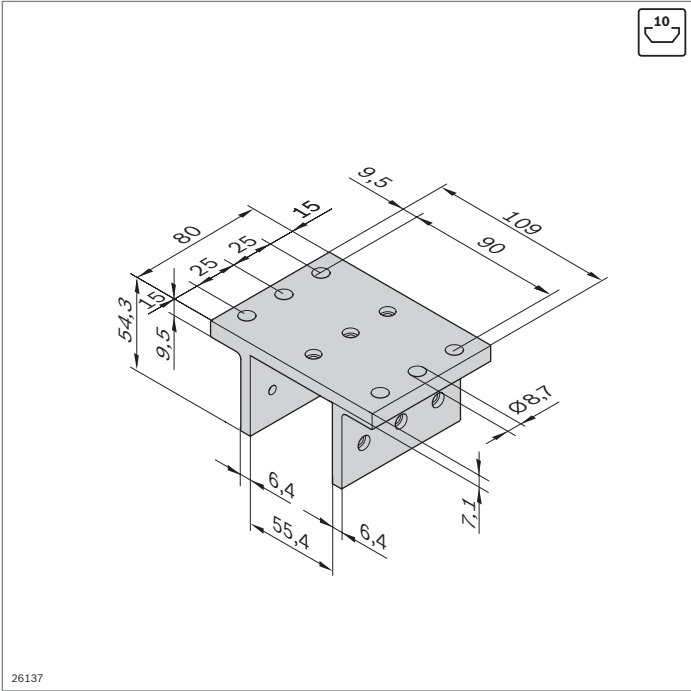
Trolley 30x30x160	No.
	1 8 981 535 477

Material: Aluminum; anodized

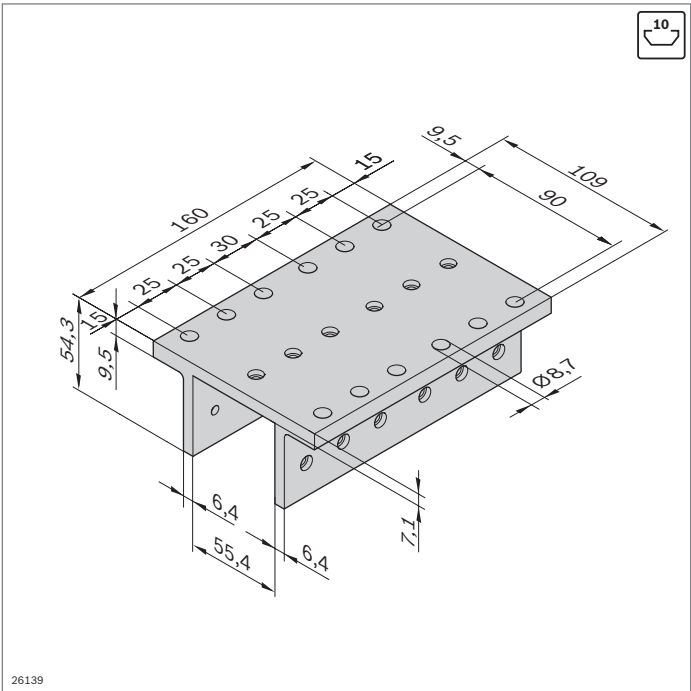
Accessories

	No.		Pcs	Pcs	Page
Slider, slot 8 mm flat	10 3 842 523 212		6	5	12-13
Slider, slot 8 mm flat lockable	1 3 842 552 423		—	1	12-11
Spacer washer Slot 8 mm	4 8 981 535 891		X ¹⁾	X ¹⁾	12-11
Screw W1451 - 3.5x14 - 10.9	10 3 842 552 421		18	17	12-12
Clamping lever, 20 mm	1 3 842 516 846		—	1	4-13
Sliding block Slot 8 mm; M8	100 3 842 514 931		—	1	3-7

¹⁾ If required



1250 N	625 N	40 Nm	150 Nm



2500 N	1250 N	80 Nm	200 Nm

EcoSlide 45x45x80

- For use with profile width 45 mm
- Maximum sliding speed: 12 m/min

Trolley 45x45x80	No.
	1 8 981 535 323

Material: Aluminum; anodized

Accessories

	No.		Pcs	Pcs	Page
Slider, slot 10 mm flat	10 3 842 530 329		3	2	12-13
Slider, slot 10 mm flat lockable	1 3 842 552 424		—	1	12-11
Spacer washer Slot 10 mm	4 8 981 535 890		X ¹⁾	X ¹⁾	12-12
Screw W1452 - 4x18 - 10.9	10 3 842 552 422		9	8	12-12
Clamping lever, 20 mm	1 3 842 516 846		—	1	4-13
Sliding block Slot 10 mm, M8	100 3 842 528 735		—	1	3-7

¹⁾ If required

EcoSlide 45x45x160

- For use with profile width 45 mm
- Maximum sliding speed: 12 m/min

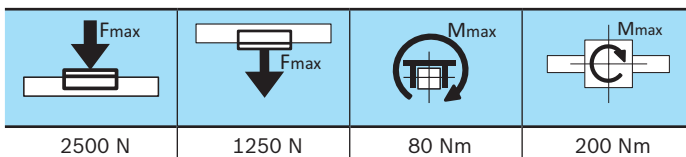
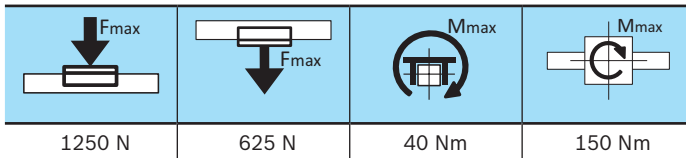
Trolley 45x45x160	No.
	1 8 981 535 324

Material: Aluminum; anodized

Accessories

	No.		Pcs	Pcs	Page
Slider, slot 10 mm flat	10 3 842 530 329		6	5	12-13
Slider, slot 10 mm flat lockable	1 3 842 552 424		—	1	12-11
Spacer washer Slot 10 mm	4 8 981 535 890		X ¹⁾	X ¹⁾	12-12
Screw W1452 - 4x18 - 10.9	10 3 842 552 422		18	17	12-12
Clamping lever, 20 mm	1 3 842 516 846		—	1	4-13
Sliding block Slot 10 mm, M8	100 3 842 528 735		—	1	3-7

¹⁾ If required



- ▶ For use with profile width 60 mm
- ▶ Maximum sliding speed: 12 m/min

Trolley 45x60x80	No.
	1 8 981 535 478

Material: Aluminum; anodized

Accessories

		 No.			Page
			Pcs	Pcs	
Slider, slot 10 mm flat	10	3 842 530 329	3	2	12-13
Slider, slot 10 mm flat lockable	1	3 842 552 424	—	1	12-11
Spacer washer Slot 10 mm	4	8 981 535 890	X ¹⁾	X ¹⁾	12-12
Screw W1452 - 4x18 - 10.9	10	3 842 552 422	9	8	12-12
Clamping lever, 20 mm	1	3 842 516 846	—	1	4-13
Sliding block Slot 10 mm, M8	100	3 842 528 735	—	1	3-7

1) If required

- ## EcoSlide 45x60x160

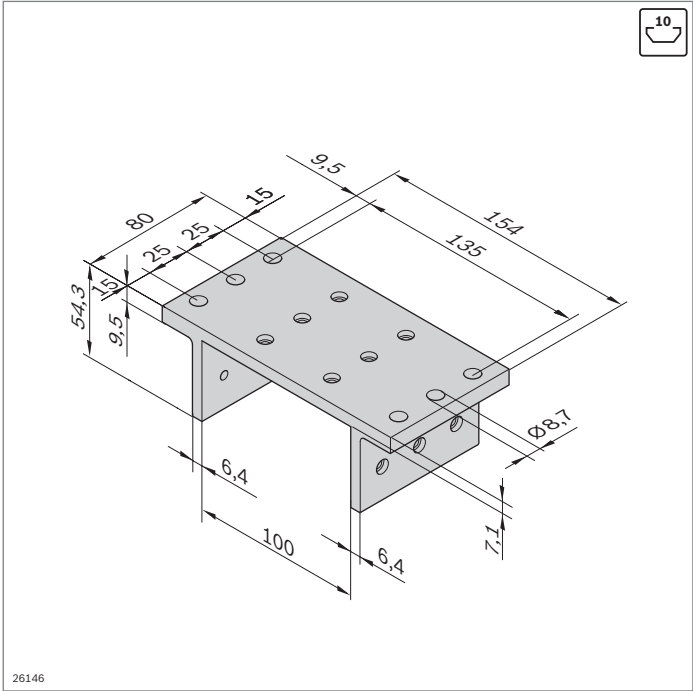
Trolley 45x60x160	 No.
	1 8 981 535 479

Material:	Aluminum; anodized
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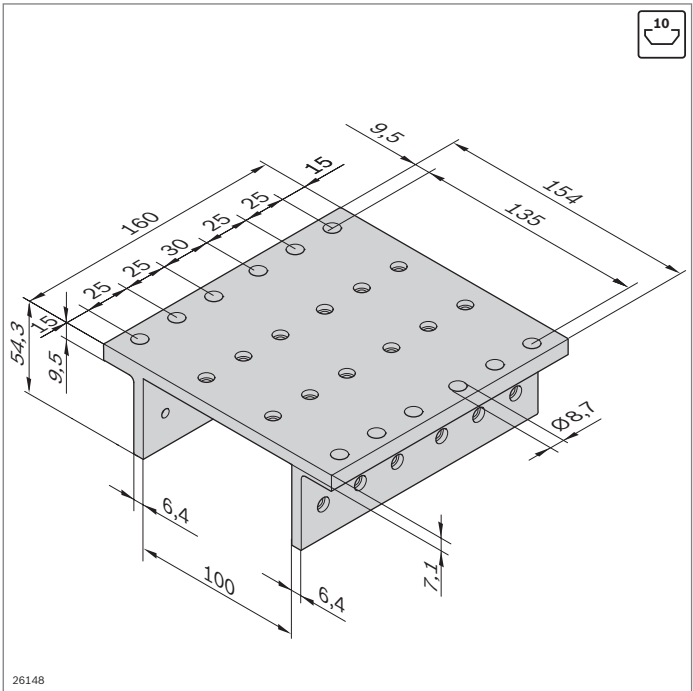
Accessories

		 No.			Page
			Pcs	Pcs	
Slider, slot 10 mm flat	10	3 842 530 329	6	5	12-13
Slider, slot 10 mm flat lockable	1	3 842 552 424	—	1	12-11
Spacer washer Slot 10 mm	4	8 981 535 890	X ¹⁾	X ¹⁾	12-12
Screw W1452 - 4x18 - 10.9	10	3 842 552 422	18	17	12-12
Clamping lever, 20 mm	1	3 842 516 846	—	1	4-13
Sliding block Slot 10 mm, M8	100	3 842 528 735	—	1	3-7

1) If required



2500 N	1250 N	50 Nm	150 Nm



5000 N	2500 N	100 Nm	200 Nm

EcoSlide 45x90x80

- For use with profile width 90 mm
- Maximum sliding speed: 12 m/min

Trolley 45x90x80	No.
	1 8 981 535 325

Material: Aluminum; anodized

Accessories

No.		Pcs	Pcs	Page
Slider, slot 10 mm flat	10 3 842 530 329	4	3	12-13
Slider, slot 10 mm flat lockable	1 3 842 552 424	—	1	12-11
Spacer washer Slot 10 mm	4 8 981 535 890	X ¹⁾	X ¹⁾	12-12
Screw W1452 - 4x18 - 10.9	10 3 842 552 422	12	11	12-12
Clamping lever, 20 mm	1 3 842 516 846	—	1	4-13
Sliding block Slot 10 mm, M8	100 3 842 528 735	—	1	3-7

¹⁾ If required

EcoSlide 45x90x160

- For use with profile width 90 mm
- Maximum sliding speed: 12 m/min

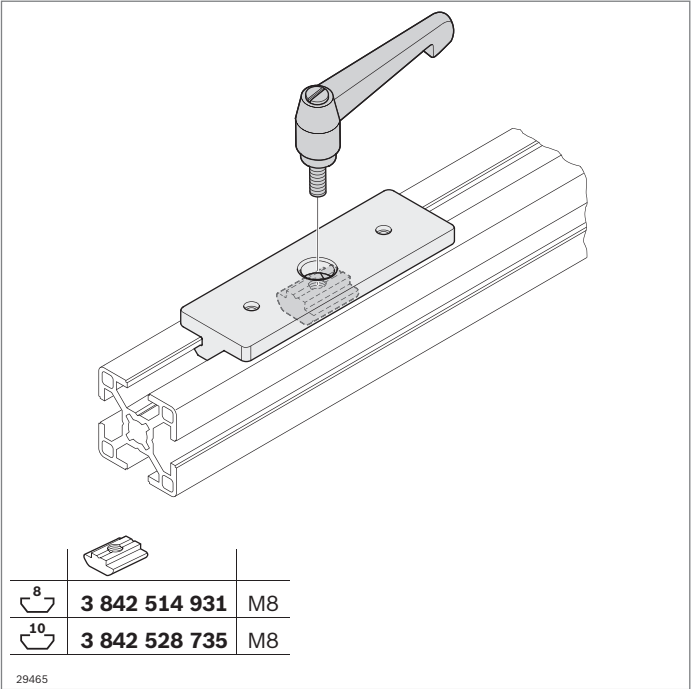
Trolley 45x90x160	No.
	1 8 981 535 326

Material: Aluminum; anodized

Accessories

No.		Pcs	Pcs	Page
Slider, slot 10 mm flat	10 3 842 530 329	8	7	12-13
Slider, slot 10 mm flat lockable	1 3 842 552 424	—	1	12-11
Spacer washer Slot 10 mm	4 8 981 535 890	X ¹⁾	X ¹⁾	12-12
Screw W1452 - 4x18 - 10.9	10 3 842 552 422	24	23	12-12
Clamping lever, 20 mm	1 3 842 516 846	—	1	4-13
Sliding block Slot 10 mm, M8	100 3 842 528 735	—	1	3-7

¹⁾ If required



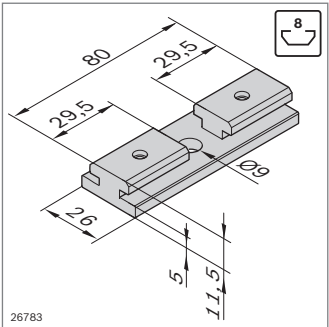
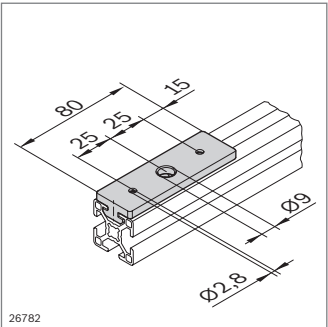
Slider, flat lockable



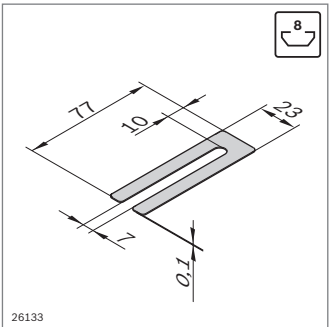
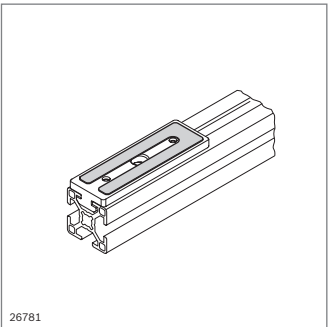
- Suitable for clamping using a sliding block and a clamping lever
- For constructing low-wear guides

Accessories:

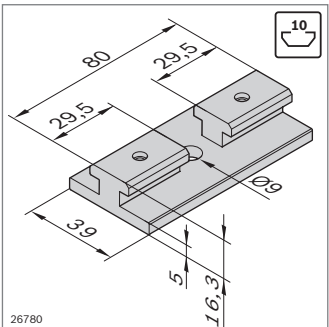
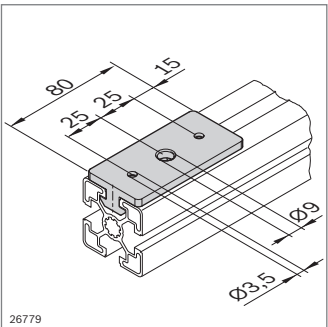
- Sliding blocks (p. 3-7)
- Clamping lever (p. 4-13)



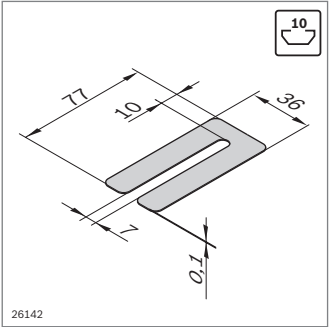
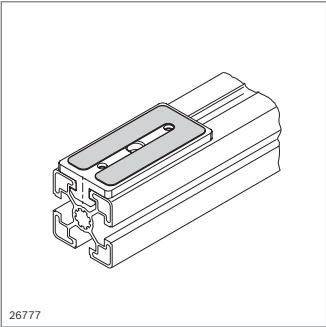
Slider, flat lockable	Slot		No.
	8	1	3 842 552 423
Material: POM; natural			
Accessories: Sliding block, T-nut, slot 8 (M8), 3 842 514 931, p. 3-7			



Spacer washer	Slot		No.
77x23	8	4	8 981 535 891
Material: Steel; plain			



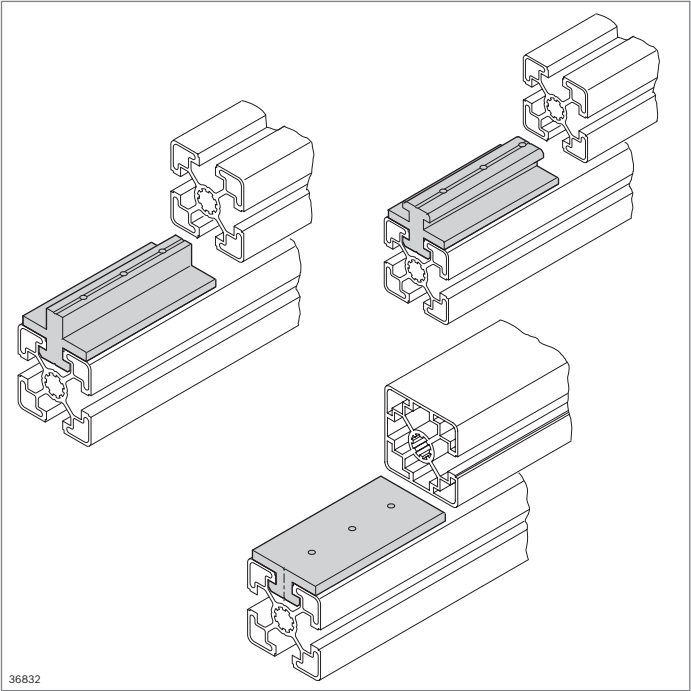
Slider, flat lockable	Slot		No.
	10	1	3 842 552 424
Material: POM; natural			
Accessories: Sliding block, T-nut, slot 10 (M8), 3 842 528 735, p. 3-7			



Spacer washer	Slot		No.
77x36	10	4	8 981 535 890
Material: Steel; plain			



Plastic self-tapping screw	Slot		No.
W1451 - 3.5x14 - 10.9	8	10	3 842 552 421
W1452 - 4x18 - 10.9	10	10	3 842 552 422
Material: Steel; galvanized			



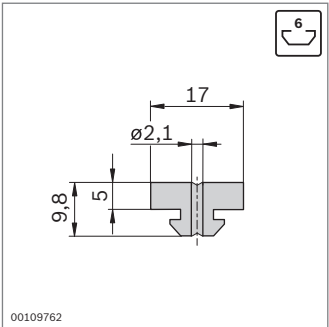
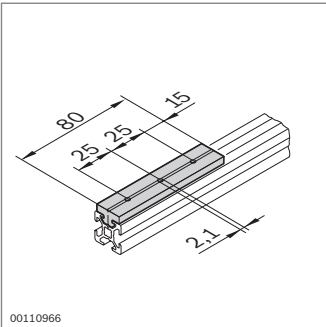
Slider for profiles



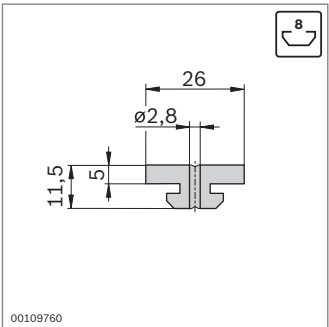
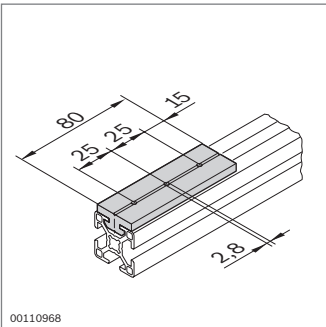
Slider

- For the construction of low-wear guides, e.g. for manual sliding and sliding and lifting doors, as well as drawer slides

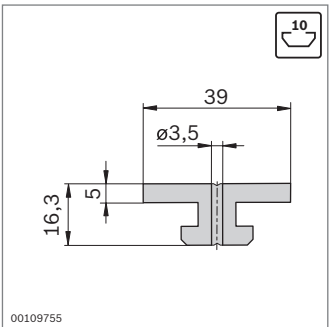
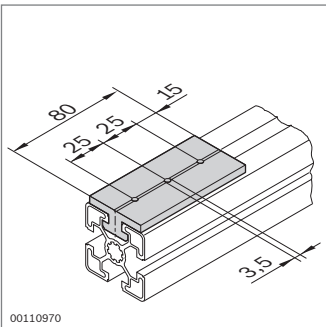
Optional accessories:
Self-tapping screws for fastening the slider in a profile slot



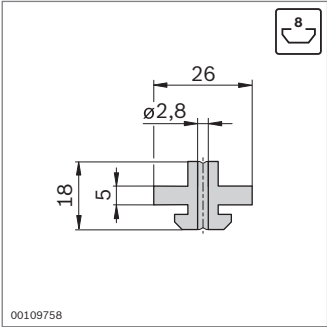
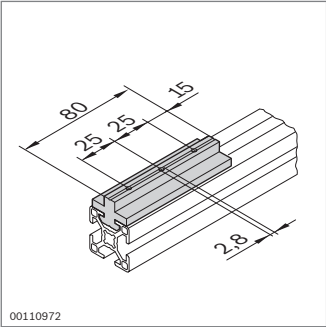
Slider, flat		No.
		10 3 842 523 213
Material:	POM; natural	



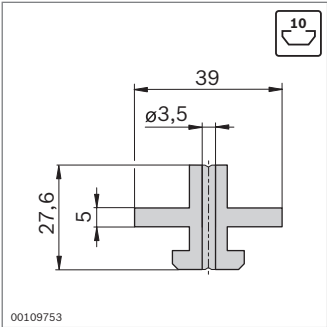
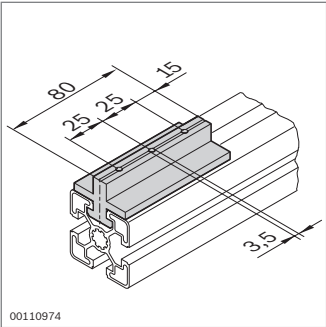
Slider, flat		No.
		10 3 842 523 212
Material:	POM; natural	



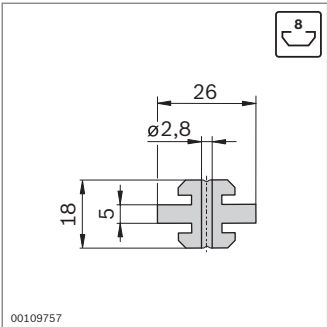
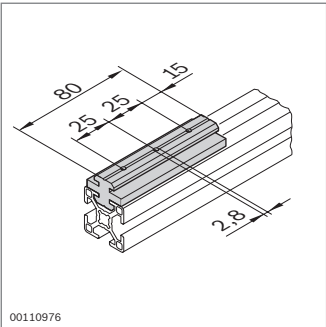
Slider, flat		No.
		10 3 842 530 329
Material:	POM; natural	



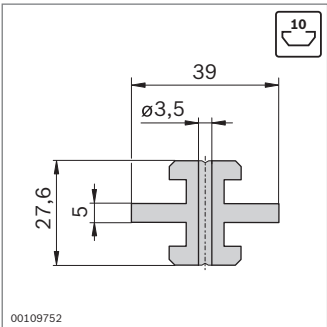
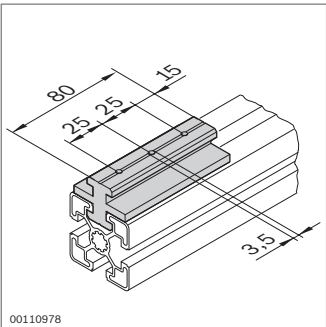
Slider, center		No.	
		10	3 842 523 210
Material:		POM; natural	



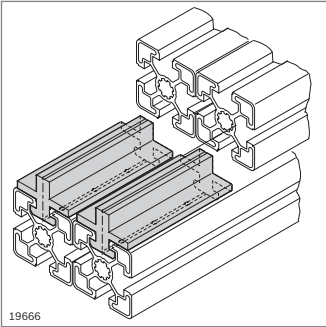
Slider, center		No.	
		10	3 842 523 206
Material:		POM; natural	



Slider, center		No.	
		10	3 842 523 209
Material:		POM; natural	

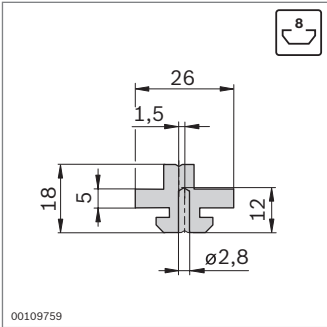
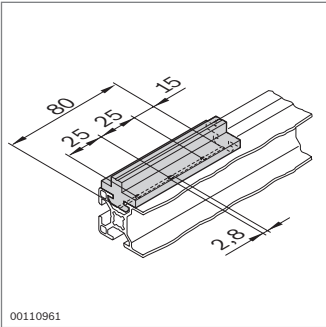


Slider, center		No.	
		10	3 842 523 205
Material:		POM; natural	

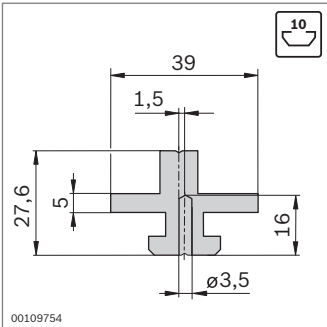
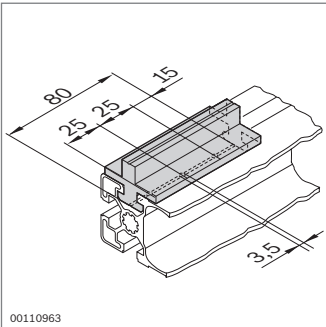


Offset sliders

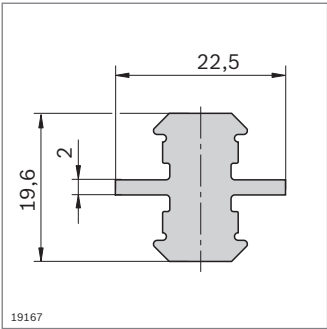
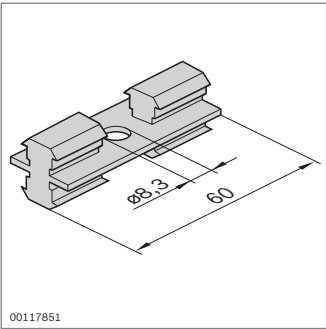
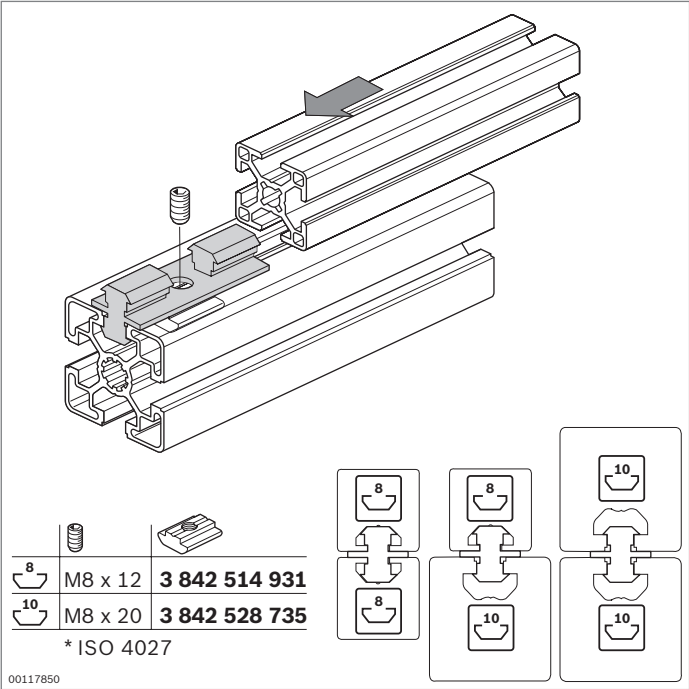
► For constructing multiple sliding doors



Slider, offset		No.	
Material:		10	3 842 523 211
POM; natural			



Slider, offset		No.	
Material:		10	3 842 523 207
POM; natural			



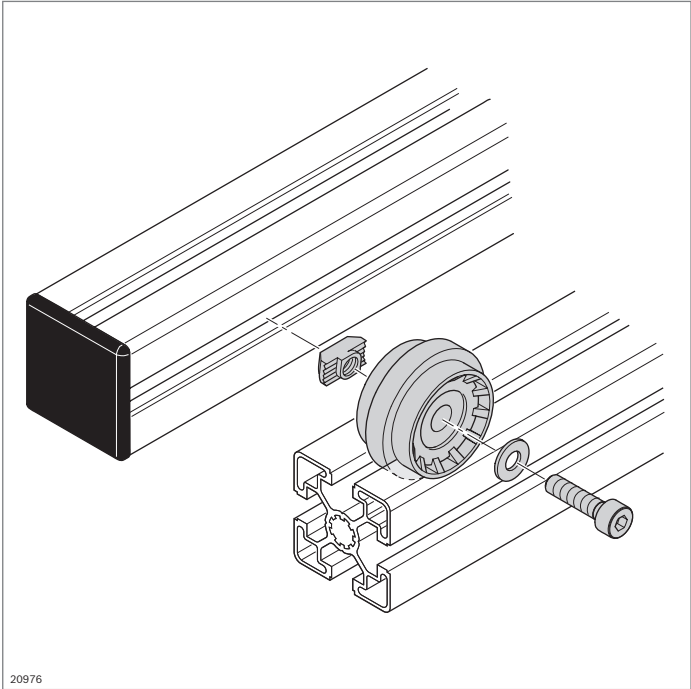
Multi-slider



- Multi-slider for constructing low-wear guides
- Suitable for all profiles with 8 mm and 10 mm slot widths
- Combination of profiles with different slot widths possible

Accessories:
Headless setscrew (ISO 4027) and sliding block (p. 3-7)
for fastening the slider in the profile slot

Multi-slider 8/10		No.
		10 3 842 513 517
Material:		POM; natural

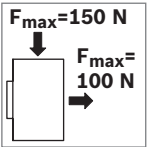
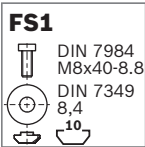


20976

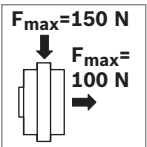
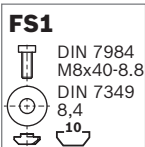
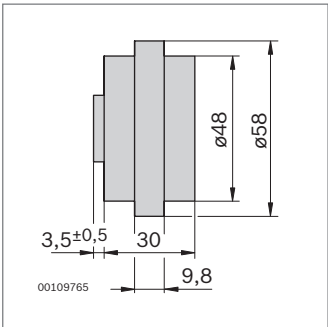
Support wheels



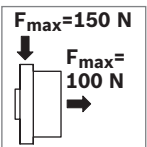
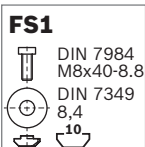
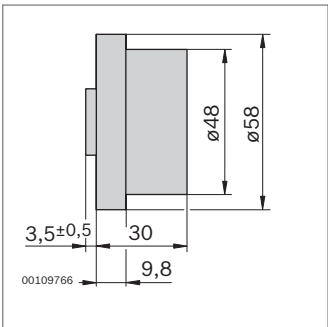
- ▶ Support wheel for constructing trolleys or roller sections
- ▶ Mounted on profiles with 10 mm slot
- ▶ Good running characteristics thanks to deep-groove ball bearing with large diameter
- ▶ Support wheel with rim can be guided in 10 mm slot
- ▶ ESD-conductive



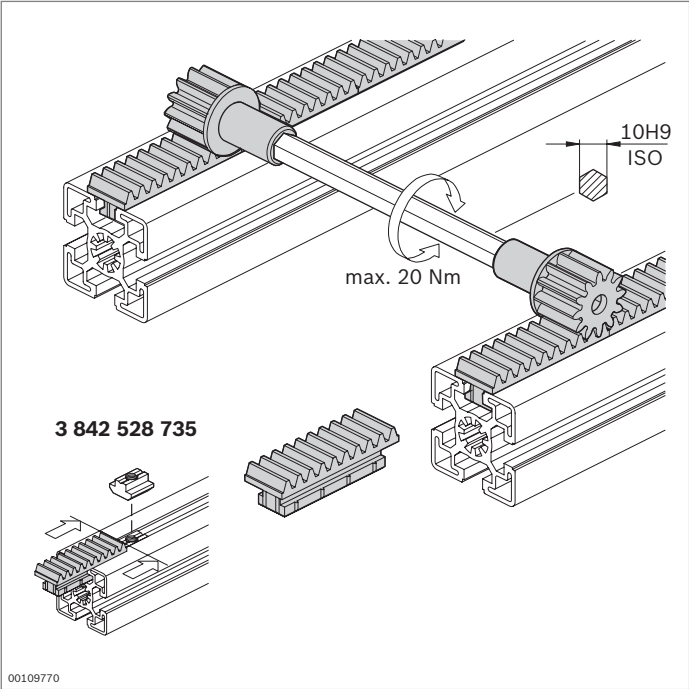
Support wheel	ESD	No.	FS
		10	3 842 218 942 FS1
Material:	Vestamid; black		
	Fastening material: Steel; galvanized		
Scope of delivery:	Incl. fastening material (FS)		



Support wheels with center rim	ESD	No.	FS
		10	3 842 218 940 FS1
Material:	Vestamid; black		
	Fastening material: Steel; galvanized		
Scope of delivery:	Incl. fastening material (FS)		



Support wheels with side rim	ESD	No.	FS
		10	3 842 218 941 FS1
Material:	Vestamid; black		
	Fastening material: Steel; galvanized		
Scope of delivery:	Incl. fastening material (FS)		



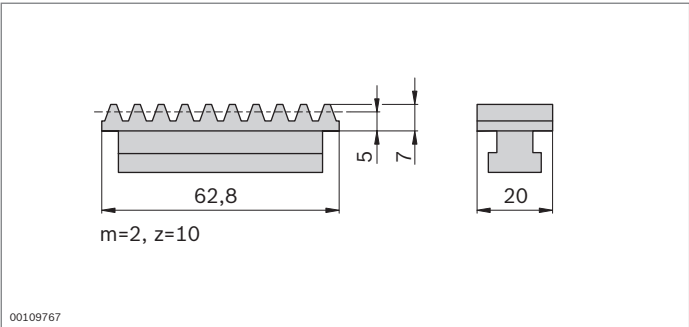
**Rack
Pinion**



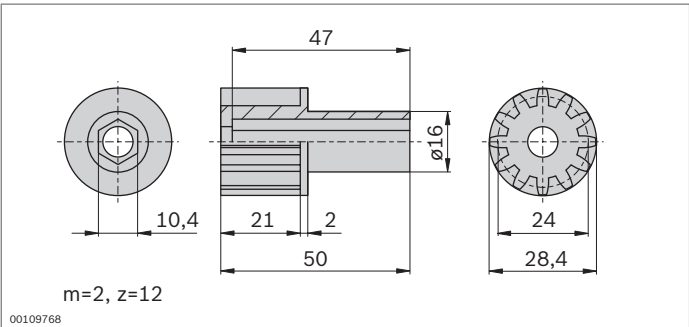
- For constructing synchronous shafts to prevent tilting in the case of large guide widths

Required accessories:

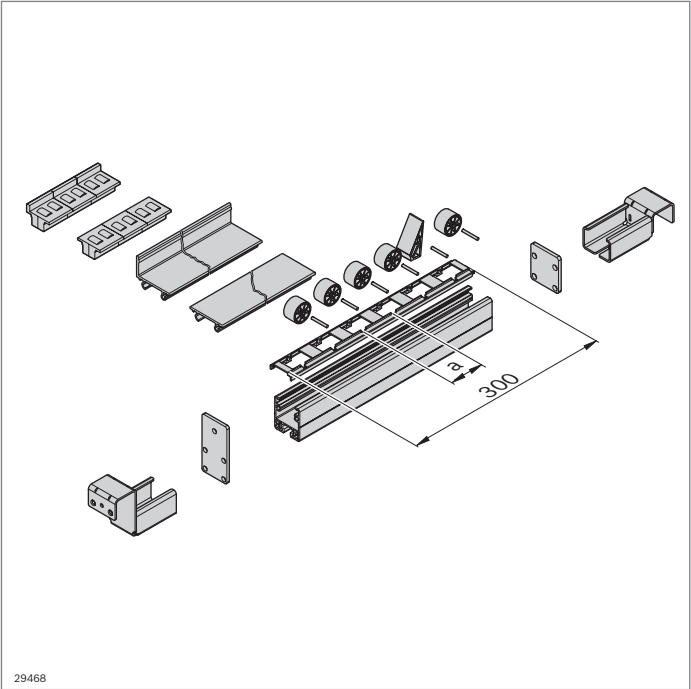
- Standard commercially available hexagonal shaft 10H9
- Sliding block for fixing the rack in the slot (p. 3-7)



Rack	No.
10	3 842 501 578
Material:	PA; black

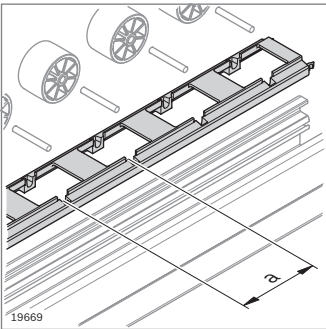
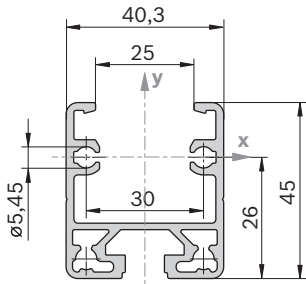


Pinion	No.
	3 842 501 576
Material:	POM, white



U-profile

A = 4,4 cm²
I_x = 10,4 cm⁴
I_y = 8,3 cm⁴
W_x = 4,6 cm³
W_y = 4,1 cm³
m = 1,2 kg/m



Elements for the construction of conveyor track Lean



- Components for constructing manual conveyor sections
- Based on multi-functional U-profile
- Clip-in conveyor elements for all requirements:
 - Rollers with or without flange; four colors to visually identify inventories (kanban) or to differentiate between good/reject parts
 - Slide rails with or without integrated lateral guide (GSSK, GS)
 - Roller elements with and without roller flange (RE45SK, RE45)

Accessories:
Round tube D28 (p. 2-70)

- U-profile with 10 mm slot

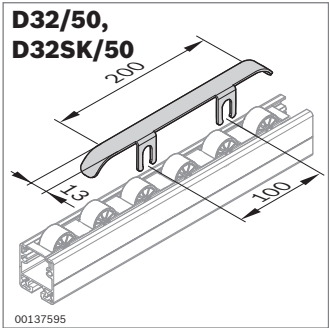
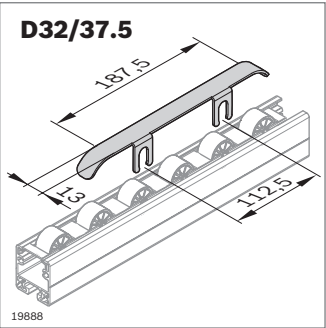
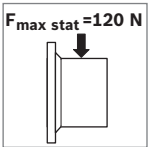
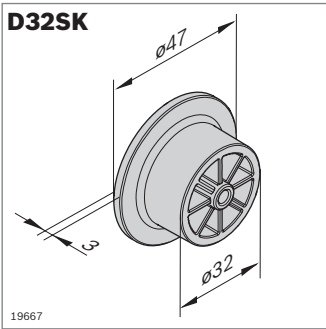
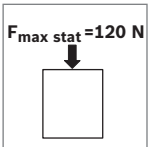
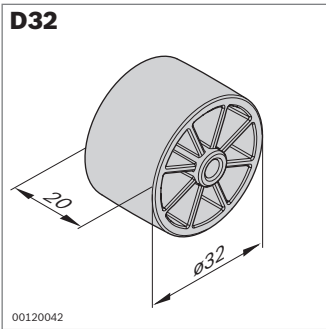
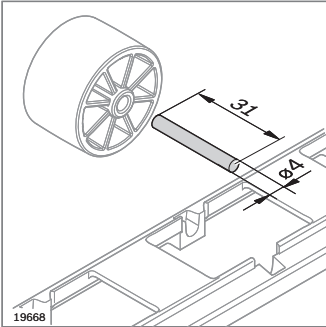
U-profile		L (mm)	ESD	No.
1 pc		30 ... 6070		3 842 993 316 / L
20 pcs		6070		3 842 535 115
1 pc		30 ... 6070		3 842 995 027 / L
20 pcs		6070		3 842 541 814

Material: U-profile: Aluminum, anodized
U-profile ESD: Aluminum, untreated

- Roller carrier for rollers D32 and D32SK (p. 12-20)

Roller carrier	a (mm)	ESD		No.
D32/37.5	37.5	20		3 842 537 944
			20	3 842 537 945
D32/50	50	20		3 842 532 887
			20	3 842 538 094
D 32SK/50	50	20		3 842 532 886
			20	3 842 537 947

Material: ABS



► Steel axle for rollers D32, D32SK

Steel axle	ESD	No.
	100	3 842 532 862

Material: Steel; stainless

Roller	Color	ESD	No.
D32	Black	100	3 842 532 865
		100	3 842 537 961
	Red	100	3 842 532 866
		100	3 842 537 960
	Yellow	100	3 842 532 870
		100	3 842 537 959
	Green	100	3 842 532 752
		100	3 842 537 958

Material: PE; colored / ESD made of PA, colored

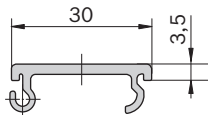
Roller	Color	ESD	No.
D32SK	Black	100	3 842 532 867
		100	3 842 537 965
	Red	100	3 842 532 883
		100	3 842 537 964
	Yellow	100	3 842 532 884
		100	3 842 537 963
	Green	100	3 842 532 880
		100	3 842 537 962

Material: PE; colored / ESD made of PA, colored

Brake	ESD	No.
D32/37.5	20	3 842 537 948
D32/50, D32SK/50	20	3 842 532 881

Material: Steel; galvanized

GS



19156

$F_{\max \text{ stat}} =$
200 N /
100 mm

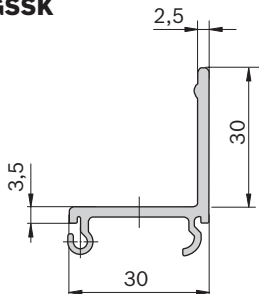


- Slide rail GS for constructing conveyor tracks with large gradients
- Slide rail for use with heavy containers

Slide rail	Color	L (mm)	ESD	No.
GS	Dust gray	3000	20	3 842 535 124
	Black	3000	20	3 842 537 803

Material: PVC

GSSK



19155

$F_{\max \text{ stat}} =$
200 N /
100 mm

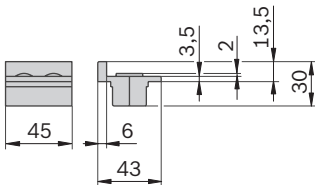


- Slide rail with lateral guide GSSK for constructing conveyor tracks with large gradients
- Slide rail for use with heavy containers

Slide rail	Color	L (mm)	ESD	No.
GSSK	Dust gray	3000	20	3 842 537 806
	Black	3000	20	3 842 537 807

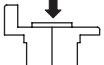
Material: PVC

RE45SK



00109805

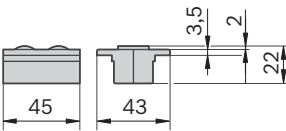
$F_{\max \text{ stat}} =$
20 N



Roller element	Color	ESD	No.
RE45SK	Signal gray	100	3 842 554 748
	Black	100	3 842 538 065

Material: PA

RE45



00109807

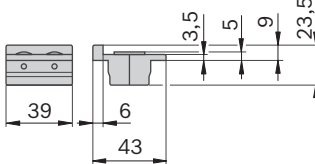
$F_{\max \text{ stat}} =$
20 N



Roller element	Color	ESD	No.
RE45	Signal gray	100	3 842 554 746
	Black	100	3 842 538 064

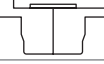
Material: PA

RE39



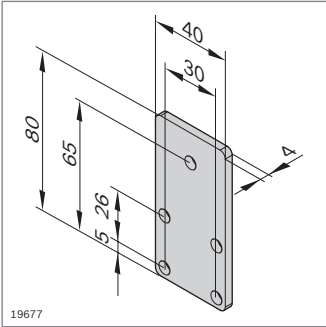
00109808

$F_{\max \text{ stat}} =$
40 N

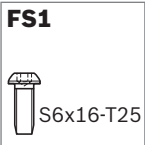
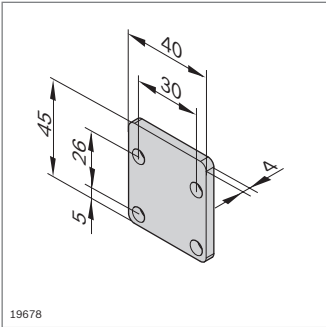


Roller element	Color	ESD	No.
RE39	Black	10	3 842 520 000
	Black	10	3 842 538 245

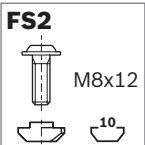
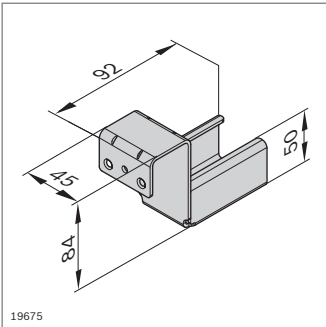
Material: PA



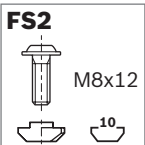
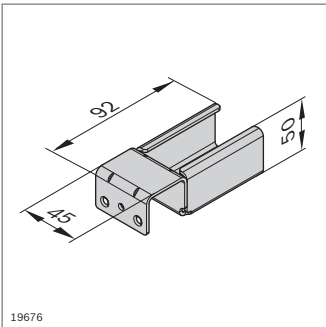
Stop plate with stop	ESD	No.	FS
40x80	20	3 842 535 121	4xFS1
Material: Steel; galvanized			
Scope of delivery: Incl. fastening material (FS)			



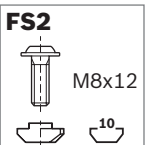
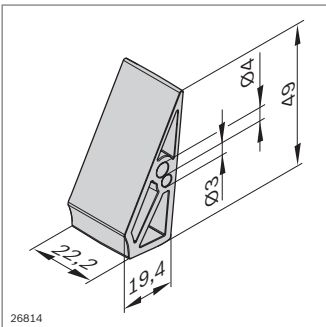
Stop plate without stop	ESD	No.	FS
40x45	20	3 842 535 122	4xFS1
Material: Steel; galvanized			
Scope of delivery: Incl. fastening material (FS)			



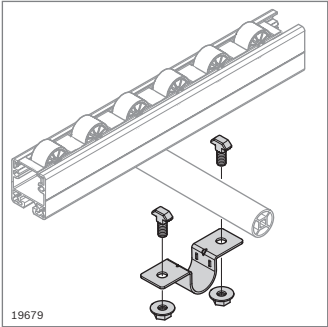
Rail holder with stop	ESD	No.	FS
	20	3 842 537 660	FS2
Material: Steel; galvanized			
Scope of delivery: Incl. fastening material (FS)			



Rail holder without stop	ESD	No.	FS
	20	3 842 537 661	FS2
Material: Steel; galvanized			
Scope of delivery: Incl. fastening material (FS)			



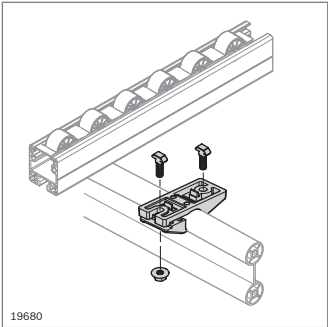
Stopper XLean/Lean	ESD	No.	FS
	10	3 842 552 151	FS2
Material: PP			
Fastening material: Steel; galvanized			
Scope of delivery: Incl. fastening material (FS)			



FS3

HS10-M8x20

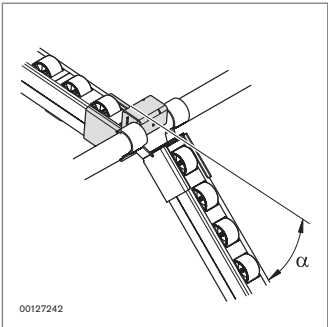
M8



FS4

HS10-M8x30

EN 1661-M8-8.8



FS5

M8x12-10.9-VZ

10

Tube clamp D28	No.	FS
	20	3 842 535 364 2xFS3

Material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)

Holder for strut profile D28x55	No.	FS
	20	3 842 537 720 2xFS4

Material: Diecast aluminum

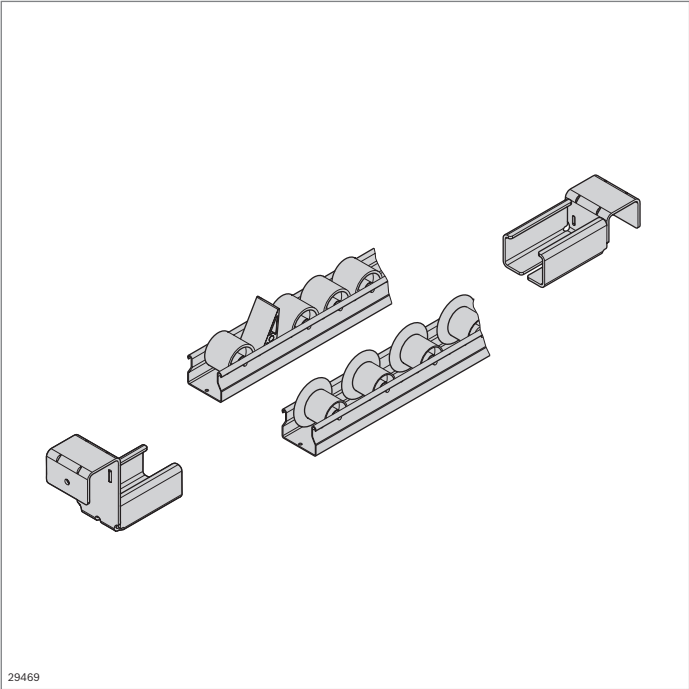
Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)

- Flexible bridge with maximum tilt ($\alpha_{\max}$) from horizontal:
- With round tube D28 (p. 2-70): $\alpha_{\max} = 40^\circ$
 - With strut profile D28x55 (p 2-71): $\alpha_{\max} = 30^\circ$

Flexible bridge	No.	FS
	20	3 842 537 951 FS5

Material: Steel; galvanized

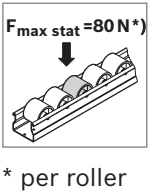
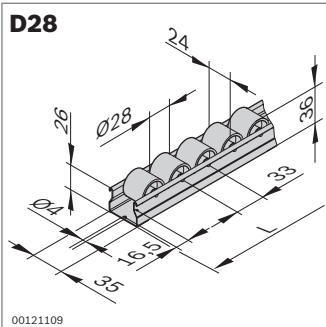


Elements for the construction of conveyor track XLean



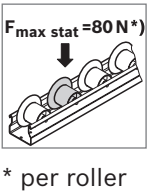
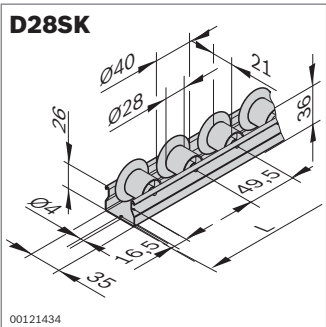
- Conveyor track made of steel profiles with plastic rollers and optional roller flange
- Available as ESD-conductive version.
- Self-supporting roller section
- Roller section with drill holes for fastening

Accessories:
Round tube D28 (p. 2-70)



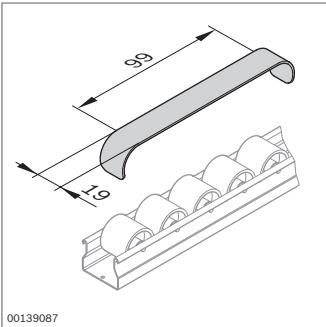
Roller section	Color	L (mm)	ESD	No.
D28	Gray	100 ... 4500	1	3 842 993 321 / L
		4500	50	3 842 537 776
	Black	100 ... 4500	1	3 842 993 431 / L
		4500	50	3 842 537 778

Material: Rail: Steel, galvanized
Roller: PP



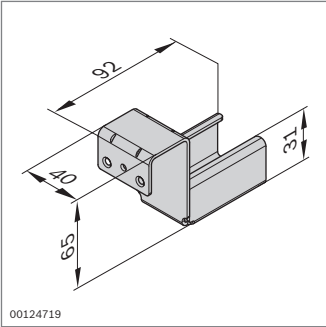
Roller section	Color	L (mm)	ESD	No.
D28SK	Gray	100 ... 4500	1	3 842 993 322 / L
		4500	50	3 842 537 777
	Black	100 ... 4500	1	3 842 993 432 / L
		4500	50	3 842 537 779

Material: Rail: Steel, galvanized
Roller: PP

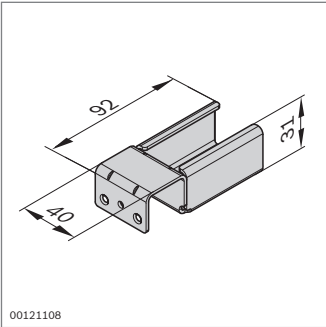


Brake	No.
	20 3 842 532 871

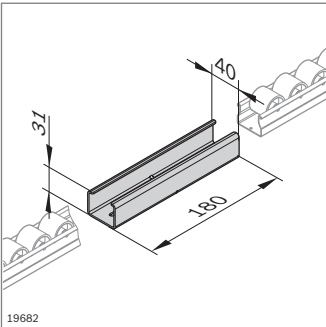
Material: Steel; galvanized



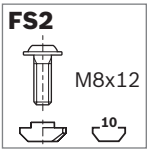
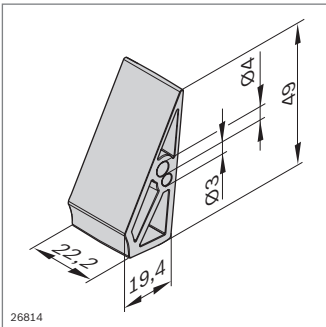
Rail holder with stop			No.
		20	3 842 538 372
Material:	Steel; galvanized		



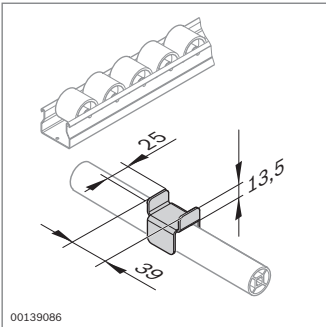
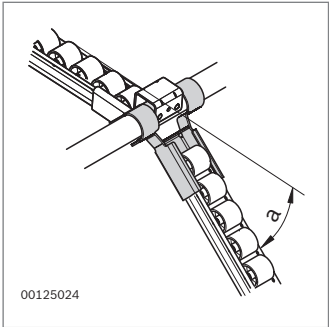
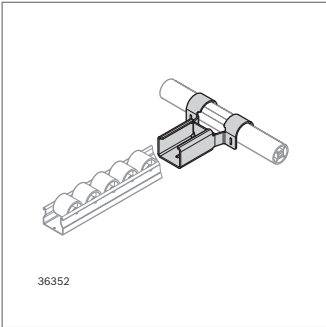
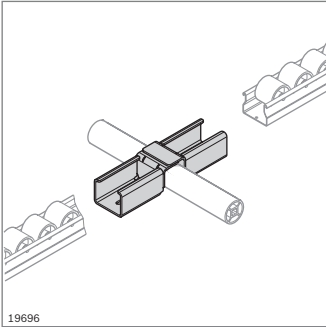
Rail holder without stop			No.
		20	3 842 537 687
Material:	Steel; galvanized		



Section link			No.
		20	3 842 536 722
Material:	Steel; galvanized		



Stopper XLean/Lean		ESD		No.	FS
			10	3 842 552 151	FS2
Material:	PP				
	Fastening material: Steel; galvanized				
Scope of delivery:	Incl. fastening material (FS)				



Bridge	No.
	20 3 842 536 724

Material: Steel; galvanized

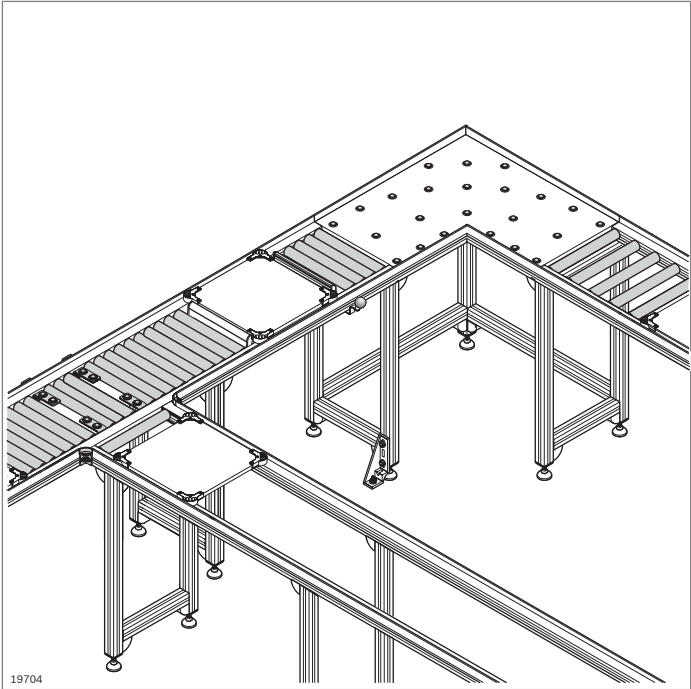
- Flexible bridge with maximum tilt ($\alpha_{\max}$) from horizontal:
- With round tube D28 (p. 2-70): $\alpha_{\max} = 40^\circ$
 - With strut profile D28x55 (p 2-71): $\alpha_{\max} = 30^\circ$

Flexible bridge	No.
	20 3 842 537 911

Material: Steel; galvanized

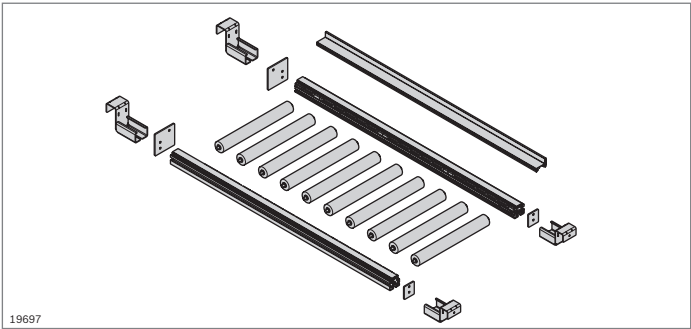
Mounting	No.
	20 3 842 537 657

Material: Steel; galvanized



Elements for the construction of conveyor track EcoFlow

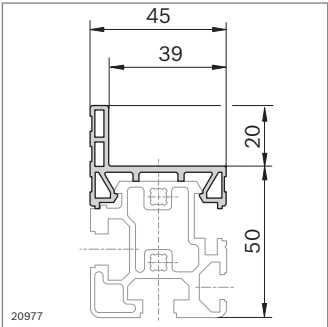
- Based on EcoFlow section profile
- For manual slide sections with rollers
- Clip-in guide profiles with lateral guide and clip-in conveyor rollers



MV45x45

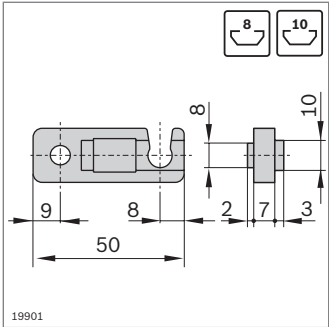
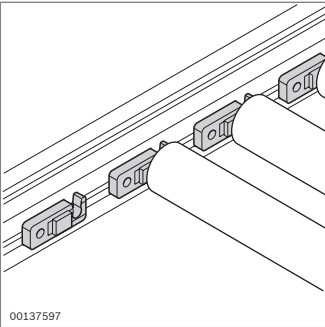
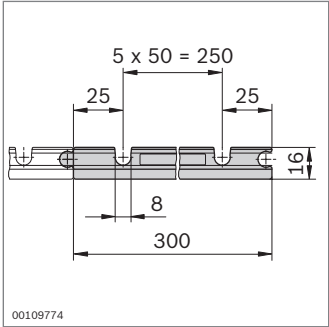
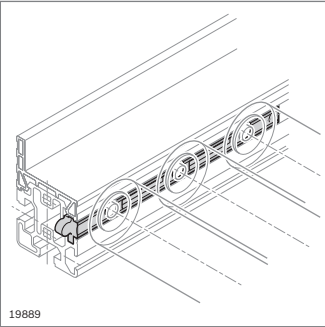
A = 6,2 cm²
I_x = 11,8 cm⁴
I_y = 10,5 cm⁴
W_x = 5,3 cm³
W_y = 4,7 cm³
m = 1,7 kg/m

19698



Section profile MV45x45		L (mm)	No.
1 pc		30 ... 6070	3 842 993 029 / L
20 pcs		6070	3 842 537 321
Material:		Aluminum; anodized	

Guide profile MV45	Color	L (mm)	ESD 	No.
	Dusty gray RAL 7037	30 ... 3000	1	3 842 993 511 / L
	Dusty gray RAL 7037	3000	10	3 842 525 443
	Black	30 ... 3000 	1	3 842 993 512 / L
	Black	3000 	10	3 842 526 034
Material:	PVC			

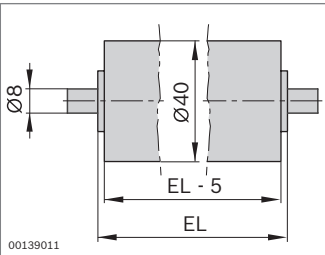
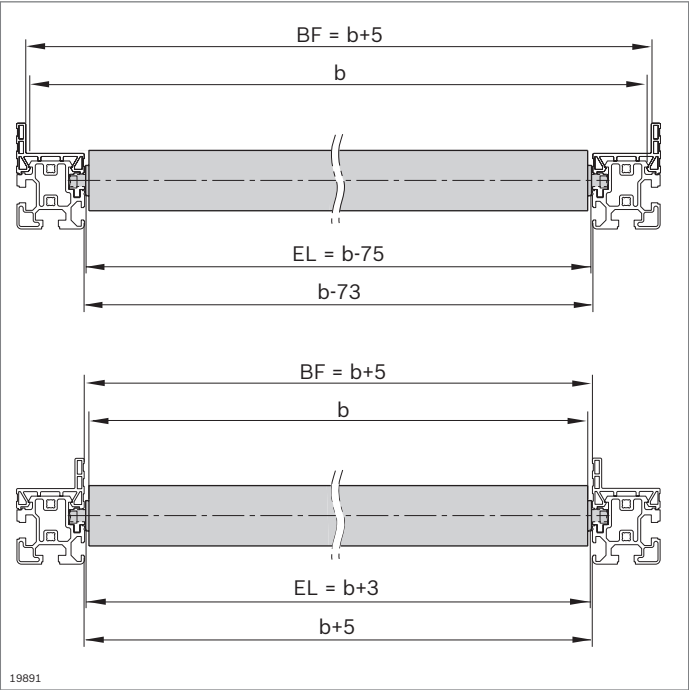
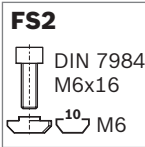
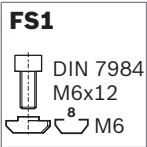


EcoFlow roller carrier	ESD	No.
	10	3 842 535 683

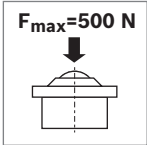
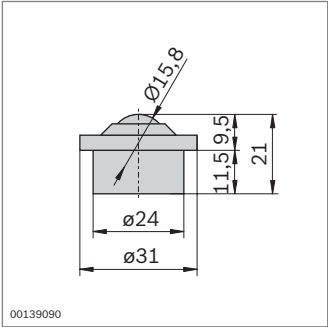
Material: ABS; black

Roller fixation	Slot	No.	FS
	8 10	3 842 535 667	FS1
	10 10	3 842 535 668	FS2

Material: Roller fixation: PA6, black
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)



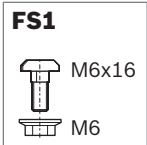
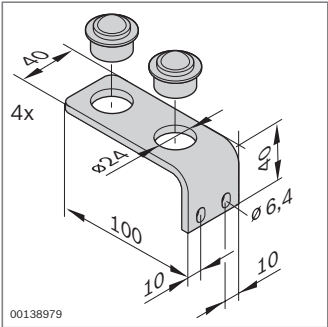
EcoFlow roller	F _{max} (N)	EL (mm)	ESD	No.
Plastic, gray	150	105 ... 605		3 842 994 989 / L
		225		3 842 525 740
		325		3 842 525 741
		425		3 842 525 742
		525		3 842 537 164
Steel; galvanized	500	105 ... 1005		3 842 994 988 / L
		225		3 842 525 737
		325		3 842 525 738
		425		3 842 525 739
		525		3 842 537 163
Stainless steel	150	105 ... 1005		3 842 995 008 / L



- Ball roller for smooth manual movement of goods with large-surfaces

Ball roller	ESD	No.
	20	3 842 541 008

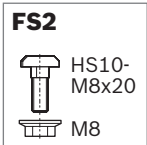
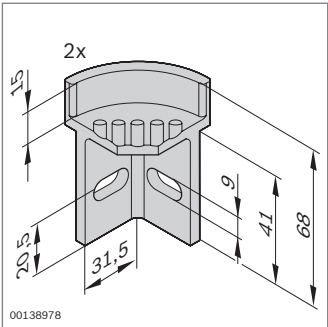
Material: Housing: Steel; galvanized
Ball: Stainless steel



Transverse conveying	ESD	No.	FS
	Set	3 842 536 055	8xFS1

Material: Bracket Steel; galvanized
Ball: Stainless steel

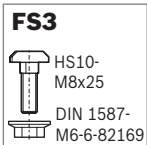
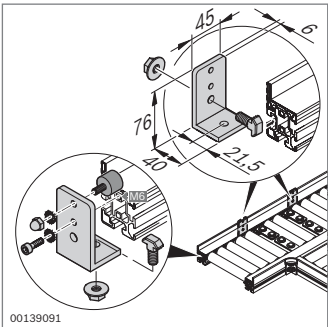
Scope of delivery: Incl. 4 x bracket plate, fastening material (FS) for 10 mm slot



Corner piece	ESD	No.	FS
	Set	3 842 536 056	4xFS2

Material: PA; black

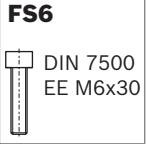
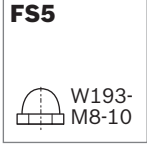
Scope of delivery: Incl. 2 x corner piece, fastening material (FS) for 10 mm slot

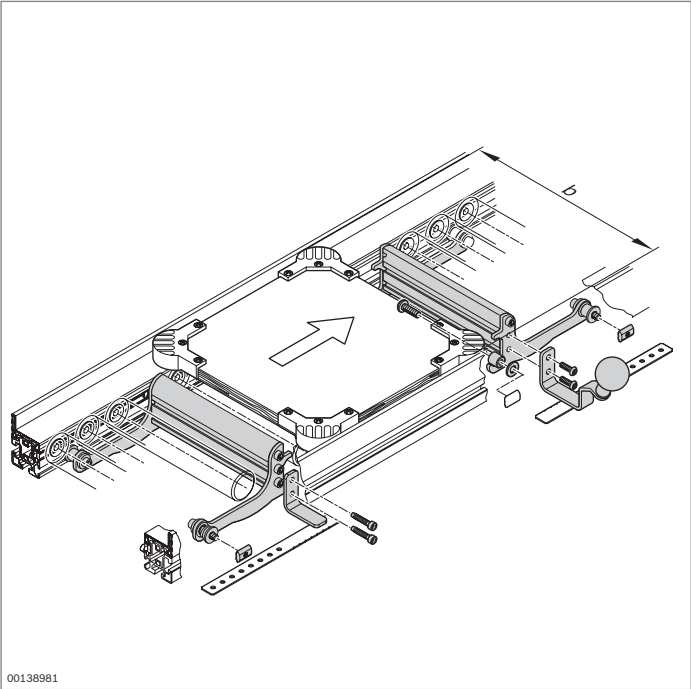


Stop	No.	FS
Set	3 842 536 057	2xFS3, 4xFS4, 2xFS5 2xFS6

Material: Aluminum; anodized

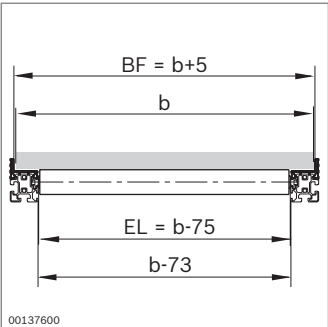
Scope of delivery: Incl. 2 x stop, fastening material (FS)





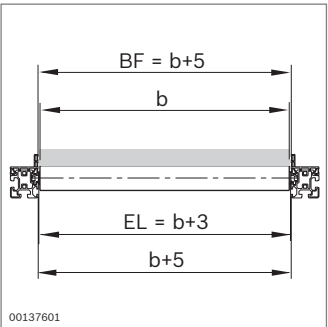
EcoFlow stop gates and return stops

- Stop gate and return stop for positioning workpiece pallets or containers
- At the planning stage remember to leave sufficient leg room. The stop gate and return stop require 45 mm more space below the bottom
- We recommend using a workpiece pallet with corner pieces (p. 12-31) to provide a defined stopping mechanism



Stop gate	EL (mm)	No.
	105 ... 1005	3 842 995 007 / EL
	225	3 842 537 894
	325	3 842 537 895
	425	3 842 537 896
	525	3 842 537 897

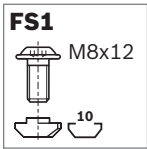
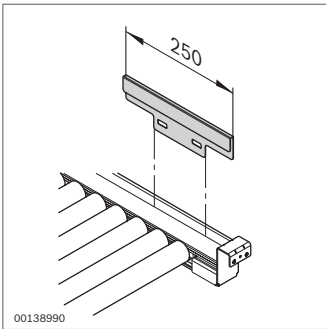
Scope of delivery: Incl. Fastening material
Condition on delivery: As components (pre-assembled)



Return stop	EL (mm)	No.
	105 ... 1005	3 842 995 017 / EL
	225	3 842 537 898
	325	3 842 537 899
	425	3 842 537 900
	525	3 842 537 901

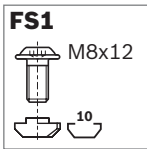
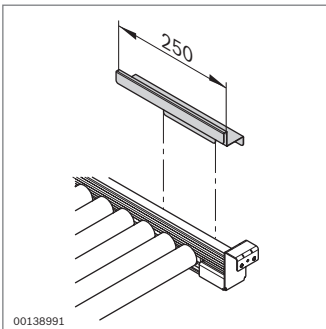
Scope of delivery: Incl. Fastening material
Condition on delivery: As components (pre-assembled)

EcoFlow accessories



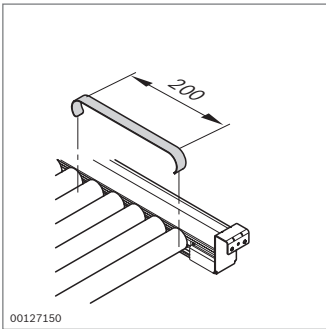
- Protective cover to protect the EcoFlow guide profile when loading the conveyor track

Protective cover		No.	FS
Outer slide rail	Set	3 842 537 583	4xFS1
Material: Steel; galvanized			
Scope of delivery: Incl. 2 x protective cover, fastening material (FS)			



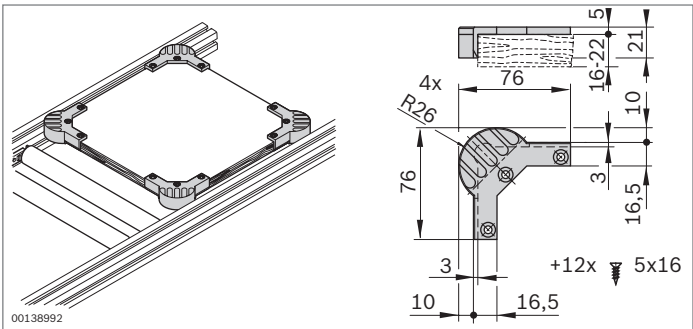
- Protective cover to protect the EcoFlow guide profile when loading the conveyor track

Protective cover		No.	FS
Inner slide rail	Set	3 842 537 584	4xFS1
Material: Steel; galvanized			
Scope of delivery: Incl. 2 x protective cover, fastening material (FS)			



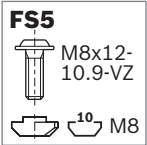
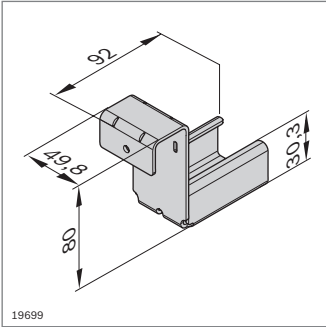
- Brake for bringing containers to a stop gently

Brake		No.
	20	3 842 537 740
Material: Steel; galvanized		

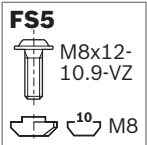
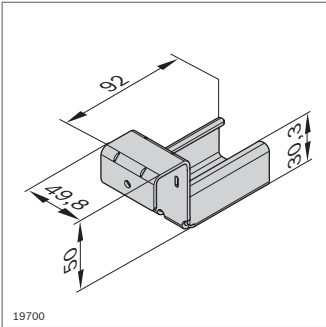


- Corner pieces for assembly of workpiece pallets
- For isolating parts from the pallet queue, well-defined guidance and stopping surfaces, good transition through curves and avoidance of edges where trapping may occur

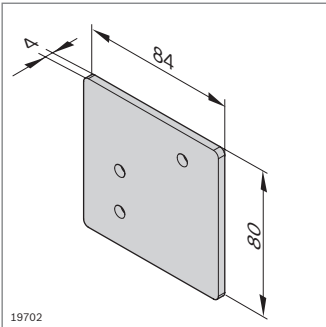
Corner pieces for workpiece pallets	ESD		No.
	Set		3 842 536 054
Material: PA; black			



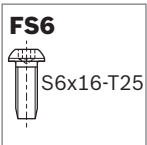
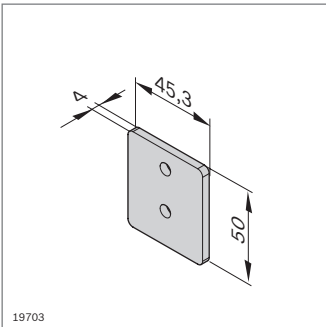
Rail holder with stop		No.	FS
	20	3 842 537 664	FS5
Material:	Steel; galvanized		
Accessories:	Round tube D28 (p. 2-70)		
Scope of delivery:	Incl. fastening material (FS)		



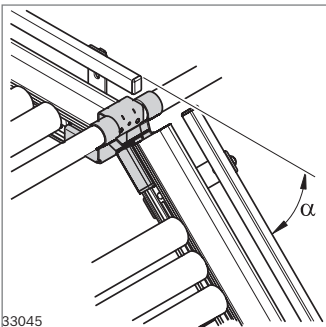
Rail holder without stop		No.	FS
	20	3 842 537 665	FS5
Material:	Steel; galvanized		
Accessories:	Round tube D28 (p. 2-70)		
Scope of delivery:	Incl. fastening material (FS)		



Stop plate with stop		No.	FS
	20	3 842 537 593	2xFS6
Material:	Steel; galvanized		
Scope of delivery:	Incl. fastening material (FS)		

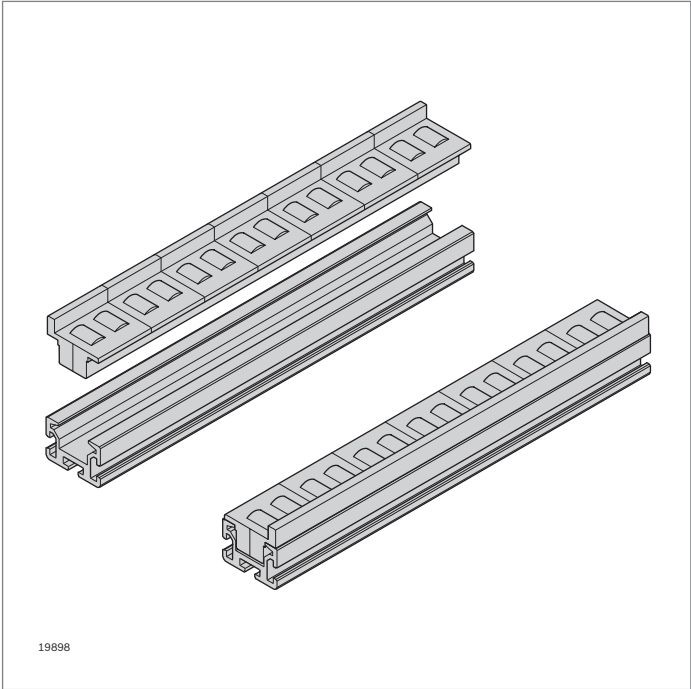


Stop plate without stop		No.	FS
	20	3 842 537 592	2xFS6
Material:	Steel; galvanized		
Scope of delivery:	Incl. fastening material (FS)		



- Flexible bridge with maximum tilt ($\alpha_{\max}$) from horizontal:
- With round tube D28 (p. 2-70): $\alpha_{\max} = 40^\circ$
 - With strut profile D28x55 (p 2-71): $\alpha_{\max} = 30^\circ$

Flexible bridge		No.
	20	3 842 537 950
Material:	Steel; galvanized	



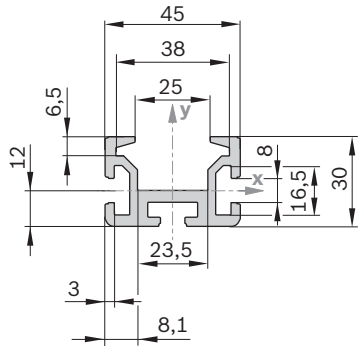
Conveyor track made of section profiles and roller elements

- Economical solution for manual slide sections
- Roller elements can be clipped in

Accessories:
Roller elements (p. 12-21)

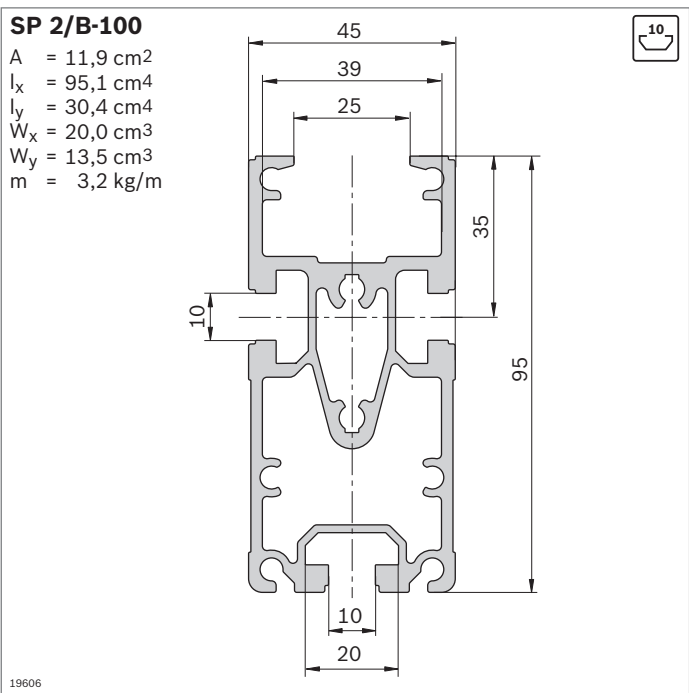
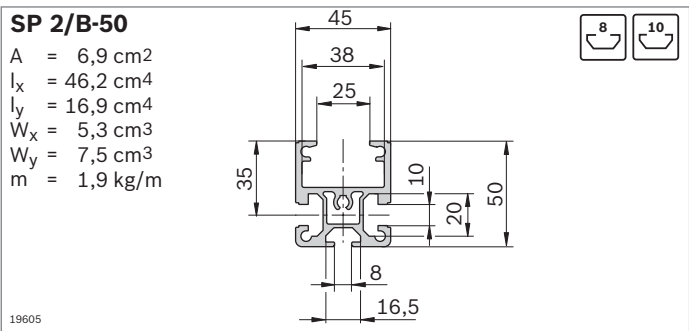
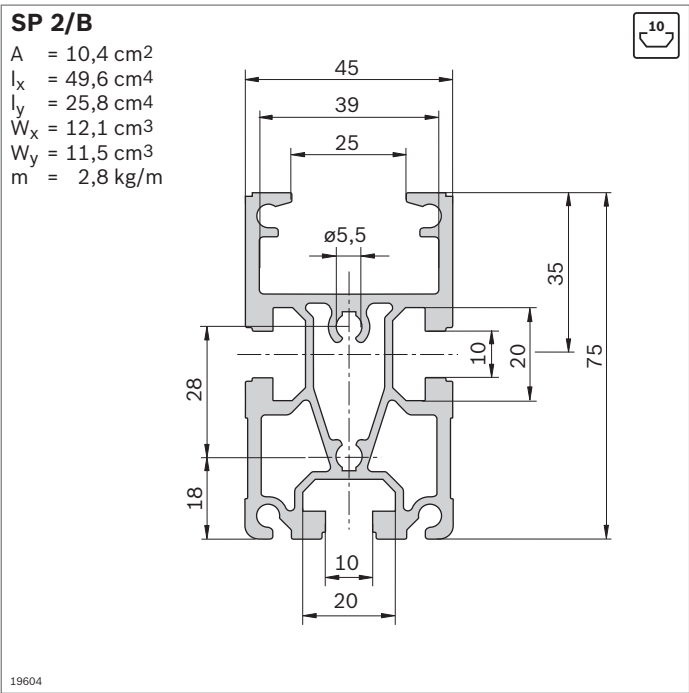
SP 2/R

A = 5,2 cm²
I_x = 4,3 cm⁴
I_y = 11,7 cm⁴
W_x = 2,4 cm³
W_y = 5,2 cm³
m = 1,4 kg/m



19893

Section profile SP 2/R	L (mm)	No.
	50 ... 6000	3 842 992 676 / L
Material:	Aluminum, natural-colored, anodized	



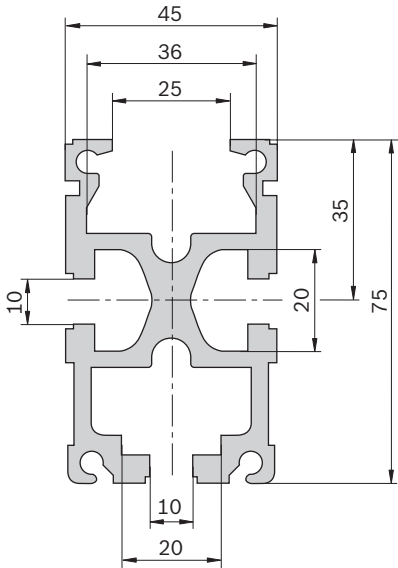
Section profile SP 2/B		Slot	L (mm)	No.
1 pc		10	200...6070	3 842 992 884 / L
 16 pcs		10	6070	3 842 532 695
Material:		Aluminum, natural-colored, anodized		
Accessories:		Cross connector QV 2 (p. 12-42)		

Section profile SP 2/B-50		Slot	L (mm)	No.
1 pc		8 / 10	200...6070	3 842 992 903 / L
 20 pcs		8 / 10	6070	3 842 532 697
Material:		Aluminum, natural-colored, anodized		

Section profile SP 2/B-100		Slot	L (mm)	No.
1 pc			200...6070	3 842 993 259 / L
 16 pcs		10	6070	3 842 532 608
Material:		Aluminum, natural-colored, anodized		
Accessories:		Cross connector QV 2 (p. 12-42)		

SP 2/BH

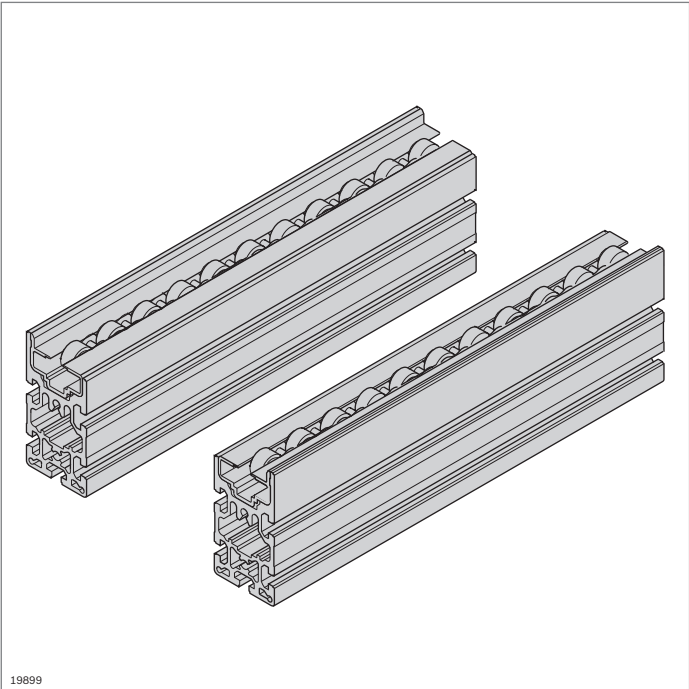
A = 12,4 cm²
I_x = 53,7 cm⁴
I_y = 28,6 cm⁴
W_x = 14,0 cm³
W_y = 13,8 cm³
m = 3,3 kg/m



Section profile SP 2/BH	Slot	L (mm)	No.
1 pc	10	200...6070	3 842 990 409 / L
16 pcs	10	6070	3 842 532 696

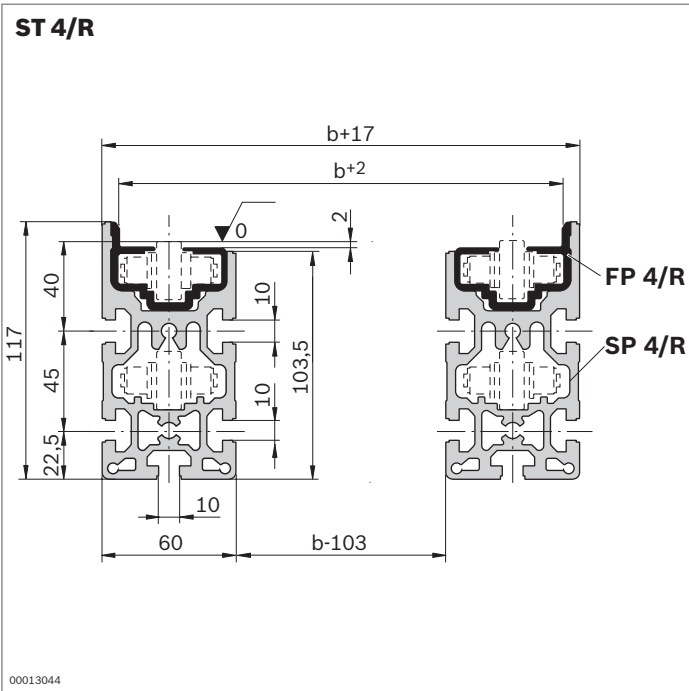
Material: Aluminum, natural-colored, anodized
Accessories: Cross connector QV 2 (p. 12-42)

19607



Conveyor sections made of SP 4/R section profiles and accumulation roller chains

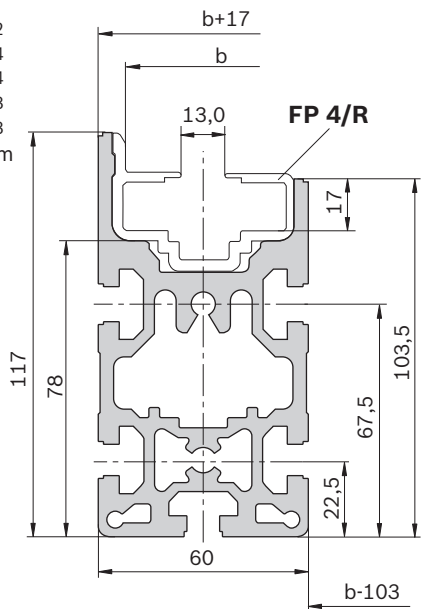
- For constructing manual slide sections with high bearing loads (up to 2 kg/cm)
- For applications with and without workpiece pallets
- Low friction
- Steel chain with support wheels made of PA 12



Section ST 4/R	L (mm)	No.
	200...6000	3 842 994 839 / L
Material:	Aluminum, natural-colored, anodized	
	Guide profile: PA 12	
Scope of delivery:	2 x section profile SP 4/R	
	2 x guide profile FP 4/R	
Condition on delivery:	Assembled	
Accessories:	Accumulation roller chain (p. 12-38)	
	Cross connector QV 4 (p. 12-38)	

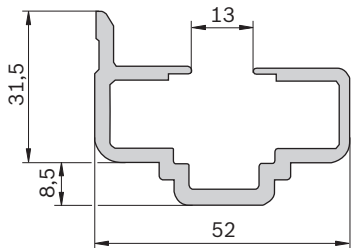
SP 4/R

A = 26,13 cm²
I_x = 222,0 cm⁴
I_y = 95,5 cm⁴
W_x = 84,86 cm³
W_y = 16,41 cm³
m = 3,5 kg/m



19608

FP 4/R



19610

Section profile SP 4/R

L (mm) No.

10 pcs

6000 **3 842 532 505**

Material: Aluminum, natural-colored, anodized
Accessories: Guide profile FP 4/R
Accumulation roller chain (p. 12-38)
Cross connector QV 4 (p. 12-38)

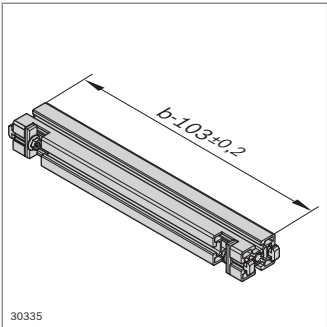
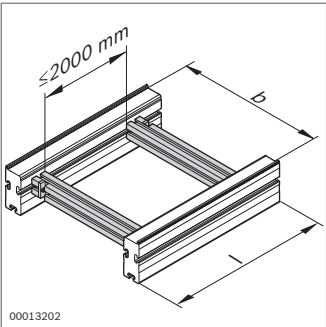
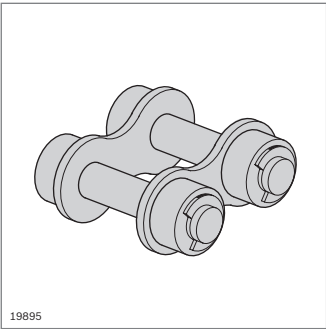
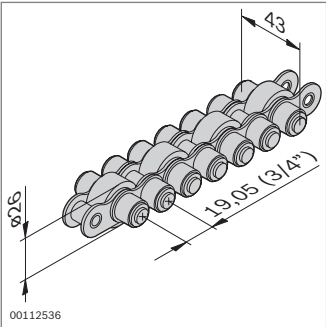
Guide profile FP 4/R

L (mm) ESD No.

10 pcs

6000 **3 842 532 508**

Material: PA 12; black



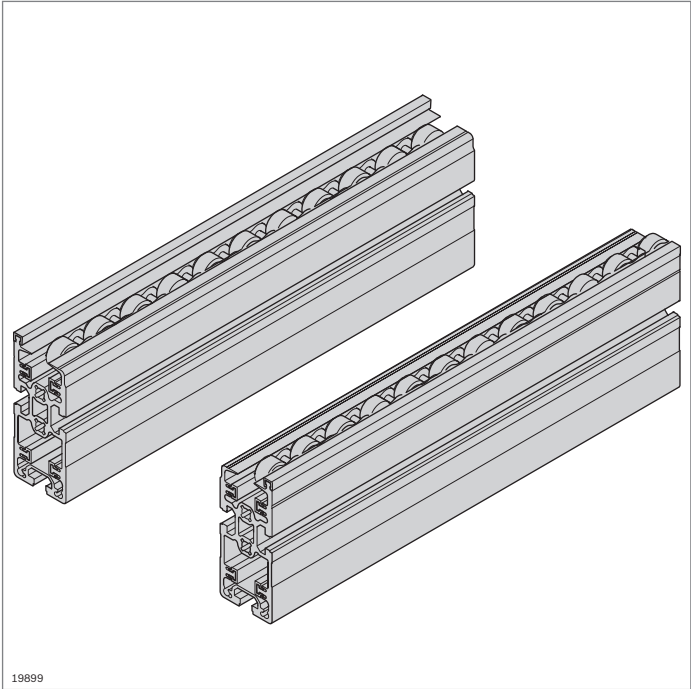
Accumulation roller chain		L (mm)	No.
Support wheel: PA 12		5000	3 842 508 967
Material:	Accumulation roller chain: Steel		
	Support wheel: see ordering table		
Scope of delivery:	Incl. Chain lock		
Accessories:	Additional chain lock (3 842 071 941)		

► Chain lock for extending accumulation roller chains

Chain lock		No.
		3 842 071 941
Material:	Steel	

- Cross connector QV 4 for connecting two section profiles
- For defining the track width

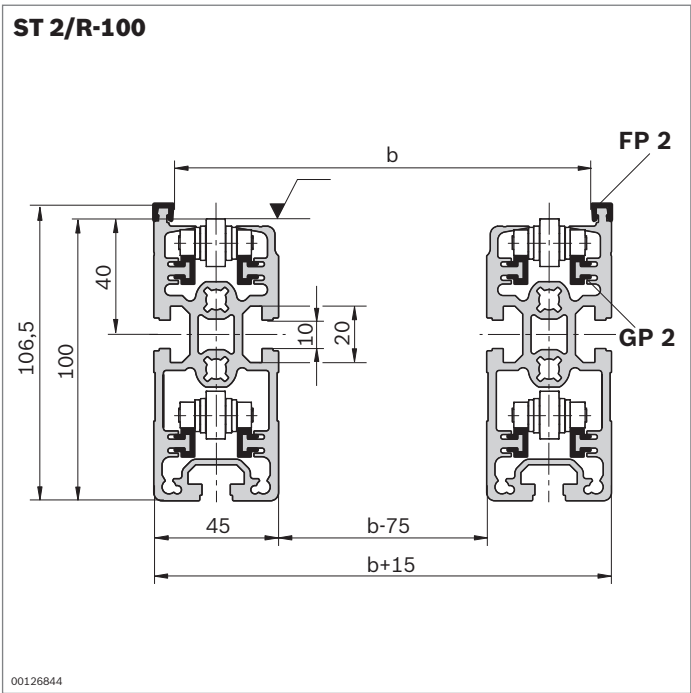
Cross connector QV 4		b (mm)	No.
		443...1243	3 842 994 832 / b



19899

Conveyor sections made of SP 2 section profiles and accumulation roller chains

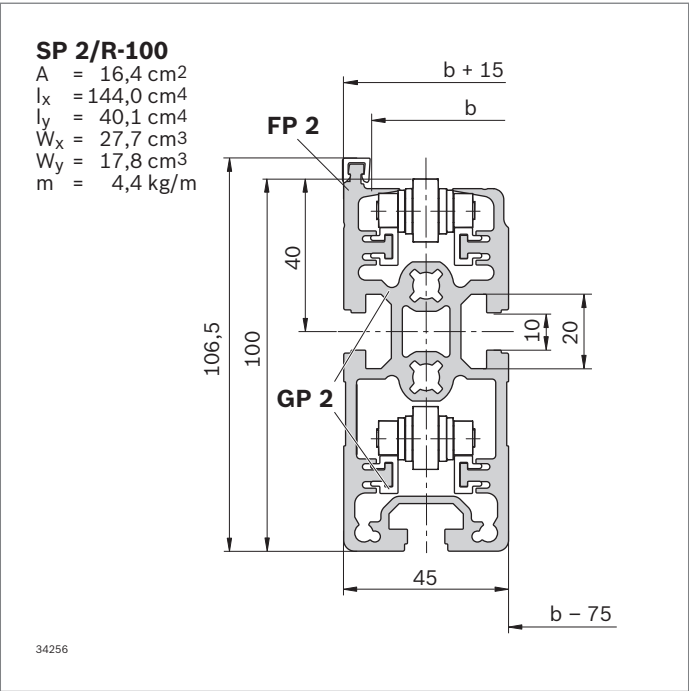
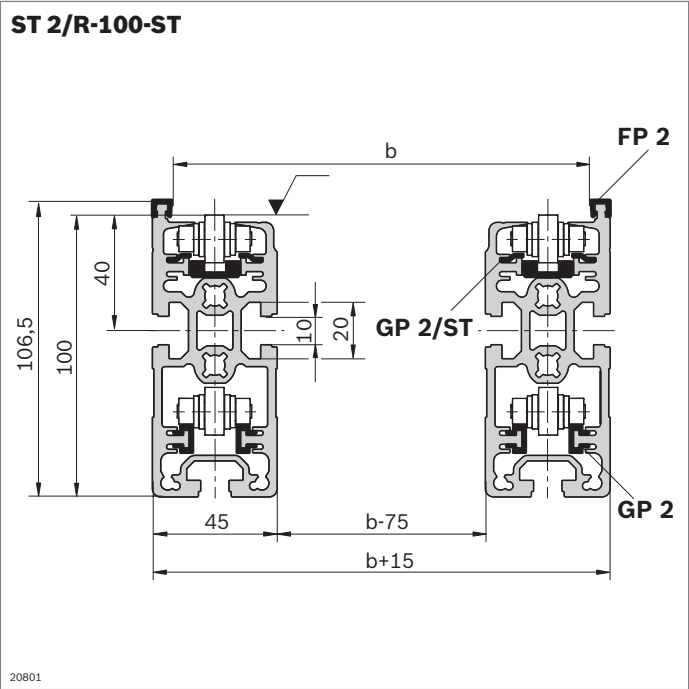
- For constructing manual slide sections with high bearing loads (up to 2.0 kg/cm)
- For applications with and without workpiece pallets
- Accumulation roller chain with and without small parts protection



00126844

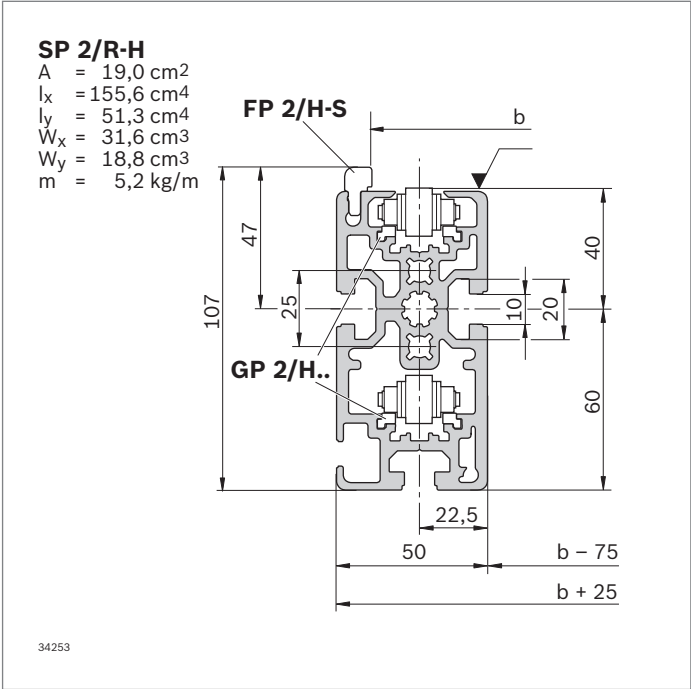
- Customizable section with plastic guide profile

Section ST 2/R-100	ESD	L (mm)	No.
		60 ... 6000	3 842 994 889 /L
Material:	Aluminum, natural-colored, anodized Glide profile, guide profile: PA 12		
Scope of delivery:	2 x section profile SP 2/R-100 2 x guide profile FP 2 8 x glide profile GP 2		
Condition on delivery:	Assembled		
Accessories:	Accumulation roller chain (p. 12-42) Accumulation roller chain with small parts protection (p. 12-42) Cross connector QV 2, QV 2-H (p. 12-42)		

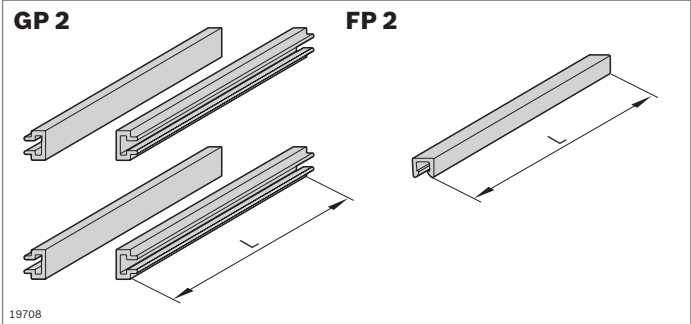


Section ST 2/R-100 ST	ESD	L (mm)	No.
		60 ... 6000	3 842 994 907 / L
Material:	Aluminum, natural-colored, anodized Slide profile: Steel Guide profile: PA 12 Accumulation roller chain guide profile PE		
Scope of delivery:	2 x section profile SP 2/R-100 2 x guide profile FP 2 4 x glide profile GP 2 4 x glide profile GP 2/ST 2 x guide profile for accumulation roller chain		
Condition on delivery:	Assembled		
Accessories:	Accumulation roller chain (p. 12-42) Accumulation roller chain with small parts protection (p. 12-42) Cross connector QV 2, QV 2-H (p. 12-42)		

Section profile SP 2/R-100	L (mm)	No.
16 pcs	6070	3 842 529 931
Material:	Aluminum, natural-colored, anodized	
Accessories:	PA guide and glide profile (p. 12-41) ST guide and glide profile (p. 12-41)	



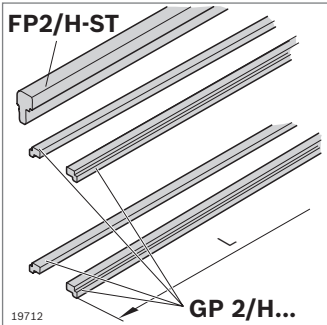
Section profile SP 2/R-H			L (mm)	No.
	12 pcs		6070	3 842 536 792
Material:		Aluminum, natural-colored, anodized		
Accessories:		Guide profile FP 2/H-ST Glide profile GP 2/H-KST Glide profile GP 2/H-ST		



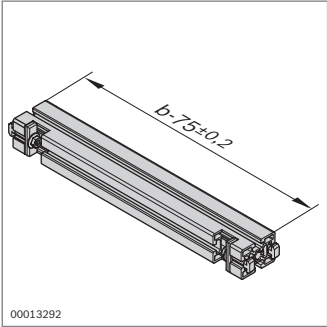
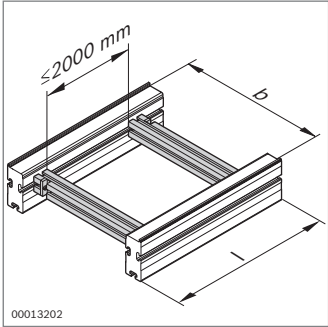
Guide and glide profile PA		ESD	No.
			3 842 529 933
Material:		PA 12; black	
Scope of delivery:		64 x glide profile GP 2 (L = 6000 mm) 16 x guide profile FP 2 (L = 6000 mm)	



Guide and glide profile ST		ESD	No.
			3 842 532 676
Material:		GP 2/ST: Steel; corrosion-resistant Accumulation roller chain guide profile PE	
Scope of delivery:		32 x glide profile GP 2/ST (L = 3000 mm) 24 x guide profile for accumulation roller chain (L = 2000 mm)	



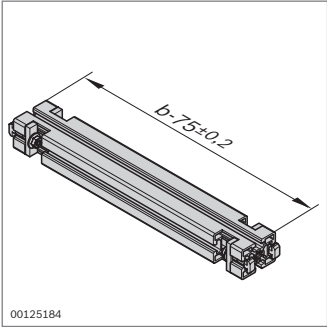
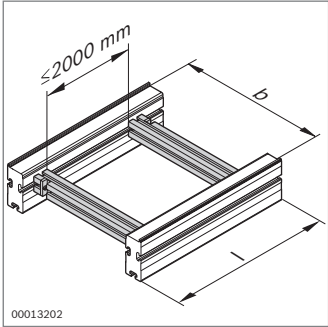
Guide profile		L (mm)	ESD	No.
FP 2/H-ST	24 pcs	3000		3 842 537 890
Material:		Steel; corrosion-resistant		
Glide profiles		L (mm)	ESD	No.
GP 2/H-ST	48 pcs	3000		3 842 537 888
GP 2/H-KST	48 pcs	3000		3 842 537 889
Material:		H-KST: PA H-ST: Steel; corrosion-resistant		



- Cross connector QV 2 for connecting two section profiles
- For defining the track width

Cross connector QV 2	b (mm)	No.
	160...1200	3 842 994 635 / b

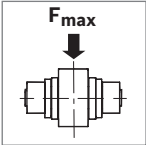
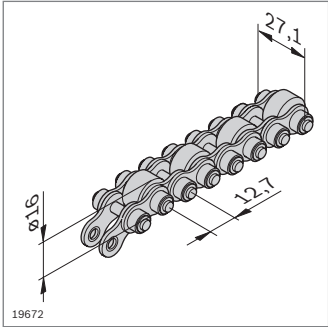
Material: Aluminum, natural-colored, anodized
Fastening material: Steel
Scope of delivery: Strut profile 45x60, 2 x QV mounting kit (p. 3-62)



- Cross connector QV 2-H for connecting two section profiles
- For heavy applications
- For defining the track width

Cross connector QV 2-H	b (mm)	No.
	160...1200	3 842 993 052 / b

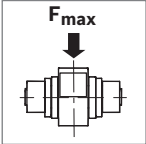
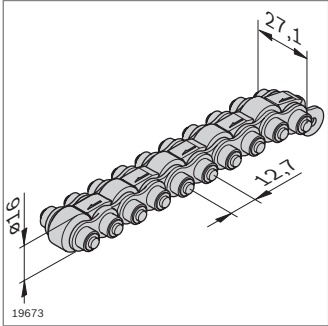
Material: Aluminum, natural-colored, anodized
Fastening material: Steel
Scope of delivery: Strut profile 45x60, 4 x QV mounting kit (p. 3-62)



Accumulation roller chain	F _{max} (kg/cm)	L (mm)	No.
Support wheel: PA 12	1.5	12000	3 842 523 918
Support wheel: Steel	2.0 ¹⁾ /1.5 ²⁾	12000	3 842 530 864

1) When using glide profile GP 2/ST
2) When using glide profile GP 2

Material: Accumulation roller chain: Steel
Support wheel: see ordering table
Scope of delivery: Incl. Chain lock
Accessories: Additional chain lock (**3 842 530 417**)



Accumulation roller chain with small parts trap	F _{max} (kg/cm)	L (mm)	No.
Support wheel: PA 12	1.5	12000	3 842 536 268
Support wheel: Steel	2.0 ¹⁾ /1.5 ²⁾	12000	3 842 536 270

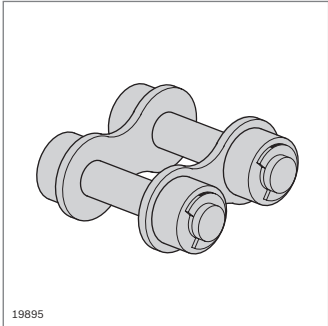
1) When using glide profile GP 2/ST
2) When using glide profile GP 2

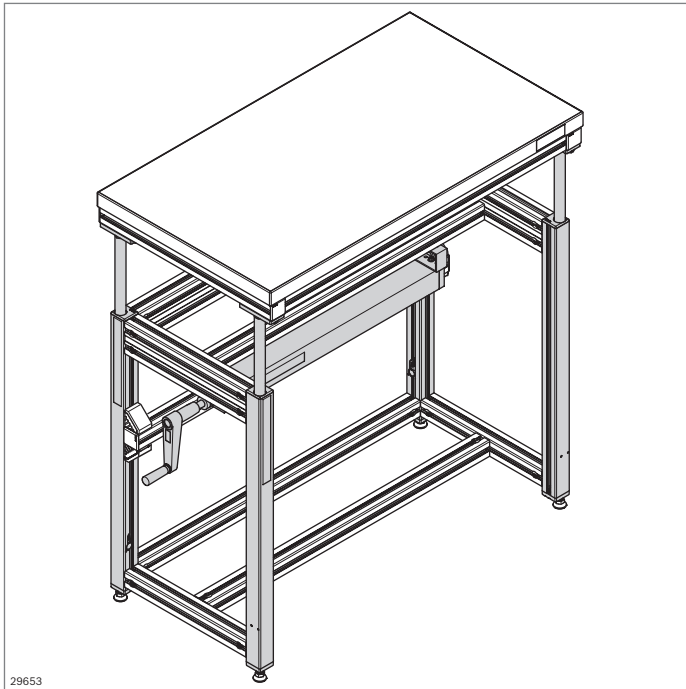
Material: Accumulation roller chain: Steel
Support wheel: see ordering table
Scope of delivery: Incl. Chain lock
Accessories: Additional chain lock (**3 842 530 417**)

- Chain lock for extending accumulation roller chains

Chain lock	No.
	3 842 530 417

Material: Steel





29653

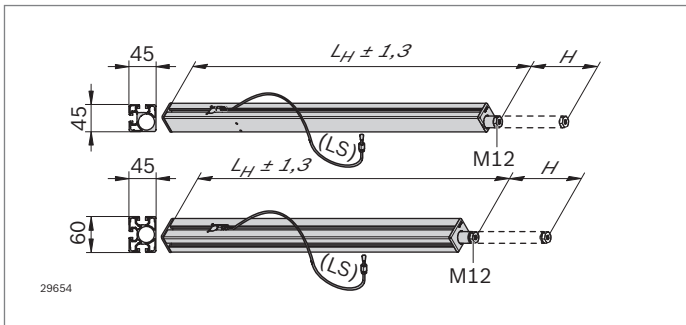
Components for height adjustment 45x45 and 45x60



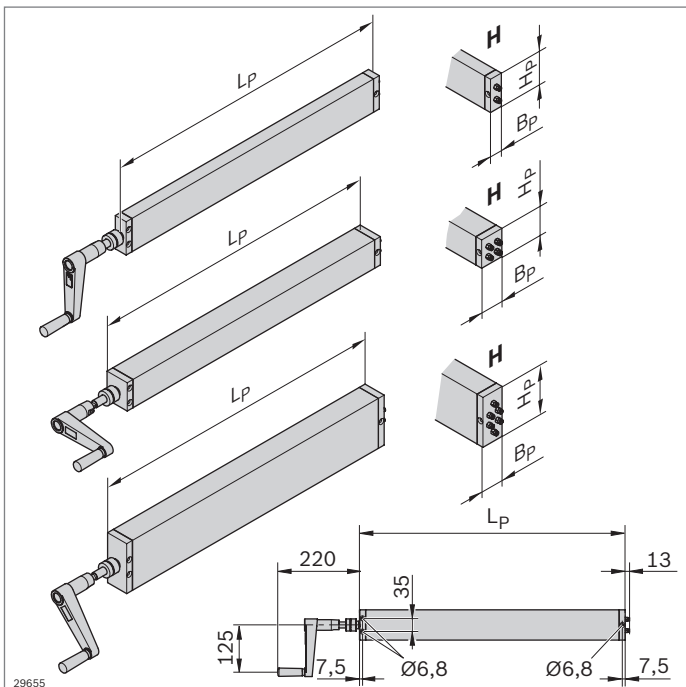
- ▶ Infinitely variable hydraulic height adjustment with a crank handle, e.g. for work benches, tables or frames
- ▶ Max. bearing load per lifting module 800 N
- ▶ Maximum lift 400 mm
- ▶ Simplest mounting system due to use of hydraulic hoses with quick-release couplings
- ▶ Variable or fixed lengths for lifting module and hoses
- ▶ Can be used for the implementation of EN 1570-1, taking other measures for integration into products into consideration

Optional accessories:

- ▶ Connection elements, e.g. bracket (p. 3-18),
- ▶ Leveling foot, e.g. **3 842 529 025** (p. 6-4)



29654



29655

Lifting module	L _H (mm)	L _S (mm)	No.
45x45 Adaptable	720 ... 2000 ¹⁾	1000 ... 4000 ²⁾	Set 3 842 994 000/L_H/L_S
Standard	770	2500	Set 3 842 552 131
45x60 Adaptable	720 ... 2000 ¹⁾	1000 ... 4000 ²⁾	Set 3 842 994 001/L_H/L_S
Standard	770	2500	Set 3 842 552 132

¹⁾ Lifting module length (L_H) can be ordered in 10 mm increments

²⁾ Hose length (L_S) can be ordered in 1000, 1500, 2000, 2500, 3000, 4000 mm

Scope of delivery: 2 x lifting module with integrated hydraulic cylinder incl. hose (bend radius min. 50 mm) and quick-release coupling; 2 x cover cap

Condition on delivery: Assembled, filled with food-safe HPL oil of class NSF H1

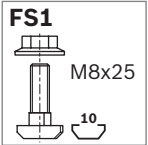
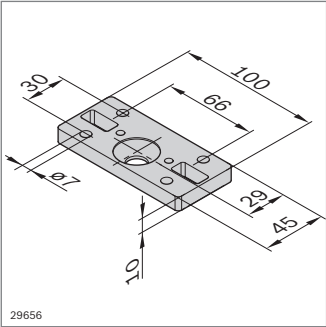
Pump and drive

- ▶ Synchronous activation of 2, 4 or 6 lifting modules
- ▶ Can be mounted in any position
- ▶ Incl. Friction clutch for load control
- ▶ 4 mm stroke per rotation
- ▶ Crank handle, retractable

Pump	Max. Load (N)	No. Lift module	L _P (mm)	B _P (mm)	H _P (mm)	No.
	1600	2	702.5 ^{±2}	30	80	3 842 552 133
	3200	4	702.5 ^{±2}	56	68	3 842 552 134
	3200	6	714.5 ^{±2}	60	120	3 842 552 135

Scope of delivery: Pump incl. hand crank and quick-release coupling

Condition on delivery: Assembled, filled with food-safe HPL oil of class NSF H1

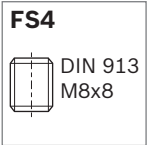
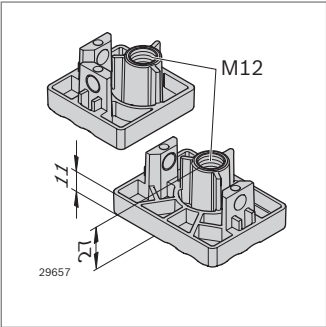


Connecting plate

- For mounting the lifting module on a foot, profile or table top

Connecting plate	No.	FS
	Set 3 842 552 176	4xFS1, 2xFS2, 4xFS3

Material: Aluminum
Fastening material: Steel; galvanized
Scope of delivery: 2 x connecting plate; incl. fastening material (FS)

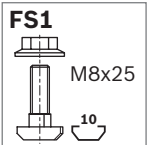
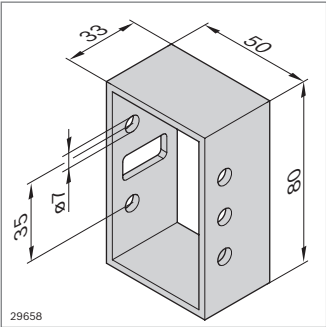


Adapter plate

- For mounting a leveling foot (e.g. **3 842 529 025**) to the lifting module
- Max. screw-in depth of the spindle with $L_H = 720 \text{ mm}$: ~ 50 mm

Adapter plate	No.	FS
45x45	Set 3 842 552 174	4xFS4
45x60	Set 3 842 552 175	4xFS4

Material: Diecast zinc
Fastening material: Steel; galvanized,
Scope of delivery: 2 x adapter plate; incl. fastening material (FS)

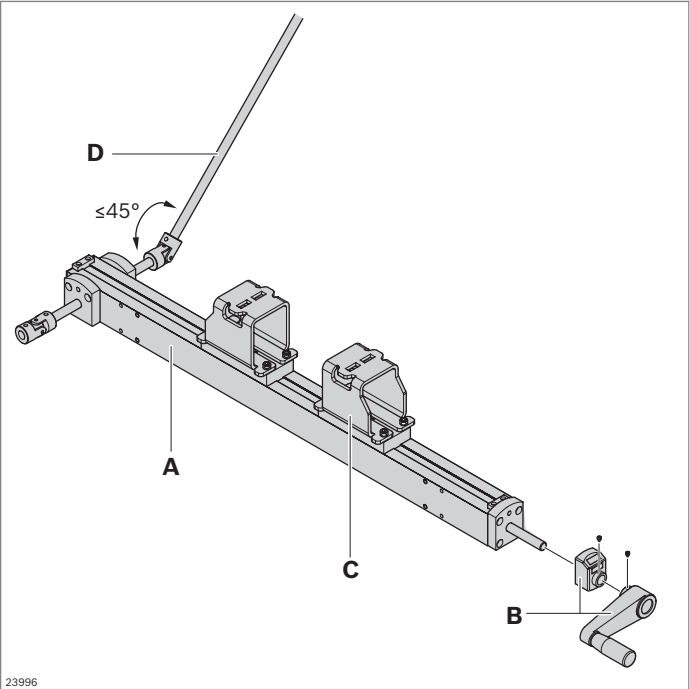


Connection adapter

- For mounting the pump on a profile or a table top
- Independent of the pump size, mounting requires 3 countersunk screws (ISO 10642, M6, 8.8) in 40 mm (pump for 2 lifting modules) or 70 mm (pump for 4 or 6 lifting modules)

Connection adapter	No.	FS
	Set 3 842 552 177	2xFS1

Material: Aluminum
Fastening material: Steel; galvanized
Scope of delivery: 2 x connection adapter; incl. fastening material (FS)



23996

Adjustment unit

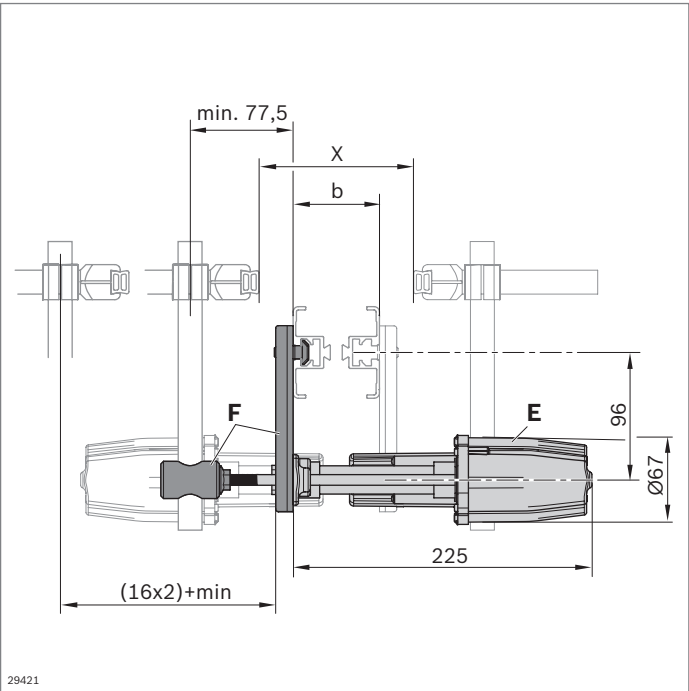
- Can be used for parallel width adjustment

Adjustment unit (A)	No.
	3 842 547 971

Crank handle (B)	No.
	3 842 547 990

Connection kit (C)	No.
	3 842 547 729

Profile rail D12 (D)	L (mm)	No.
1 pc	200 ... 3000	3 842 993 306 / L
6 pcs	3000	3 842 533 841



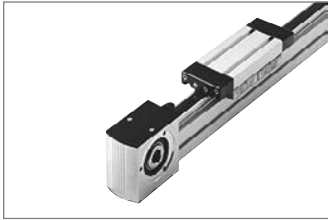
29421

- Can be used for automatic (pneumatic) adjustment of lateral guides
- See also VarioFlow *plus* catalog (**R999000401**)

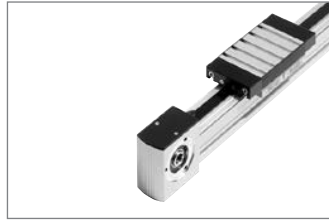
Adjustment unit (E)	No.
	3 842 547 707

Assembly kit (F)	No.
	3 842 547 718

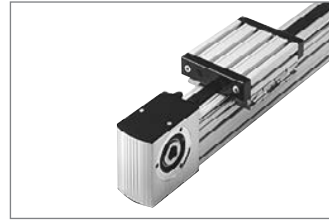
Linear guides



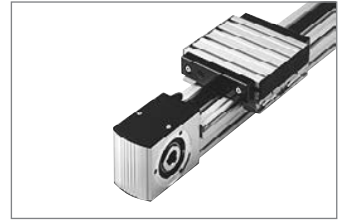
Cam roller guide LF6S
(p. 13-6)



Cam roller guide LF6C
(p. 13-11)



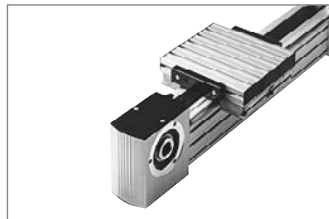
Cam roller guide LF12S
(p. 13-16)



Cam roller guide LF12C
(p. 13-23)



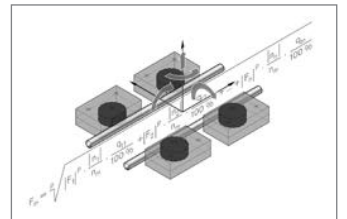
Cam roller guide LF20S
(p. 13-30)



Cam roller guide LF20C
(p. 13-37)



Plug-in shafts, synchronous
shafts (p. 13-47)

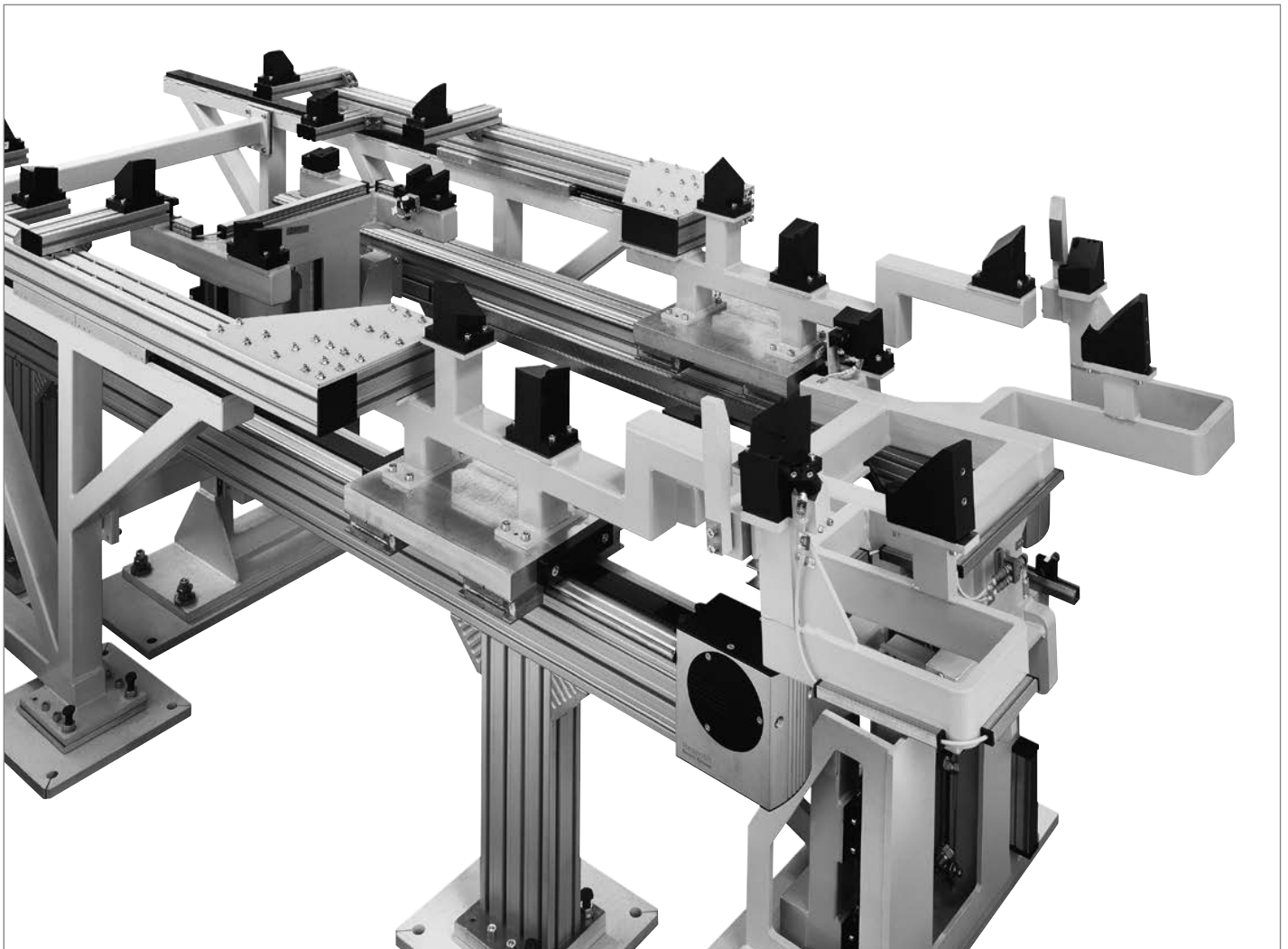


Design (p. 13-49)

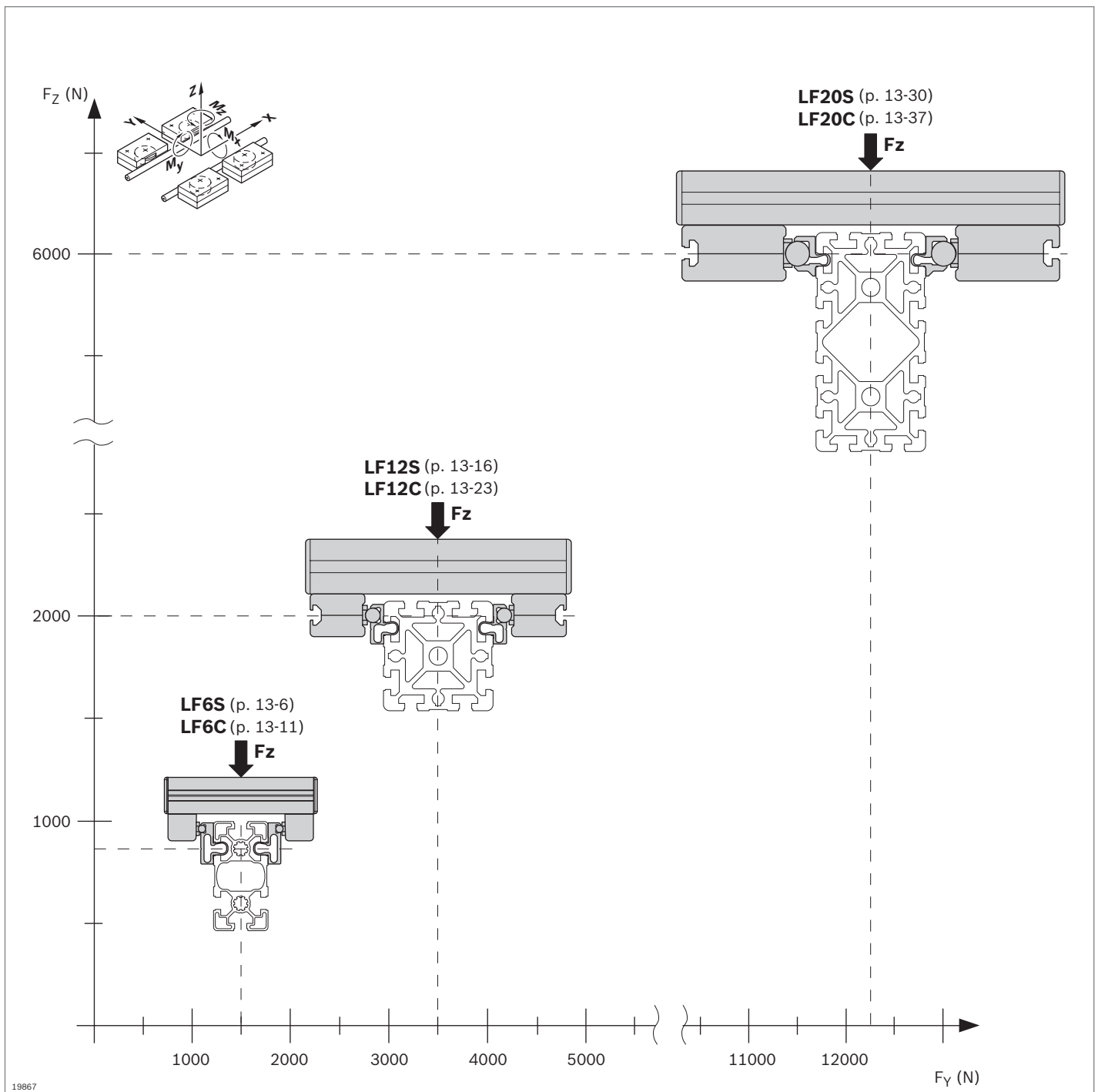


Linear guides

- ▶ For constructing linear guides based on cam roller guides
- ▶ Cam roller guides are suitable for applications with high speeds and medium loads, in particular for the construction of handling equipment, feed systems, guides in work machines, and many other applications
- ▶ Fully pre-assembled in any required length or as individual components for assembly on site
- ▶ Without drive or with toothed belt drive for attaching gears and motors

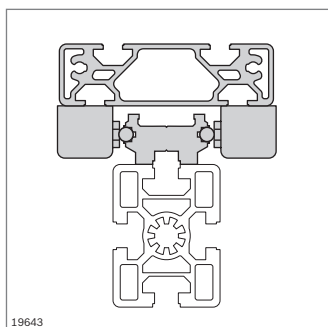


Linear guides – sizes, designs, and loads



19867

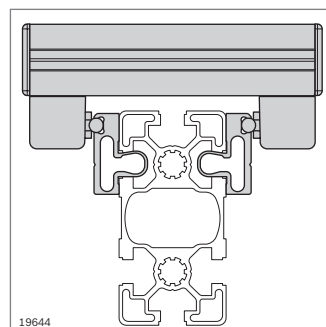
13



19643

LF...S

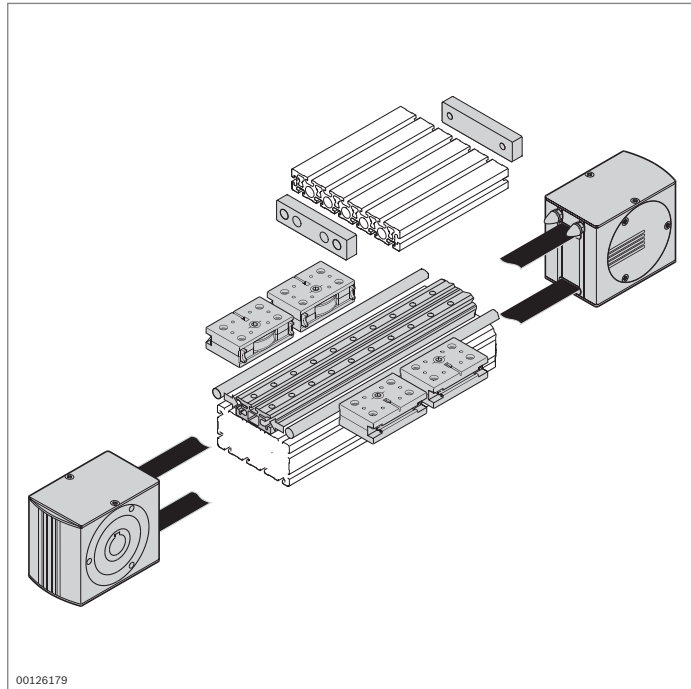
- ▶ Compact construction
- ▶ Fixed track width
- ▶ $v_{\max} = 5 \text{ m/s}$



19644

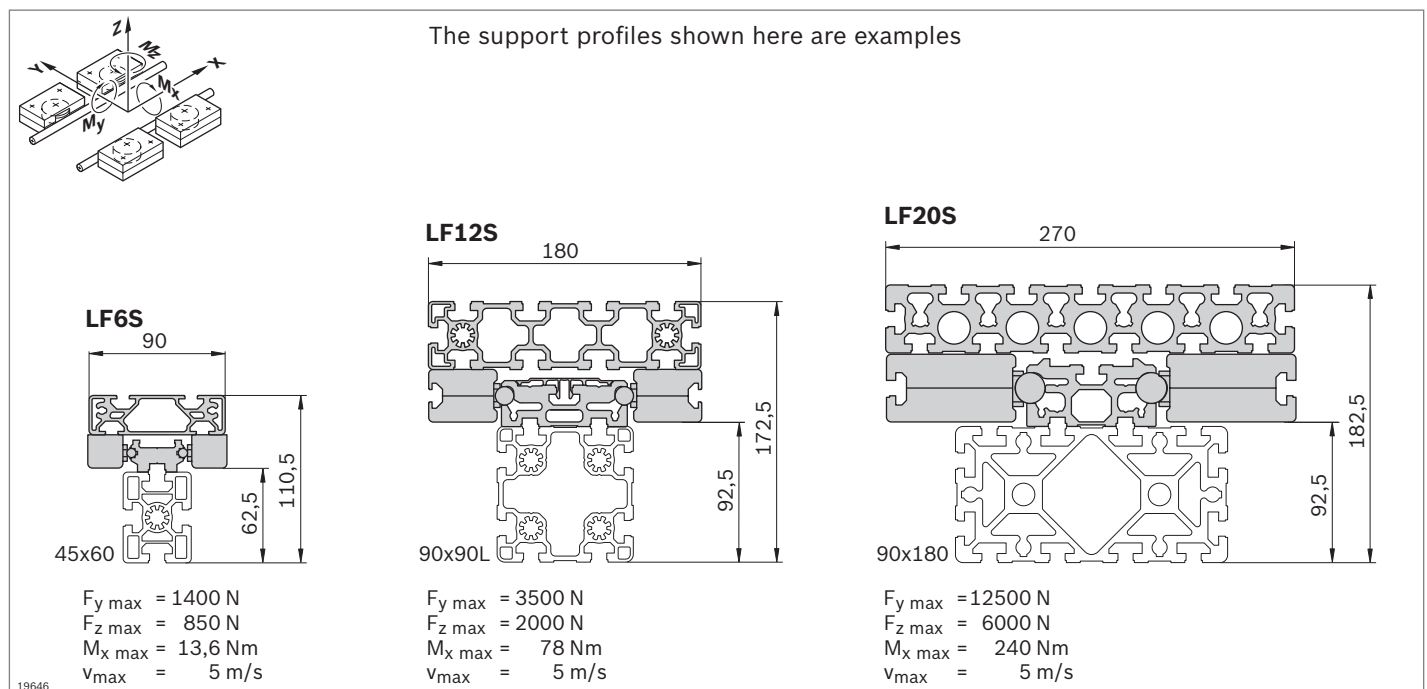
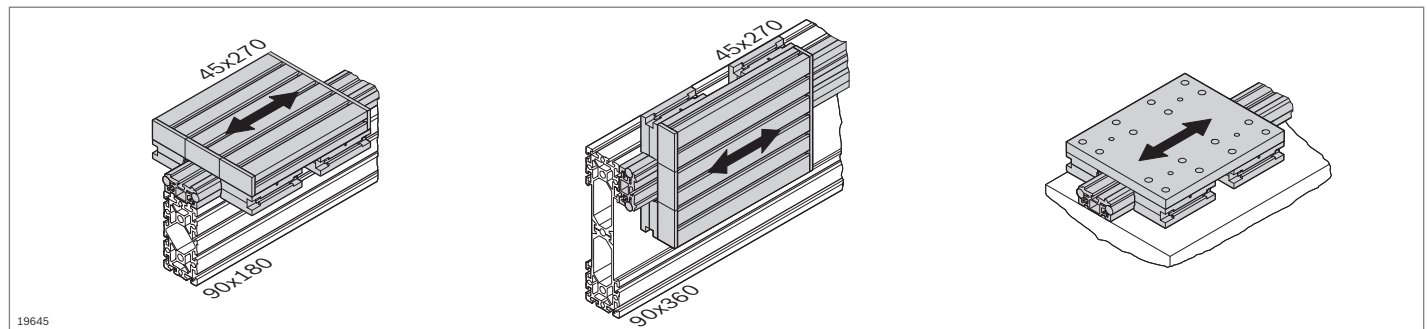
LF...C

- ▶ Freely selectable track width for greater torque absorption
- ▶ $v_{\max} = 5 \text{ m/s}$



Cam roller guides LF...S

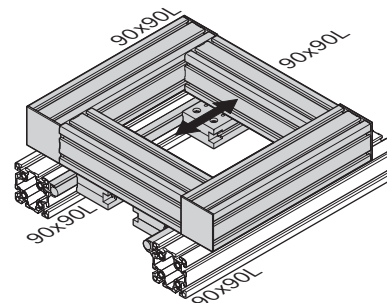
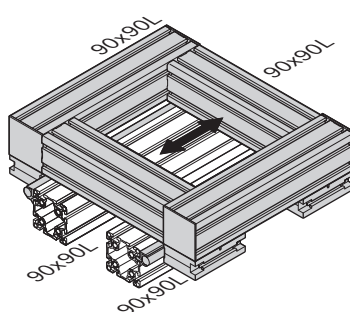
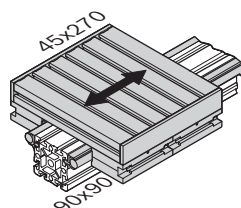
- ▶ Cam roller guide LF...S with fixed track widths
- ▶ Guide rail made of aluminum with hardened and polished VA guide rods
- ▶ Simple mounting on strut profile or directly on flat surface, e.g. on a machine
- ▶ High precision, dimensional stability and torsional rigidity
- ▶ Lighter and cheaper than steel guides
- ▶ Light trolley with good torsional rigidity
- ▶ Freely selectable trolley lengths
- ▶ Freely selectable stroke lengths possible
- ▶ High permissible speed



Cam roller guides LF...C

- ▶ Cam roller guide LF...C for free choice of track widths and large track widths
- ▶ Clamping profile made of aluminum with hardened and polished VA guide rods
- ▶ Easy assembly through clipping the clamping profile into the slots of any Rexroth profile with 10 mm slot
- ▶ Optimally adjustable to different loads
- ▶ Greater torque absorption due to a C construction and free choice of track width
- ▶ Light trolley with good torsional rigidity
- ▶ Freely selectable trolley lengths and widths
- ▶ Freely selectable stroke lengths possible
- ▶ High permissible speed

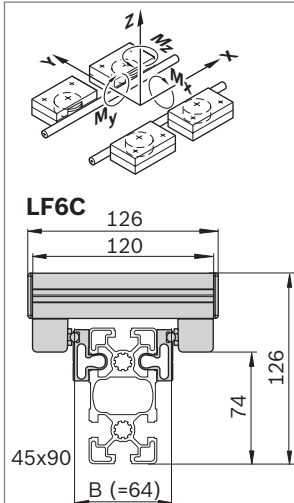
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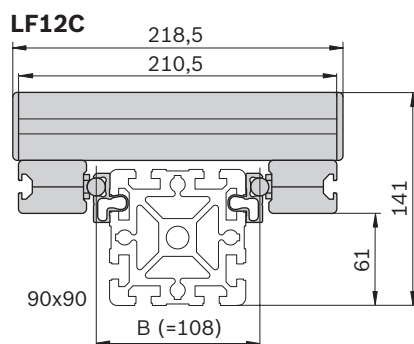
19874

13

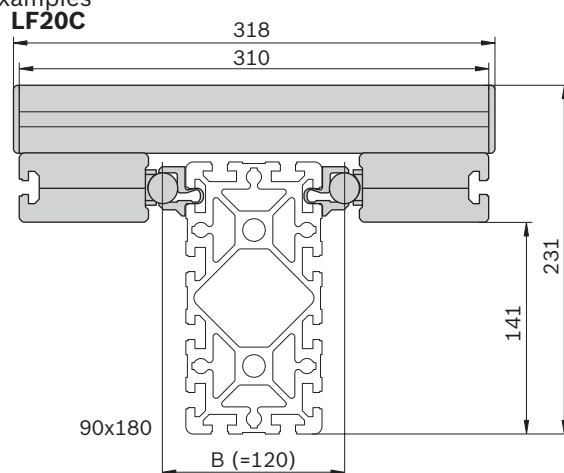
The support profiles shown here are examples



$F_y \text{ max} = 1400 \text{ N}$
 $F_z \text{ max} = 850 \text{ N}$
 $M_x \text{ max} = 0,4 \times B \text{ Nm}$
 $M_x \text{ max} = 25,6 \text{ Nm (B=64mm)}$
 $v_{\text{max}} = 5 \text{ m/s}$

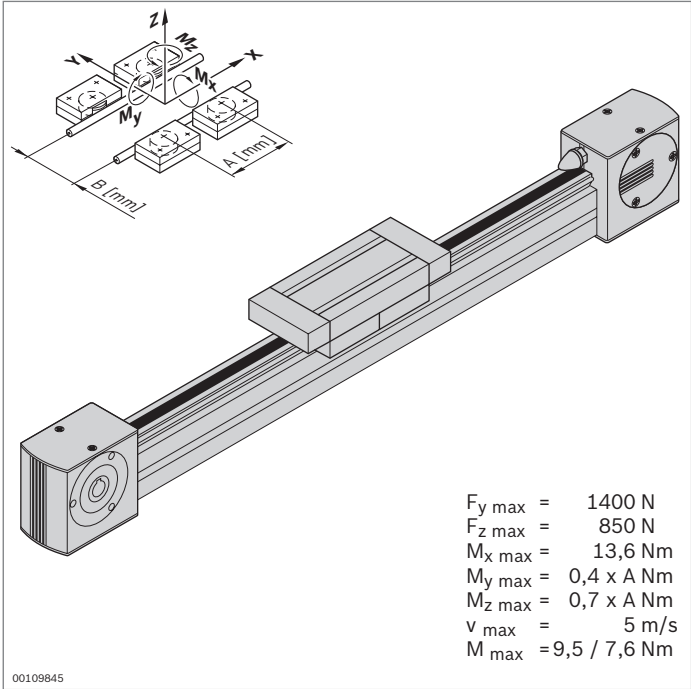


$F_y \text{ max} = 3500 \text{ N}$
 $F_z \text{ max} = 2000 \text{ N}$
 $M_x \text{ max} = 1,0 \times B \text{ Nm}$
 $M_x \text{ max} = 108 \text{ Nm (B=108mm)}$
 $v_{\text{max}} = 5 \text{ m/s}$



$F_y \text{ max} = 12500 \text{ N}$
 $F_z \text{ max} = 6000 \text{ N}$
 $M_x \text{ max} = 3,0 \times B \text{ Nm}$
 $M_x \text{ max} = 360 \text{ Nm (B=120 mm)}$
 $v_{\text{max}} = 5 \text{ m/s}$

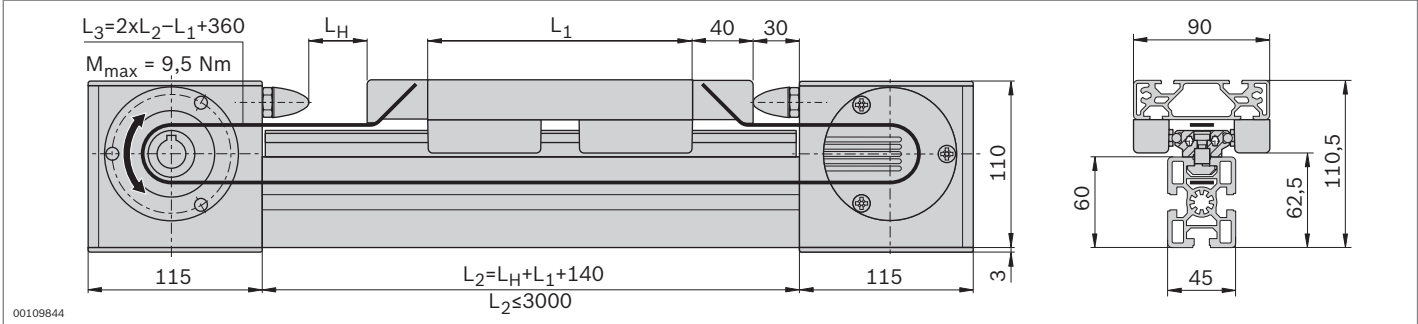
19647



Cam roller guide LF6S – complete axis



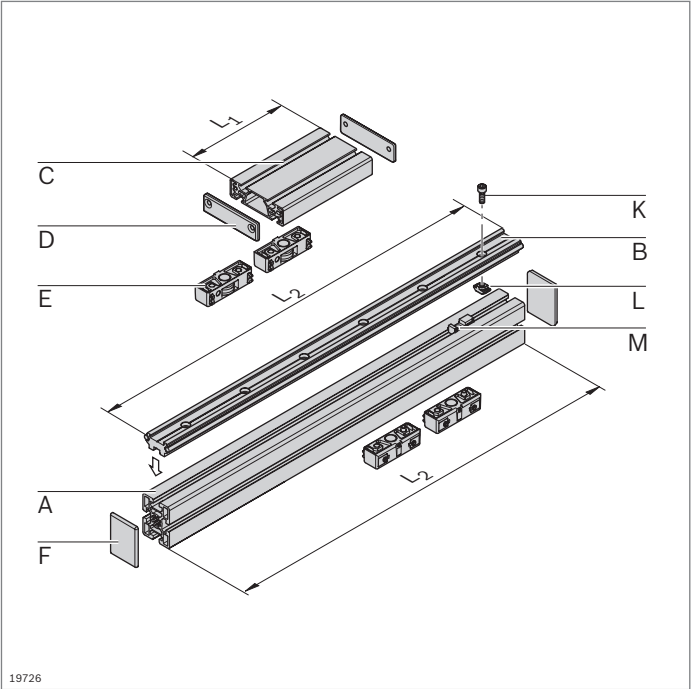
- Fully assembled cam roller guide
- Stroke and trolley length can be individually selected
- Rail profile screwed onto strut profile 45x60
- Incl. toothed belt drive; additional notes on the drive concept (p. 13-44)



Technical data

See pages 13-57 for notes on layout and drive

Complete axis LF6S	L_H / L_1 (mm)	No.
	$L_1 + 80 \leq L_H \leq 2710$	3 842 998 495 / L_H / L_1
	$150 \leq L_1 \leq 1000$	



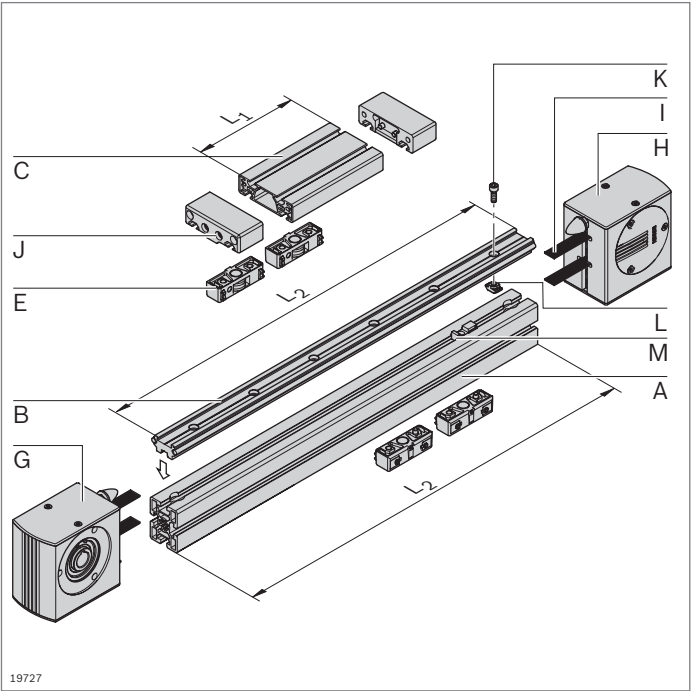
Cam roller guide LF6S – components

- Components for the individual assembly of cam roller guides, with or without drive

Parts list for cam roller guide LF6S without drive

Component	No.	Pcs	Page
A Profile 45x60	3 842 990 570 / L₂	1	2-40
B Guide profile LF6S	3 842 993 966 / L₂	1	13-8
C Trolley profile LF6S	3 842 993 061 / L₁	1	13-8
D Cover cap LF6S	3 842 535 645	2	13-9
E Guide bearing LF6	3 842 535 662	4	13-8
F Cover cap 45x60	3 842 548 755	2	2-40
K Cylinder bolt M6x20 – DIN 7984		n ¹⁾	
L T-nut M6, 10 mm slot	3 842 530 285	n ¹⁾	3-4
M Sliding block	3 842 146 877	n ¹⁾	13-8

1) For identification see page 13-8

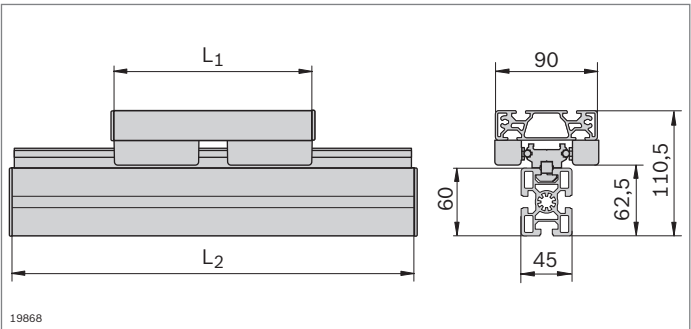


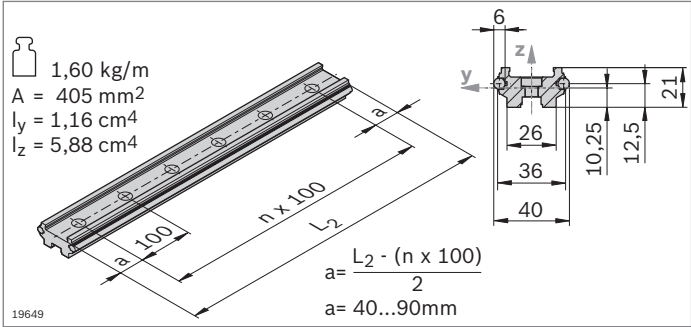
Parts list for cam roller guide LF6S with drive

Component	No.	Pcs	Page
A Profile 45x60 LF LF	3 842 993 085 / L₂	1	2-40
B Guide profile LF6S	3 842 993 966 / L₂	1	13-8
C Trolley profile LF6S	3 842 993 061 / L₁	1	13-8
E Guide bearing LF6	3 842 535 662	4	13-8
G Drive head LF6S	3 842 526 410	1	13-9
H Return head LF6S	3 842 526 411	1	13-10
I Toothed belt LF6S	3 842 994 659 / L₃¹⁾	1	13-10
J Belt connector LF6S	3 842 535 682	2	13-10
K Cylinder bolt M6x20 – DIN 7984		n ²⁾	
L T-nut M6, 10 mm slot	3 842 530 285	n ²⁾	3-4
M Sliding block	3 842 146 877	n ²⁾	13-8

1) $L_3 = 2 \times L_2 - L_1 + 360$

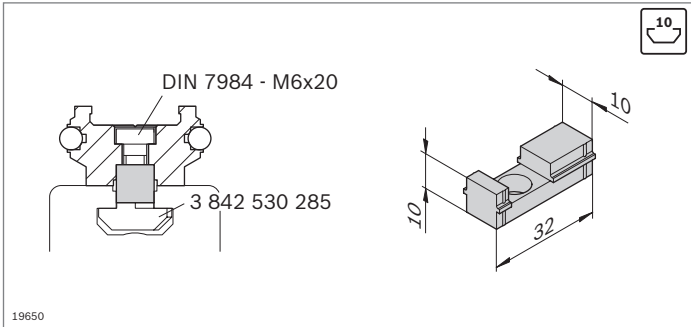
2) For identification see page 13-8





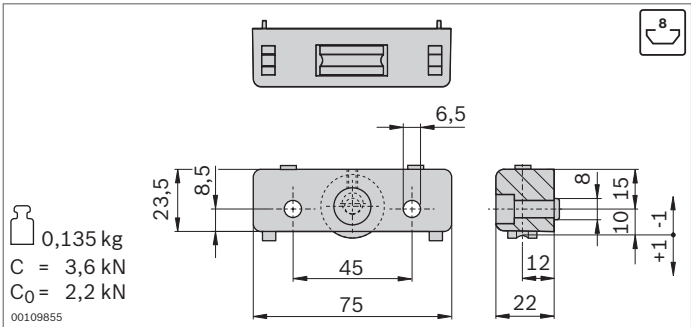
- ▶ Guide profile LF6S with integrated guide rods
- ▶ Installation on MGE strut profiles with 10 mm slot or directly on a flat surface

Guide profile	L ₂ (mm)	No.
LF6S	1 pc 150 ... 3000	3 842 993 966 / L₂
	10 pcs 3000	3 842 539 412
Material:	Guide profile: Aluminum; anodized Guide rod: Solid shaft VA, induction hardened, polished	
Condition on delivery:	Ungreased guide rods; greasing according to assembly instructions 3 842 527 226	
Required accessories:	Cylinder bolt DIN 7984 – M6x20 T-nut M6, 10 mm slot 3 842 530 285 (p. 3-4)	



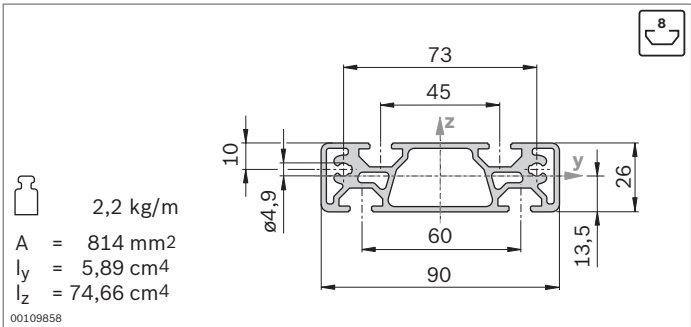
- ▶ Sliding block as a centering aid for mounting the guide profile in a 10 mm profile slot

Sliding block	No.
	50 3 842 146 877
Material:	PA; black



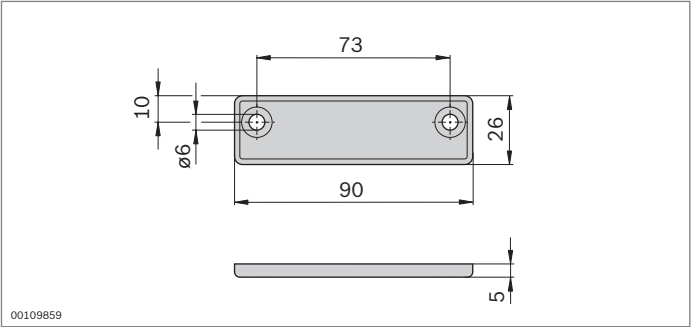
- ▶ Guide bearing for trolley construction
- ▶ Guiding via guide rod
- ▶ Cam rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free cam roller adjustment via eccentric bolts

Guide bearing	No.	FS
LF6	2 3 842 535 662	2xFS1
Material:	Housing: Diecast aluminum Cam roller: Steel, hardened, polished	
Scope of delivery:	Incl. fastening material (FS)	
Condition on delivery:	Lubricating felts ungreased; greasing according to assembly instructions 3 842 527 226	



- ▶ Trolley profile for the construction of trolley LF6S

Trolley profile	L ₁ (mm)	No.
LF6S	150 ... 3000	3 842 993 061 / L₁
Material:	Aluminum; anodized	

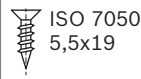


- Cover cap for trolley profile LF6S
- For use on trolleys which are not driven by a toothed belt

Cover cap		No.	FS
LF6S		2	3 842 535 645 2xFS2

Material: PA; black

FS2

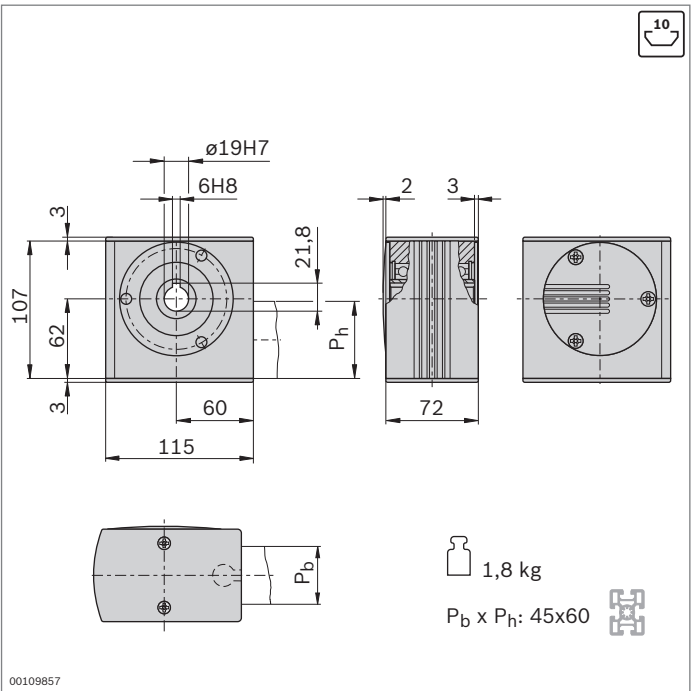


- Drive head for transferring drive torque to a toothed belt
- For direct mounting of a motor or (in conjunction with a plug-in shaft) for mounting a hollow shaft gear or a coupling (p. 13-46)
- Mounted with longitudinal end connector directly on profile 45x60
- Profile finishing: LF blind hole drilling for longitudinal end connector

Drive head	No.	FS
LF6S	3 842 526 410	2xFS3, FS4

Material: Aluminum; anodized
Hollow shaft: Steel; galvanized
Cover caps: PA; black

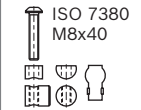
Scope of delivery: Incl. Fastening material (FS), cover caps



1,8 kg

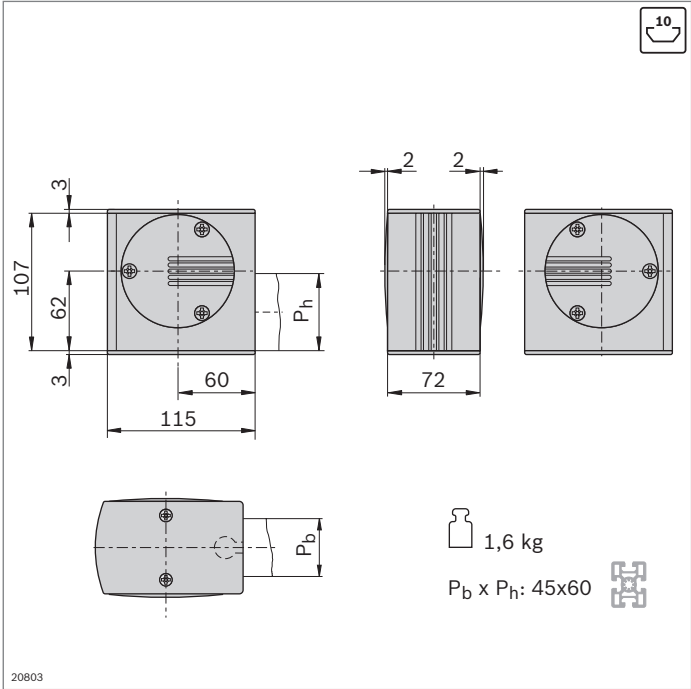
P_b x P_h: 45x60

FS3



FS4



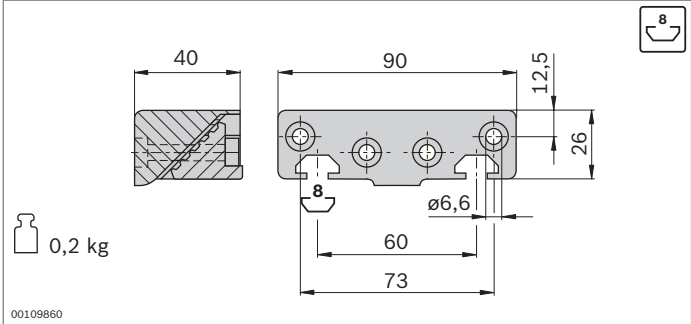
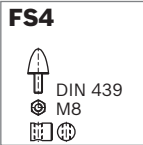


- ▶ Return head for tensioning the toothed belt and changing its direction
- ▶ Mounted directly on profile using longitudinal end connector
- ▶ Profile finishing: LF blind hole drilling for longitudinal end connector

Return head	No.	FS
LF6S	3 842 526 411	2xFS3, FS4

Material: Aluminum; anodized
Hollow shaft: Steel; galvanized
Cover caps: PA; black

Scope of delivery: Incl. Fastening material (FS), cover caps

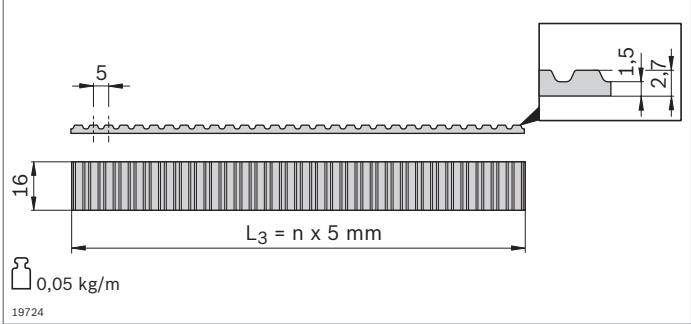
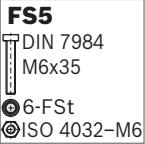


- ▶ Belt connector for fixing the toothed belt on the front of the trolley
- ▶ All connecting parts for mounting on the trolley profile LF6S are included

Belt connector	No.	FS
LF6S	2 3 842 535 682	2xFS5, 2xFS6

Material: Aluminum, painted black

Scope of delivery: Incl. fastening material (FS)

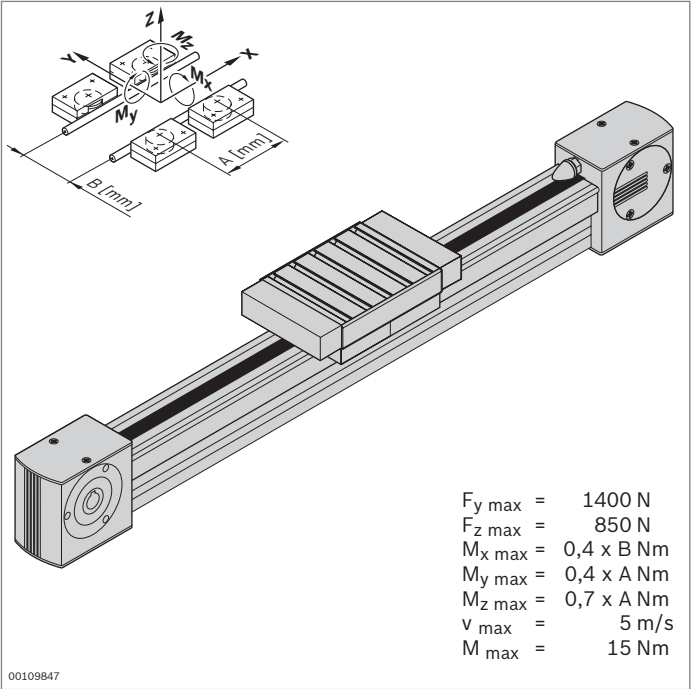


- ▶ Toothed belt as a trolley drive
- ▶ Pitch: AT5

Toothed belt	L ₃ (mm)	No.
LF6S	300 ... 50000	3 842 994 659 / L ₃ ¹⁾
	50000	3 842 513 646

¹⁾ L₃ = 2xL₂ - L₁ + 360

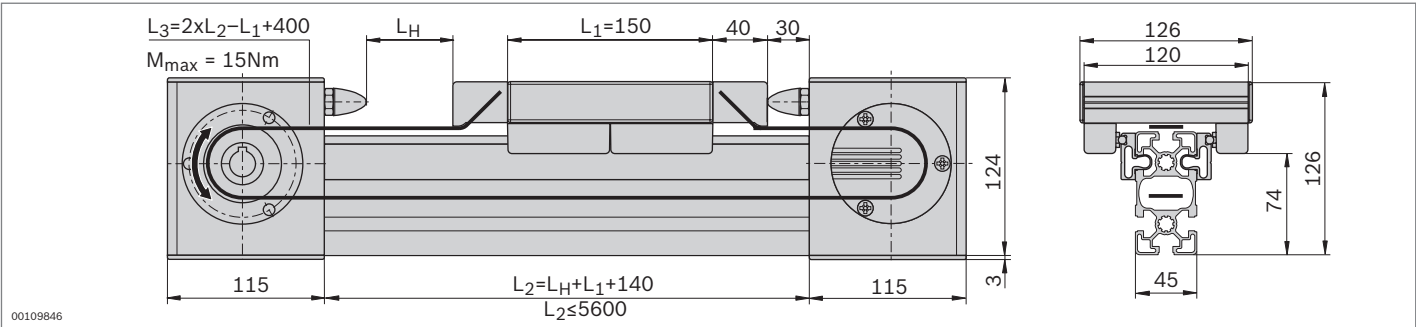
Material: PU with embedded steel wires



Cam roller guide LF6C – complete axis



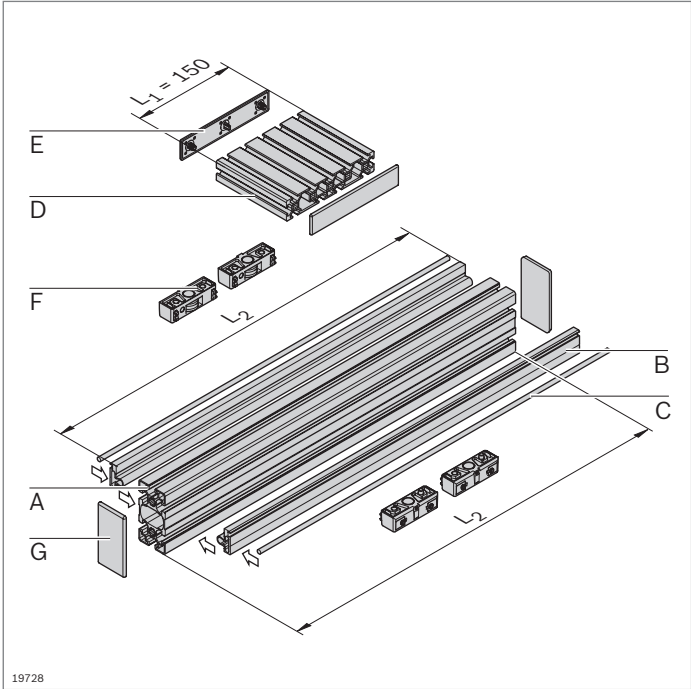
- Fully assembled cam roller guide
- Stroke can be individually selected
- Clamping profile clipped into strut profile 45x90L
- Incl. toothed belt drive; additional notes on the drive concept (p. 13-44)



Technical data

For notes on layout and drive, see page 13-50

Complete axis	L_H (mm)	No.
LF6C	50 ... 5310	3 842 998 496 / L_H

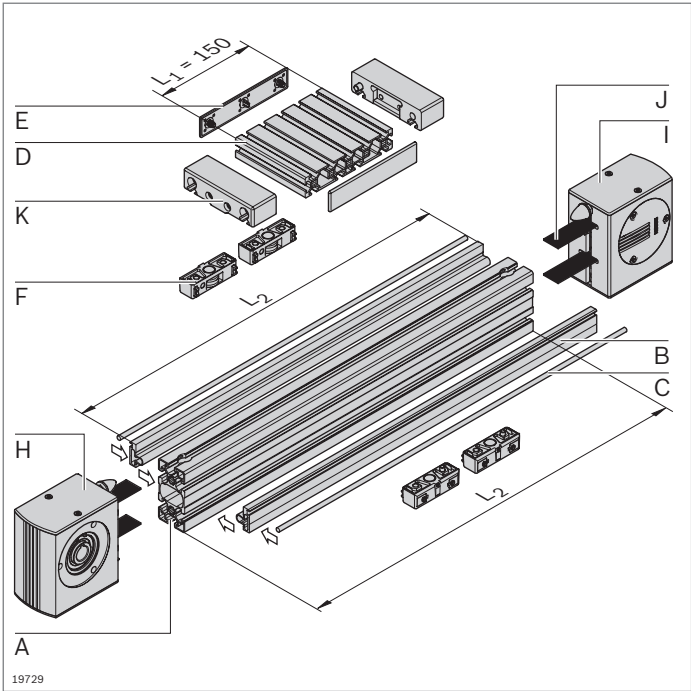


Cam roller guide LF6C – components

- Components for the individual assembly of cam roller guides, with or without drive

Parts list for cam roller guide LF6C without drive

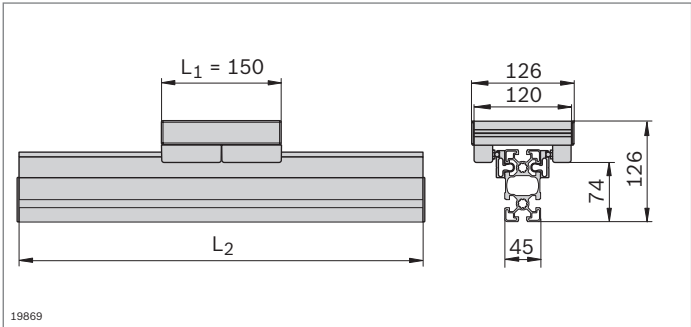
Component	No.	Pcs	Page
A Profile 45x90L 	3 842 992 432 / L₂	1	2-41
B Clamping profile LF6C	3 842 992 925 / L₂	2	13-13
C Guide rod LF6	3 842 993 967 / L₂	2	13-13
D Trolley profile LF6C	3 842 993 952 / 120 mm	1	13-13
E Cover cap LF6C	3 842 539 120	2	13-14
F Guide bearing LF6	3 842 535 662	4	13-13
G Cover cap 45x90	3 842 548 757	2	2-41

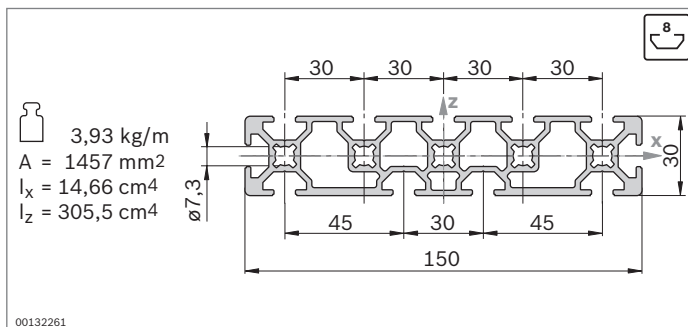


Parts list for cam roller guide LF6C with drive

Component	No.	Pcs	Page
A Profile 45x90L LF6C  LF	3 842 993 084 / L₂	1	2-41
B Clamping profile LF6C	3 842 992 925 / L₂	2	13-13
C Guide rod LF	3 842 993 967 / L₂	2	13-13
D Trolley profile LF6C	3 842 993 952 / 120 mm	1	13-13
E Cover cap LF6C	3 842 539 120	2	13-14
F Guide bearing LF6	3 842 535 662	4	13-13
H Drive head LF6C	3 842 526 416	1	13-14
I Return head LF6C	3 842 526 417	1	13-15
J Toothed belt LF6C	3 842 994 711 / L₃¹⁾	1	13-15
K Belt connector LF6C	3 842 535 681	2	13-15

¹⁾ L₃ = 2xL₂ - L₁ + 400

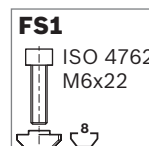




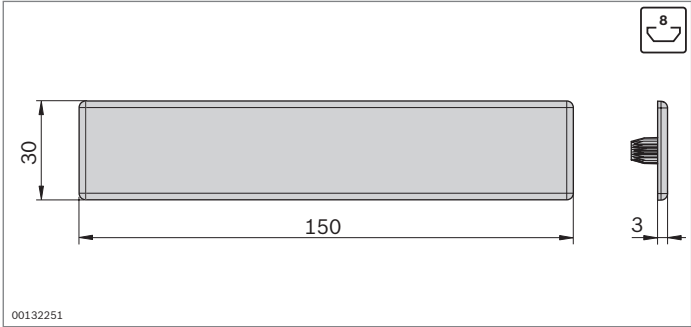
- ▶ Guide bearing for trolley construction
- ▶ Guiding via guide rod
- ▶ Cam rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free cam roller adjustment via eccentric bolts

Guide bearing		No.	FS
LF6	2	3 842 535 662	2xFS1

Material:	Housing: Diecast aluminum Cam roller: Steel, hardened, polished
Scope of delivery:	Incl. fastening material (FS)
Condition on delivery:	Lubricating felts ungreased; greasing according to assembly instructions
	3 842 527 226

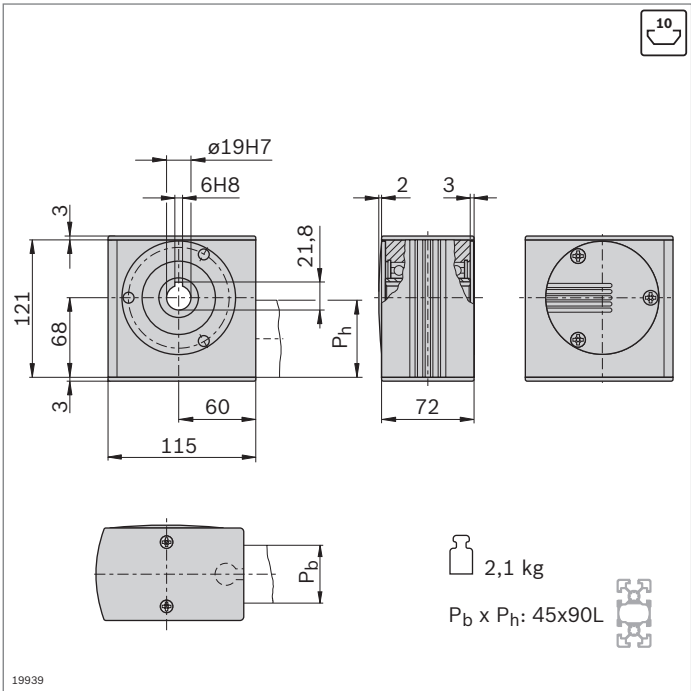


- | Trolley profile | L (mm) | No. |
|-----------------|--------------------|-------------------|
| LF6C | 150 ... 3000 | 3 842 993 952 / L |
| Material: | Aluminum; anodized | |



- ▶ Cover cap for trolley profile LF6C
- ▶ For use on trolleys which are not driven by a toothed belt

Cover cap	No.
LF6C	2 3 842 539 120
Material:	PA; black

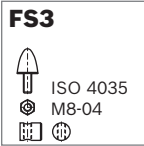


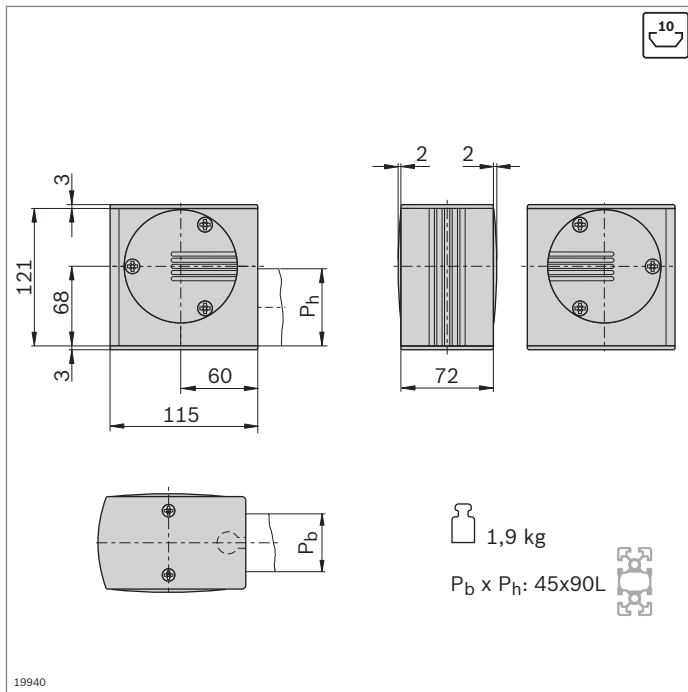
- ▶ Drive head for transferring drive torque to a toothed belt
- ▶ For direct mounting of a motor or (in conjunction with a plug-in shaft) for mounting a hollow shaft gear or a coupling (p. 13-46)
- ▶ Mounted directly on profile 45x90L using longitudinal end connector
- ▶ Profile finishing: LF blind hole drilling for longitudinal end connector

Drive head	No.	FS
LF6C	3 842 526 416	2xFS2, FS3

Material: Aluminum; anodized
Hollow shaft: Steel; galvanized
Cover caps: PA; black

Scope of delivery: Incl. Fastening material (FS), cover caps



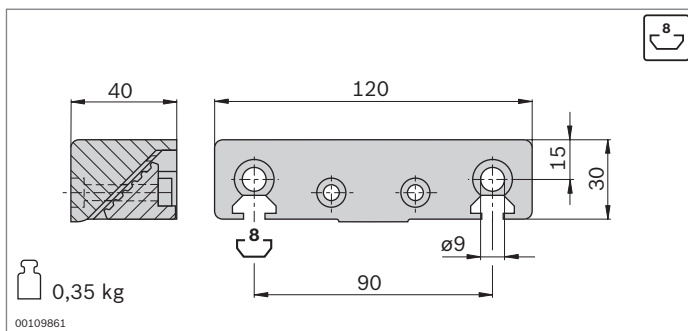
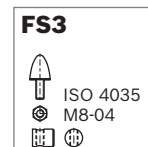
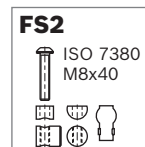


- Return head for tensioning the toothed belt and changing its direction
- Mounted directly on profile 45x90L using longitudinal end connector
- Profile finishing: LF blind hole drilling for longitudinal end connector

Return head	No.	FS
LF6C	3 842 526 417	2xFS2, FS3

Material: Aluminum; anodized
Hollow shaft: Steel; galvanized
Cover caps: PA; black

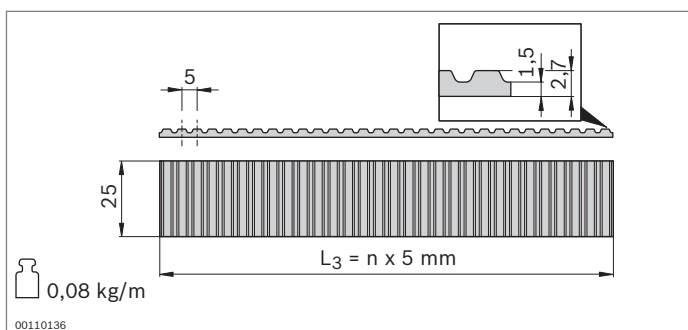
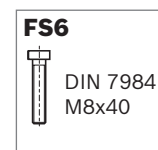
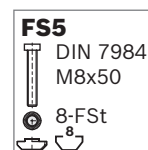
Scope of delivery: Incl. Fastening material (FS), cover caps



- Belt connector for fastening the toothed belt to the trolley slot
- All connecting parts for mounting on the trolley profile LF6C are included

Belt connector	No.	FS
LF6C	2 3 842 535 681	2xFS4, 2xFS5, 2xFS6

Material: Aluminum, painted black
Scope of delivery: Incl. fastening material (FS)

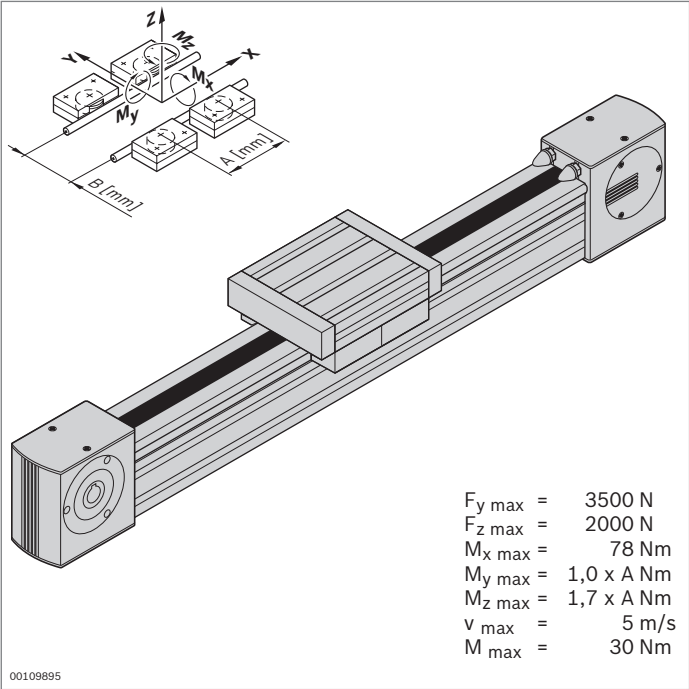


- Toothed belt as a trolley drive
- Pitch: AT5

Toothed belt	L ₃ (mm)	No.
LF6C	300 ... 50000	3 842 994 711 / L₃¹⁾
	50000	3 842 518 856

¹⁾ L₃ = 2xL₂ - L₁ + 400

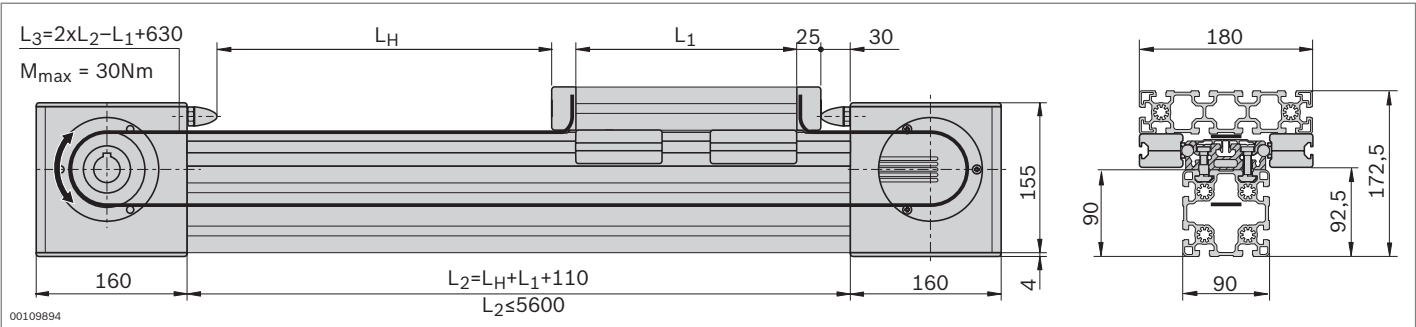
Material: PU with embedded steel wires



Cam roller guide LF12S – complete axis



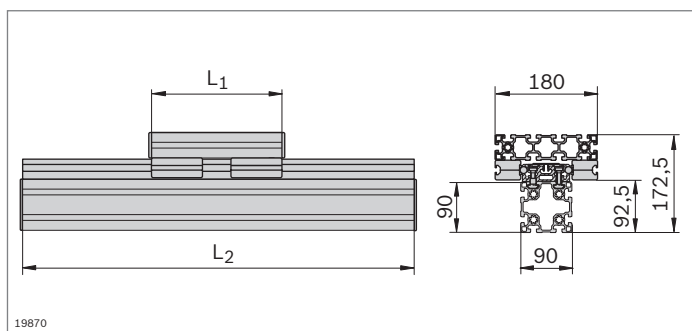
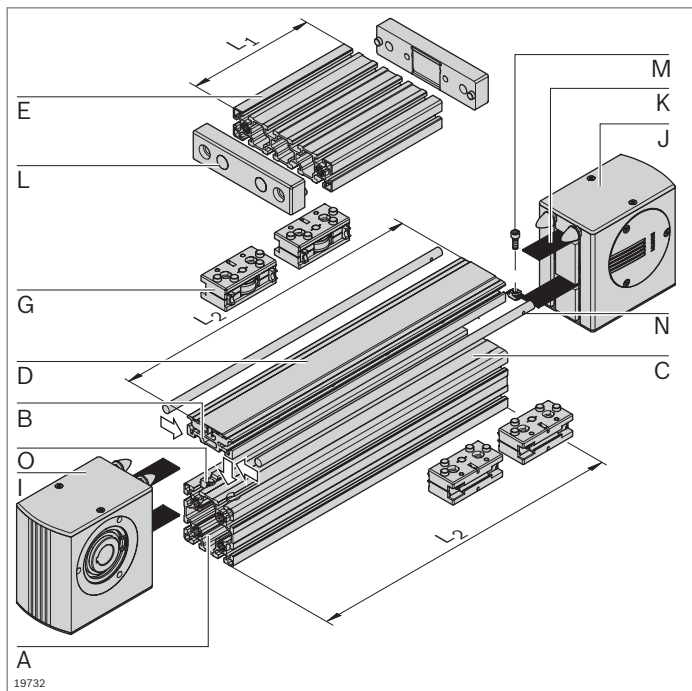
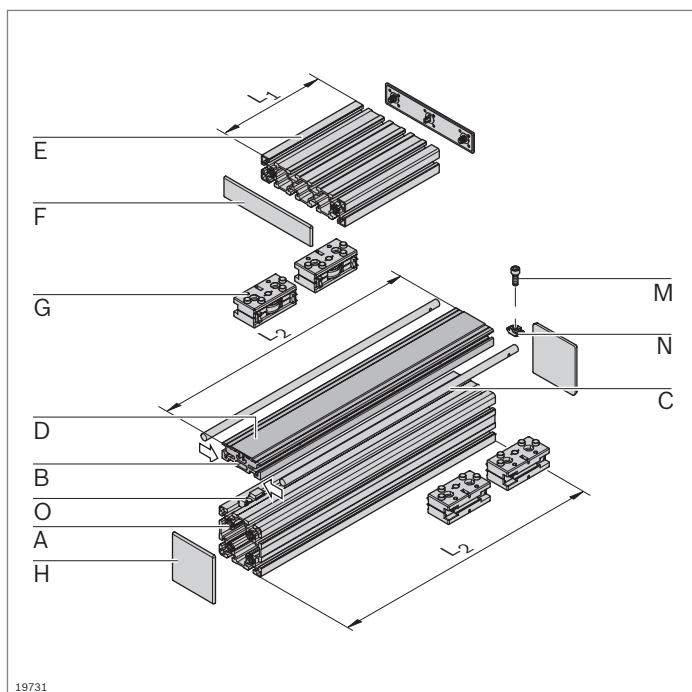
- Fully assembled cam roller guide
- Stroke and trolley length can be individually selected
- Rail profile screwed onto strut profile 90x90L
- Incl. toothed belt drive; additional notes on the drive concept (p. 13-44)



Technical data

See pages 13-57 for notes on layout and drive

Complete axis	L_H / L_1 (mm)	No.
LF12S	$L_1 + 50 \leq L_H \leq 5310$ $180 \leq L_1 \leq 1000$	3 842 998 497 / L_H / L_1



Cam roller guide LF12S – components

- Components for the individual assembly of cam roller guides, with or without drive

Parts list for cam roller guide LF12S without drive

Component	No.	Pcs	Page
A Profile 90x90L 	3 842 992 415 / L₂	1	2-45
B Guide profile LF12S	3 842 992 438 / L₂	1	13-18
C Guide rod LF12	3 842 993 968 / L₂	2	13-18
D Cover profile LF12S	3 842 993 062 / L₂	1	13-18
E Profile 45x180	3 842 990 335 / L₁	1	2-43
F Cover cap 45x180	3 842 548 795	2	2-43
G Guide bearing LF12	3 842 535 664	4	13-19
H Cover cap 90x90L	3 842 548 759	2	2-45
M Cylinder bolt DIN 7984 – M8x30		n ¹⁾	
N T-nut M8, 10 mm slot	3 842 530 287	n ¹⁾	3-4
O Sliding block	3 842 146 877	n ¹⁾	13-18

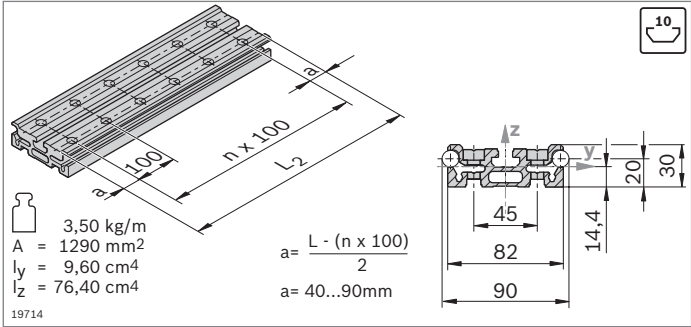
1) For identification see page 13-18

Parts list for cam roller guide LF12S with drive

Component	No.	Pcs	Page
A Profile 90x90L  LF	3 842 992 418 / L₂	1	2-45
B Guide profile LF12S	3 842 992 438 / L₂	1	13-18
C Guide rod LF12	3 842 993 968 / L₂	2	13-18
D Cover profile LF12S	3 842 993 062 / L₂	1	13-18
E Profile 45x180 M12  M12	3 842 990 339 / L₁	1	2-43
G Guide bearing LF12	3 842 535 664	4	13-19
I Drive head LF12S	3 842 526 412	1	13-21
J Return head LF12S	3 842 526 413	1	13-21
K Toothed belt	3 842 994 821 / L₃¹⁾	1	13-22
L Belt connector	3 842 535 680	2	13-22
M Cylinder bolt DIN 7984 – M8x30		n ²⁾	
N T-nut M8, 10 mm slot	3 842 530 287	n ²⁾	3-4
O Sliding block	3 842 146 877	n ²⁾	13-18

$$1) L_3 = 2 \times L_2 - L_1 + 630$$

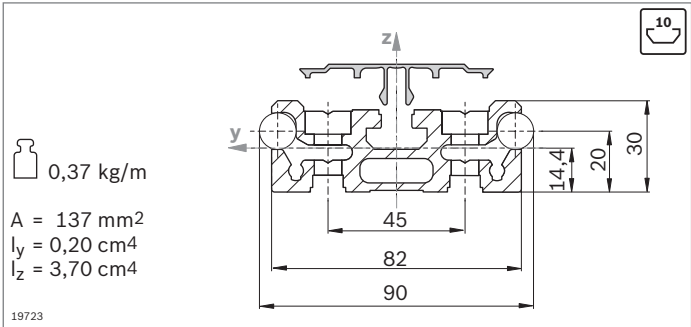
2) For identification see page 13-18



- ▶ Guide profile LF12S to hold the guide rods
- ▶ Installation on MGE strut profiles with 10 mm slot or directly on a flat surface

Guide profile	L_2 (mm)	No.
LF12S	1 pc 180 ... 6070	3 842 992 438 / L_2
	6 pcs 6070	3 842 557 945

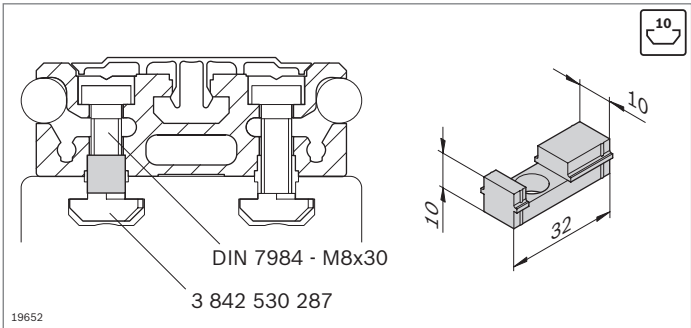
Material: Aluminum; anodized
Accessories: Cylinder bolt DIN 7984 – M8x30
T-nut M8, 10 mm slot, **3 842 530 287**
Sliding block, cover profile, guide rod



- ▶ Cover profile to prevent contamination on threaded connections

Cover profile	L_2 (mm)	No.
LF12S	150 ... 5600	3 842 993 062 / L_2

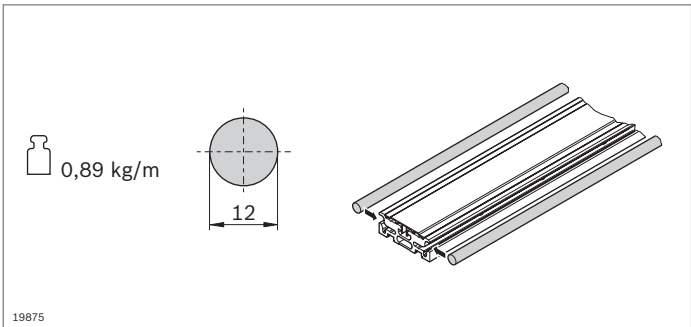
Material: Aluminum; anodized



- ▶ Sliding block as a centering aid for mounting the guide profile in a 10 mm profile slot

Sliding block	No.
	50 3 842 146 877

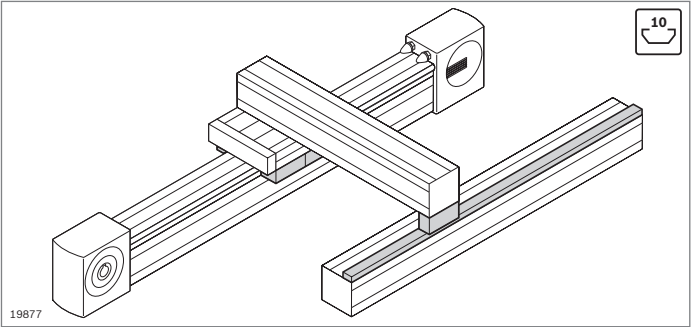
Material: PA; black



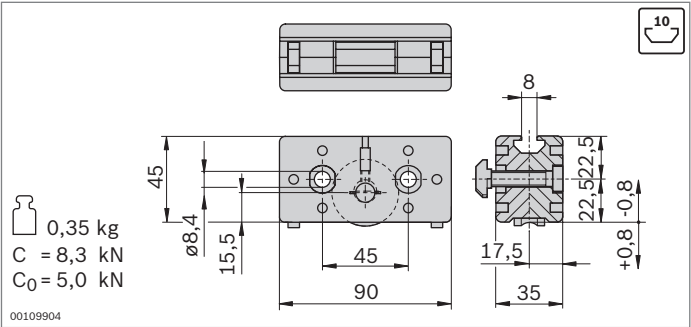
- ▶ The guide rod is pressed into the guide profile
- ▶ The guide rod guides the guide bearing

Guide rod	L_2 (mm)	No.
LF12	150 ... 2900	1 3 842 993 968 / L_2
	2900 20	3 842 539 415

Material: Solid shaft VA, induction hardened and polished
Condition on delivery: Ungreased; greasing according to assembly instructions **3 842 527 226**



- ▶ Guide bearing for trolley construction
- ▶ Supporting bearing for brackets for bearing off-center forces
- ▶ Guide rail to hold supporting bearings (p. 13-20)



- ▶ Guide bearing for trolley construction
- ▶ Guiding via guide rod
- ▶ Cam rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free cam roller adjustment via eccentric bolts
- ▶ Replacement of the lubricating felts possible from rear in installed state

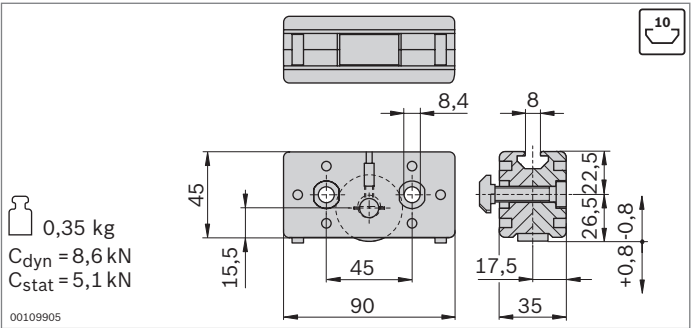
Guide bearing	No.	FS
LF12	2 3 842 535 664	2xFS1, 4xFS2

Material: Housing: Diecast aluminum
Cam roller: Steel, hardened, polished

Scope of delivery: Incl. fastening material (FS)

Condition on delivery: Lubricating felts ungreased; greasing according to assembly instructions

3 842 527 226



- ▶ Supporting bearing for brackets for bearing off-center forces
- ▶ For support on the guide rail
- ▶ Cam rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free cam roller adjustment via eccentric bolts
- ▶ Replacement of the lubricating felts possible from rear in installed state

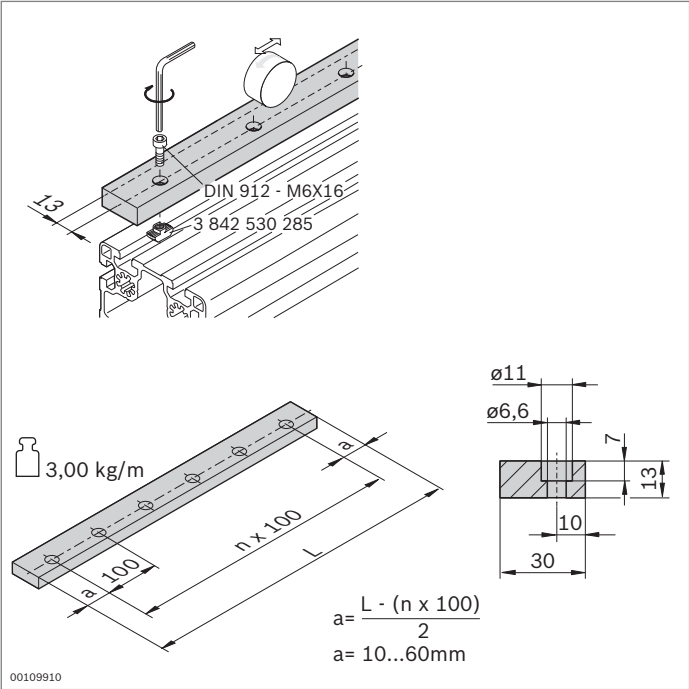
Supporting bearing	No.	FS
LF12	2 3 842 535 666	2xFS3 4xFS2

Material: Housing: Diecast aluminum
Cam roller: Steel, hardened, polished

Scope of delivery: Incl. fastening material (FS)

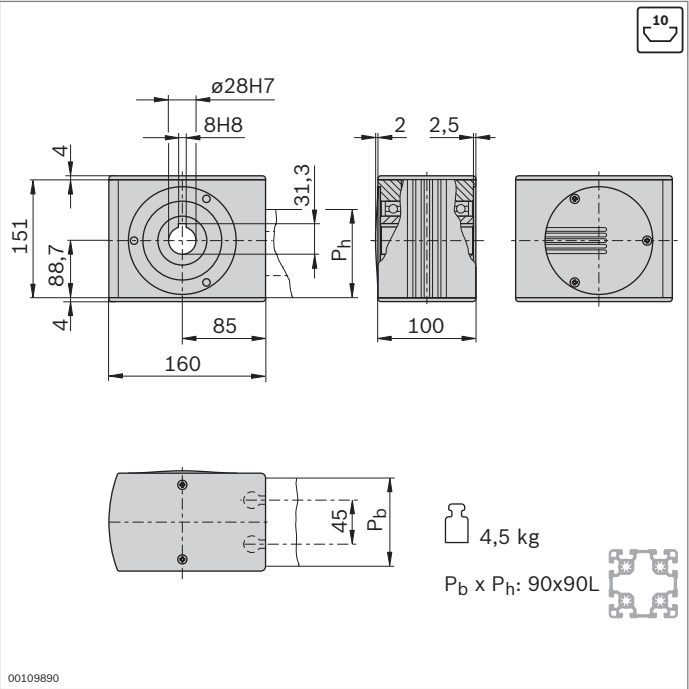
Condition on delivery: Lubricating felts ungreased; greasing according to assembly instructions

3 842 527 226



► Guide rail to hold supporting bearings

Guide rail	L (mm)	No.
LF12	120 ... 2000	3 842 994 702 / L
Material:	Steel, hardened, polished	
Condition on delivery:	Ungreased; greasing according to assembly instructions 3 842 527 226	
Accessories:	Cylinder bolt DIN 912 – M6x16 T-nut M6, 10 mm slot (3 842 530 285)	

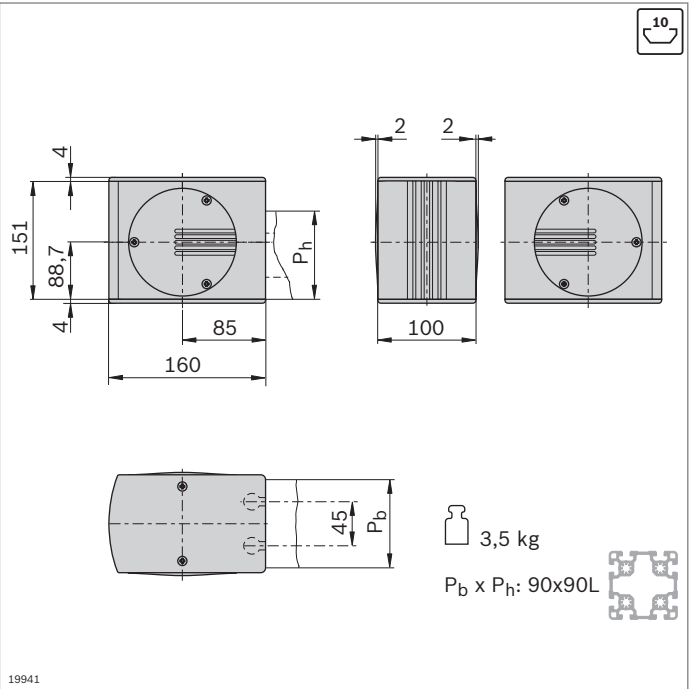
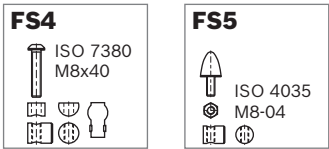


- Drive head for transferring drive torque to a toothed belt
- For direct mounting of a motor or (in conjunction with a plug-in shaft) for mounting a hollow shaft gear or a coupling (p. 13-46)
- Mounted directly on profile by using longitudinal end connector (connector included in scope of delivery)
- Profile finishing: LF blind hole drilling for longitudinal end connector

Drive head	No.	FS
LF12S	3 842 526 412	2xFS4, 2xFS5

Material: Drive head: Aluminum; anodized
Cover caps: PA; black
Hollow shaft: Steel; galvanized

Scope of delivery: Incl. Fastening material (FS), cover caps

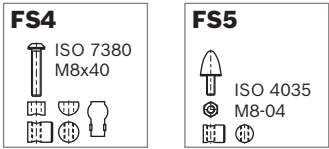


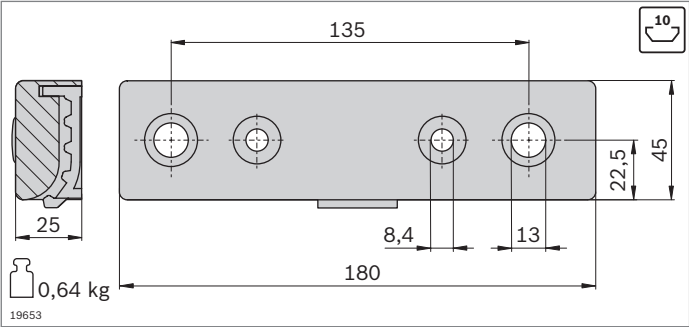
- Return head for tensioning the toothed belt and changing its direction
- Mounted directly on profile by using longitudinal end connector (connector included in scope of delivery)
- Profile finishing: LF blind hole drilling for longitudinal end connector

Return head	No.	FS
LF12S	3 842 526 413	2xFS4, 2xFS5

Material: Aluminum; anodized
Hollow shaft: Steel; galvanized
Cover caps: PA; black

Scope of delivery: Incl. Fastening material (FS), cover caps





- ▶ Belt connector suitable for trolley built out of strut profiles 45x180
- ▶ All connecting parts included for mounting on the profile end (LF12S) or in the slot (LF12C)
- ▶ Profile finishing for strut profile 45x180 for trolley LF12S: M12

Belt connector	No.	FS
LF12	2 3 842 535 680	4xFS2, 2xFS6, 2xFS7, 2xFS8, 2xFS9

Material: Aluminum, painted black
Scope of delivery: Incl. fastening material (FS)

FS2

 $\varnothing 10 \times \varnothing 5 \times 11$

FS6

 DIN7984
M12x40

FS7

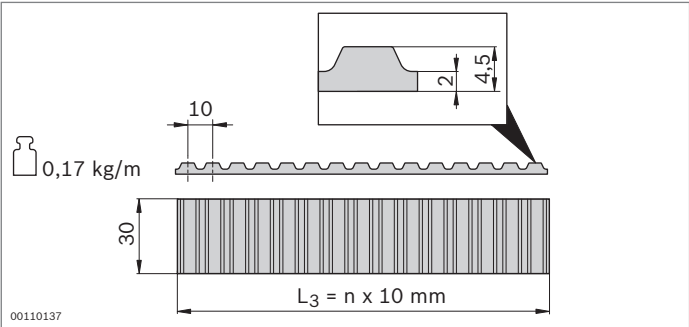
 DIN 7984
M8x30
DIN 125
A8,4
 $\varnothing 10$

FS8

 DIN 7991
M8x30
 $\varnothing 10$

FS9

 $\varnothing 18 \times 7$

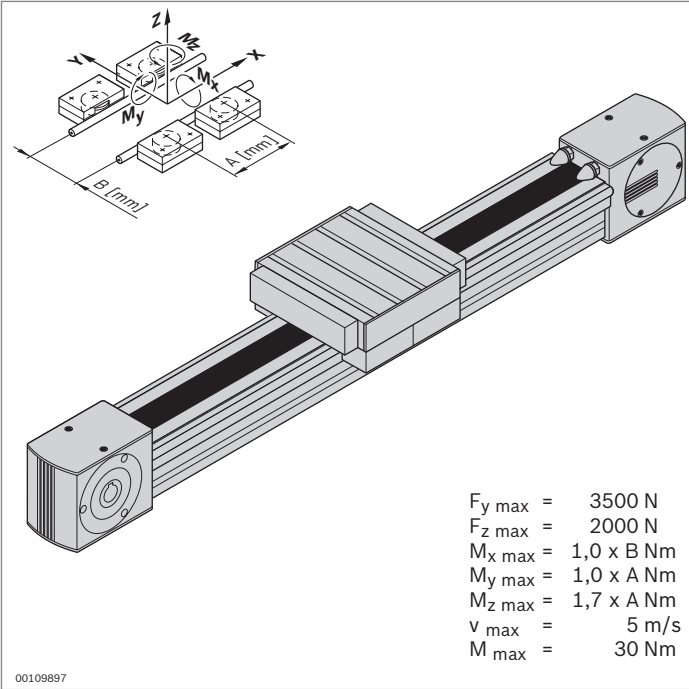


- ▶ Toothed belt as a trolley drive
- ▶ Pitch: AT10

Toothed belt	L_3 (mm)	No.
LF12	300 ... 50000	3 842 994 821 / L_3 ¹⁾
	50000	3 842 526 422

¹⁾ $L_3 = 2 \times L_2 - L_1 + 630$

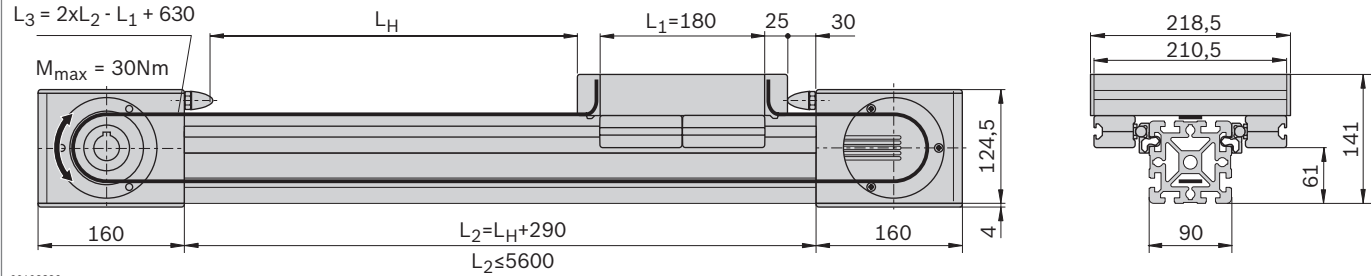
Material: PU with embedded steel wires



Cam roller guide LF12C – complete axis



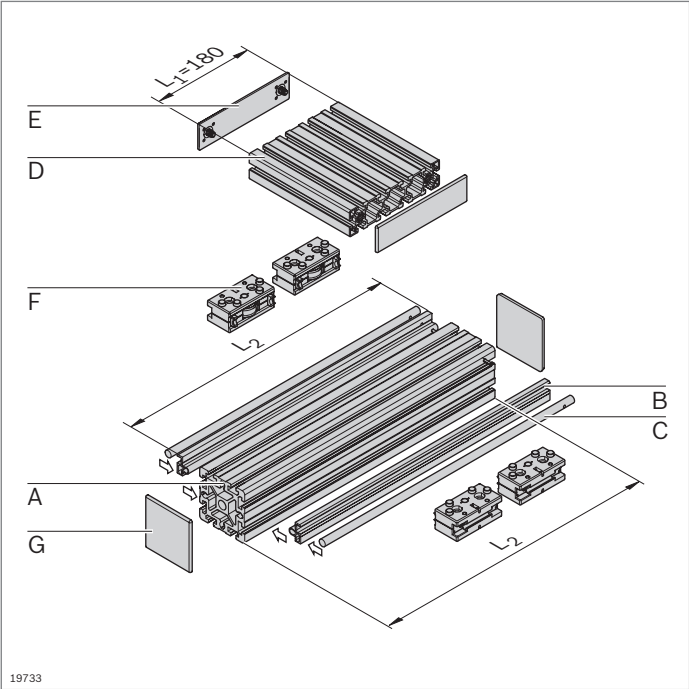
- Fully assembled cam roller guide
- Stroke can be individually selected
- Clamping profile clipped into strut profile 90x90
- Incl. toothed belt drive; additional notes on the drive concept (p. 13-44)



Technical data

For notes on layout and drive, see page 13-50

Complete axis	L_H (mm)	No.
LF12C	50 ... 5310	3 842 998 498 / L_H

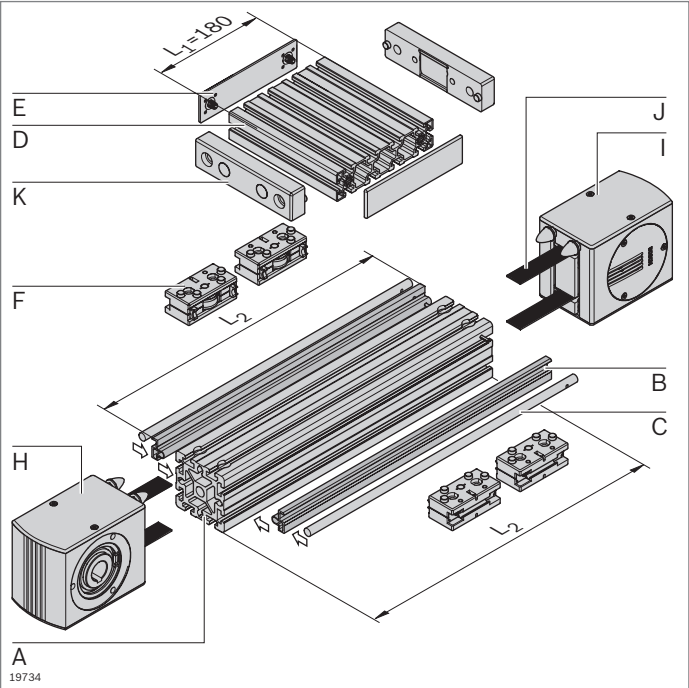


Cam roller guide LF12C – components

- Components for the individual assembly of cam roller guides, with or without drive

Parts list for cam roller guide LF12C without drive

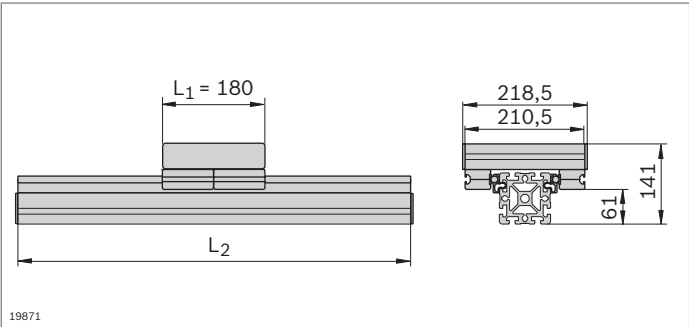
Component	No.	Pcs	Page
A Profile 90x90	3 842 990 500 / L ₂	1	2-46
B Clamping profile LF12C	3 842 992 440 / L ₂	2	13-25
C Guide rod LF12	3 842 993 968 / L ₂	2	13-25
D Profile 45x180	3 842 990 335 / 210.5 mm	1	2-43
E Cover cap 45x180	3 842 548 795	2	2-43
F Guide bearing LF12	3 842 535 664	4	13-26
G Cover cap 90x90	3 842 548 761	2	2-46

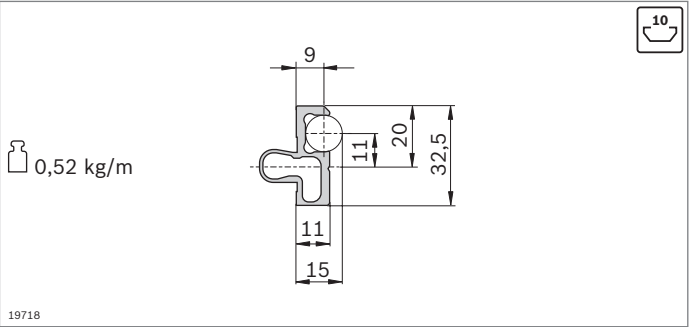


Parts list for cam roller guide LF12C with drive

Component	No.	Pcs	Page
A Profile 90x90 LF	3 842 993 082 / L ₂	1	2-46
B Clamping profile LF12C	3 842 992 440 / L ₂	2	13-25
C Guide rod LF12	3 842 993 968 / L ₂	2	13-25
D Profile 45x180	3 842 990 335 / 210.5 mm	1	2-43
E Cover cap 45x180	3 842 548 795	2	2-43
F Guide bearing LF12	3 842 535 664	4	13-26
H Drive head LF12C	3 842 526 863	1	13-28
I Return head LF12C	3 842 526 865	1	13-28
J Toothed belt LF12	3 842 994 821 / L ₃ ¹⁾	1	13-29
K Belt connector LF12	3 842 535 680	2	13-29

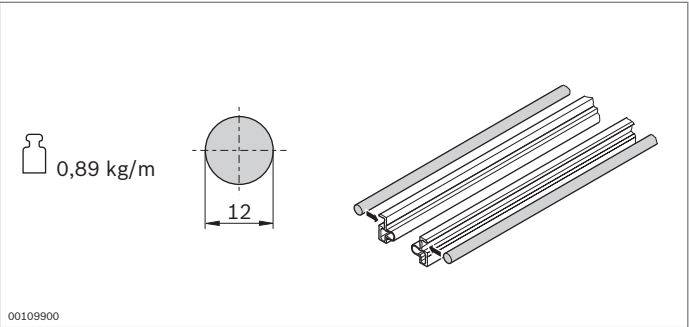
¹⁾ L₃ = 2xL₂ - L₁ + 630





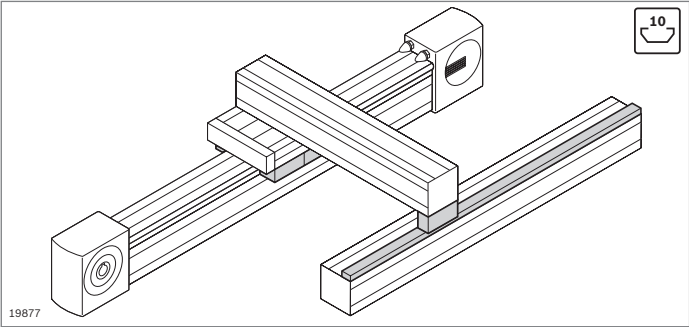
- The clamping profile is clipped into any chosen strut profile with a 10 mm slot and holds the guide rods

Clamping profile		L ₂ (mm)	No.
LF12C	1 pc	150 ... 3000	3 842 992 440 / L₂
	 20 pcs	3000	3 842 518 897
Material:		Aluminum; anodized	

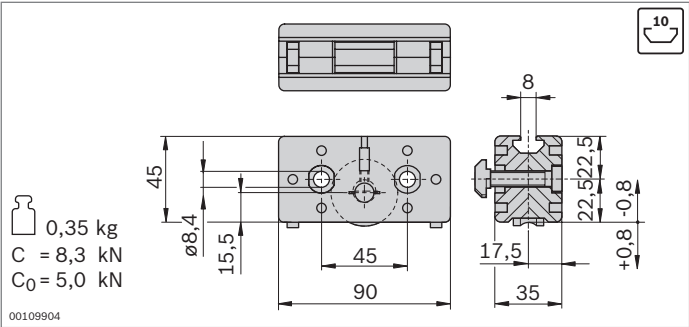


- The guide rod is pressed into the clamping profile
- The guide rod guides the guide bearing

Guide rod		L ₂ (mm)	No.
LF12		150 ... 2900	1 3 842 993 968 / L₂
		2900	20 3 842 539 415
Material:		Solid shaft VA, induction hardened and polished	
Condition on delivery:		Ungreased; greasing according to assembly instructions 3 842 527 226	



- ▶ Guide bearing for trolley construction
- ▶ Supporting bearing for brackets for bearing off-center forces
- ▶ Guide rail to support supporting bearings (p. 13-27)



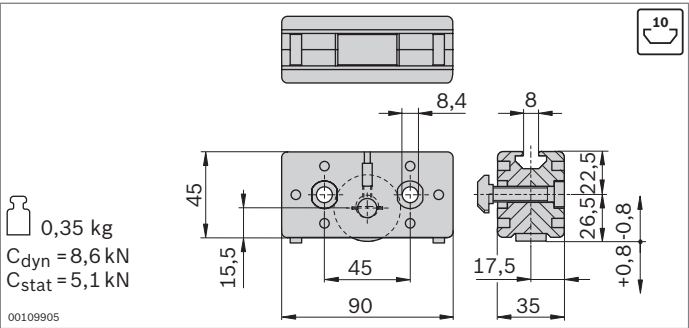
- ▶ Guide bearing for trolley construction
- ▶ Guiding via guide rod
- ▶ Cam rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free cam roller adjustment via eccentric bolts
- ▶ Replacement of the lubricating felts possible from rear in installed state

Guide bearing	No.	FS
LF12	2 3 842 535 664	2xFS1 4xFS2

Material: Guide bearing: Diecast aluminum
Cam roller: Steel, hardened, polished

Scope of delivery: Incl. fastening material (FS)

Condition on delivery: Lubricating felts ungreased; greasing according to assembly instructions
3 842 527 226



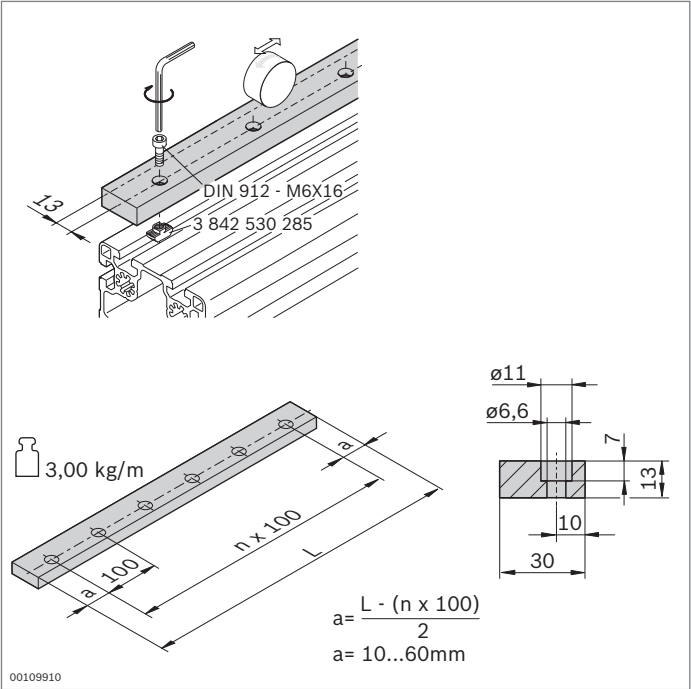
- ▶ Supporting bearing for brackets for bearing off-center forces
- ▶ For support on the guide rail
- ▶ Cam rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free cam roller adjustment via eccentric bolts
- ▶ Replacement of the lubricating felts possible from rear in installed state

Supporting bearing	No.	FS
LF12	2 3 842 535 666	2xFS1 4xFS2

Material: Guide bearing: Diecast aluminum
Cam roller: Steel, hardened, polished

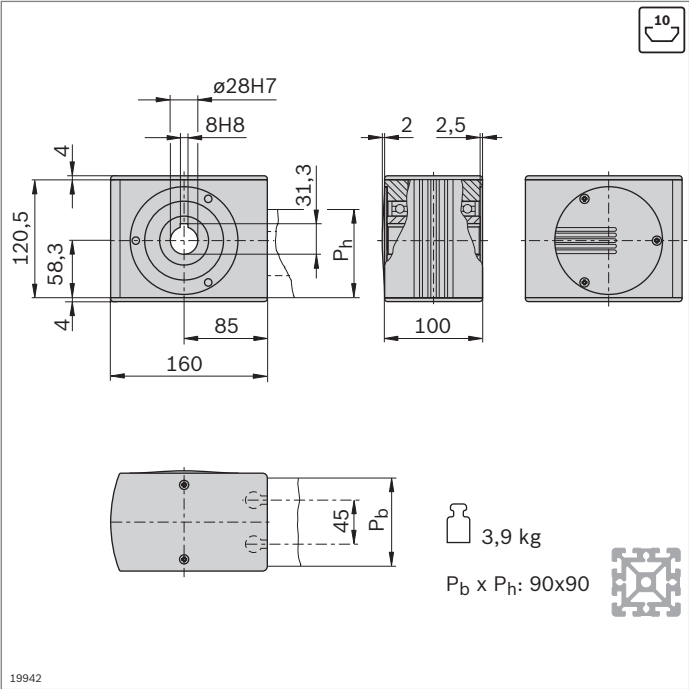
Scope of delivery: Incl. fastening material (FS)

Condition on delivery: Lubricating felts ungreased; greasing according to assembly instructions
3 842 527 226



► Guide rail to hold supporting bearings

Guide rail	L (mm)	No.
LF12	120 ... 2000	3 842 994 702 / L
Material:	Steel, hardened, polished	
Condition on delivery:	Ungreased; greasing according to assembly instructions 3 842 527 226	
Accessories:	Cylinder bolt DIN 912 – M6x16 T-nut M6, 10 mm slot (3 842 530 285)	

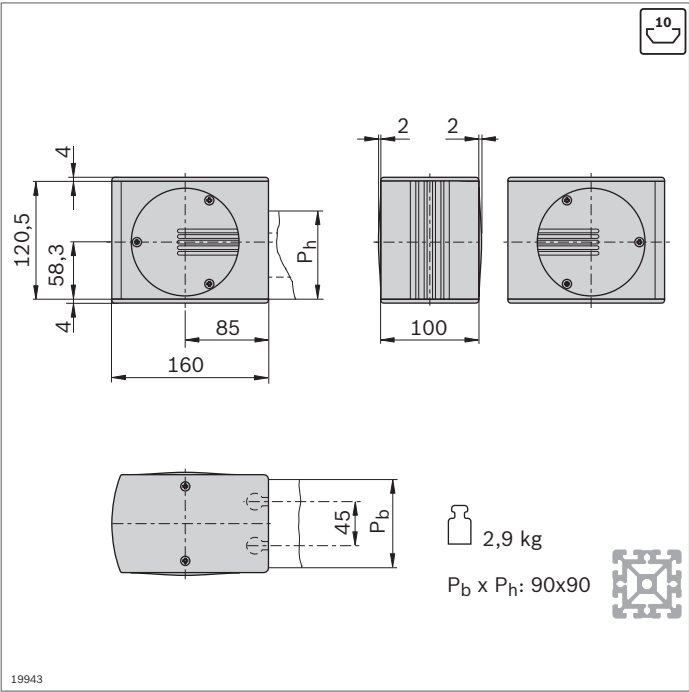
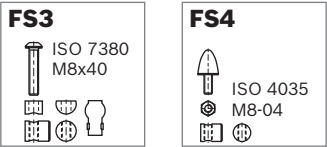


- ▶ Drive head for transferring drive torque to a toothed belt
- ▶ For direct mounting of a motor or (in conjunction with a plug-in shaft) for mounting a hollow shaft gear or a coupling (p. 13-46)
- ▶ Mounted directly on profile by using longitudinal end connector (connector included in scope of delivery)
- ▶ Profile finishing: LF blind hole drilling for longitudinal end connector

Drive head	No.	FS
LF12C	3 842 526 863	4xFS3, 2xFS4

Material: Drive head: Aluminum; anodized
Hollow shaft: Steel; galvanized
Cover caps: PA; black

Scope of delivery: Incl. Fastening material (FS), cover caps

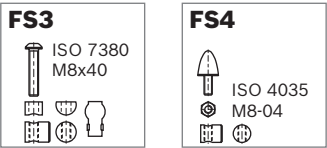


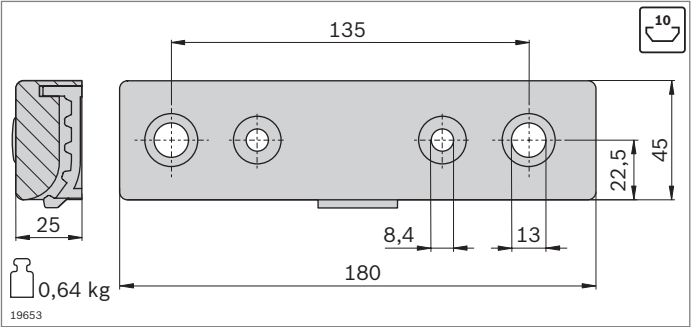
- ▶ Return head for tensioning the toothed belt and changing its direction
- ▶ Mounted directly on profile by using longitudinal end connector (connector included in scope of delivery)
- ▶ Profile finishing: LF blind hole drilling for longitudinal end connector

Return head	No.	FS
LF12C	3 842 526 865	4xFS3, 2xFS4

Material: Return head: Aluminum; anodized
Hollow shaft: Steel; galvanized
Cover caps: PA; black

Scope of delivery: Incl. Fastening material (FS), cover caps





- ▶ Belt connector suitable for trolley built out of strut profiles 45x180
- ▶ All connecting parts included for mounting at the profile end (LF12S) or the slot (LF12C)
- ▶ Profile finishing for strut profile 45x180 for trolley LF12S: M12

Belt connector		No.	FS
LF12	2	3 842 535 680	4xFS2, 2xFS5, 2xFS6, 2xFS7, 2xFS8

Material: Aluminum, painted black
Scope of delivery: Incl. fastening material (FS)

FS2

ø10xø5x11

FS5

DIN7984
M12x40

FS6

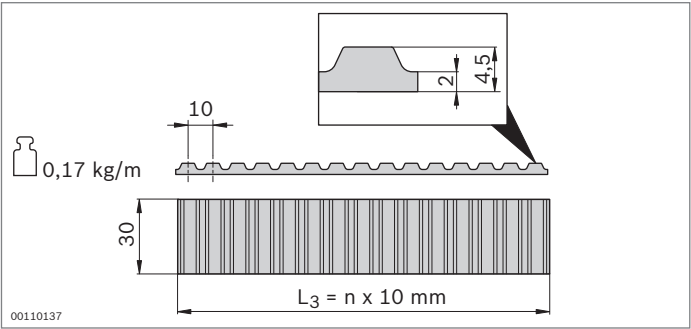
DIN 7984
M8x30
DIN 125
A8,4
10

FS7

DIN 7991
M8x30
10

FS8

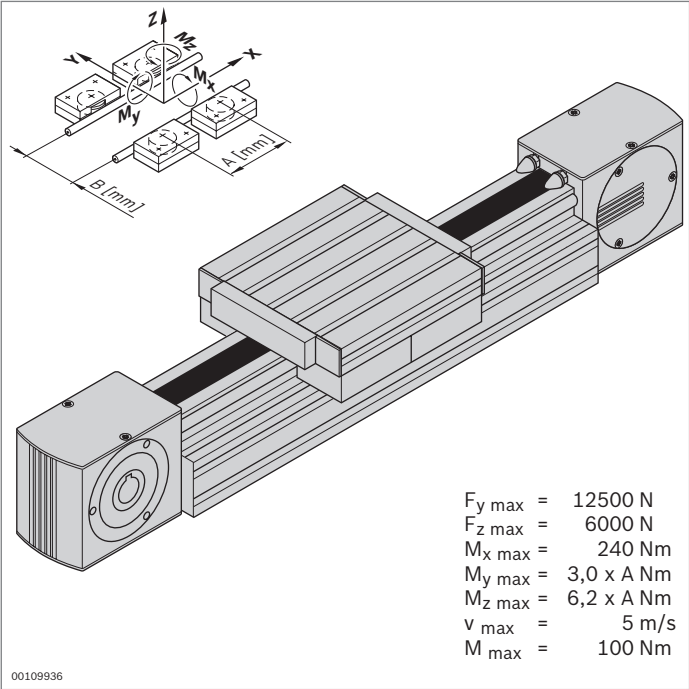
ø18x7



- ▶ Toothed belt as a trolley drive
- ▶ Pitch: AT10

Toothed belt	L ₃ (mm)	No.
LF12	300 ... 50000	3 842 994 821 / L ₃ ¹⁾
	50000	3 842 526 422

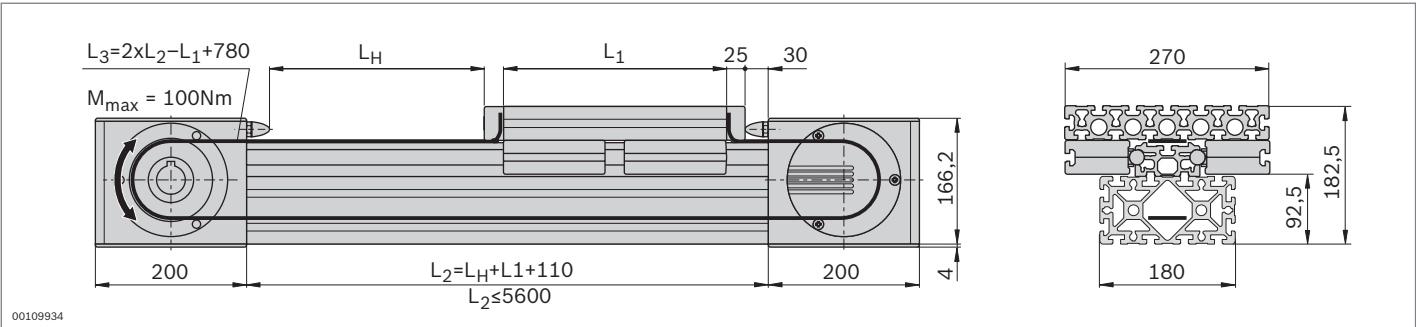
¹⁾ L₃ = 2xL₂ - L₁ + 630
Material: PU with embedded steel wires



Cam roller guide LF20S – complete axis



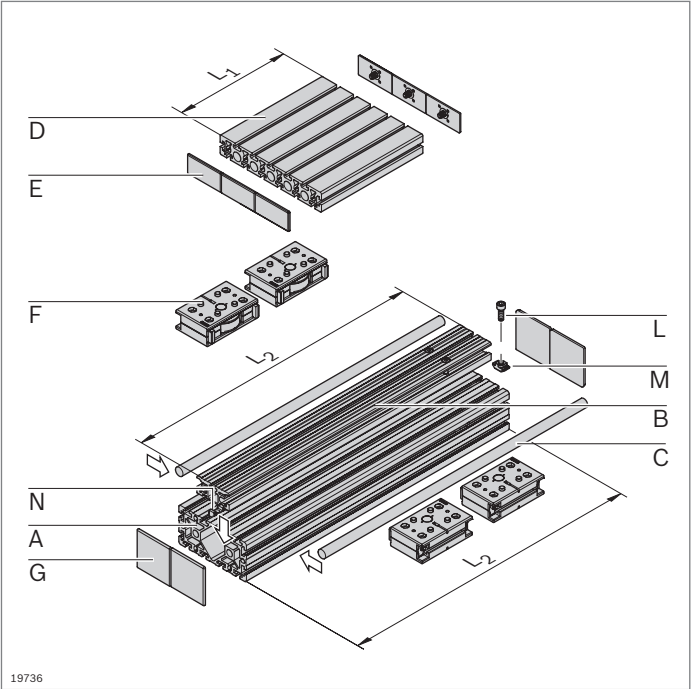
- Fully assembled cam roller guide
- Stroke and trolley length can be individually selected
- Rail profile mounted on strut profile 90x180
- Incl. toothed belt drive; additional notes on the drive concept (p. 13-44)



Technical data

See pages 13-57 for notes on layout and drive

Complete axis	L _H / L ₁ (mm)	No.
LF20S	L ₁ +50 ≤ L _H ≤ 5220 270 ≤ L ₁ ≤ 1000	3 842 998 499 / L _H / L ₁



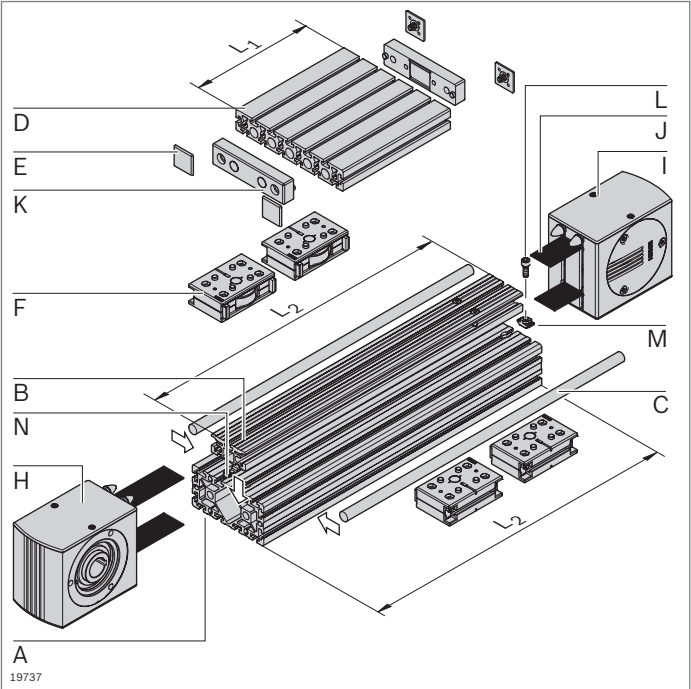
Cam roller guide LF20S – components

► Components for the individual assembly of cam roller guides, with or without drive

Parts list for cam roller guide LF20S without drive

Component	No.	Pcs	Page
A Profile 90x180	3 842 990 416 / L₂	1	2-47
B Guide profile LF20S	3 842 993 080 / L₂	1	13-32
C Guide rod LF20	3 842 993 969 / L₂	2	13-32
D Profile 45x270	3 842 992 927 / L₁	1	2-44
E Cover cap 45x90	3 842 548 757	6	2-44
F Guide bearing LF20	3 842 535 663	4	13-33
G Cover cap 90x90	3 842 548 761	4	2-46
L Cylinder bolt DIN 7984 – M8x45		n ¹⁾	
M T-nut M8, 10 mm slot	3 842 530 287	n ¹⁾	3-4
N Sliding block	3 842 146 877	n ¹⁾	13-32

1) For identification see page 13-32

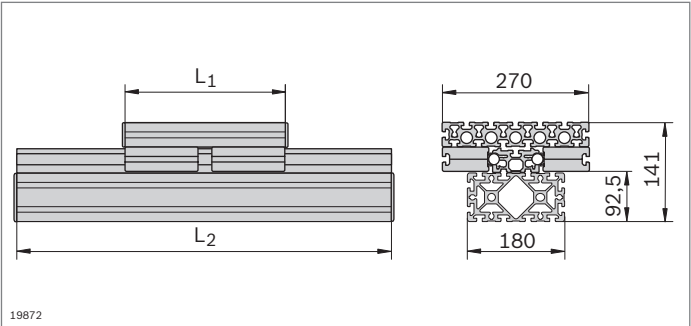


Parts list for cam roller guide LF20S with drive

Component	No.	Pcs	Page
A Profile 90x180 LF-S	3 842 993 081 / L₂	1	2-47
B Guide profile LF20S	3 842 993 080 / L₂	1	13-32
C Guide rod LF20	3 842 993 969 / L₂	2	13-32
D Profile 45x270 M12	3 842 992 928 / L₁	1	2-44
E Cover cap 45x45	3 842 548 753	4	2-39
F Guide bearing LF20	3 842 535 663	4	13-33
H Drive head LF20S	3 842 526 414	1	13-35
I Return head LF20S	3 842 526 415	1	13-35
J Toothed belt LF20	3 842 994 662 / L₃¹⁾	1	13-36
K Belt connector LF20	3 842 535 680	2	13-36
L Cylinder bolt DIN 7984 – M8x45		n ²⁾	
M T-nut M8, 10 mm slot	3 842 530 287	n ²⁾	3-4
N Sliding block	3 842 146 877	n ²⁾	13-32

1) $L_3 = 2 \times L_2 - L_1 + 780$

2) For identification see page 13-32





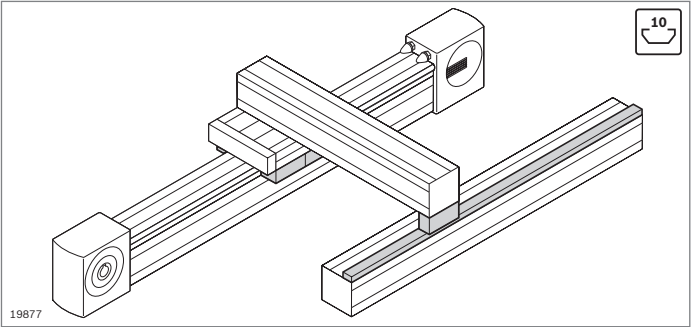
- Accessories: Cylinder screw DIN 7984 M8x45
 T-nut M8, 10 mm slot (p. 3-4)
 Sliding block



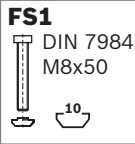
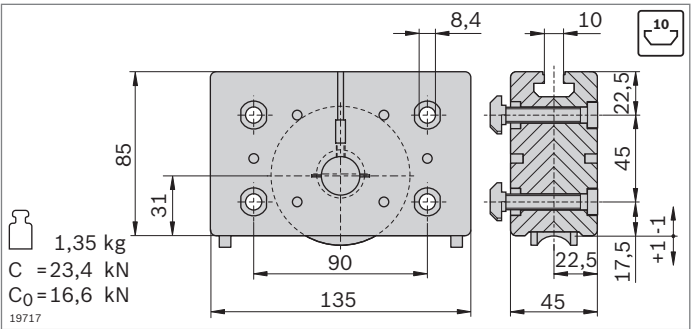
- Material: PA; black



- | | |
|------------------------|---|
| Material: | Solid shaft VA, induction hardened, polished |
| Condition on delivery: | Ungreased; greasing according to assembly instructions 3 842 527 226 |



- ▶ Guide bearing for trolley construction
- ▶ Supporting bearing for brackets for bearing off-center forces
- ▶ Guide rail to support supporting bearings (p. 13-34)



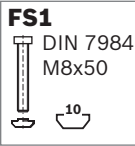
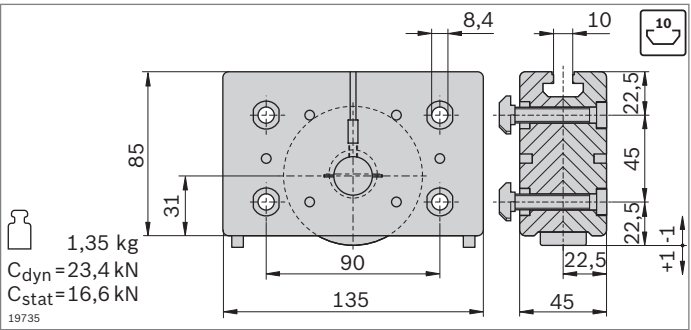
- ▶ Guide bearing for trolley construction
- ▶ Guiding via guide rod
- ▶ Cam rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free cam roller adjustment via eccentric bolts
- ▶ Replacement of the lubricating felts possible from rear in installed state

Guide bearing	No.	FS
LF20	2 3 842 535 663	4xFS1 4xFS2

Material: Housing: Diecast aluminum
Cam roller: Steel, hardened, polished

Scope of delivery: Incl. fastening material (FS)

Condition on delivery: Lubricating felts ungreased; greasing according to assembly instructions
3 842 527 226



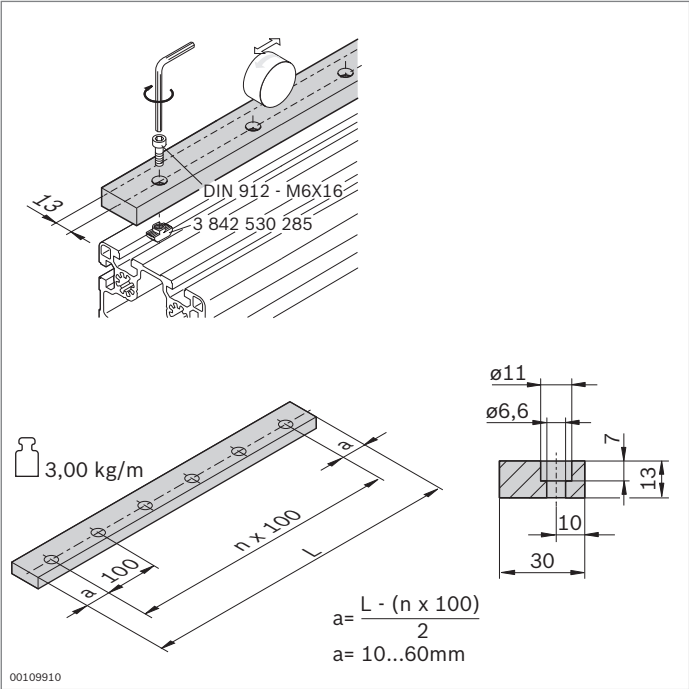
- ▶ Supporting bearing for brackets for bearing off-center forces
- ▶ For support on the guide rail
- ▶ Cam rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free cam roller adjustment via eccentric bolts
- ▶ Replacement of the lubricating felts possible from rear in installed state

Supporting bearing	No.	FS
LF20	2 3 842 535 665	4xFS1 4xFS2

Material: Housing: Diecast aluminum
Cam roller: Steel, hardened, polished

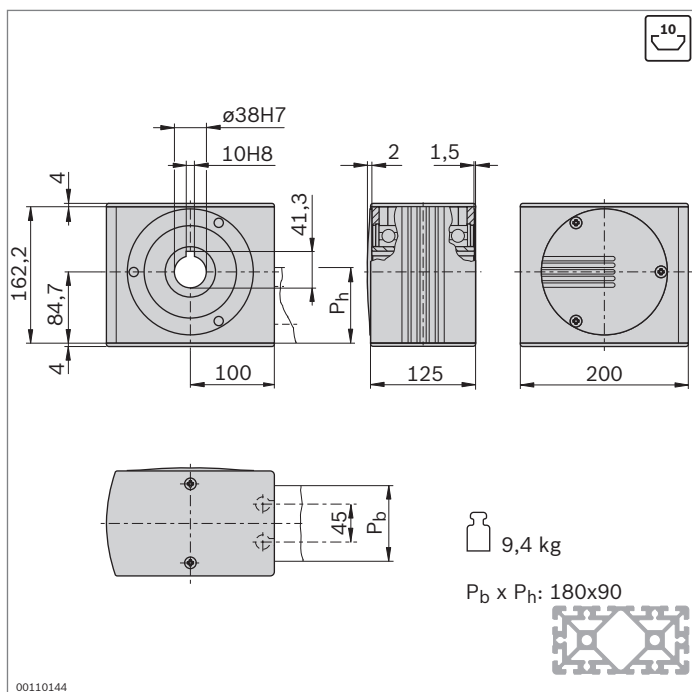
Scope of delivery: Incl. fastening material (FS)

Condition on delivery: Lubricating felts ungreased; greasing according to assembly instructions
3 842 527 226



► Guide rail to hold supporting bearings

Guide rail	L (mm)	No.
LF20	120 ... 2000	3 842 994 702 / L
Material:	Steel, hardened, polished	
Condition on delivery:	Ungreased; greasing according to assembly instructions 3 842 527 226	
Accessories:	Cylinder bolt DIN 912 – M6x16 T-nut M6, 10 mm slot (3 842 530 285)	

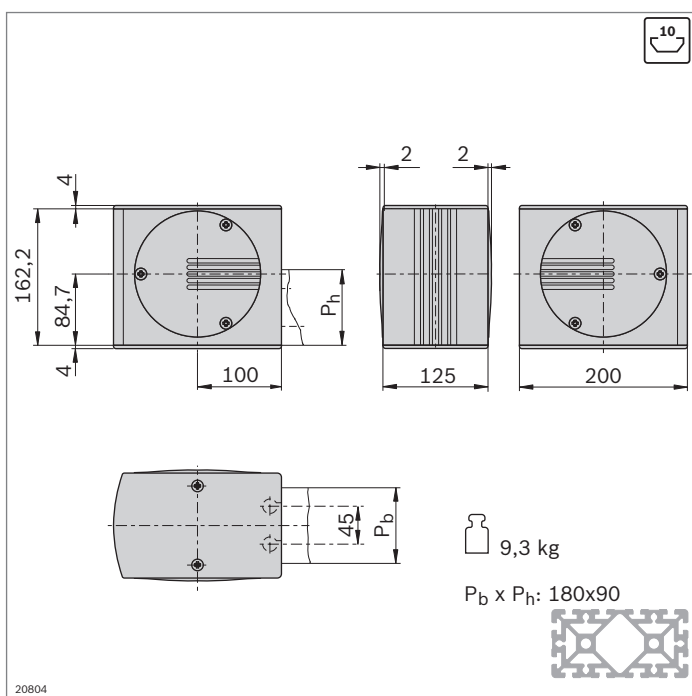
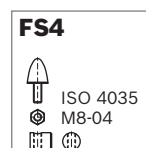
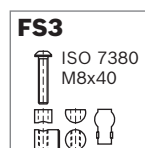


- ▶ Drive head for transferring drive torque to a toothed belt
- ▶ For direct mounting of a motor or (in conjunction with a plug-in shaft) for mounting a hollow shaft gear or a coupling (p. 13-46)
- ▶ Mounted directly on profile by using longitudinal end connector (connector included in scope of delivery)
- ▶ Profile finishing: LF-S blind hole drilling for longitudinal end connector

Drive head	No.	FS
LF20S	3 842 526 414	4xFS3, 2xFS4

Material:	Drive head: Aluminum; anodized Hollow shaft: Steel; galvanized
-----------	---

Scope of delivery: Incl. Fastening material (FS), cover caps

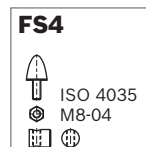
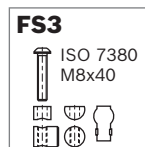


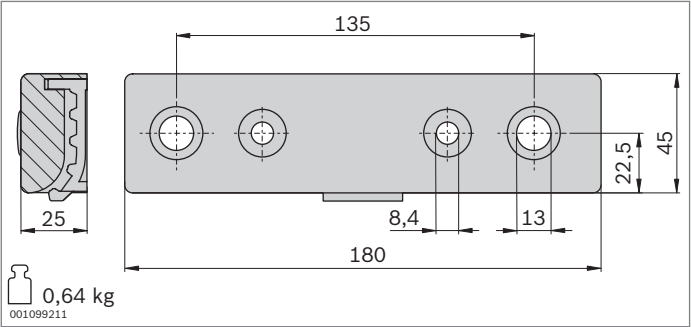
- ▶ Return head for tensioning the toothed belt and changing its direction
- ▶ Mounted directly on profile by using longitudinal end connector (connector included in scope of delivery)
- ▶ Profile finishing: LF-S blind hole drilling for longitudinal end connector

Return head	No.	FS
LF20S	3 842 526 415	4xFS3, 2xFS4

Material:	Return head: Aluminum; anodized Hollow shaft: Steel; galvanized Cover caps: PA; black
-----------	---

Scope of delivery: Incl. Fastening material (FS), cover caps





- ▶ Belt connector for fixing the toothed belt on the front of the trolley
- ▶ Profile finishing for strut profile 45x270 for trolley LF20S: M12
- ▶ All connecting parts included for mounting at the profile end (LF20S) or the slot (LF20C)

Belt connector	No.	FS
LF20	2 3 842 535 680	4xFS2, 2xFS5, 2xFS6, 2xFS7, 2xFS8

Material: Aluminum, painted black
Scope of delivery: Incl. fastening material (FS)

FS2

Ø10xØ5x11

FS5

DIN7984
M12x40

FS6

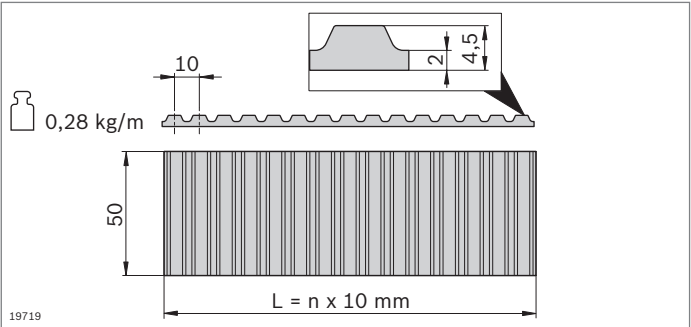
DIN 7984
M8x30
DIN 125
A8,4

FS7

DIN 7991
M8x30

FS8

Ø18x7

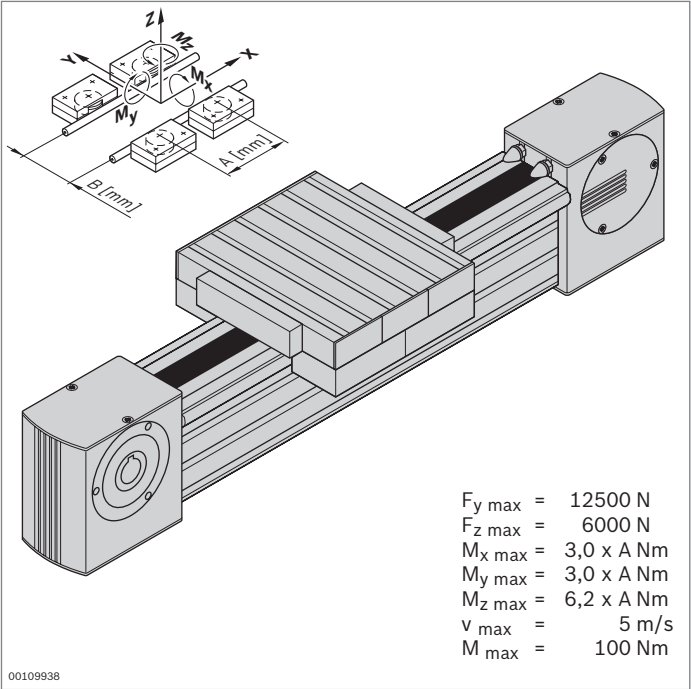


- ▶ Toothed belt as a trolley drive
- ▶ Pitch: AT10

Toothed belt	L ₃ (mm)	No.
LF20	300 ... 50000	3 842 994 662 / L ₃ ¹⁾
	50000	3 842 513 648

¹⁾ L₃ = 2xL₂ - L₁ + 780

Material: PU with embedded steel wires

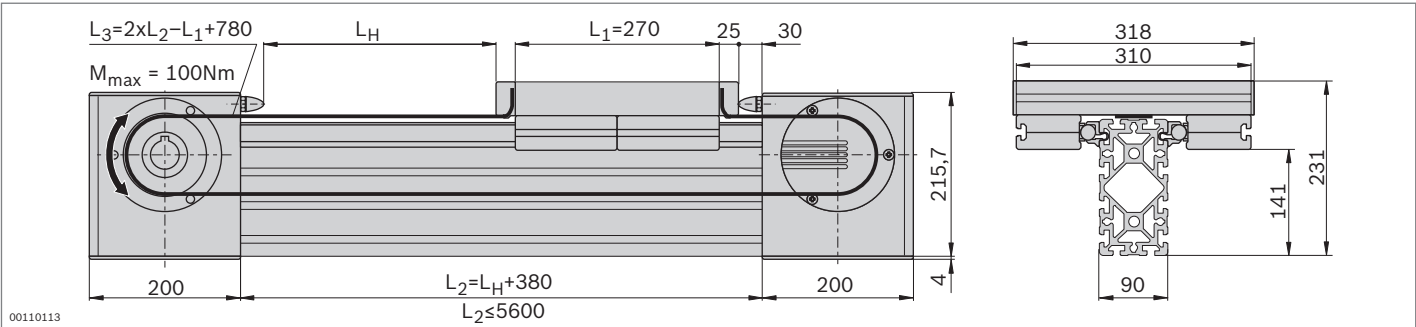


$F_{y \max} = 12500 \text{ N}$
 $F_{z \max} = 6000 \text{ N}$
 $M_{x \max} = 3,0 \times A \text{ Nm}$
 $M_{y \max} = 3,0 \times A \text{ Nm}$
 $M_{z \max} = 6,2 \times A \text{ Nm}$
 $v_{\max} = 5 \text{ m/s}$
 $M_{\max} = 100 \text{ Nm}$

Cam roller guide LF20C – complete axis



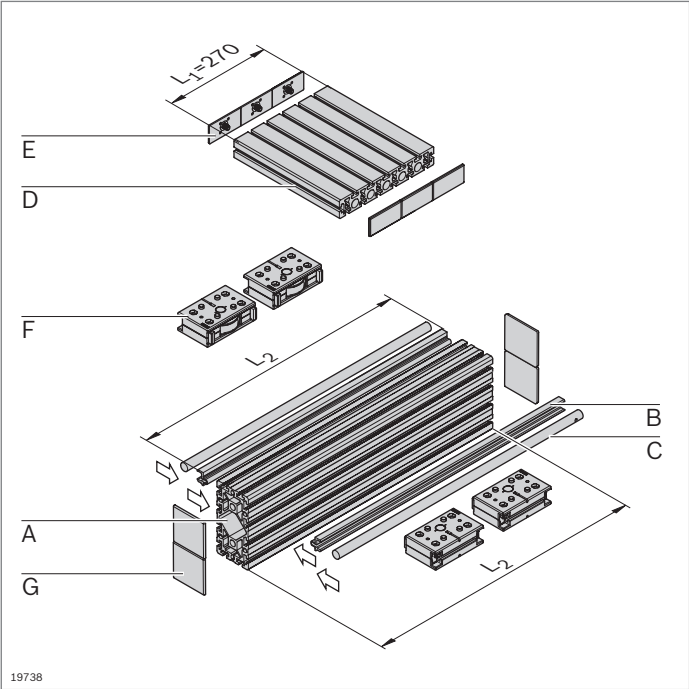
- Fully assembled cam roller guide
- Stroke can be individually selected
- Clamping profile clipped into strut profile 90x180
- Incl. toothed belt drive; additional notes on the drive concept (p. 13-44)



Technical data

For notes on layout and drive, see page 13-50

Complete axis	L_H (mm)	No.
LF20C	50 ... 5220	3 842 998 500 / L_H

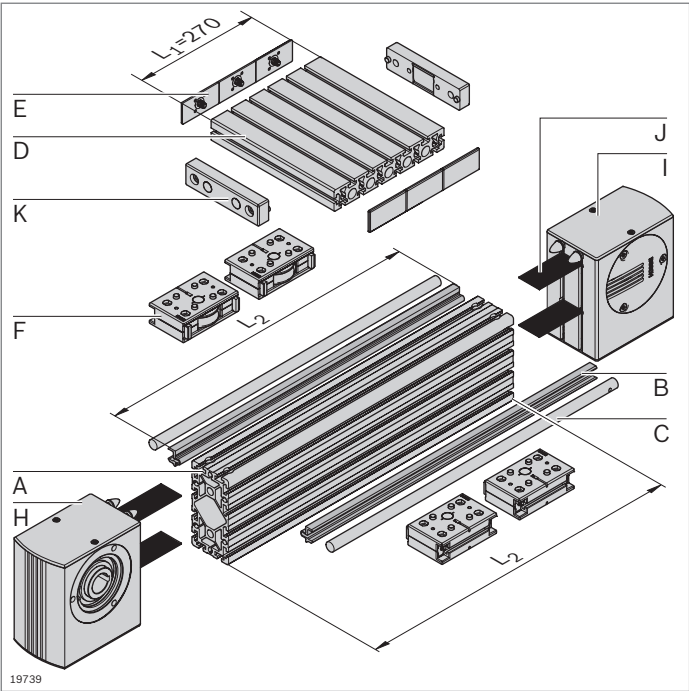


Cam roller guide LF20C – components

► Components for the individual assembly of cam roller guides, with or without drive

Parts list for cam roller guide LF20C without drive

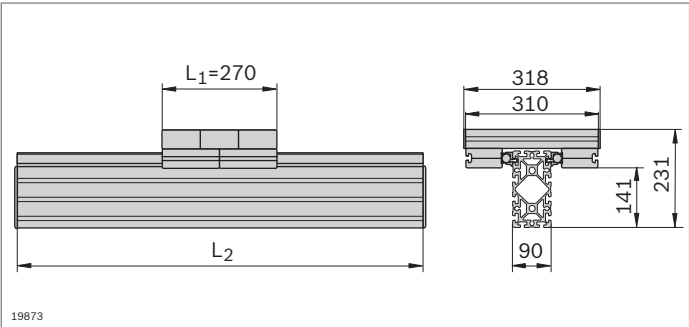
Component	No.	Pcs	Page
A Profile 90x180	3 842 990 416 / L ₂	1	2-47
B Clamping profile LF20C	3 842 992 441 / L ₂	2	13-39
C Guide rod LF20	3 842 993 969 / L ₂	2	13-39
D Profile 45x270	3 842 992 927 / 310 mm	1	2-44
E Cover cap 45x90	3 842 548 757	6	2-44
F Guide bearing LF20	3 842 535 663	4	13-40
G Cover cap 90x90	3 842 548 761	4	2-47

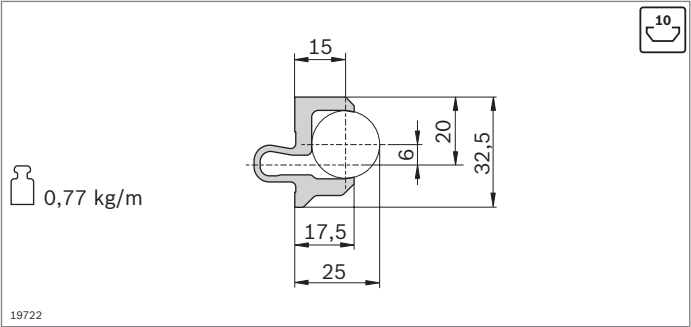


Parts list for cam roller guide LF20C with drive

Component	No.	Pcs	Page
A Profile 90x180 LF LF	3 842 992 898 / L ₂	1	2-47
B Clamping profile LF20C	3 842 992 441 / L ₂	2	13-39
C Guide rod LF20	3 842 993 969 / L ₂	2	13-39
D Profile 45x270	3 842 992 927 / 310 mm	1	2-44
E Cover cap 45x90	3 842 548 757	6	2-44
F Guide bearing LF20	3 842 535 663	4	13-40
H Drive head	3 842 526 867	1	13-42
I Return head	3 842 526 869	1	13-42
J Toothed belt	3 842 994 662 / L ₃ ¹⁾	1	13-43
K Belt connector	3 842 535 680	2	13-43

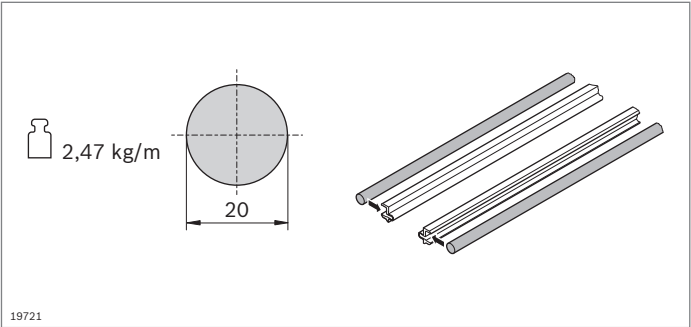
¹⁾ L₃ = 2xL₂ - L₁ + 780





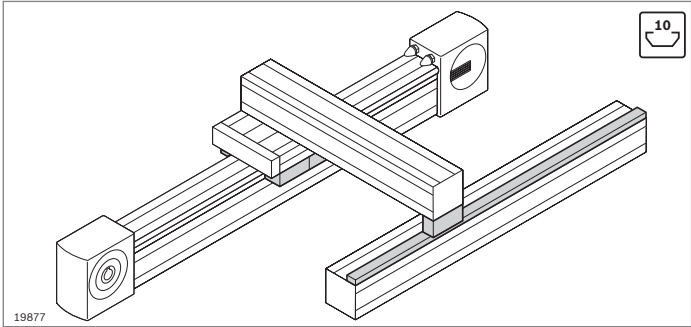
- The clamping profile is clipped into any chosen 10 mm strut profile slot and holds the guide rods

Clamping profile	L (mm)	No.
LF20C	1 pc 150 ... 3000	3 842 992 441 / L
	20 pcs 3000	3 842 518 898
Material:	Aluminum; anodized	

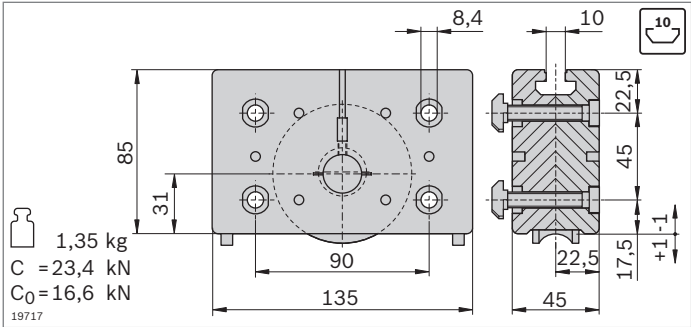


- The guide rod is pressed into the clamping profile
- The guide rod guides the guide bearing

Guide rod	L (mm)	No.
LF20	150 ... 2900 1	3 842 993 969 / L
	2900 20	3 842 539 416
Material:	Solid shaft VA, induction hardened, polished	
Condition on delivery:	Ungreased; greasing according to assembly instructions 3 842 527 226	



- ▶ Guide bearing for trolley construction
- ▶ Supporting bearing for brackets for bearing off-center forces
- ▶ Guide rail to support supporting bearings (p. 13-41)



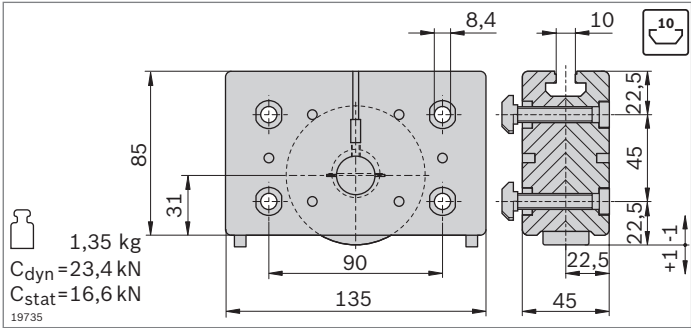
- ▶ Guide bearing for trolley construction
- ▶ Guiding via guide rod
- ▶ Cam rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free cam roller adjustment via eccentric bolts
- ▶ Replacement of the lubricating felts possible from rear in installed state

Guide bearing	No.	FS
LF20	2 3 842 535 663	4xFS1 4xFS2

Material: Housing: Diecast aluminum
Cam roller: Steel, hardened, polished

Scope of delivery: Incl. fastening material (FS)

Condition on delivery: Lubricating felts ungreased; greasing according to assembly instructions
3 842 527 226



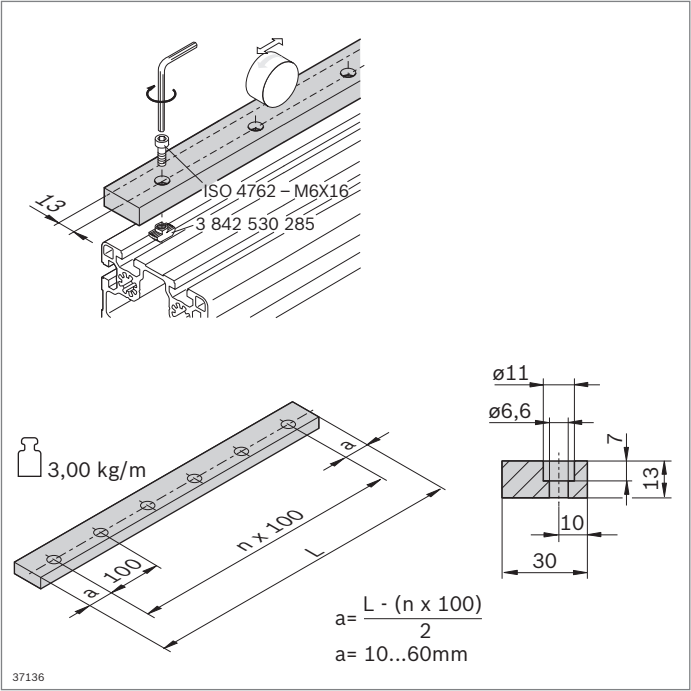
- ▶ Supporting bearing for brackets for bearing off-center forces
- ▶ For support on the guide rail
- ▶ Cam rollers with ball bearings, permanently lubricated
- ▶ Lubricating felts with guide rod lubrication reservoir
- ▶ Play-free cam roller adjustment via eccentric bolts
- ▶ Replacement of the lubricating felts possible from rear in installed state

Supporting bearing	No.	FS
LF20	2 3 842 535 665	4xFS1 4xFS2

Material: Housing: Diecast aluminum
Cam roller: Steel, hardened, polished

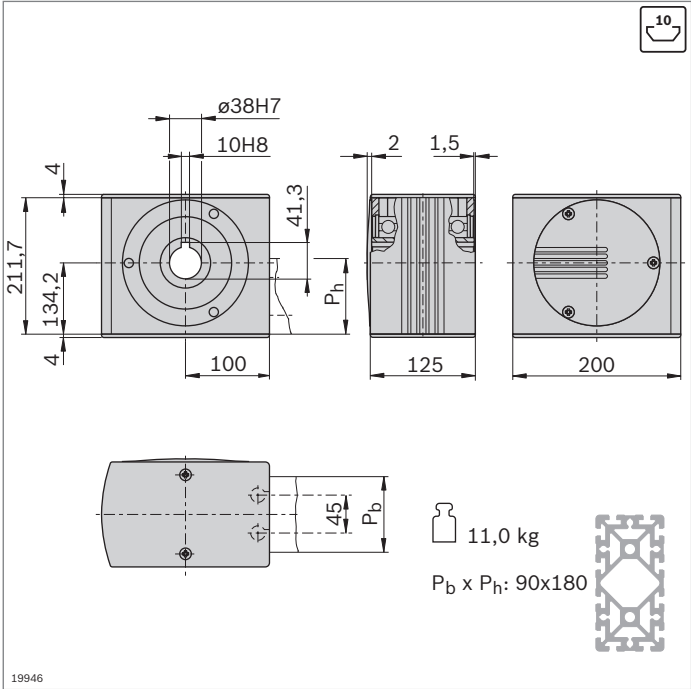
Scope of delivery: Incl. fastening material (FS)

Condition on delivery: Lubricating felts ungreased; greasing according to assembly instructions
3 842 527 226



► Guide rail to hold supporting bearings

Guide rail	L (mm)	No.
LF20	120 ... 2000	3 842 994 702 / L
Material:	Steel, hardened, polished	
Accessories:	Cap screw ISO 4762 – M6x16 T-nut M6, 10 mm slot (3 842 530 285)	
Condition on delivery:	Ungreased; greasing according to assembly instructions 3 842 527 226	

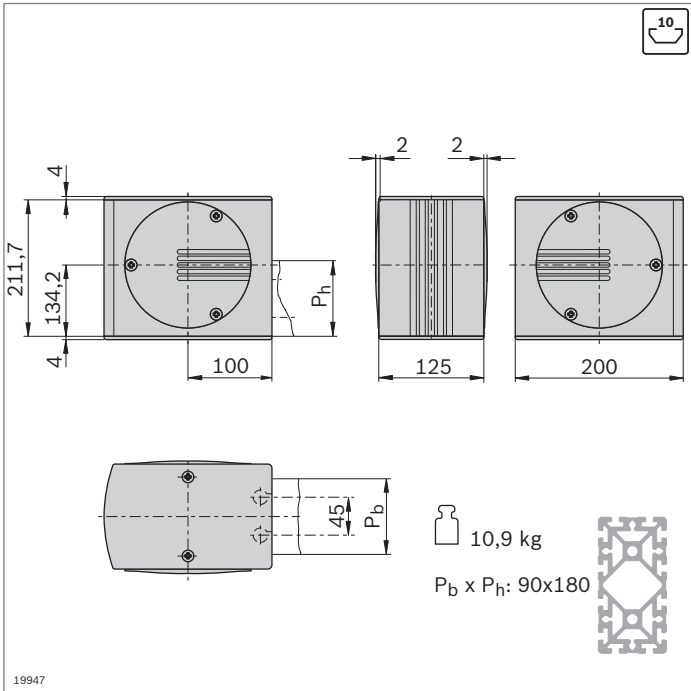
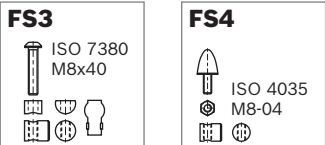


- ▶ Drive head for transferring drive torque to a toothed belt
- ▶ For direct mounting of a motor or (in conjunction with a plug-in shaft) for mounting a hollow shaft gear or a coupling (p. 13-46)
- ▶ Mounted directly on profile by using longitudinal end connector (connector included in scope of delivery)
- ▶ Profile finishing: LF blind hole drilling for longitudinal end connector

Drive head	No.	FS
LF20C	3 842 526 867	4xFS3, 2xFS4

Material: Drive head: Aluminum; anodized
Hollow shaft: Steel; galvanized

Scope of delivery: Incl. Fastening material (FS), cover caps

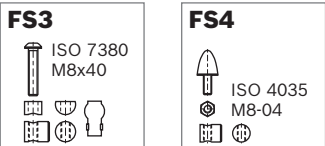


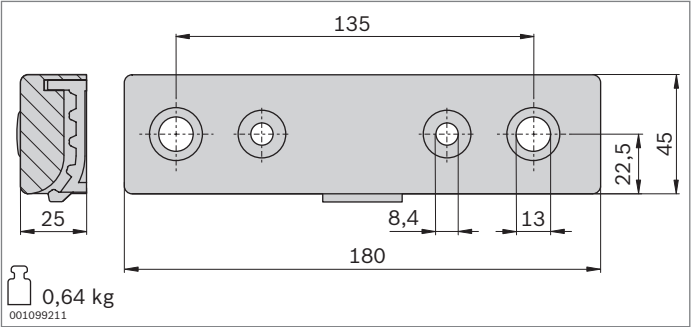
- ▶ Return head for tensioning the toothed belt and changing its direction
- ▶ Mounted directly on profile by using longitudinal end connector (connector included in scope of delivery)
- ▶ Profile finishing: LF blind hole drilling for longitudinal end connector

Return head	No.	FS
LF20C	3 842 526 869	4xFS3, 2xFS4

Material: Return head: Aluminum; anodized
Hollow shaft: Steel; galvanized
Cover caps: PA; black

Scope of delivery: Incl. Fastening material (FS), cover caps





- Belt connector for fastening the toothed belt to the trolley slot
- Profile finishing for strut profile 45x270 for trolley LF20S: M12
- All connecting parts included for mounting at the profile end (LF20S) or the slot (LF20C)

Belt connector	No.	FS
LF20	2	3 842 535 680 4xFS2, 2xFS5, 2xFS6, 2xFS7, 2xFS8

Material: Aluminum, painted black
Scope of delivery: Incl. fastening material (FS)

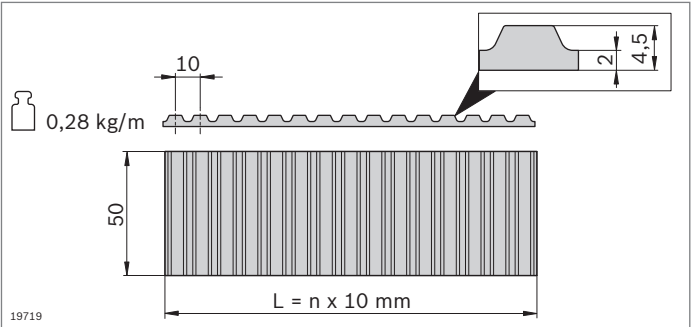
FS2
 $\varnothing 10 \times \varnothing 5 \times 11$

FS5
 DIN 7984
M12x40

FS6
 DIN 7984
M8x30
DIN 125
A8,4

FS7
 DIN 7991
M8x30

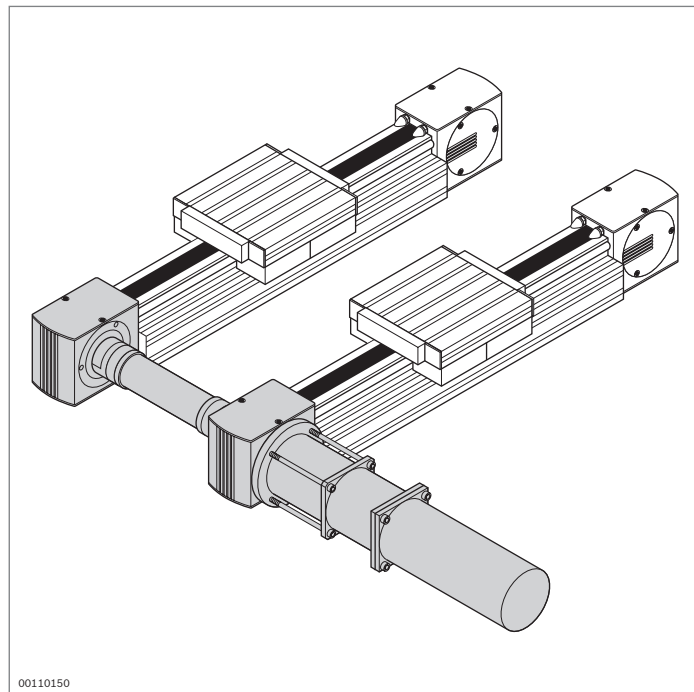
FS8
 $\varnothing 18 \times 7$



- Toothed belt as a trolley drive
- Pitch: AT10

Toothed belt	L (mm)	No.
LF20	300 ... 50000	3 842 994 662 / L ₃ ¹⁾
	50000	3 842 513 648

¹⁾ $L_3 = 2 \times L_2 - L_1 + 780$
Material: PU with embedded steel wires



Linear guide drives

Drive concept

The linear guides are driven via the hollow shaft in the drive head. The drive head is used to directly install a motor or alternatively (in connection with a plug-in shaft) a hollow shaft gear or a coupling. Depending on the desired speeds of movement for the application, it is necessary to use various motor types in conjunction with intermediate gears. Due to the multitude of drive components available in the market, there are a large number of possible combinations.

The MGE modular profile system makes it easy to assemble Bosch Rexroth linear guides through the use of a standard shaft and simple connection dimensions.

Fastening

The drive head is directly secured on the profile by means of longitudinal end connectors.

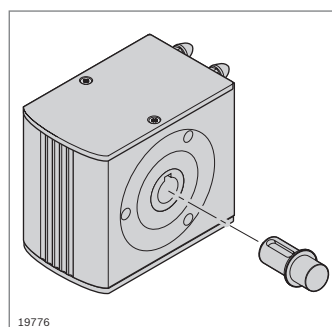
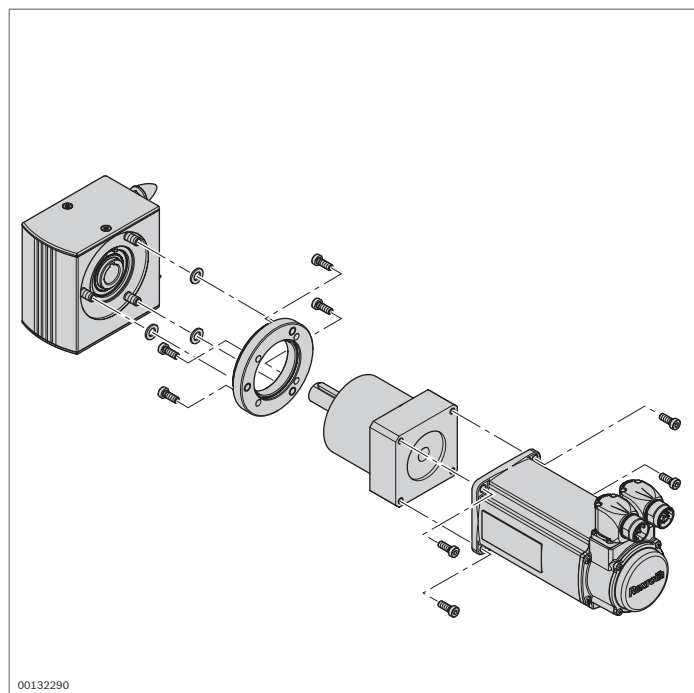
The motor, or the intermediate gear flange, can be screwed to the drive head as a complete unit from the left- or right-hand side.

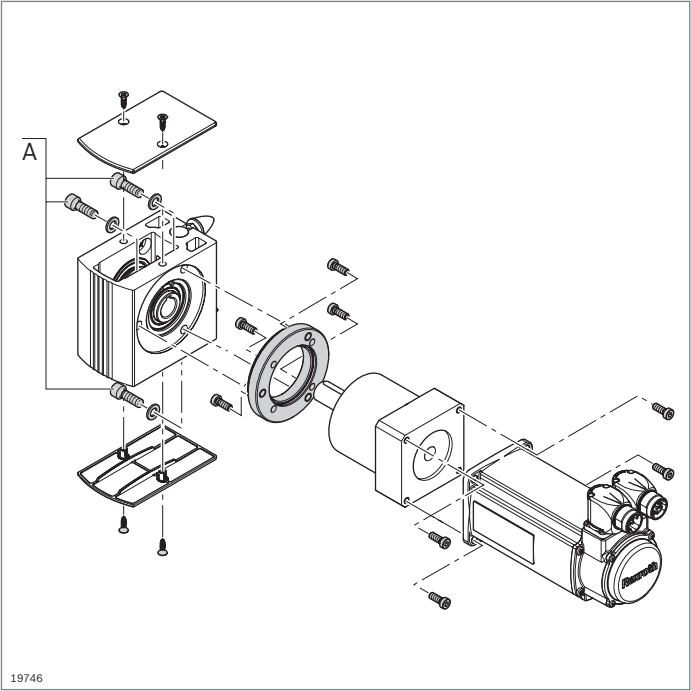
Synchronous shafts

The use of synchronous shafts (p. 13-47) enables several linear axes to be operated with one drive.

Connection dimensions (flanges)

The connection dimensions for the size LF6, LF12 and LF20 linear guides are shown on pages 13-45.





Flange

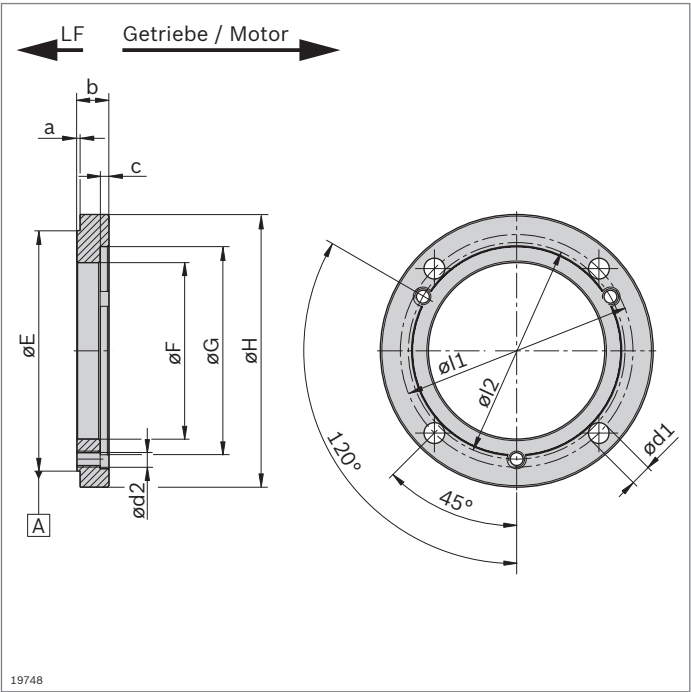
A flange is generally required for fixing the motor/gear unit in place. The connection dimensions for connection to the drive head are shown below. The connection to the motor/ gear unit depends on the model chosen in each case.

Also see connection dimensions of drive heads
LF6S (p. 13-9), LF6C (p. 13-14),
LF12C (p. 13-28), LF12S (p. 13-21),
LF20C (p. 13-42), LF20S (p. 13-35)

Fastening material flange (A)

Note regarding flange in self-build version. Adapt fastening material to suit differing flange thicknesses.

	LF6 (b = 14.5 mm)	LF12 (b = 20 mm)	LF20 (b = 20 mm)
Drive head – flange	ISO 4762 – M8x22 (3x) ISO 7092 – 8 (3x)	ISO 4762 – M8x25 (3x) ISO 7092 – 8 (3x)	ISO 4762 – M10x30 (3x) ISO 7092 – 10 (3x)

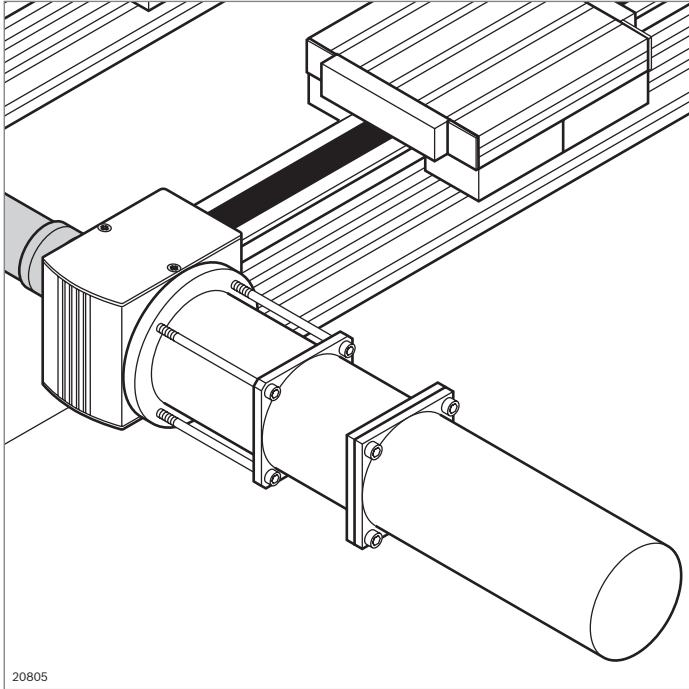


Drawing and dimensions for flange in self-build version. Customer-specific adjustment is necessary, depending on the motor and gear unit. The fastening material must be self-sourced.

Flange

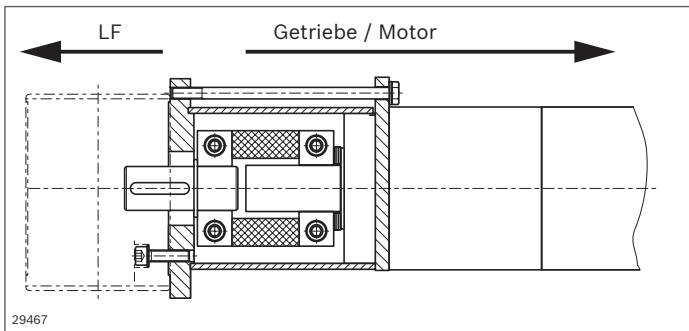
Dimension parameter	LF6 (mm)	LF12 (mm)	LF20 (mm)
a	3.5 ± 0.15	3.5 ± 0.15	2 ± 0.15
b _{min} *)	0.05	*)	*)
c*)	*)	*)	*)
E	Ø 88 -0.1/-0.3	Ø 111 -0.1/-0.3	Ø 150 -0.1/-0.3
F _{min} *)	Ø *)	Ø *)	Ø *)
G*)	0.05	Ø *)	Ø *)
H*)	Ø *)	Ø *)	Ø *)
I1*)	Ø *)	Ø *)	Ø *)
I2	Ø 78	Ø 100	Ø 135
d1*)	Ø *)	Ø *)	Ø *)
d2	Ø 0.25	M8	M10

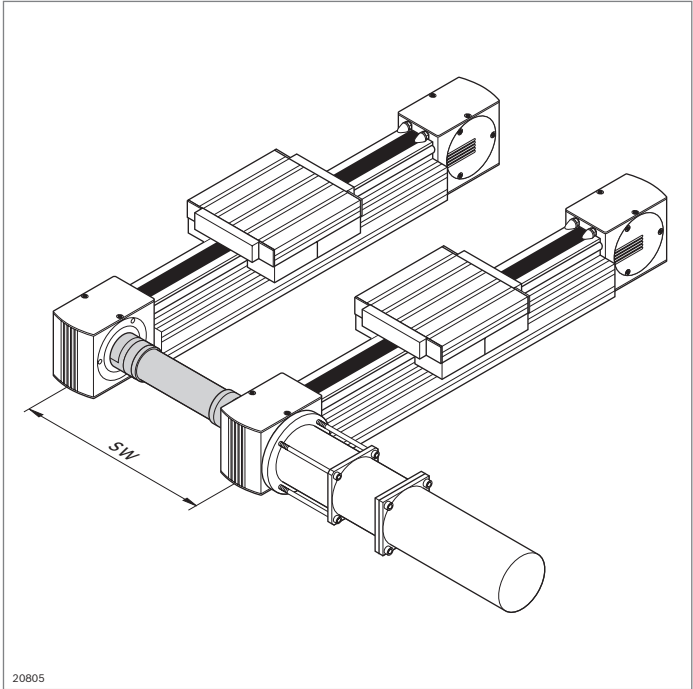
*) Dimension according to customer drive.
Notice: The values must be checked by the user.



Alternative mounting with coupling

Instead of direct mounting over the section link, a coupling can be inserted. This allows any user truing errors to be rectified. The coupling must be designed and sourced by the customer.





SW = support separation

Plug-in shafts, synchronous shafts

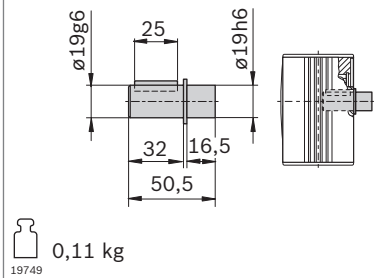
Plug-in shafts

- Enable the installation of customized drive solutions

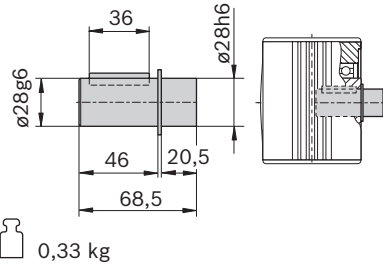
Plug-in shaft	No.
LF6	3 842 526 893
LF12	3 842 526 894
LF20	3 842 526 895

Material: Nickel-plated steel

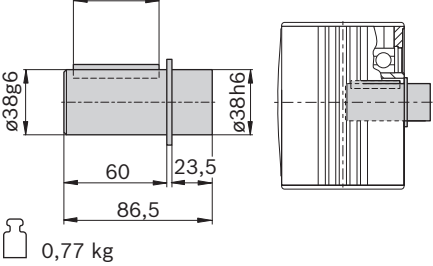
LF6

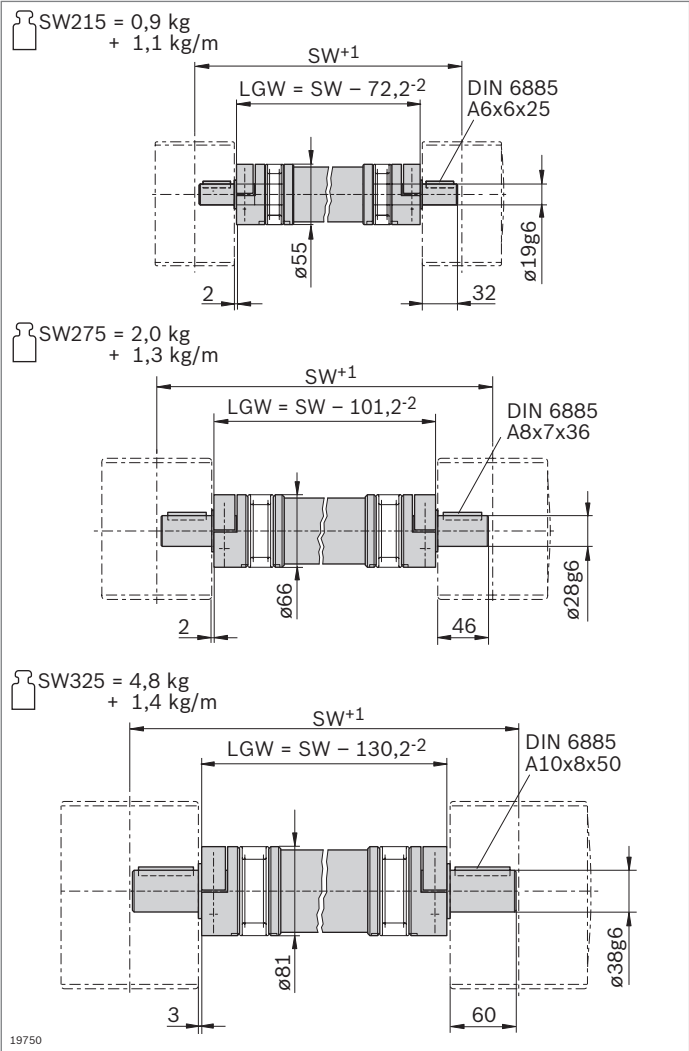


LF12



LF20





SW = support separation
LGW = length of synchronous shaft

Synchronous shafts

- Allow several linear guides to be operated synchronously while being driven by a common motor
- The synchronous shaft can be replaced without the drive heads having to be disassembled

The selection diagrams on page 13-55, 13-56 specify maximum values without safety margins.

Synchronous shaft	SW (mm)	No.
LF6	215 ... 3000	3 842 994 811 / SW
LF12	275 ... 3500	3 842 994 812 / SW
LF20	325 ... 3500	3 842 994 813 / SW

Material: Steel/aluminum

Technical data for roller, design, mounting

General technical data and calculations

Speed

$$v_{\max} = 5 \text{ m/s}$$

Acceleration

$$a_{\max} = 15 \text{ m/s}^2$$

Temperature resistance

$$-10 \text{ °C} < \vartheta < 40 \text{ °C}$$

Lubrication

All cam roller guide bearings are delivered with built-in lubricating felts.

Condition on delivery

Ungreased (greasing with Klüber Isoflex Topas NCA 52;
see assembly instructions **3 842 527 226**)

Lubricating felts with reservoir are not greased.

Guide rods are ungreased.

Definition of dynamic load rating C

The radial loading of constant magnitude and direction which a linear rolling bearing can theoretically withstand for a nominal service life of 100 km distance traveled (acc. to ISO 14728 Part 1).

Note regarding maximum load $F_{\max}$

The maximum loads apply to individual loads. Combining loads decreases the expected service life.

Definition and calculation of = nominal service life

The calculated service life which an individual linear rolling bearing – or a group of apparently identical rolling element bearings operating under the same conditions – can attain with a 90 % probability, based on the materials of normal manufacturing quality that are generally used today and under usual operating conditions (acc. to ISO 14728 Part 1) and optimal installation conditions.

Nominal service life at constant speed

$$L = \left(\frac{C}{F} \right)^3 10^5$$

$$L_h = \left(\frac{L}{2 \cdot s \cdot n_s \cdot 60} \right)$$

L = nominal service life (m)

L_h = nominal service life (h)

C = dynamic load capacity (N)

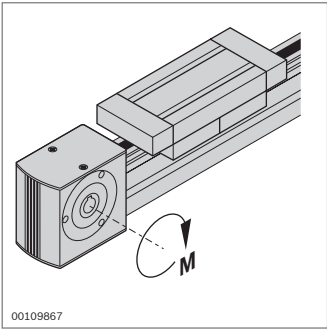
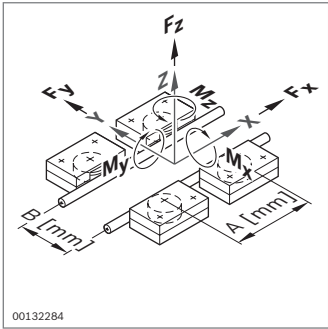
F = equivalent load (N)

s = length of stroke* (m)

n_s = stroke frequency (double stroke) (min^{-1})

*) For $s < 2 \cdot L_1$ (trolley length) load capacities are reduced.

Please consult us.



Load-dependent design

- The specified values are maximum single loads, which are reduced when loads are combined

Notice: If cumulative forces and moments arise in your application and load limits may be reached, please contact your Rexroth representative for consultation in design.

	$A_{min}^{1)}$ (mm)	F_z (N)	F_y (N)	M_x (Nm)	M_z (Nm)	M_y (Nm)	v_{max} (m/s)	M_{max} (Nm)
LF6S	75	850	1400	13.6	$0.7 \cdot A^{2)}$	$0.4 \cdot A^{2)}$	5	9.5 / 7.6
LF6C	75	850	1400	$0.4 \cdot B^{2)}$	$0.7 \cdot A^{2)}$	$0.4 \cdot A^{2)}$	5	15
LF12S	90	2000	3500	78.0	$1.7 \cdot A^{2)}$	$1.0 \cdot A^{2)}$	5	30
LF12C	90	2000	3500	$1.0 \cdot B^{2)}$	$1.7 \cdot A^{2)}$	$1.0 \cdot A^{2)}$	5	30
LF20S	135	6000	12500	240.0	$6.2 \cdot A^{2)}$	$3.0 \cdot A^{2)}$	5	100
LF20C³⁾	135	6000	12500	$3.0 \cdot B^{2)}$	$6.2 \cdot A^{2)}$	$3.0 \cdot A^{2)}$	5	100

1) A_{min} = Length guide bearing

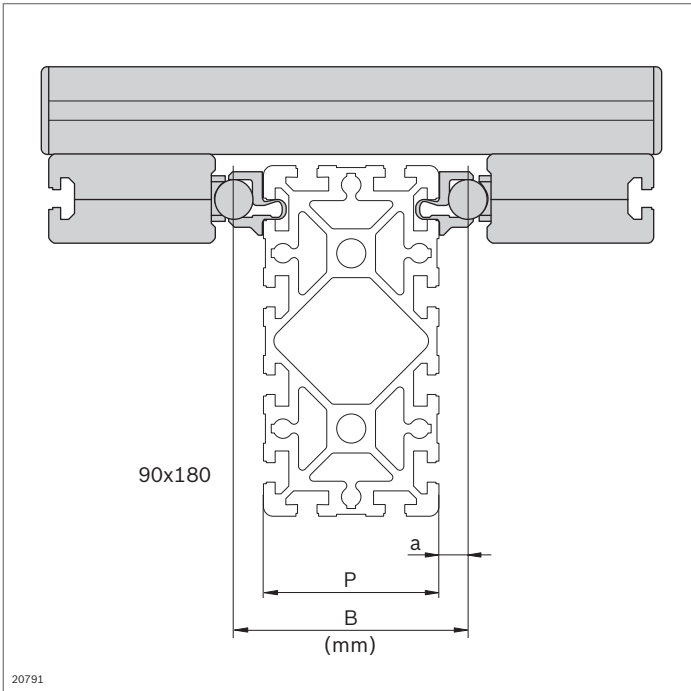
2) Notice: A (spacing of support wheels, see image above) in mm; see below for calculation of B (track width)

3) Maximum values (profile slot load-bearing capacity) are only reached with the following profiles: 45x270; 60x90; 90x90; 90x180; 90x360 (see p. 18-15)

Do not exceed the maximum loading of the screwed connections for rails, carriages and fastenings.

Ensure sufficiently stable basic profile and respective substructure.

Take account of the general service life of lubricants!



Calculating the track width B

$$B = P + 2 \cdot a$$

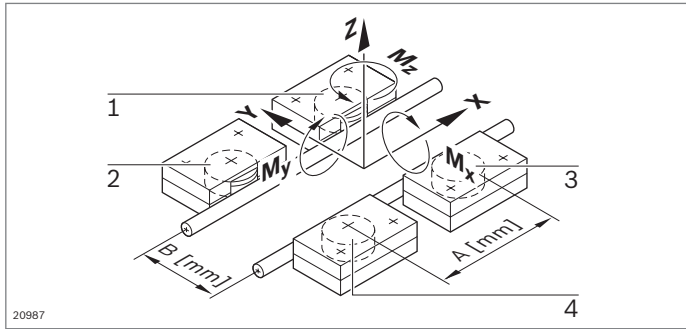
- B = track width (in mm)
- P = profile width (in mm)
- a = rod spacing (in mm)

LF ... C

- Values for a: for LF6C = 9.5 mm (p. 13-13)
- for LF12C = 9 mm (p. 13-25)
- for LF20C = 15 mm (p. 13-39)

LF ... S

- Values for a: for LF6S = 40 – 6 = 34 mm (p. 13-8)
- for LF12S = 90 – 12 = 78 mm (p. 13-18)
- for LF20S = 100 – 20 = 80 mm (p. 13-32)



Cam roller 1:

$$F_r = -\left(\frac{F_y}{2}\right) - \left(\frac{M_z}{A}\right)$$

$$F_a = \left(\frac{F_z}{4}\right) + \left(\frac{M_x}{2 \cdot B}\right) - \left(\frac{M_y}{2 \cdot A}\right)$$

Cam roller 3:

$$F_r = +\left(\frac{F_y}{2}\right) + \left(\frac{M_z}{A}\right)$$

$$F_a = \left(\frac{F_z}{4}\right) - \left(\frac{M_x}{2 \cdot B}\right) - \left(\frac{M_y}{2 \cdot A}\right)$$

Cam roller 2:

$$F_r = -\left(\frac{F_y}{2}\right) + \left(\frac{M_z}{A}\right)$$

$$F_a = \left(\frac{F_z}{4}\right) + \left(\frac{M_x}{2 \cdot B}\right) + \left(\frac{M_y}{2 \cdot A}\right)$$

Cam roller 4:

$$F_r = +\left(\frac{F_y}{2}\right) - \left(\frac{M_z}{A}\right)$$

$$F_a = \left(\frac{F_z}{4}\right) - \left(\frac{M_x}{2 \cdot B}\right) + \left(\frac{M_y}{2 \cdot A}\right)$$

Calculation of load on bearing for a trolley

Loading of the individual rollers

- A mm: Spacing of the rollers' rotational axes
- B mm: Center-to-center distance between the guide rods
- Only compressive forces can be transferred between cam rollers and guide rods in the radial direction.
The following therefore applies in respect of radial forces:
 $F_r \leq 0$: $F_r = 0$
- Cam rollers can be loaded equally in both directions.
Therefore force F_a is sufficient for calculating P and P_0

Table 1: Load factors for cam rollers

	Load case: $F_r \geq F_a $				Load case: $F_r < F_a $			
	x	y	x_0	y_0	x	y	x_0	y_0
LF6	1	3.1	1.2	3.5	0.5	3.6	1	3.7
LF12	1	4.2	1.2	5.2	0.5	4.7	1	5.4
LF20	1	4	1.2	4.9	0.5	4.5	1.1	5

Table 2: Cam rollers - load capacities

	C for 10^5 m (N)	C_0 (N)
LF6	3670	2280
LF12	8300	5000
LF20	23400	16600

Equivalent dynamic and static loads

To calculate the service life of a cam roller guide, the roller with the greatest load has to be considered.

The following must be determined:

$$P = \max (P_1, \dots, P_4)$$

$$P_0 = \max (P_{01}, \dots, P_{04})$$

Equivalent dynamic load P

$$P = x \cdot |F_r| + y \cdot |F_a|$$

Equivalent static load P_0

$$P_0 = x_0 \cdot |F_r| + y_0 \cdot |F_a|$$

F_r (N): radial load of the roller

The following applies: $F_r \leq 0$: $F_r = 0$

F_a (N): axial load of the roller

x, x_0 : Radial factor (table 1)

y, y_0 : Axial factor (table 1)

C: dynamic load capacity (table 2)

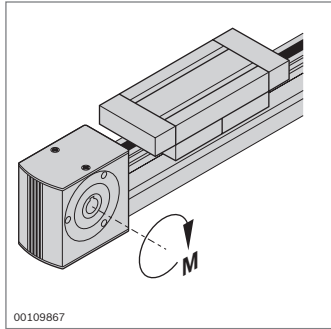
C_0 : static load capacity (table 2)

Static safety values:

$$S_0 = \left(\frac{C_0}{P_0}\right)$$

$S_0 \geq 4$ recommended!

Size selection



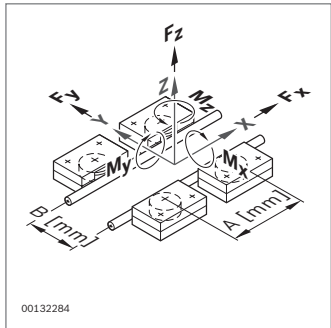
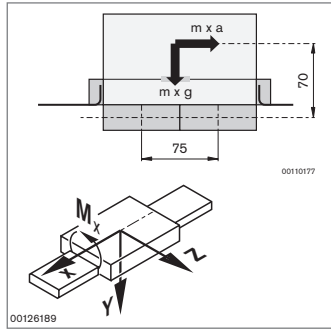
Determining the forces and moments which arise

$$\begin{matrix} F_{x \text{ dyn}}, F_{y \text{ dyn}}, F_{z \text{ dyn}}^{1)} \\ M_{x \text{ dyn}}, M_{y \text{ dyn}}, M_{z \text{ dyn}} \end{matrix}$$

1) $F_{z \text{ dyn}}$ includes the weight of the trolley

All the influences must be considered, e.g.:

- Net mass and load
- Acceleration forces and moments
- Process forces and moments
- Loads caused by dampers and/or stops



Determining the permissible forces and moments

For values see p. 13-51

Example

$$\begin{aligned} m &= 30 \text{ kg} & a &= 2.5 \text{ m/s}^2; \\ L_1 &= 150 \text{ mm} & L_2 &= 5000 \text{ mm} \\ g &= 9.81 \text{ m/s}^2 \end{aligned}$$

$$F_{z \text{ dyn}} = m \cdot g = 294 \text{ N}$$

$$M_{y \text{ dyn}} = m \cdot a \cdot 70 \text{ mm} = 5.25 \text{ Nm}$$

Example of LF 6 S, LF 6 C

$$\begin{aligned} F_{z \text{ dyn zul}} &= 850 \text{ N} > F_{z \text{ dyn}} = 294 \text{ N} \\ M_{y \text{ dyn zul}} &= 0.4 \cdot A = 0.4 \cdot 75 \text{ mm} \\ &= 30 \text{ Nm} > M_{y \text{ dyn}} = 5.25 \text{ Nm} \end{aligned}$$

Selection of the suitable size

$$\begin{matrix} F_{x, y, z \text{ dyn}} < F_{x, y, z \text{ dyn zul}} ! \\ M_{x, y, z \text{ dyn}} < M_{x, y, z \text{ dyn zul}} ! \end{matrix}$$

If F and M are cumulative:

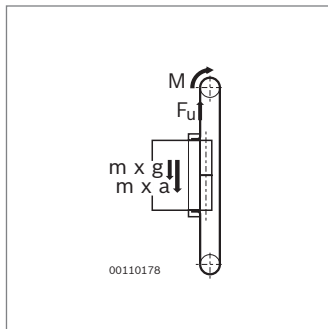
In case of higher load, the next size is to be used. In case of doubt, please contact your Rexroth representative for consultation in design.

Example

$$F_{z \text{ dyn}} = 294 \text{ N} < F_{z \text{ dyn zul}} = 850 \text{ N} !$$

$$\begin{aligned} M_{y \text{ dyn}} &= 5.25 \text{ Nm} < M_{y \text{ dyn zul}} \\ &= 30 \text{ Nm} ! \end{aligned}$$

Calculating the drive

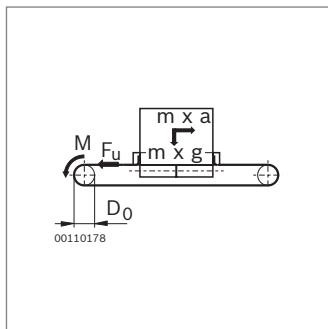


Peripheral force F_u

$$F_u = m \cdot a + m \cdot g + F_0 + \mu \cdot m \cdot g$$

$$F_u \leq F_{u \text{ zul}} !$$

F_0 : frictional force on return units
 μ : coefficient of friction of the guide
 see table below.



Alternative calculation formula

$$F_u = m \cdot a + F_0 + \mu \cdot m \cdot g \leq F_{u \text{ zul}} !$$

Example of LF6C

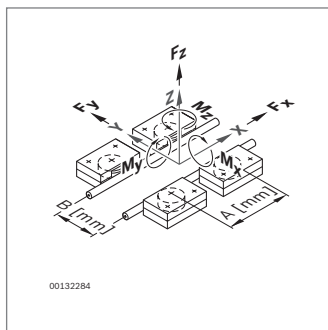
$$m = 30 \text{ kg}; \quad a = 2.5 \text{ m/s}^2$$

$$F_u = (30 \cdot 2.5) \text{ N} + 10 \text{ N}$$

$$+ (0.025 \cdot 30 \cdot 9.81) \text{ N}$$

$$F_u = 75 \text{ N} + 10 \text{ N} + 0.025 \cdot 294 \text{ N}$$

$$F_u = 92.35 \text{ N} < F_{u \text{ zul}} = 600 \text{ N} !$$



Required drive torque M

$$M = \frac{1}{2} \cdot D_0 \cdot F_u \leq M_{\text{zul}} !$$

Example

$$M = \frac{1}{2} \cdot 50.94 \text{ mm} \cdot 92.35 \text{ N}$$

$$= 2.4 \text{ Nm}$$

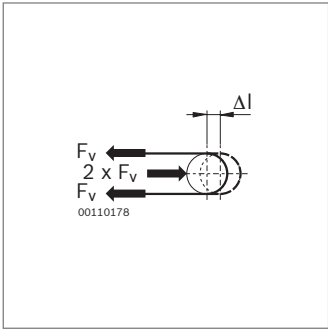
$$M = 2.35 \text{ Nm} \leq M_{\text{zul}}$$

$$= 15 \text{ Nm} !$$

	v (m/s)	$F_{u \text{ zul}}$ (N)	M_{zul} (Nm)	F_0 (N)	μ	D_0 (mm)	$D_0 \times \pi$ (mm)
LF6S	≤ 2.0	500	9.5	10	0.025	38.21	120
LF6S	2.01 ... 5.0	400	7.6	10	0.025	38.21	120
LF6C	≤ 5.0	600	15.0	10	0.025	50.94	160
LF12S	≤ 5.0	820	30.0	30	0.020	73.20	230
LF12C	≤ 5.0	820	30.0	30	0.020	73.20	230
LF20S	≤ 5.0	2000	100.0	35	0.015	101.86	320
LF20C	≤ 5.0	2000	100.0	35	0.015	101.86	320

F_0 : frictional force on return units; μ : coefficient of friction

Checking the selected size

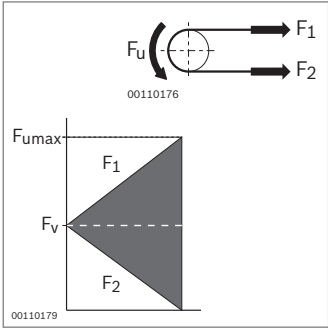


Preload force F_v of toothed belt

$$0.5 \cdot F_u \leq F_v \leq F_u$$

Recommendation: $F_v = 0.5 \cdot F_u$

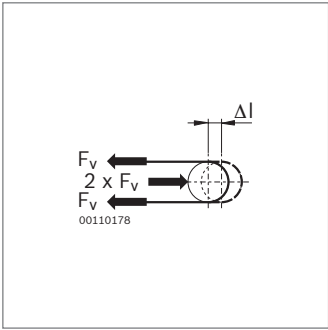
Example
 $F_u = 92.35 \text{ N}$
 $F_v = 50 \text{ N}$



Maximum toothed belt force $F_{1 \text{ max}}$

$$F_{1 \text{ max}} = F_v + 0.5 \cdot F_u \leq F_{1 \text{ zul}} !$$
$$F_{2 \text{ min}} = F_v - 0.5 \cdot F_u > 0 !$$

Example of LF6C
 $F_{1 \text{ max}} = 50 \text{ N} + 0.5 \cdot 92.35 \text{ N}$
 $F_{1 \text{ max}} = 96.18 \text{ N} < F_{1 \text{ zul}} = 900 \text{ N} !$
 $F_{2 \text{ min}} = 50 \text{ N} - 0.5 \cdot 92.35 \text{ N}$
 $F_{2 \text{ min}} = 3.825 \text{ N} > 0 !$



Required preload length Δl

$$\Delta l = 0.5 \cdot F_v \cdot L / C_{\text{spez}} \leq \Delta l_{\text{max}} !$$

Example
 $L = 2 \cdot L_2 - L_1 + 400 \text{ mm}$
 $L = 10250 \text{ mm}$
 $\Delta l = 0.5 \cdot 50 \text{ N} \cdot 10250 \text{ mm} / 420000 \text{ N}$
 $\Delta l = 0.8 \text{ mm} < \Delta l_{\text{max}} = 13 \text{ mm} !$

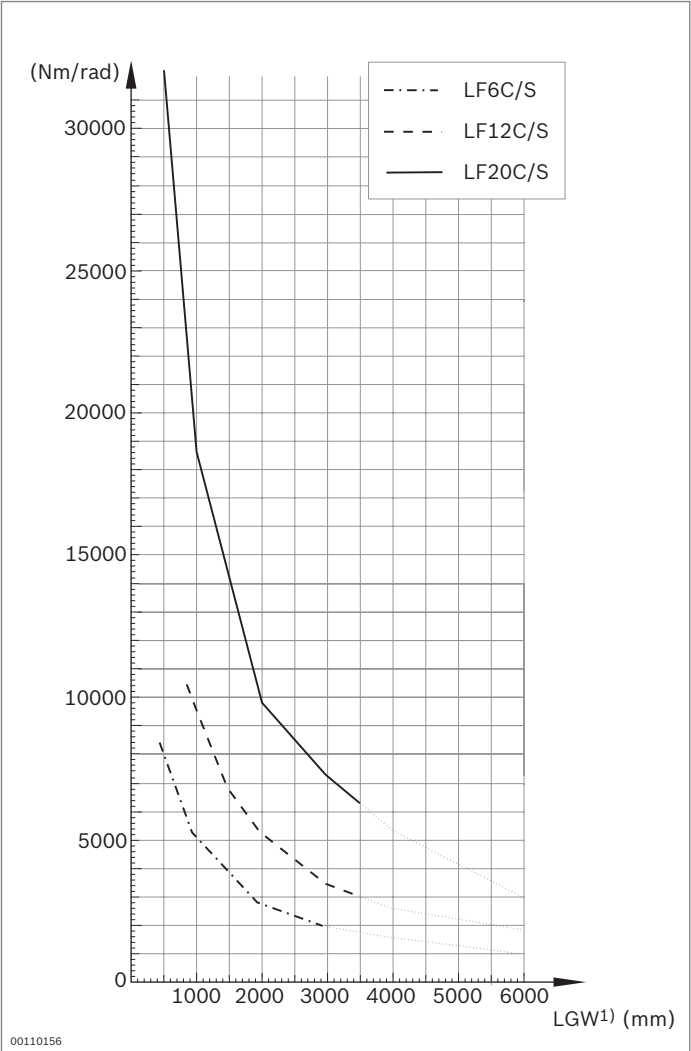
	$F_{1 \text{ zul}} \text{ (N)}$	$C_{\text{spez}} \text{ (N)}$	$\Delta l_{\text{max}} \text{ (mm)}$	$L \text{ (mm)}$	Page
LF6S	750	315000	11	$2 \cdot L_2 - L_1 + 360$	13-6
LF6C	900	420000	13	$2 \cdot L_2 - L_1 + 400$	13-11
LF12S	1230	1250000	16	$2 \cdot L_2 - L_1 + 630$	13-16
LF12C	1230	1250000	16	$2 \cdot L_2 - L_1 + 630$	13-23
LF20S	3000	1870000	23	$2 \cdot L_2 - L_1 + 780$	13-30
LF20C	3000	1870000	23	$2 \cdot L_2 - L_1 + 780$	13-37

C_{spez} : Belt stiffness;
L: Toothed belt,
see also LF6S (p. 13-6), LF6C (p. 13-11),
LF12S (p. 13-16), LF12C (p. 13-23),
LF20S (p. 13-30), LF20C (p. 13-37)

Dimensioning of synchronous shafts

		LF6		LF12	LF20
Support separation SW	horizontal		215 ... 3000 mm	275 ... 3500 mm	325 ... 3500 mm
	vertical		215 ... 2000 mm	275 ... 2000 mm	325 ... 1100 mm
Nominal torque		max. 30 Nm		max. 60 Nm	max. 150 Nm
Permitted rpm		Diagram 3 (p. 13-56) max. 0.7 · n _k		Diagram 3 (p. 13-56) max. 0.7 · n _k	Diagram 3 (p. 13-56) max. 0.7 · n _k
Elasticity	axial		max. 2 mm	max. 3 mm	max. 4 mm
	lateral		Diagram 4 (p. 13-56)	Diagram 4 (p. 13-56)	Diagram 4 (p. 13-56)
	Rotation angle		Diagram 5 (p. 13-56)	Diagram 5 (p. 13-56)	Diagram 5 (p. 13-56)

Diagram 1: Torsion stiffness



¹⁾ Length synchronous shaft LGW

- LF6 LGW = SW - 72
- LF12 LGW = SW - 101
- LF20 LGW = SW - 130

Diagram 2: Mass inertia

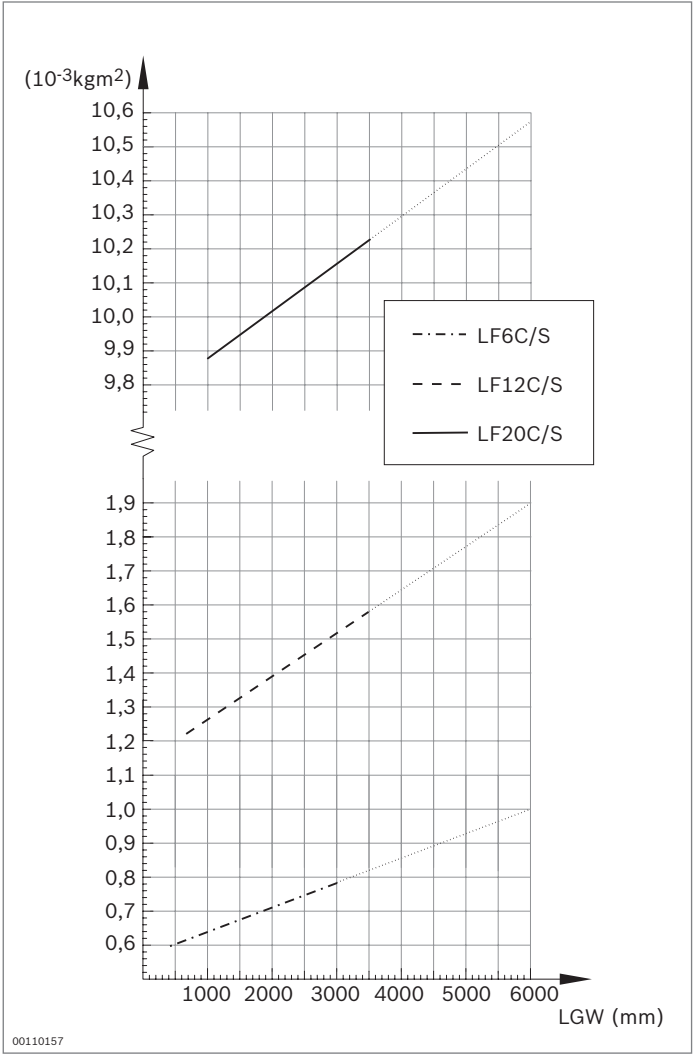


Diagram 3: Critical rpm due to bending n_k

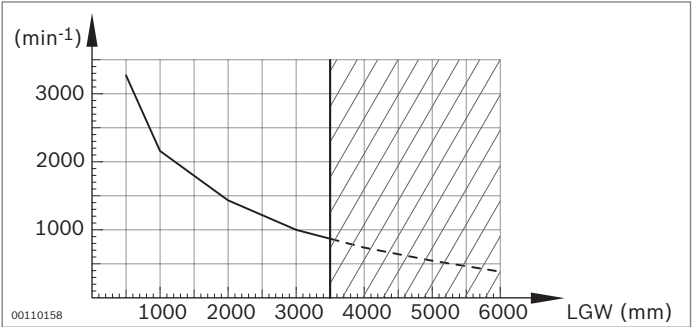
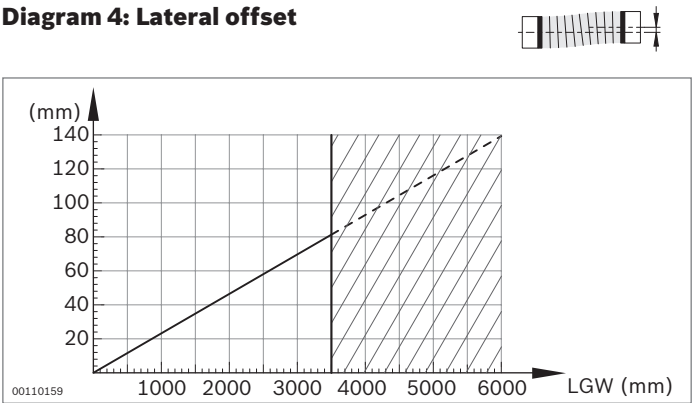
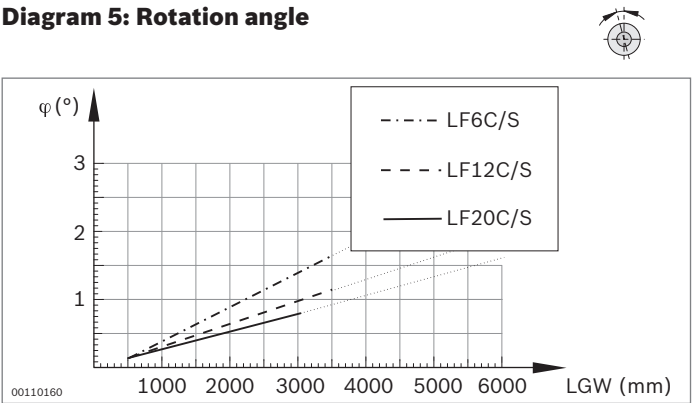


Diagram 4: Lateral offset

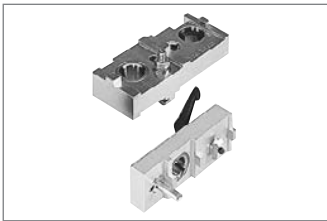


Aligned shafts are recommended.

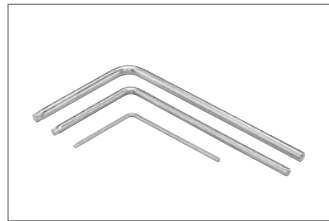
Diagram 5: Rotation angle



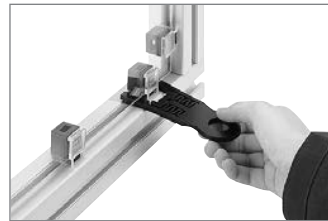
Tools



Drilling jigs (p. 14-2)



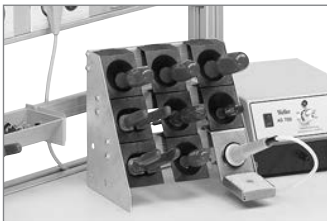
Torx® offset screwdriver
(p. 14-5)



Variofix remover,
Flexible grinder (p. 14-6)



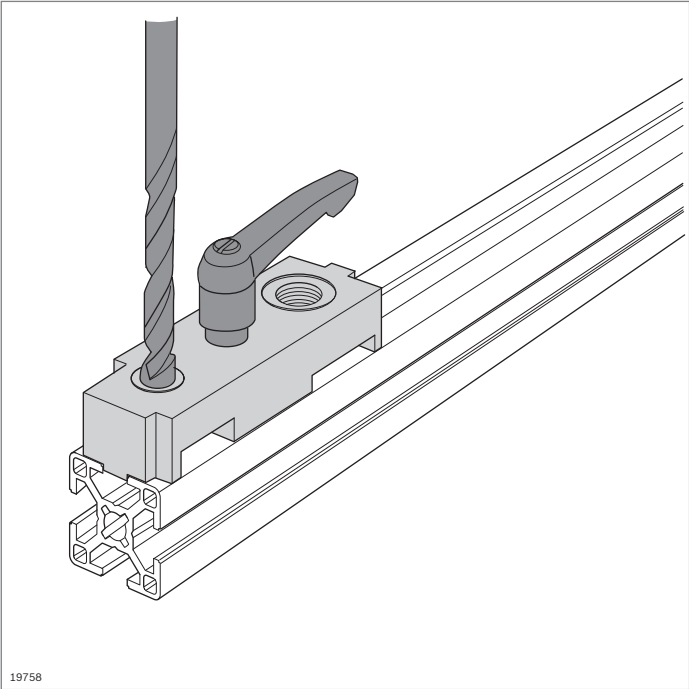
Beveling shears (p. 14-6)



Tool shelf,
tool holder (p. 14-7)

Let us send you information on the complete product range
of Bosch power tools!

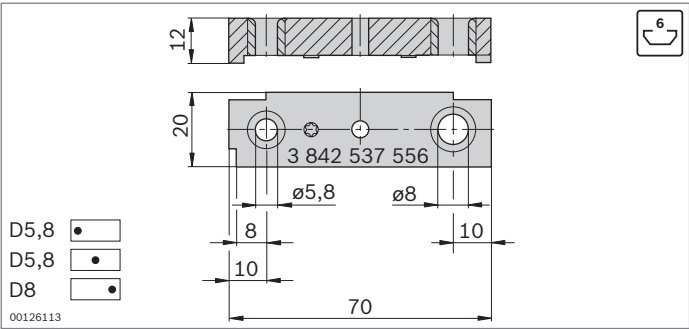
Robert Bosch GmbH
Geschäftsbereich Elektrowerkzeuge
PO Box 10 01 56
D-70745 Leinfelden-Echterdingen
<http://www.bosch-pt.com>



Drilling jigs



- For simple drilling of standard holes for the Rexroth range of connectors
- Stopping surfaces and edges for precise hole positioning
- Lockable



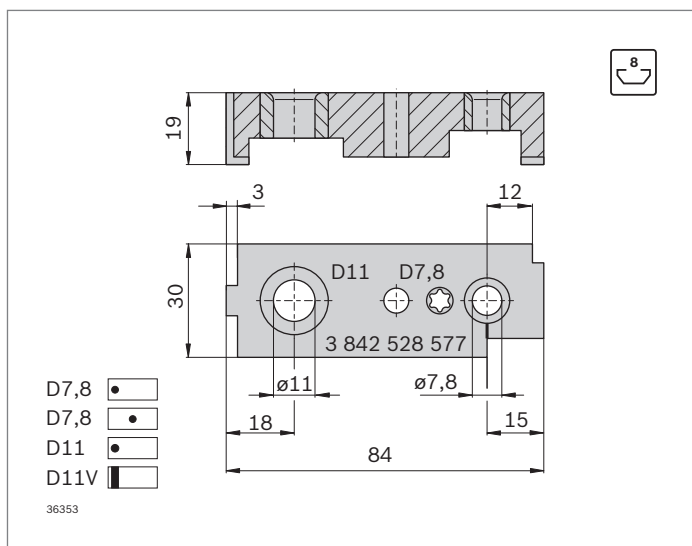
Drilling jigs – slot 6 mm

- For through-holes (ø5.8) for hexagonal-star socket screwdrivers T25
- For fastening holes (ø8) for quick connectors

Drilling jig	No.	FS
Slot 6 mm	3 842 537 556	FS1

Material: Aluminum
Scope of delivery: Incl. fastening material (FS)

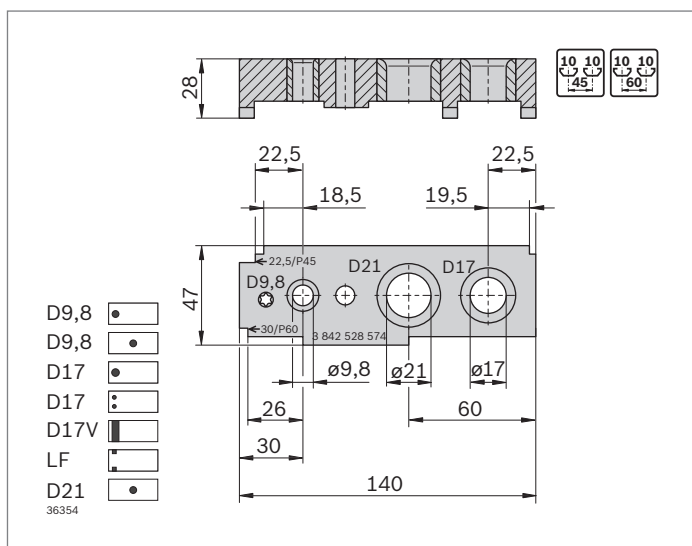
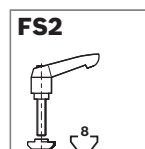




Drilling jigs – slot 8 mm

- For through-holes ($\varnothing 7.8$) for hexagonal-star socket screwdrivers T40
- For fastening holes ($\varnothing 11$) for quick connectors

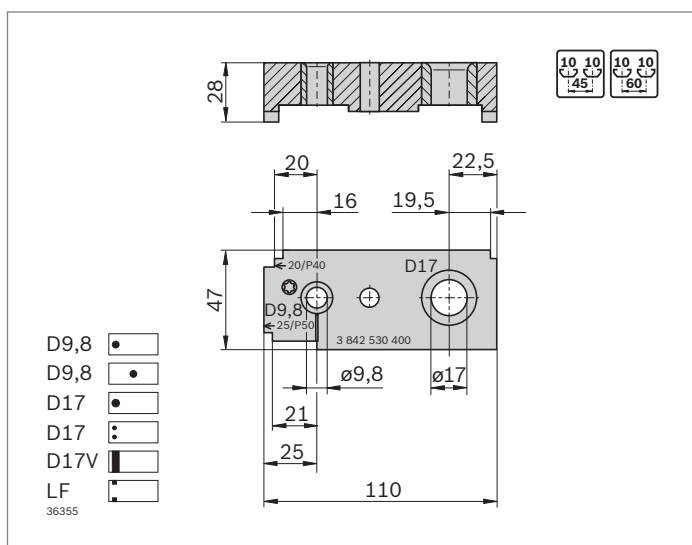
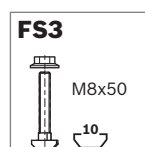
Drilling jig	No.	FS
Slot 8 mm	3 842 528 577	FS2
Material:	Steel; galvanized	
Scope of delivery:	Incl. fastening material (FS)	



Drilling jigs – slot 10 mm, modular dimensions 45, 60

- For fastening holes ($\varnothing 17$) for bolt connectors, quick connectors, and threaded sleeves
- For through-holes ($\varnothing 9.8$) for hexagonal-star socket screwdrivers T50
- For counterbores ($\varnothing 21$) for pneumatic connections

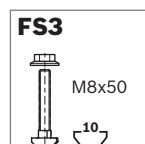
Drilling jig	No.	FS
Slot 10 mm, modular dimensions 45, 60	3 842 528 574	FS3
Material:	Steel; galvanized	
Scope of delivery:	Incl. fastening material (FS)	

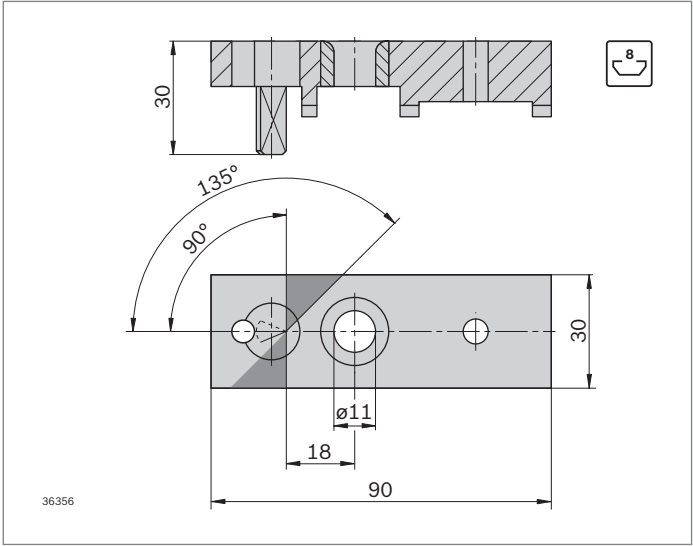


Drilling jigs – slot 10 mm, modular dimensions 40, 50

- For through-holes ($\varnothing 9.8$) for hexagonal-star socket screwdrivers T50
- For fastening holes ($\varnothing 17$) for bolt connectors, quick connectors, and threaded sleeves

Drilling jig	No.	FS
Slot 10 mm, modular dimensions 40, 50	3 842 530 400	FS3
Material:	Steel; galvanized	
Scope of delivery:	Incl. fastening material (FS)	



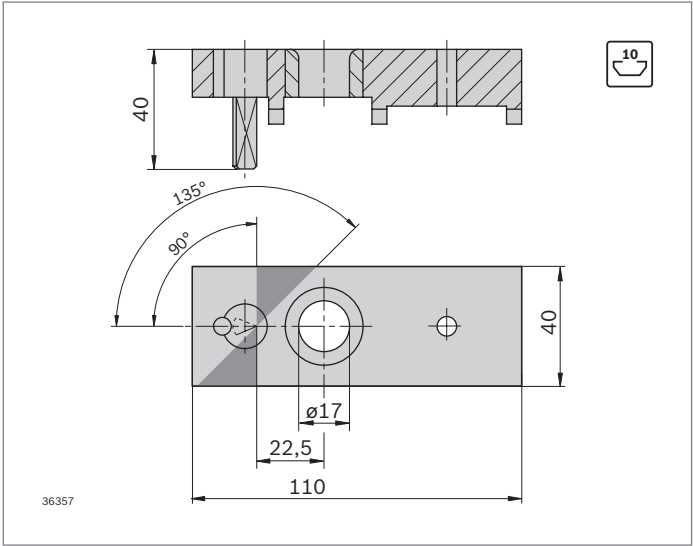


Drilling jig for diagonally sawn profiles – slot 8 mm

► For fastening holes (ø11) for bendable quick connectors

Drilling jig	No.	FS
Slot 8 mm – diagonally sawn profiles	3 842 516 729	FS2

Material: Aluminum
Scope of delivery: Incl. fastening material (FS)
Also see bendable quick connector (p. 3-57)

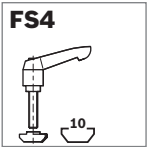


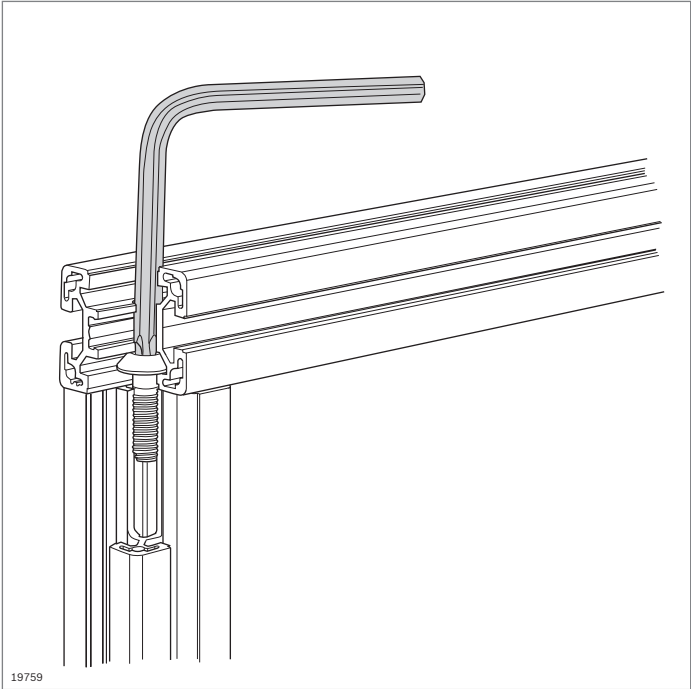
Drilling jig for diagonally sawn profiles – slot 10 mm

► For fastening holes (ø17) for bendable quick connectors

Drilling jig	No.	FS
Slot 10 mm – diagonally sawn profiles	3 842 516 731	FS4

Material: Aluminum
Scope of delivery: Incl. fastening material (FS)
Also see bendable quick connector (p. 3-57)



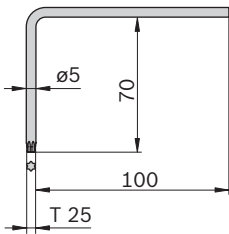


Torx® offset screwdriver



- Offset screwdriver for the central bolts (p. 3-41):
 - S6x16-**T25**
 - S8x25-**T40**
 - S12x30-**T50**, M12x30-**T50**
- Long shank for easy screw head access

T25



00111397

Offset screwdriver T25



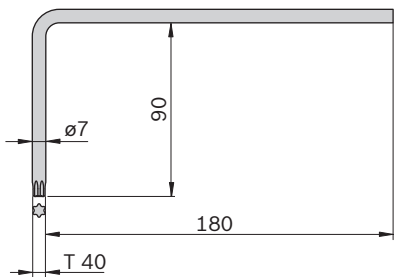
No.

5

3 842 528 590

Material: Chrome vanadium steel

T40



00111398

Offset screwdriver T40



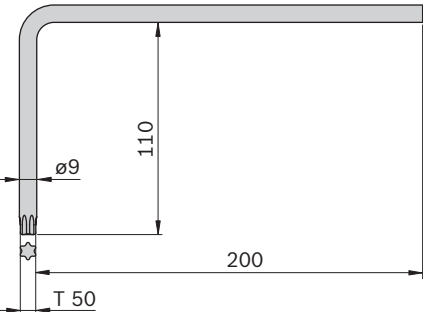
No.

5

3 842 528 588

Material: Chrome vanadium steel

T50



00111399

Offset screwdriver T50

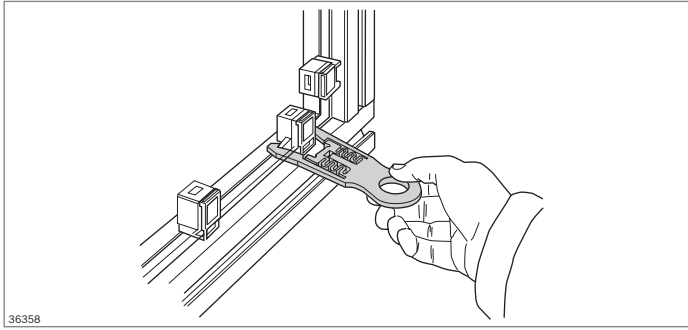


No.

5

3 842 528 586

Material: Chrome vanadium steel

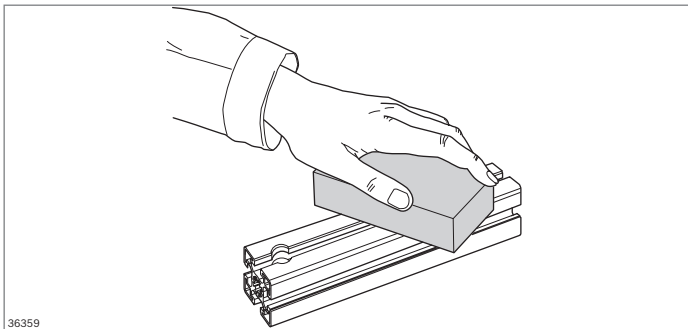


Variofix remover

- For fast, easy removal of the Variofix snap-in clip (p. 7-6), even in hard-to-reach places
- The Variofix remover is pushed onto the snap-in clip of the Variofix block so that it spreads the teeth of the clip and can then be removed together with the clip

Variofix remover	No.
	10 3 842 526 589

Material: PA

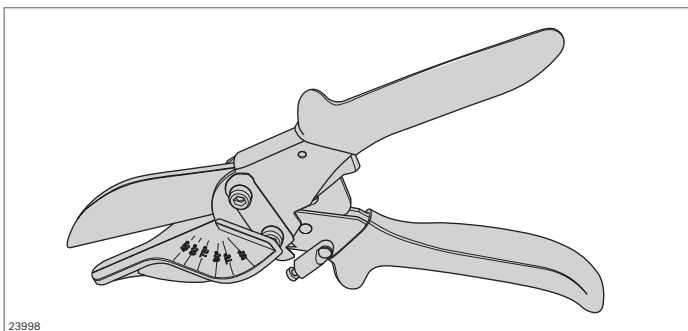


Flexible grinder for anodized surfaces

- Hand grinder for removing light soiling and minor scratches
- Handy grindstone made of flexible base material containing abrasive agents
- Long service life thanks to automatic, continual surface renewal, like an eraser
- Suitable for all natural-colored, anodized surfaces, e.g. also for aluminum windows and doors

Flexible grinder for anodized surfaces	No.
	3 842 518 650

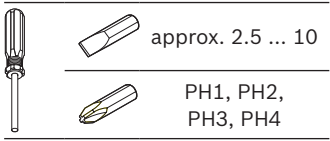
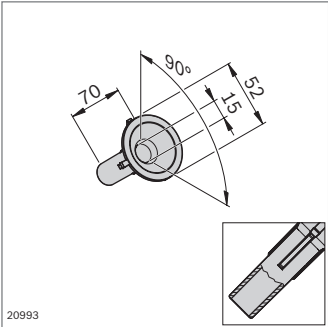
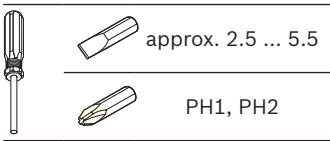
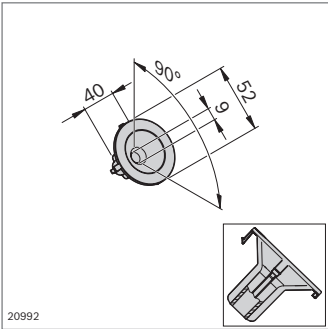
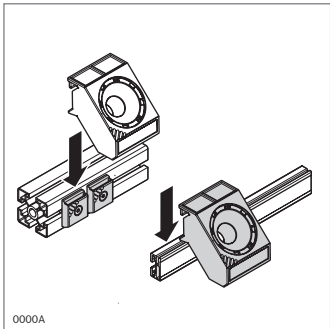
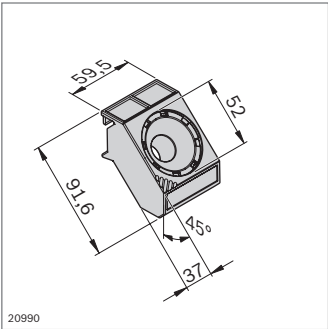
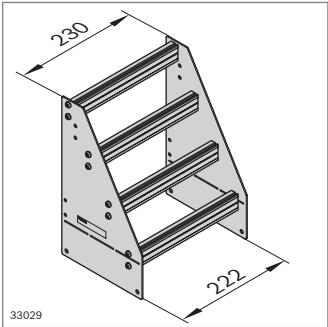
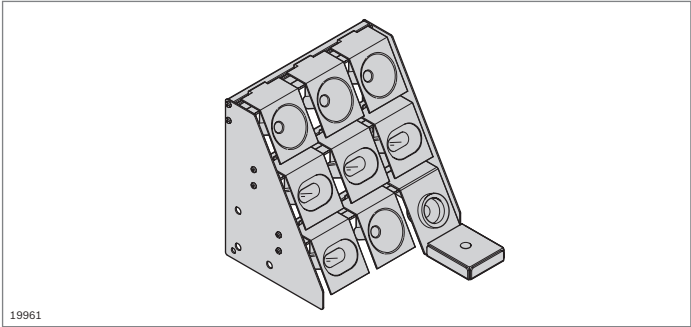
Material: Silicon carbide 60 %
polyurethane 40 %



Miter cutter

- For length-trimming of plastic profiles, e.g. slot cover profiles

Miter cutter	No.
	3 842 547 982



Tool shelf Tool holder



- Tool shelf and tool holder for ergonomic and handy positioning of tools at the workstation
- Tool shelf can be individually equipped
- Accessories: Container mount (p. 2-61)

Tool shelf	ESD	No.
		3 842 554 909

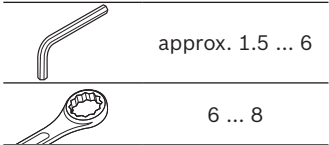
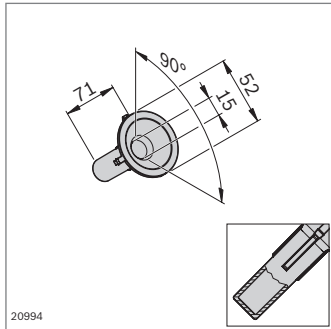
Material: Side parts: Sheet aluminum
Suspension profile: Aluminum; anodized

Tool holder D52 for bucket trays D52-9 and D52-15

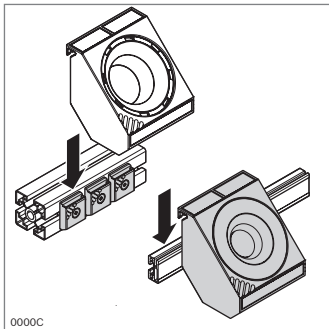
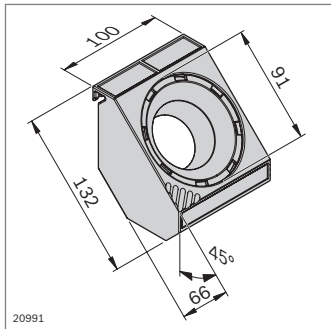
Tool holder D52	ESD	No.
		3 842 544 832

Bucket tray D52-9 (without base)	ESD	No.
		3 842 544 834

Bucket-tray D52-15 (with base)	ESD	No.
		3 842 544 835

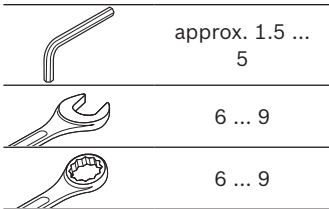
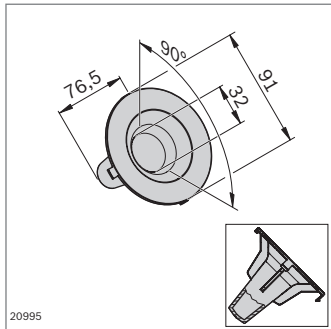


Bucket-tray D52-15 (with base)	ESD	No.
		3 842 544 836

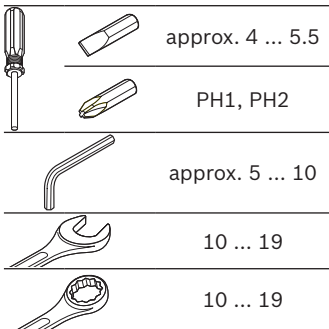
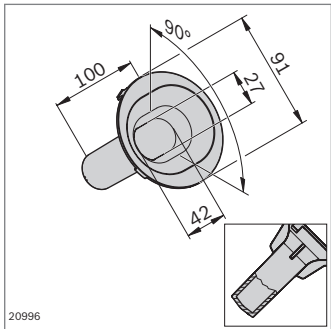


Tool holder D91 for bucket trays D91-32, D91 Oval53 L100 and D91 Oval53 L136

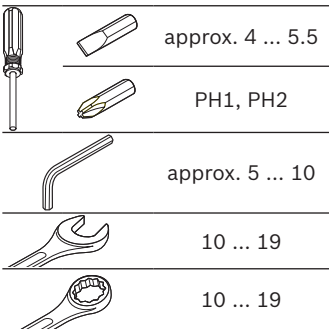
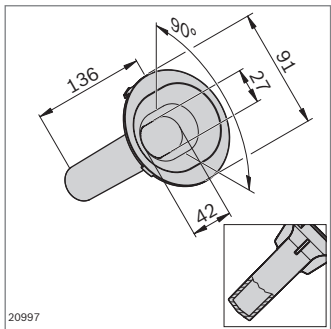
Tool holder D91	ESD	No.
		3 842 544 833



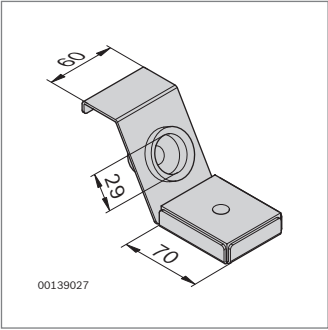
Bucket-tray D91-32 (with base)	ESD	No.
		3 842 544 837



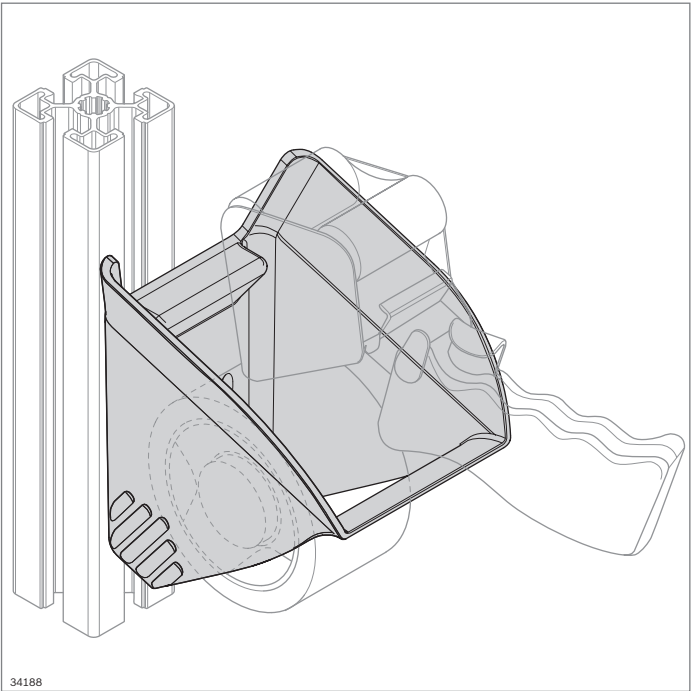
Bucket-tray D91 Oval53 L100 (with base)	ESD	No.
		3 842 546 744



Bucket-tray D91 Oval53 L136 (with base)	ESD	No.
		3 842 546 745



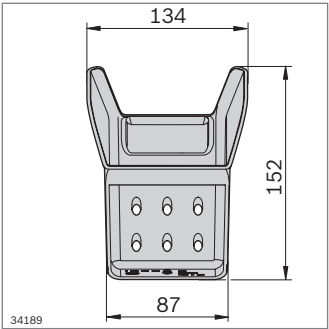
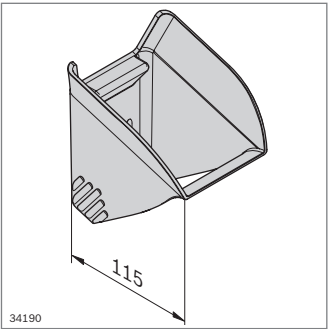
Tool holder for soldering irons	ESD	No.
		3 842 514 524



Tool holder TAPE 50 mm



- ▶ Tool holder for tape dispenser with a width of 50 mm
- ▶ Time savings of 10 % to 20 % based on MTM, achievable with
 - Defined place for faster reaching and picking
 - Docking aids for easy, ergonomic depositing
- ▶ Supports 5S principles for order and cleanliness at the workstation via defined place



Tool holder TAPE 50 mm	ESD	No.
		3 842 555 673

Material: PA 6; black

Scope of delivery: Incl. fastening material for fastening in 8 mm or 10 mm slots

FiFo station



Guide rail (p. 15-2)



Adapter (p. 15-3)



Right end cap, small
(p. 15-3)



Left end cap, small
(p. 15-3)

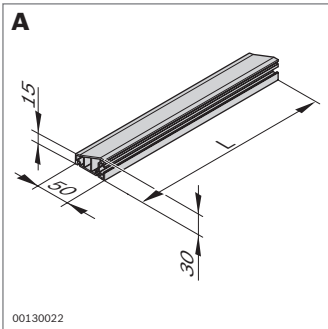
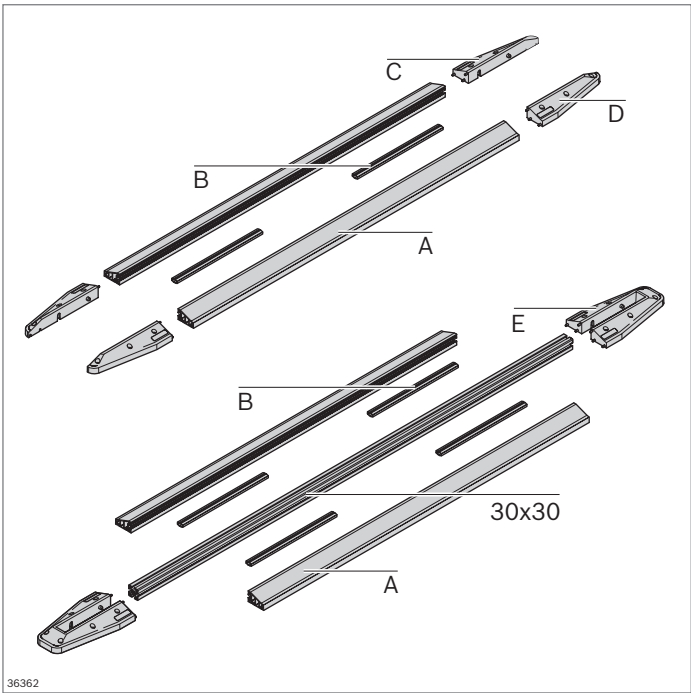


End cap, large (p. 15-3)



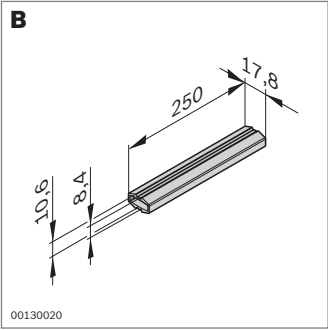
FiFo station

- Components for constructing a FiFo station for material shuttles
- Clearly organized and highly transparent production operations through having standardized delivery routes
- Modular system lets you adapt the layout to your needs and to your available space



- Adhesive strips for fastening to floor
- Screw fitting to floor possible at end caps

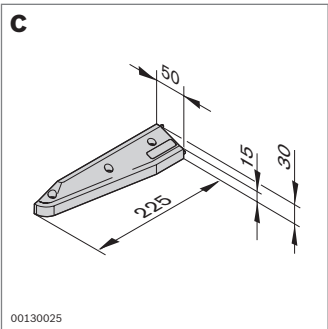
Guide rail	L (mm)		No.
A	1200	10	3 842 540 012
	2400	10	3 842 539 894
Material: PVC, yellow			



- For the parallel connection of guide rails, or a guide rail with a 30x30 profile

Adapter		No.
B	20	3 842 539 898

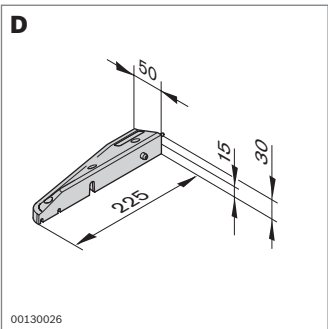
Material: PP



- For use as a jointing aid and for fastening the guide rails to the floor

Right-hand end cap, small		No.
C	10	3 842 539 895

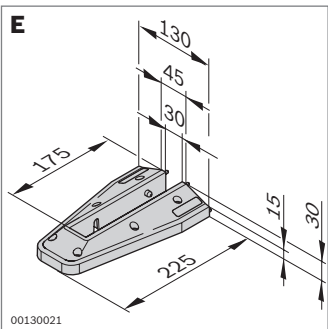
Material: PA 6; black



- For use as a jointing aid and for fastening the guide rails to the floor

Left-hand end cap, small		No.
D	10	3 842 539 896

Material: PA 6; black



- For installing a 30x30 profile between two guide rails
- The 30 mm profile can be used to construct flow rack systems, information boards, and height limits. Since the guide rails are flat-sided, setup can be done using a wide profile (40, 45, 50)

Required accessories:

- Profile 30x30 (p. 2-16)

End cap, large		No.
E	10	3 842 539 897

Material: PA 6; black

Components for lateral guides



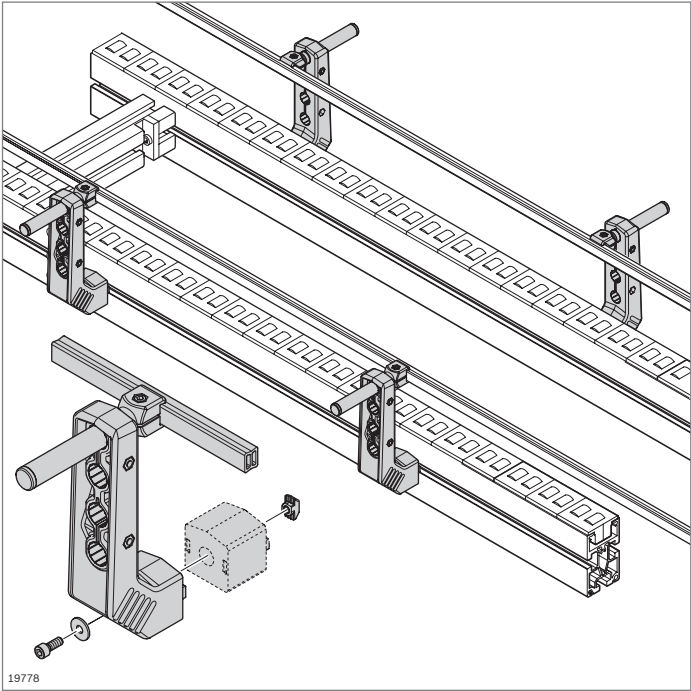
Profile rails, slide rails
(p. 16-3)



Holder, fixed (p. 16-6)

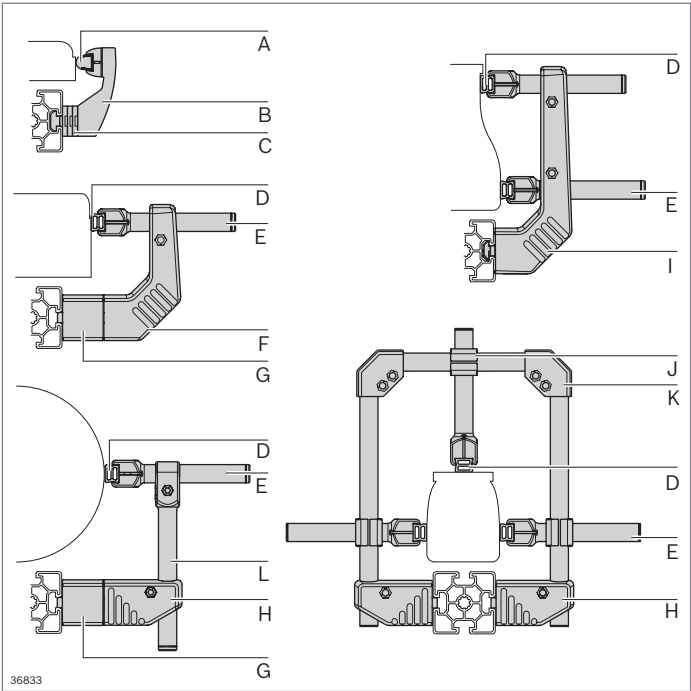


Holder, variable (p. 16-8)

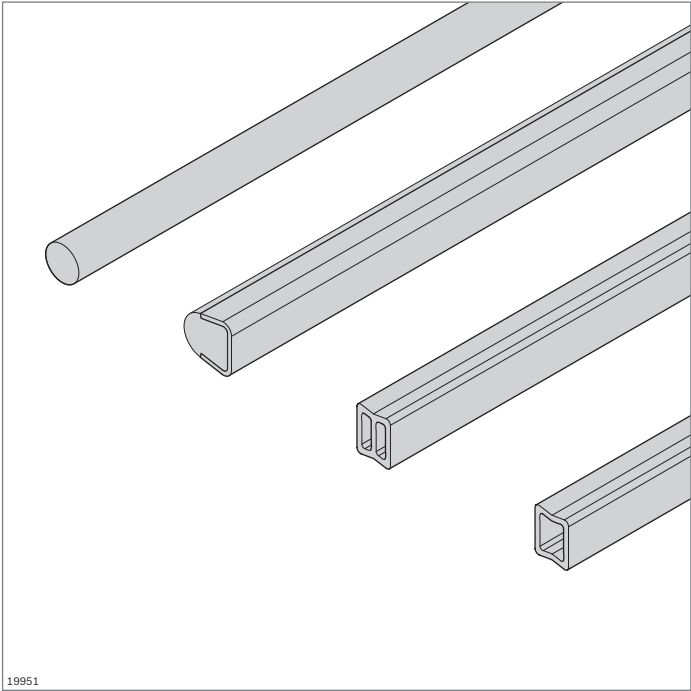


Components for lateral guides

- Wide variety of profile rail and holder combinations for individual solutions
- Easy to clean
- Robust
- Only one tool required for adjustment
- Interface slot 10 mm

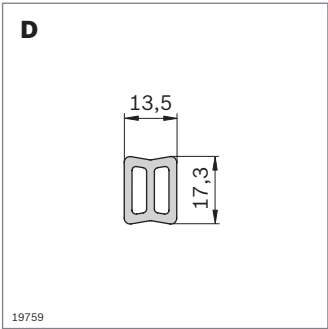


Components	Page
A Profile rail 17x17.5	16-4
B Holder, fixed	16-6
C Spacer plate	16-6
D Aluminum profile rail	16-3
E Clamping holder C L100	16-9
F Holder L134	16-10
G Spacer	16-11
H Holder L45	16-11
I Holder L204	16-10
J Cross piece	16-12
K Corner piece	16-12
L Vertical clamping holder D18 L160	16-11



Profile rails and accessories for lateral guides

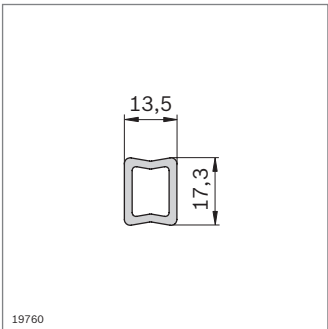
- ▶ Profile rails for lateral guiding of transported material
- ▶ Suitable for fixed lateral guide holders (p. 16-6), and variable lateral guide holders (p. 16-8)
- ▶ Various materials and geometries for different applications (p. 16-3, 16-4)
- ▶ Slide rails for secure guiding of transport material (p. 16-4)
- ▶ Profile connector for profile rail extension (p. 16-5)



- ▶ Aluminum profile rail for robust lateral guides

Aluminum profile rail		L (mm)	No.
1 pc		200 ... 3000	3 842 993 887 / L
 20 pcs		3000	3 842 538 829

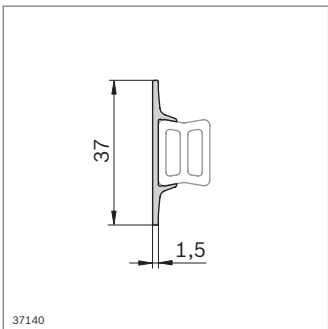
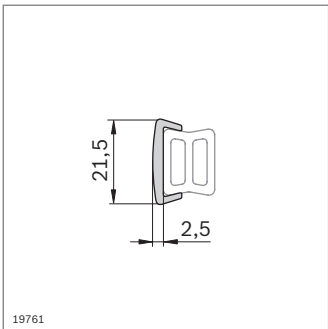
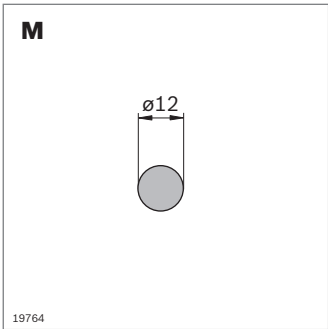
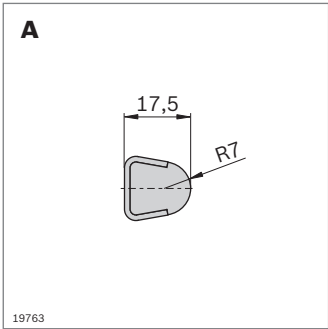
Material: Aluminum; natural, anodized
Accessories: Narrow slide rail; high slide rail; outer profile connector; inner profile connector; cover cap; clamping holder C L100; holder; clamping head



- ▶ HDPE profile rail for light applications
- ▶ Bendable

HDPE profile rail		L (mm)	No.
1 pc		3000	3 842 538 388

Material: HDPE; gray
Accessories: Narrow slide rail; high slide rail; outer profile connector; inner profile connector; cover cap; clamping holder C L100; holder; clamping head



- ▶ Profile rail 17x17.5 in robust stainless steel version with PE guide for gentle product handling

Profile rail 17x17.5		L (mm)	No.
1 pc		200 ... 3000	3 842 994 863 / L
20 pcs		3000	3 842 529 850
Material:		Steel, stainless / PE; natural	
Accessories:		Outer profile connector; clamping holder C L100; holder; clamping head; clamping head	

- ▶ Profile rail D12 in robust stainless steel version

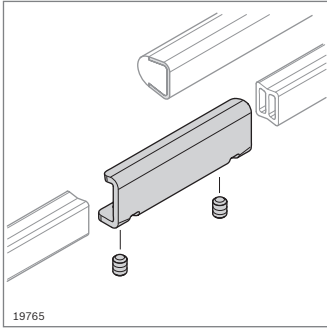
Profile rail D12		L (mm)	No.
1 pc		200 ... 3000	3 842 993 306 / L
6 pcs		3000	3 842 533 841
Material:		Steel; stainless	
Accessories:		Clamping holder D12 L100	

- ▶ Clip-on slide rail for aluminum or HDPE profile rail
- ▶ For gentle product transport and minimum wear to HDPE profile rail

Slide rail, narrow		L (mm)	ESD	No.
1 pc		3000		3 842 538 209
1 pc		3000		3 842 539 340
Material:		HDPE; gray		
		ESD: PE-UHMW, conductive, black		

- ▶ Clip-on slide rail for aluminum or HDPE profile rail
- ▶ Wide guiding surface
- ▶ For gentle product transport and minimum wear to HDPE profile rail

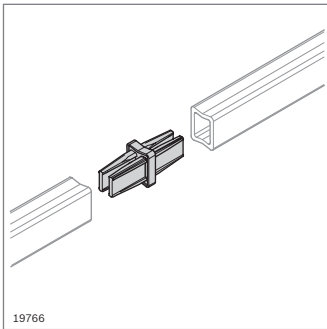
Slide rail, high		L (mm)	No.
1 pc		3000	3 842 538 389
Material:		HDPE; gray	



- Outer profile connector for aluminum profile rails, HDPE profile rail, 17x17.5 profile rail

Outer profile connector	ESD	No.
	10	3 842 539 613

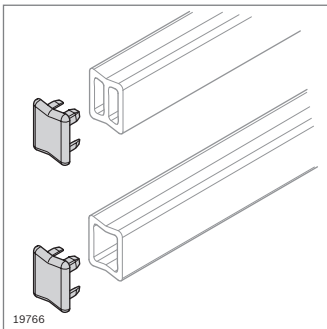
Material: Steel; stainless
 Scope of delivery: Incl. 2 x headless setscrew



- Inner profile connector for profile rail in aluminum, HDPE

Internal profile connector	ESD	No.
	10	3 842 539 345

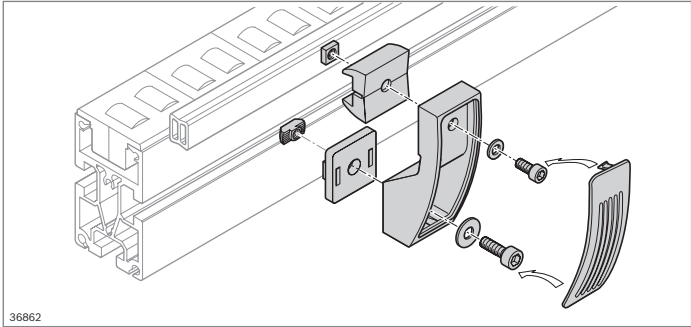
Material: PA; black, conductive



- Cover cap for profile rail in aluminum, HDPE

Cover cap	ESD	No.
	10	3 842 538 208

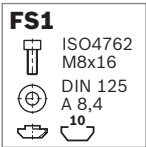
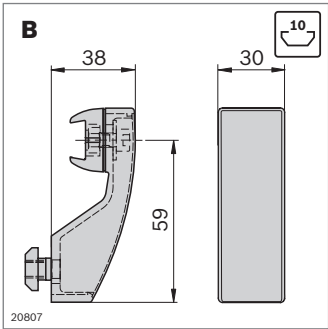
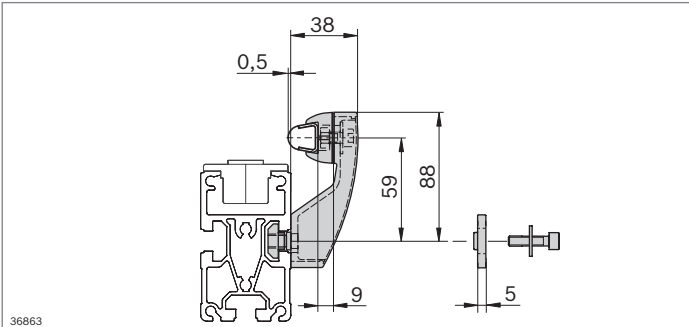
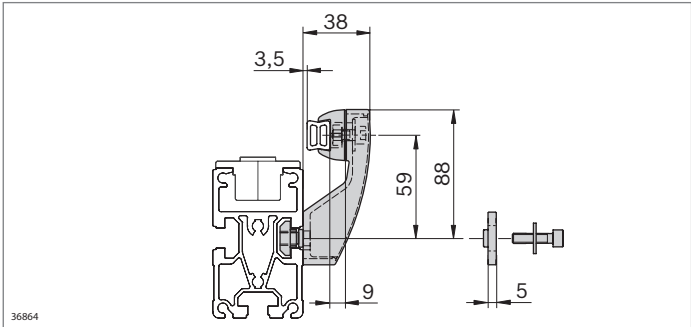
Material: PA; black, conductive



Holder for lateral guide, fixed



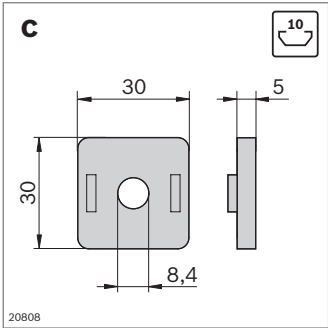
- Holders for lateral guides with fixed installation height and fixed guide width
- Easy to clean
- Robust



- Holder, fixed, for profile rail in aluminum, HDPE and 17x17.5
- For fixed guide width
- Spacer plate for guide width enlargement

Holder, fixed	No.	FS
Set	3 842 527 851	FS1

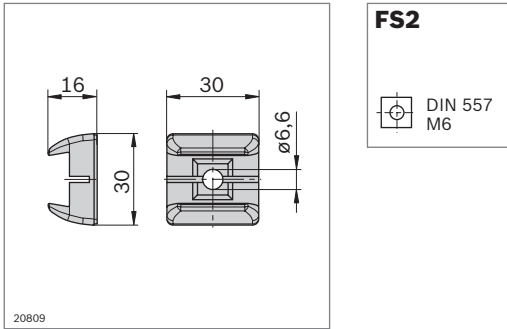
Material: PA; black
Fastening material: Steel; galvanized
Scope of delivery: Incl. clamping head, fastening material (FS)



- Spacer plate for holders, fixed, to enlarge the guide width

Spacer plate	No.
10	3 842 527 738

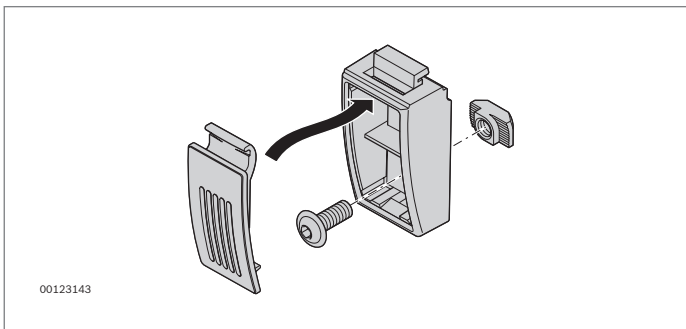
Material: PA; black



- Clamping head for on-site construction of supports for protruding transported material

Clamping head	No.	FS
Set	10 3 842 536 295	FS2

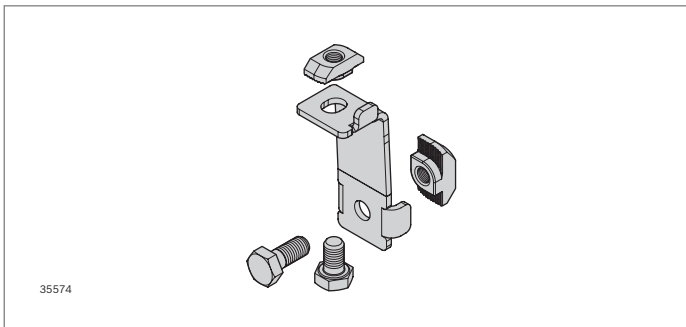
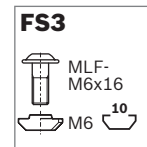
Material: PA; black
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)



- Holder for simple installation in straight sections.

Holder for lateral guide	No.	FS
	10 3 842 531 552	FS3

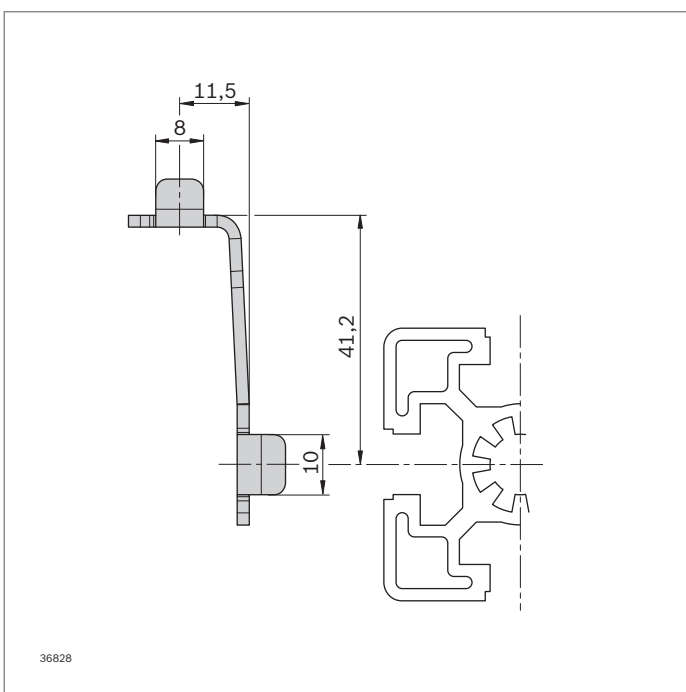
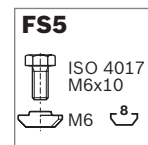
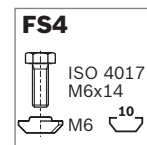
Material: PA; black
Scope of delivery: Incl. fastening material (FS)

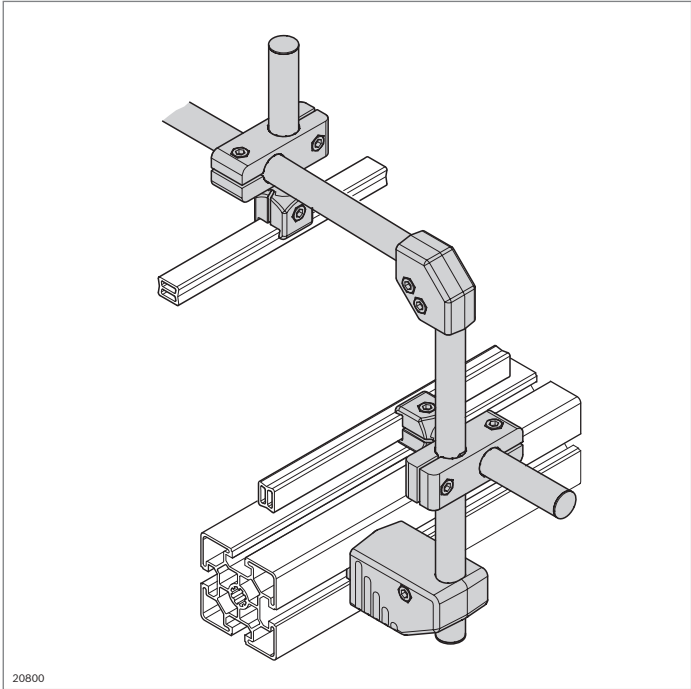


- Holder HD in sturdy design for straight sections and in the curve area

Lateral guide holder HD	No.	FS
	10 3 842 557 005	FS4, FS5

Material: Stainless steel
Fastening parts: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)

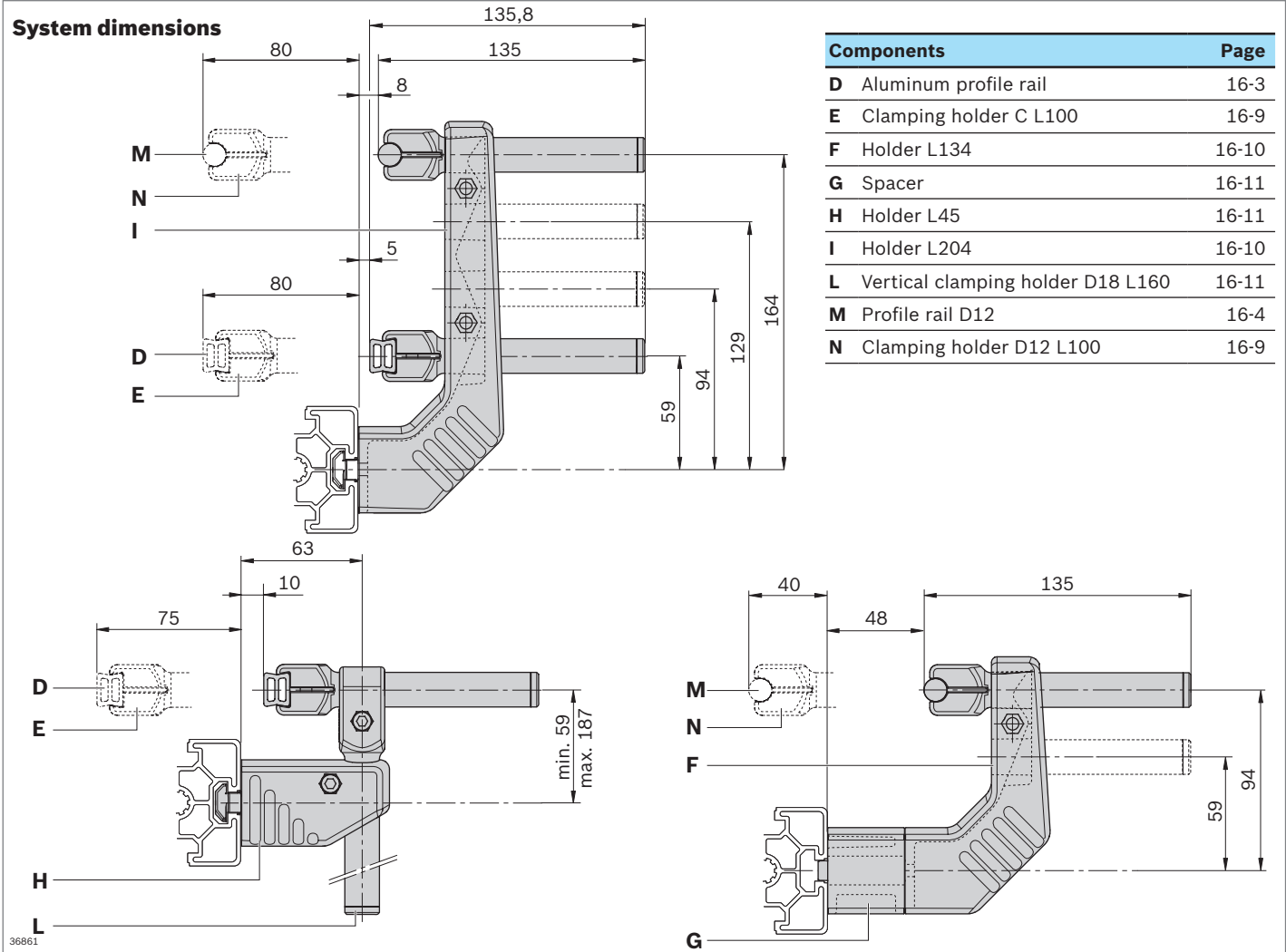


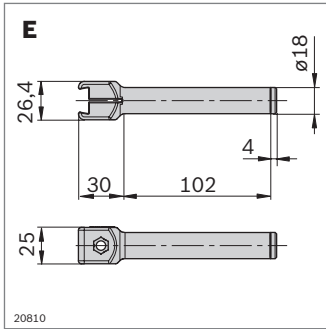


Holder for lateral guide, variable



- Holder and clamping holder allow for the variable adjustment of the guide height and width
 - Easy to clean
- Notice:** For stability in the rotational direction, at least 2 holders must be connected with a continuous profile rail.



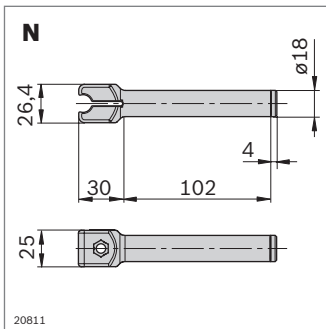


- Clamping holder C L100 for accommodating aluminum, HDPE, or 17x17.5 profile rails
- Scaling in mm and inch for simple alignment

Clamping holder C L100	No.
	10 3 842 539 499

Material: Clamping holder: PA; black
Nut, screw: Steel; stainless

Accessories: Plug

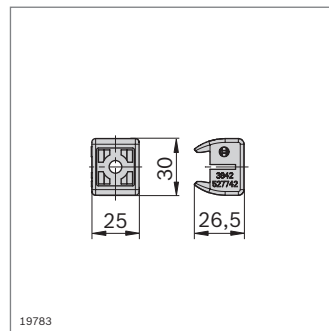
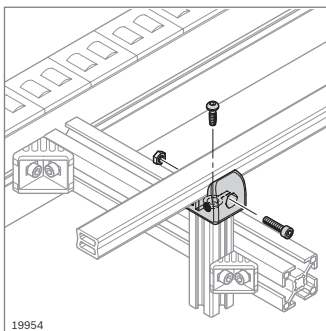


- Clamping holder D12 for accommodating D12 profile rails
- Scaling in mm and inch for simple alignment

Clamping holder D12 L100	No.
	10 3 842 539 498

Material: Clamping holder: PA; black
Nut, screw: Steel; stainless

Accessories: Plug



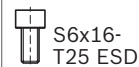
- Clamping head for accommodating aluminum, HDPE, or stainless steel profile rails with PE guide
- Direct mounting on profiles with 10 mm slot

Clamping head	No.	FS
Set	10 3 842 528 009	FS1

Material: Clamping holder: PA; black
Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)

FS1

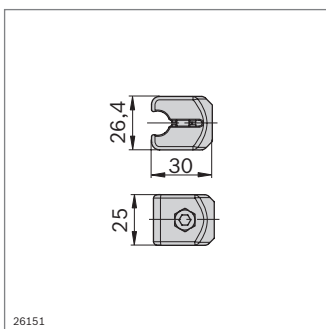


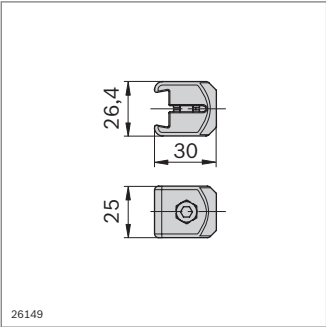
- Clamping holder D12 for accommodating D12 profile rails
- In conjunction with tube 18 for constructing longer clamping holders

Clamping holder D12	No.
	10 3 842 547 227

Material: Clamping holder: PA; black
Nut, screw: Steel; stainless

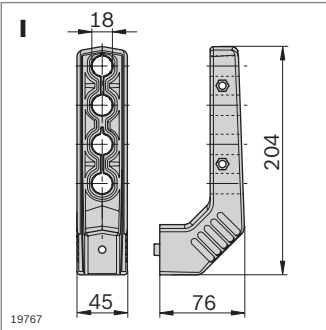
Accessories: Plug, tube D18





- ▶ Clamping holder C for accommodating aluminum, HDPE, or 17x17.5 profile rails
- ▶ In conjunction with tube D18 for constructing longer clamping holders

Clamping holder C		No.
		10 3 842 547 228
Material:	Clamping holder: PA; black Nut, screw: Steel; stainless	
Accessories:	Plug, tube D18	



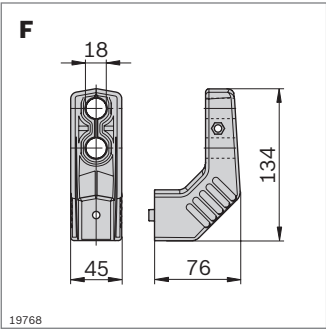
FS2

 DIN 912
M6x16

 DIN 9021
A 6,4

- ▶ Holder for fastening clamping holders C L100 or D12 L100
- ▶ Various installation heights possible for clamping holders
- ▶ Variable guide widths possible
- ▶ Additionally enlarge the guide width with the spacer
- ▶ Optional accessories: Clamping lever M6x40 (p. 4-13)

Holder L204	No.	FS
Set	3 842 539 494	FS2
Material:	PA; black Fastening material: Steel; stainless	
Scope of delivery:	Incl. fastening material (FS)	
Accessories:	T-nut M6, 10 mm slot (p. 3-4) Spacer	



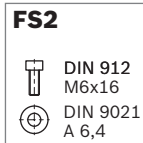
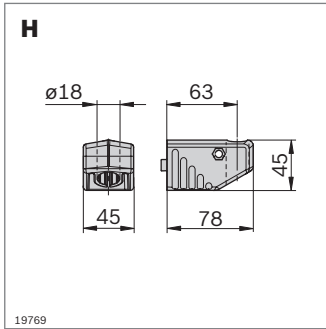
FS2

 DIN 912
M6x16

 DIN 9021
A 6,4

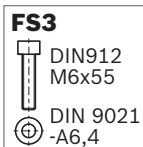
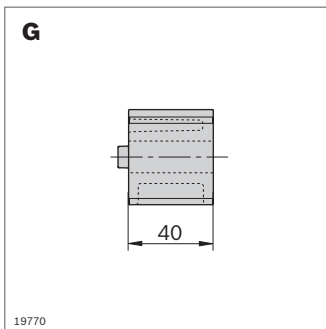
- ▶ Holder for fastening clamping holders C L100 or D12 L100
- ▶ Various installation heights possible for clamping holders
- ▶ Variable guide widths possible
- ▶ Additionally enlarge the guide width with the spacer
- ▶ Optional accessories: Clamping lever M6x40 (p. 4-13)

Holder L134	No.	FS
Set	3 842 539 495	FS2
Material:	PA; black Fastening material: Steel; stainless	
Scope of delivery:	Incl. fastening material (FS)	
Accessories:	T-nut M6, 10 mm slot (p. 3-4) Spacer	

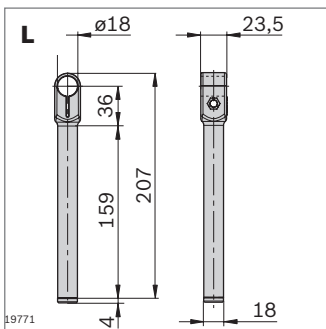


- Holder L45 for fastening vertical clamping holders or tube D18
- For infinitely height-adjustable lateral guides
- Enlarge the guide width with the spacer
- Optional accessories: Clamping lever M6x40 (p. 4-13)

Holder L45		No.	FS
Set	10	3 842 539 496	FS2
Material:	PA; black		
	Fastening material: Steel; stainless		
Scope of delivery:	Incl. fastening material (FS)		
Accessories:	T-nut M6, 10 mm slot (p. 3-4)		
	Spacer		

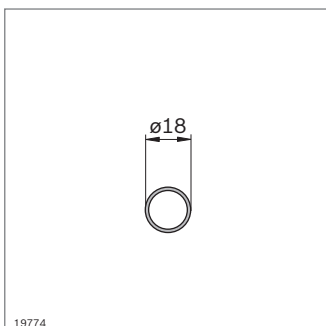


Spacer		No.	FS
Set	10	3 842 539 497	FS3
Material:	PA; black		
	Fastening material: Steel; stainless		
Scope of delivery:	Incl. fastening material (FS)		



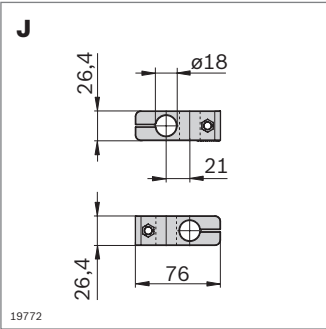
- Vertical clamping holder for constructing height-adjustable guides
- Optional accessories: Clamping lever M6x40 (p. 4-13)

Vertical clamping holder D18 L160		No.	
	10	3 842 539 500	
Material:	PA; black		
	Nut, screw: Steel; stainless		
Accessories:	Plug		



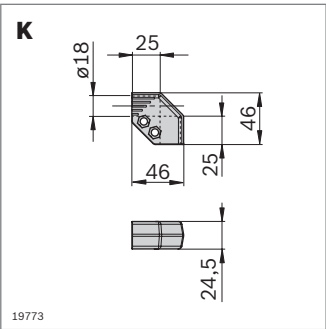
- Tube D18 for constructing height-adjustable vertical holders or cross members for upper guides

Tube D18	L (mm)	No.	
	3000	3 842 539 339	
Material:	Stainless steel		
Accessories:	Plug		



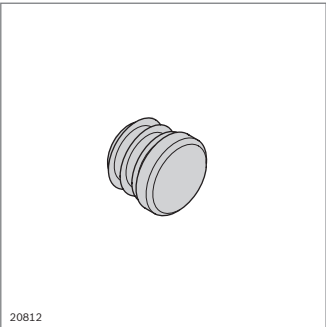
- Cross piece for the intersecting, right-angled joining of tubes D18 and clamping holders C L100 or D12 L100
- Optional accessories: Clamping lever M6x40 (p. 4-13)

Cross piece	No.
	10 3 842 539 501
Material:	Cross piece: PA; black Nut, screw: Steel; stainless



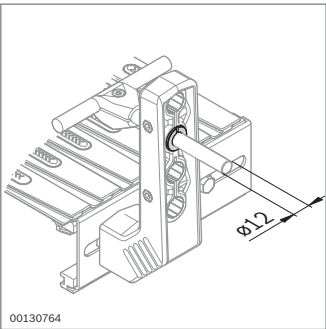
- Corner piece for the end face, right-angled joining of tubes D18 and clamping holders C L100 or D12 L100

Corner piece	No.
	10 3 842 539 505
Material:	Corner piece PA; black Nut, screw: Steel; stainless



- Plug for sealing the clamping holder C L100, clamping holder D12 L100, vertical clamping holder D18 L160 or tube D18

Plug	No.
	10 3 842 539 826
Material:	PE; black



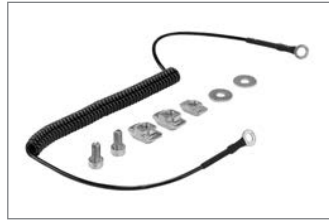
- Reducing adapter for mounting round profiles $\varnothing 12$ in attachments D18

Reducing adapter	No.
	20 3 842 539 344
Material:	PA; black

Components for ESD applications



Set of grounding components (p. 17-2)



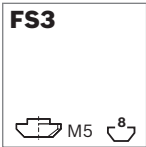
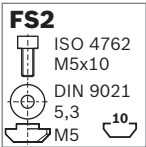
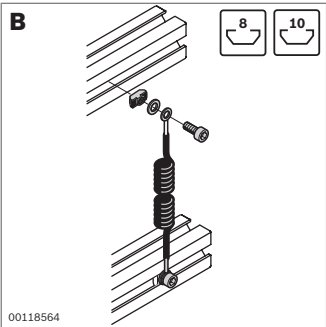
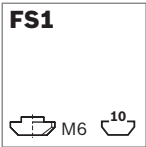
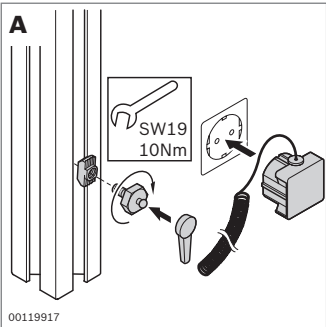
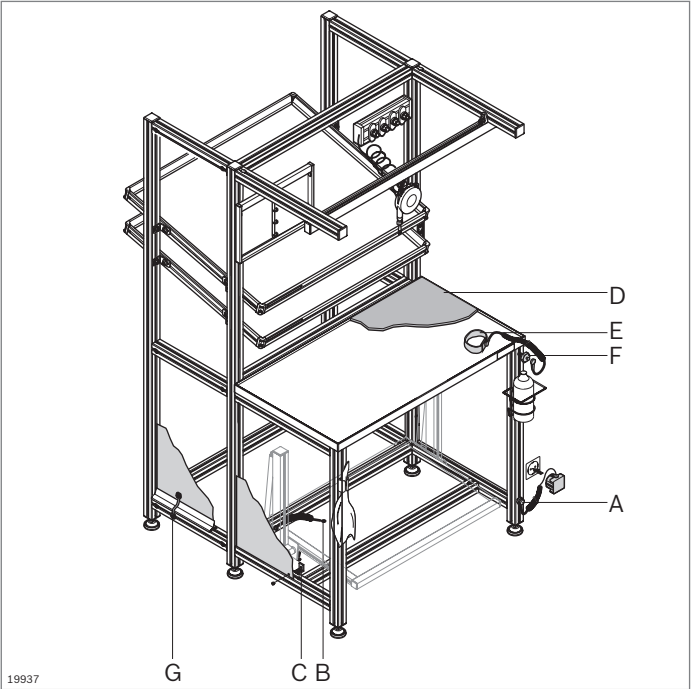
Grounding cable (p. 17-2)



Potentialfix (p. 17-3)



Wrist band, connection piece (p. 17-3)



Components for ESD applications



ESD – Electro Static Discharge

Components which, due to their electrical properties and inner structure, are damaged or destroyed by static discharge also cause economic losses running into millions of euros each year.

You can use Rexroth components for ESD applications to protect your products from this type of damage. Look for the ESD mark when selecting products (⚡).

- Set of grounding components for defined grounding of ESD workstations
- Conduction resistance $R = 1 \times 10^6 \, \Omega$

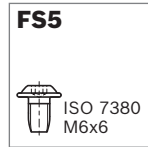
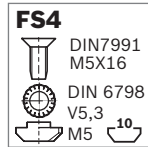
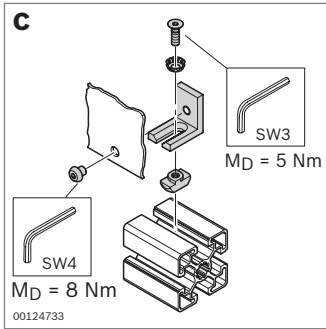
Accessories:

Damping ring or damping plate for insulation from conductive floors makes defined conduction possible (p. 6-4, 6-6)

Set of grounding components	ESD	No.	FS
A	⚡	3 842 522 087	FS1
Material: Fastening material: Steel; galvanized			
Scope of delivery: Incl. fastening material (FS)			

- Grounding cable to create defined conductive paths between strut profiles in order to protect ESD-sensitive components

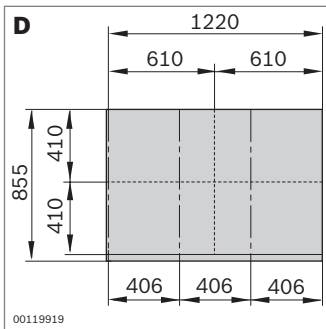
Grounding cable	ESD	No.	FS
B	⚡	3 842 519 465	2xFS2, FS3
Material: Fastening material: Steel; galvanized			
Scope of delivery: Incl. fastening material (FS)			



- Potentialfix for defined grounding of panel elements such as side panels

Potentialfix	ESD	No.	FS
C		3 842 536 320	FS4, FS5

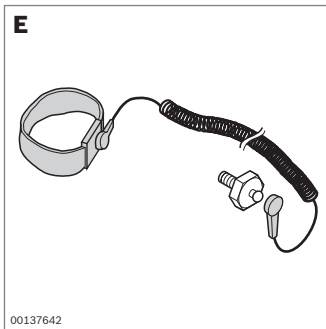
Material: Bracket: Aluminum
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)



- ESD mat insert for protecting ESD-sensitive components
- To create a safe, conductive connection, e.g. to ESD material shelves, we recommend using adhesive copper tape
- Conduction resistance $R = 10^4 \dots 10^9 \Omega$

ESD mat insert	ESD	No.
D 1220 mm x 855 mm		3 842 522 012

Material: Rubber (thickness: 2 mm)



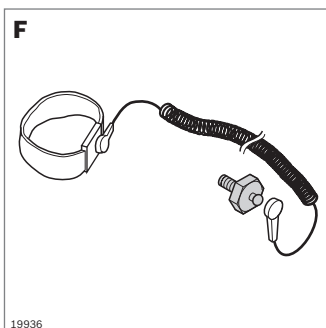
- Wrist band for defined grounding of people and protection of ESD-sensitive components

Required accessories:

- Connection piece
- T-nut M6, or swivel-in sliding block, with spring, M6

Wrist band	ESD	No.
E		3 842 516 908

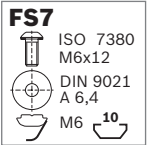
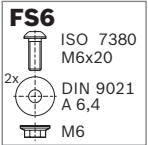
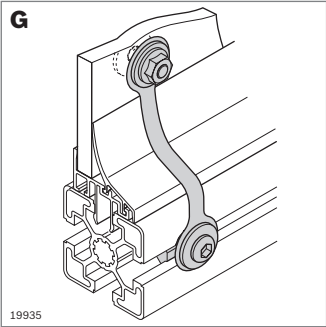
Material: Textile with woven-in conductive plastic; navy blue



- Connection piece for connecting the wrist band to the profile construction

Connection piece	ESD	No.
F		3 842 516 905

Material: Steel; galvanized



- Potential equalizer for creating electrostatic conduction between panel elements and strut profiles

Potential equalizer	ESD		No.	FS
G		10	3 842 536 148	FS6, FS7

Material: Strip steel, stainless
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)

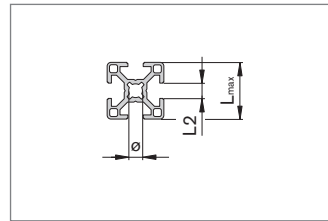
Technical data



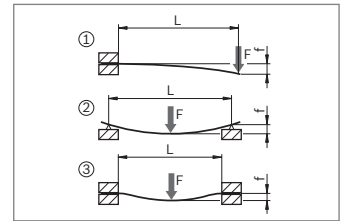
Standard profile finishing
(Quick & Easy) (p. 18-2)



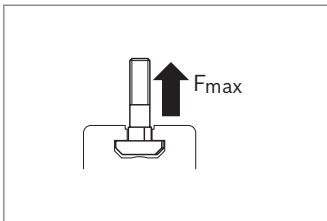
Individual profile finishing
(Quick & Easy) (p. 18-7)



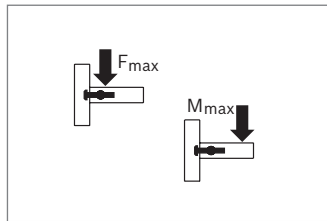
Technical data for strut
profiles (p. 18-12)



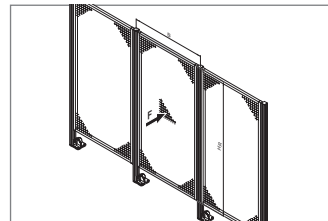
Profile deflection (p. 18-14)



Profile slot load-bearing
capacity (p. 18-15)



Load-bearing capacity
of profile connection
(p. 18-16)



Load-bearing capacity data
for EcoSafe protective
frame and EcoSafe support
(p. 18-21)

Standard profile finishing (Quick & Easy)

Standard profile finishing is used for Rexroth connection technology and attachment of accessories:

- ▶ Central bolt (corner connection)
- ▶ Quick connector
- ▶ Bolt connector
- ▶ Cross connector
- ▶ Feet and wheels

It offers decisive advantages:

- ▶ One general material number for all finishing processes at profile cross-sections
- ▶ Available for all profiles
- ▶ Any combinations possible
- ▶ Drilling of blind holes possible

This opens up completely new possibilities!

The order key has a simple structure:

There are fixed specifications for the parameters for exact finishing of each profile. See table.

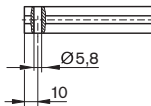
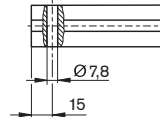
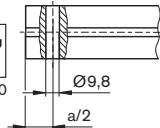
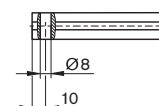
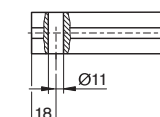
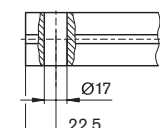
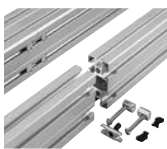
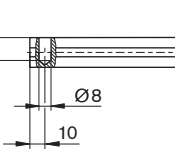
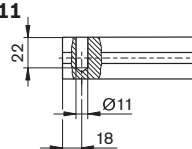
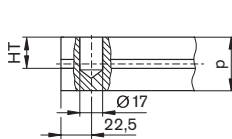
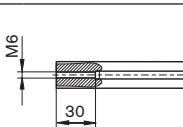
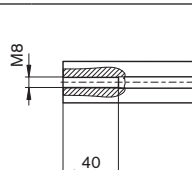
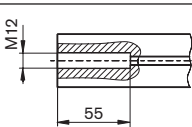
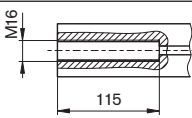
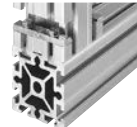
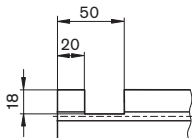
For information on slot designations and available standard profile finishing, please refer to chapter 2.

Order key for through-holes, blind holes, standard milling:

Material number / length / slot designation = finishing at profile start / finishing at profile end; ...

Order key for threads:

Material number / length / Z = Mx at profile start / Mx at profile end

Standard profile finishing			
Through-hole for corner connections with central bolt 	D5.8 	D7.8 	D9.8  a = 40/45/50/60 a/2
Through-hole for bolt connectors and quick connectors 	D8 	D11 	D17 
Blind hole For longitudinal end connectors and quick connectors in closed profiles 	DB8 	DB11 	DB17  p 40 45 50 60 HT 31 34 36 41
Threads in all core holes for accessories 	M6 	M8 	M12  M16 
Standard milling for cross connectors 			F1 



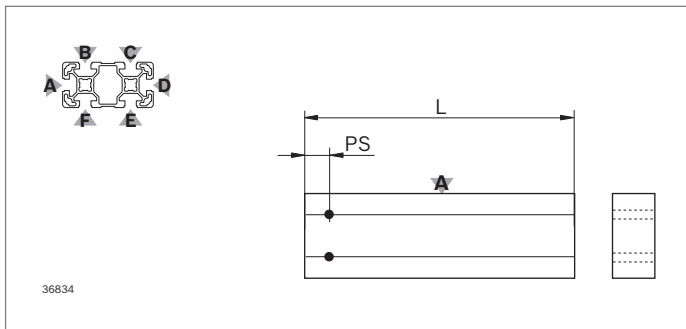
Through-hole Dx

Use:

- **D5.8; D7.8; D9.8** for corner connections with central bolt
- **D8; D11; D17** for bolt connectors and quick connectors

Fixed specifications:

Distance from profile end (PS)



Example:

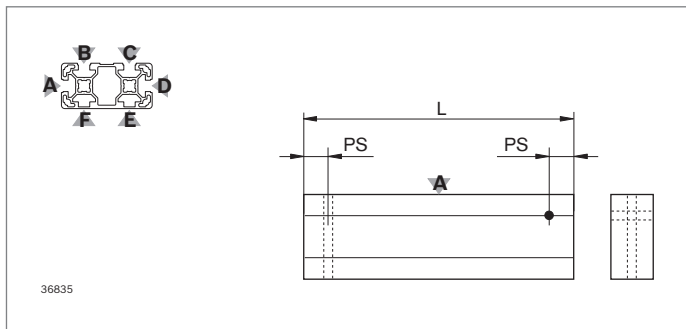
3 842 993 728 / 255 / B=D17/-; C=D17/-

Profile 40x80L / L = 255 mm /

Slot B: Through-hole D17 at profile start / without finishing at profile end;

Slot C: Through-hole D17 at profile start / without finishing at profile end

Fixed: PS = 22.5 mm (p. 18-2)



Example:

3 842 993 729 / 255 / B=-/D17; D=D17/-

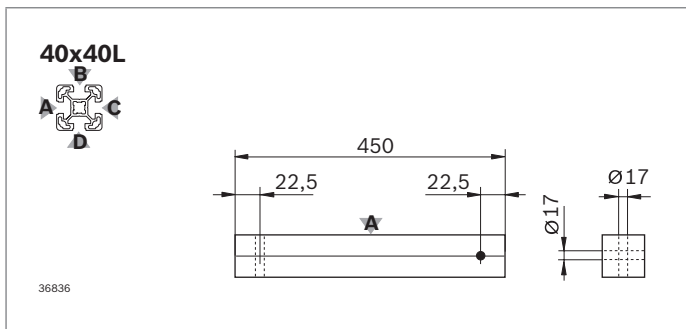
Profile 40x80L 4N / L = 255 mm /

Slot B: Without finishing at profile start / Through-hole D17 at profile end;

Slot D: Through-hole D17 at profile start / without finishing at profile end

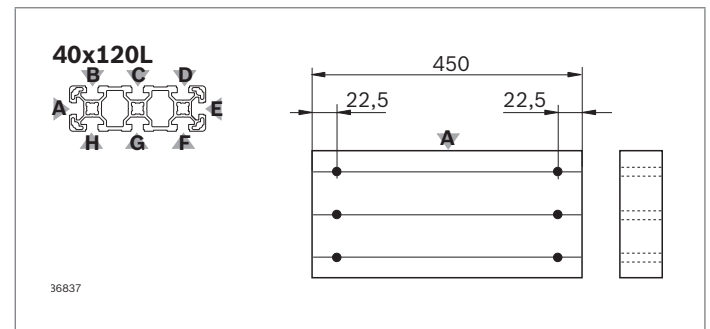
Fixed: PS = 22.5 mm (p. 18-2)

Other examples



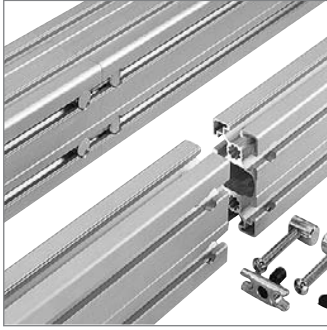
Example:

3 842 993 724 / 450 / A=D17/-; B=-/D17



Example:

3 842 993 716 / 450 / B=D17/D17; C=D17/D17; D=D17/D17



Blind hole DBx

Use:

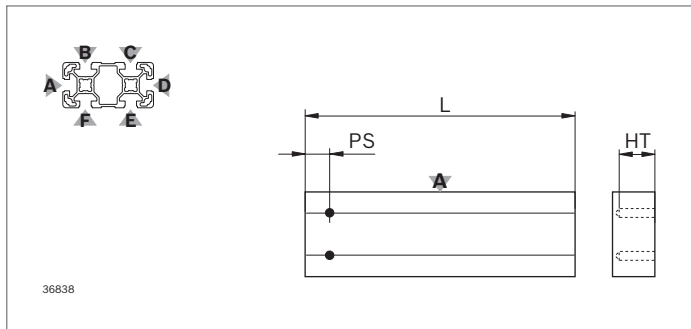
DB8; DB11; DB17 for quick connectors in closed profiles and longitudinal end connectors

Advantages:

In case of closed slots, the profile surface is not broken.

Fixed specifications:

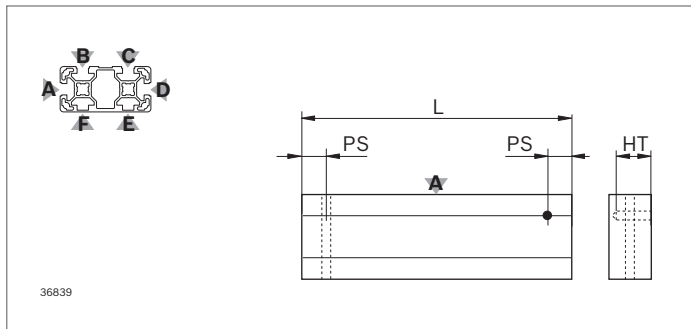
- ▶ Distance from profile end (PS)
- ▶ Depth of blind hole (HT)



Example:

3 842 993 728 / 255 / B=DB17/-; C=DB17/-

Profile 40x80L / L = 255 mm /
 Slot B: Blind hole DB17 at profile start /
 without finishing at profile end;
 Slot C: Blind hole DB17 at profile start /
 without finishing at profile end
 Fixed: PS = 22.5 mm, HT = 34 mm (p. 18-2)



Example:

3 842 993 729 / 255 / B=-/DB17; D=D17/-

Profile 40x80L 4N / L = 255 mm /
 Slot B: Without finishing at profile start /
 Blind hole DB17 at profile end;
 Slot D: Through-hole D17 at profile start /
 without finishing at profile end
 Fixed: PS = 22.5 mm, HT = 34 mm (p. 18-2)



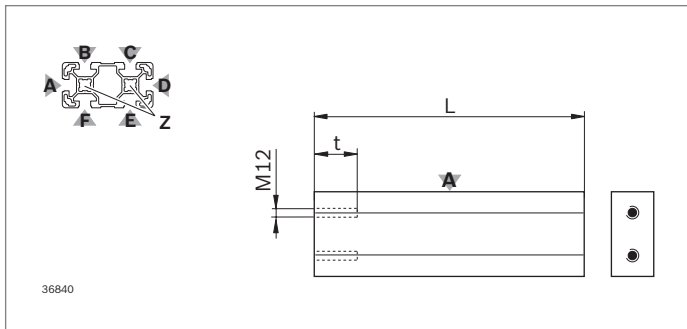
Thread Mx

Use:

M6; M8; M12; M16 in all core holes of the profile, e.g. for screw fitting of feet and wheels

Fixed specifications:

Thread depth



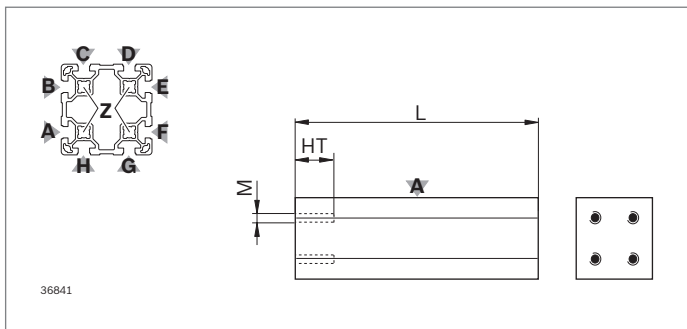
Example:

3 842 993 728 / 255 / Z=M12/-

Profile 40x80L / L = 255 mm /

Thread M12 in all core holes at profile start /
no finishing at profile end

Fixed: Thread depth HT = 55 mm (p. 18-2)



Example:

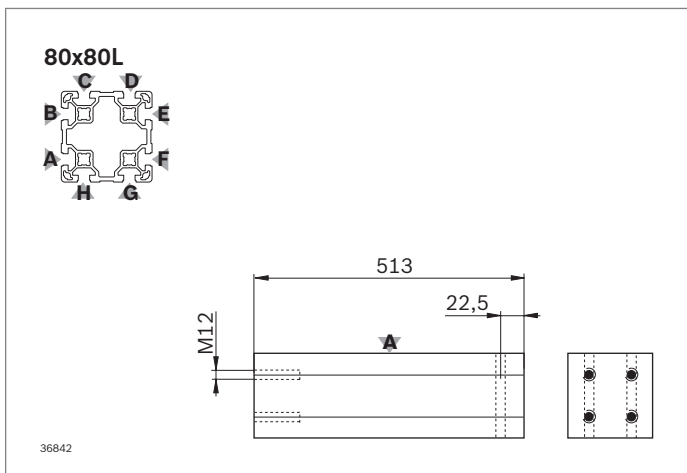
3 842 993 674 / 255 / Z=M12/-

Profile 80x80L / L = 255 mm /

Thread M12 in all core holes at profile start /
no finishing at profile end

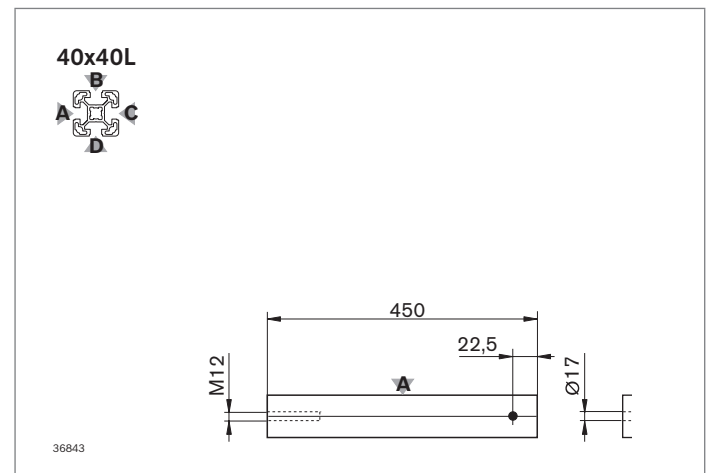
Fixed: Thread depth HT = 55 mm (p. 18-2)

Other examples



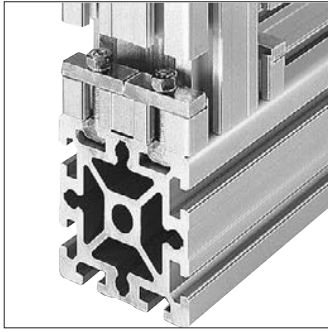
Example:

3 842 993 674 / 513 / Z=M12/-; A=-/D17; B=-/D17



Example:

3 842 993 724 / 450 / Z=M12/-; B=-/D17



Standard milling F1

Use:

F1 for cross connectors

Fixed specifications:

- ▶ Start point of milling (PS)
- ▶ End point of milling (PE)
- ▶ Depth of milling (HT)

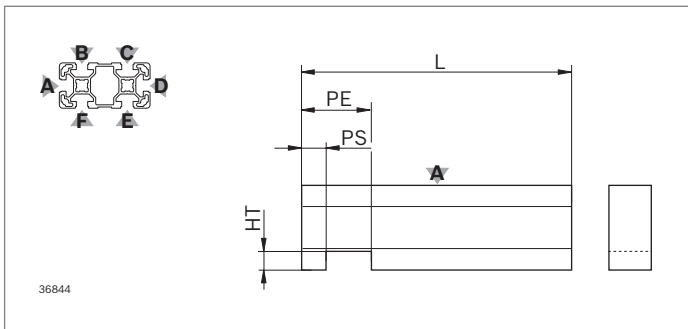
Example:

3 842 993 728 / 383 / D=F1/-

Profile 40x80L / L = 383 mm /

Slot D: Cross milling at profile start / without finishing at profile end

Fixed: PS = 20 mm; PE = 50 mm; HT = 18 mm (p. 18-2)



Example:

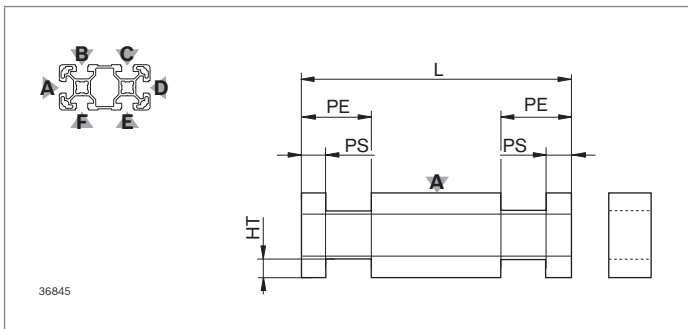
3 842 993 729 / 383 / A=F1/F1; D=F1/F1

Profile 40x80L 4N / L = 383 mm /

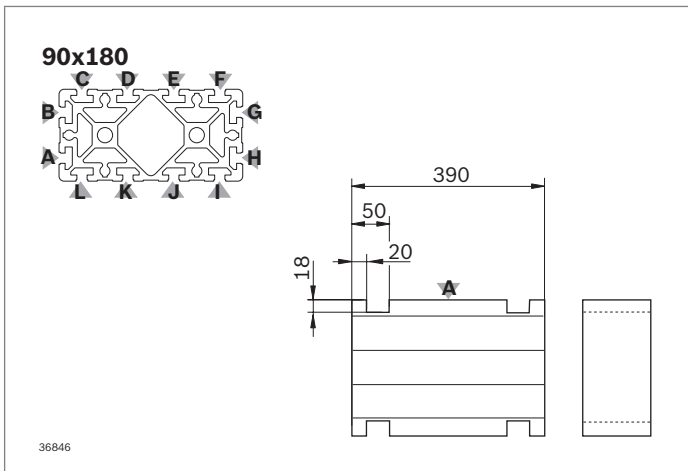
Slot A: Cross milling at profile start / cross milling at profile end

Slot D: Cross milling at profile start / cross milling at profile end

Fixed: PS = 20 mm; PE = 50 mm; HT = 18 mm (p. 18-2)

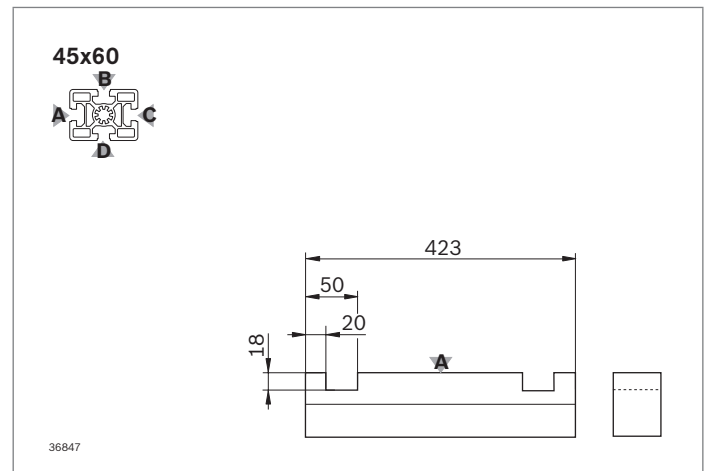


Other examples



Example:

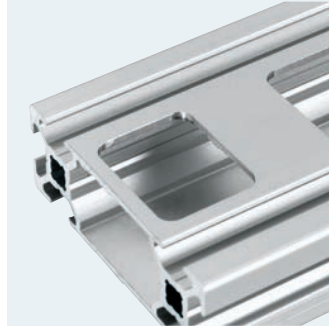
3 842 993 676 / 390 / A=F1/F1; G=F1/F1



Example:

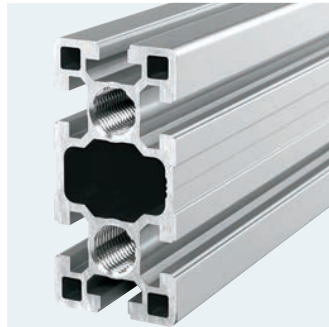
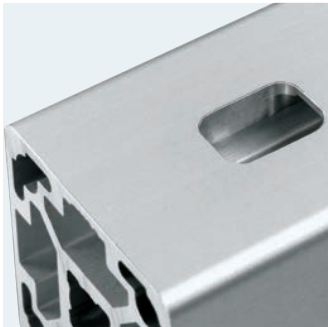
3 842 993 743 / 423 / A=F1/F1

Individual profile finishing (Quick & Easy)



With individual profile finishing, Quick & Easy offers the following advantages:

- ▶ Precise finishing at virtually every point along the profile
- ▶ Maximum variance of available finishing procedures
- ▶ Available for numerous profiles
- ▶ Finishing possible in almost any combination including sequential finishing
- ▶ Variable finishing options from one source

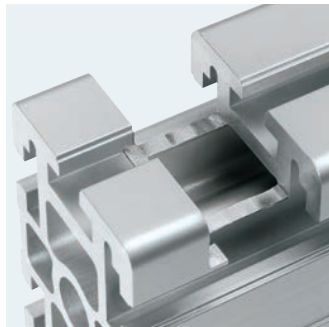


The following finishing options are available:

- ▶ Through-hole
- ▶ Blind holes
- ▶ Stepped drilling
- ▶ Cross milling (transversely to the longitudinal axis)
- ▶ Lengthwise milling (in longitudinal axis)
- ▶ Miter cuts

Notice:

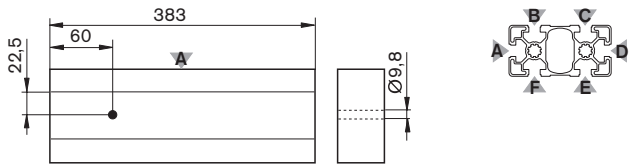
Depending on the selected finishing options, minimum and maximum lengths must be observed when ordering.



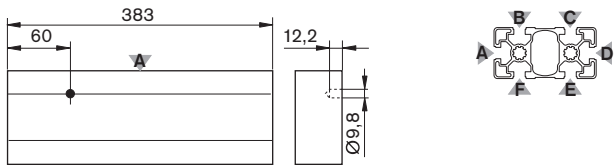


Oder examples for profile 45x90, L = 383 mm

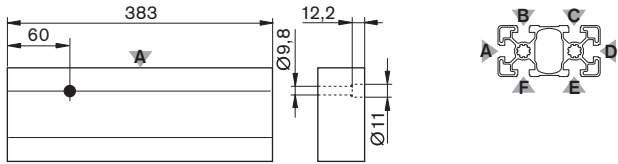
DI Through-hole next to the slot
3 842 993 661 / 383 / [B=DI; PS=60; OS=22.5; DM=9.8]



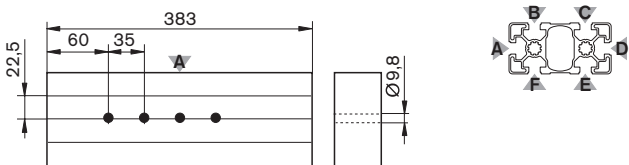
Blind hole
3 842 993 661 / 383 / [B=DI; PS=60; DM=9.8; HT=12.2]



Stepped drilling
3 842 993 661 / 383 / [B=DI; PS=60; DM=11.0; HT=12.2];
[B=DI; PS=60; DM=9.8]



DIS Sequence of through-holes
3 842 993 661 / 383 / [B=DIS; PS=60; OS=22.5; DM=9.8; SN=4; SD=35]



Drill hole

Drill hole DI

- ▶ Through-hole with diameter (**DM**) at any points of the profile (**PS**, **OS**). Please note the information on OS in the table.
- ▶ Blind hole by additional specification of drilling depth (**HT**)
- ▶ Stepped drilling by two drill holes at the same position of the profile
- ▶ Observe required minimum wall thickness (PS_{min} , PS_{max})!

Drilling sequence DIS

- ▶ Regular sequence of identical drilling (**SN**, **SD**)
- ▶ Observe required minimum wall thickness (SD_{min})!

End finishing	Abbreviation	Parameter
Drill hole	DI	PS Center point of hole $PS_{min} = DM/2 + 3 \text{ mm};$ $PS_{max} = L - (DM/2 + 3 \text{ mm})$
		OS Offset starting point (optional) Select OS so that the hole does not cut through any slot edges
		DM Hole diameter DM, see table
		HT Depth of drilling. (optional) Through-holes made if no information provided. HT_{max} , see table
		Drilling sequence DIS PS, OS, DM, HT As for drill hole DI
		SN Number of finishes $SN_{max} =$ $INT((L - 3 - PS - DM/2)/SD) + 1$
		SD Distance between adjacent finishes $SD_{min} = DM + 3$

Admissible drilling diameters and depths (in mm)

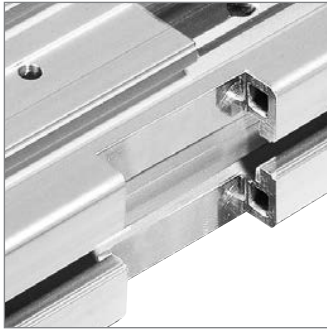
DM	5.8	6.4	7.8	8.0	8.4	9.8	11.0	17.0
HT _{max}	40.0	45.0	45.0	45.0	45.0	50.0	60.0	75.0

ATTENTION: If HT_{max} is not sufficient to drill through the profile, you must order two opposite bores!

Order key:

Material number / length / [slot designation=DI; PS=...; OS=...; DM=...; HT=...]; [...]

Material number / length / [slot designation=DIS; PS=...; OS=...; DM=...; HT=...; SN=...; SD=...]; [...]



Cross milling

Cross milling MT

- Cross milling at any point of the profile (slot designation **PS**) with variable depth (**HT**) and length (**PE – PS**); the width corresponds to the profile width.
- Observe required minimum wall thickness (PS_{min} , PS_{max})!

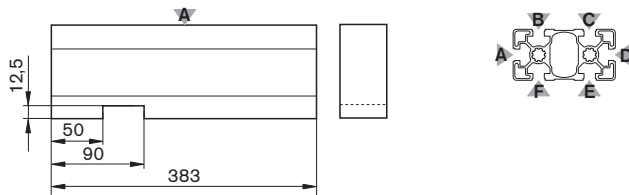
Cross milling sequence MTS

- Regular sequence of identical cross milling (**SN**, **SD**)
- Observe required minimum wall thickness (SD_{min})!

Order examples for profile 45x90, L = 383 mm

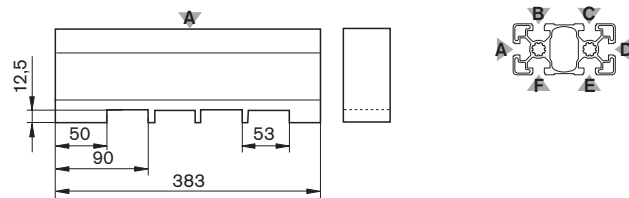
MT Cross milling on profile side slot D

3 842 993 661 / 383 / [D=MT; PS=50; HT=12.5; PE=90]



MTS Cross milling sequence on profile side slot D

3 842 993 661 / 383 / [D=MTS; PS=50; HT=12.5; PE=90; SN=4; SD=53]



End finishing Abbreviation Parameter

Cross milling	MT	PS	Starting point of milling (Profile cut surface distance – Cross milling leading edge)
			$PS_{min} = 8 \text{ mm}$ $PS_{min} = 60 \text{ mm}$ on the underside of the profile
	HT	HT	Depth of milling
			$HT_{max} = 5.5 \text{ mm}$ (slot 6 mm) $HT_{max} = 9.0 \text{ mm}$ (slot 8 mm) $HT_{max} = 12.5 \text{ mm}$ (slot 10 mm)
	PE	PE	Starting point of milling (Profile cut surface distance – Cross milling trailing edge)
			$PE_{max} = L - 8 \text{ mm}$ $8 \text{ mm} \leq PE - PS \leq 100 \text{ mm}$
Cross milling sequence	MTS	PS, HT, PE	As for cross milling MT
		SN	Number of finishes
			$SN_{max} = \text{INT}((L - 8 - PE)/SD) + 1$
		SD	Distance between adjacent finishes
			$SD_{min} = (PE - PS) + 10$

Order key:

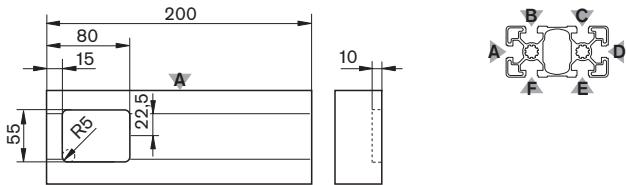
Material number / length / [slot designation=MT; PS=...; HT=...; PE=...]; [...]

Material number / length / [slot designation=MTS; PS=...; HT=...; PE=...; SN=...; SD=...]; [...]

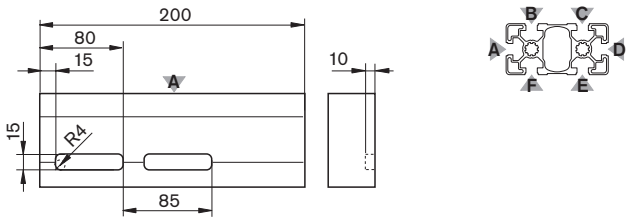


Oder examples for profile 45x90, L = 200 mm

MI Lengthwise milling
3 842 993 661 / 200 / [B=MI; PS=15; OS=22.5; DM=55; HT=10; PE=80; RG=5]



MIS Sequence of lengthwise milling
3 842 993 661 / 200 / [C=MIS; PS=15; DM=15; HT=10; PE=80; RG=4; SN=2; SD=85]



Lengthwise milling

Lengthwise milling MI

- ▶ Lengthwise milling at any point of the profile (slot designation **PS, OS**) with variable depth (**HT**), width (**DM**) and length (**PE – PS**). The milling corner radius is defined by the radius of the milling tool (**RG**).
- ▶ Observe required minimum distances (PS_{min} , PS_{max} , DM_{max})!

Lengthwise milling sequence MIS

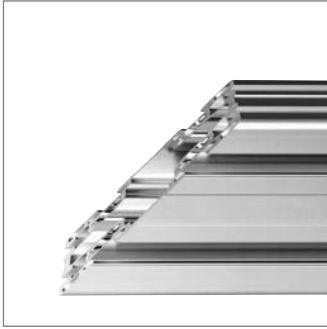
- ▶ Regular sequence of identical lengthwise milling (**SN, SD**)
- ▶ Observe required minimum wall thickness! (SD_{min})

End finishing	Abbreviation	Parameter
	Lengthwise milling	MI
		PS Starting point of milling $PS_{min} = 8 \text{ mm}$ $PS_{min} = 60 \text{ mm}$ on the underside of the profile (see order tables for guidance)
		OS Offset starting point (optional)
		DM Milling width $DM_{min} = 8 \text{ mm}$ $DM_{max} = \text{profile width/height} - 6 \text{ mm}$ At least 3 mm of profile must remain on both sides
	Lengthwise milling sequence	HT Depth of milling. $HT_{max} = 5.5 \text{ mm}$ (slot 6 mm) $HT_{max} = 9.0 \text{ mm}$ (slot 8 mm) $HT_{max} = 12.5 \text{ mm}$ (slot 10 mm)
		PE End point of milling $PE_{max} = L - 8 \text{ mm}$ $8 \text{ mm} \leq PE - PS \leq 100 \text{ mm}$
		RG Radius of milling geometry $RG = 3 \text{ mm}; 4 \text{ mm}; 5 \text{ mm}; 8 \text{ mm}$
		PS, OS, DM, HT, PE, RG As for lengthwise milling MI
	Lengthwise milling sequence	SN Number of finishes $SN_{max} = \text{INT}(L - 8 - PE/SD) + 1$
		SD Distance between adjacent finishes $SD_{min} = (PE - PS) + 10$

Order key:

Material number / length / [slot designation=MI; PS=...; OS=...; DM=...; HT=...; PE=...; RG=R..]; [...]

Material number / length / [slot designation=MIS; PS=...; OS=...; DM=...; HT=...; PE=...; RG=R..; SN=...; SD=...]; [...]



Miter cut

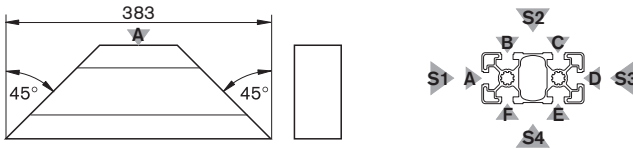
Miter cut

- ▶ Cutting of profiles at any angle
- ▶ Profile sides are numbered in clockwise direction. S1 is the left profile side according to the illustrated position on the ordered side; the following sides are designated with S2, S3 and S4.
- ▶ Miter cut is started at the indicated side. Possible sides: S1 and S3.
- ▶ Observe the maximum admissible miter bracket and minimum length

Order examples for profile 45x90, L = 383 mm

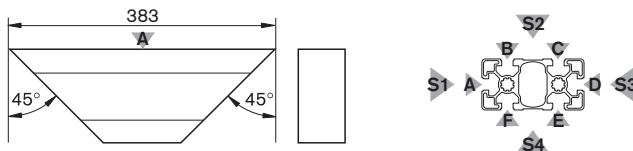
MT Miter cut on both sides through side S3 (side with slot D)

3 842 993 661 / 383 / [FS=S3; DG=45]; [BS=S3; DG=45]



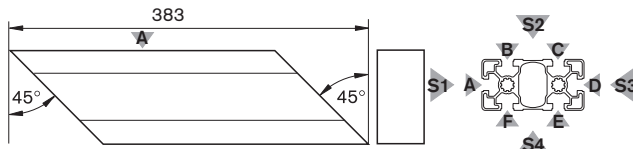
Miter cut on both sides through side S1 (side with slot A)

3 842 993 661 / 383 / [FS=S1; DG=45]; [BS=S1; DG=45]

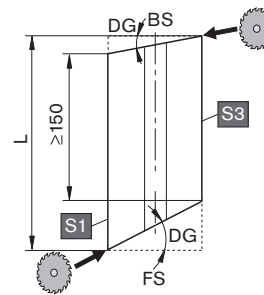


Miter cut on through side S1 (FS) and S3 (BS)

3 842 993 661 / 383 / [FS=S1; DG=45]; [BS=S3; DG=45]



End finishing	Abbreviation	Parameter
Miter cut	-	FS Front side: Designation of the profile end the miter cut is to be performed at S1, S3: Profile side on which the miter cut begins FS = S1; FS = S3
		BS Back side: Opposite profile end S1, S3: Profile side on which the miter cut begins BS = S1; BS = S3
		DG Miter bracket DG > 0 The angle is always specified as a positive value; orientation results from FS/BS and the side on which the miter cut begins. Note the maximum permissible miter angle.



Order key:

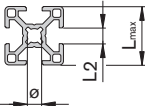
Material number / length / [FS=side; DG=miter angle]; [BS=side; DG=miter angle]

Technical data for strut profiles

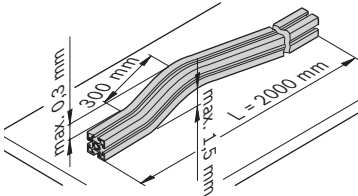
EN AW – Al MgSi		Material designation according to DIN EN 573 for Rexroth strut profiles
EN AW – 6060		Material number according to DIN EN 573
R_m	= 245 N/mm ²	Minimum tensile strength (in direction of pressure)
$R_{p0.2}$	= 195 N/mm ²	0.2 % proof stress (in direction of pressure)
A_5	= 10 %	Ductile yield A_5 or A_{10}
A_{10}	= 8 %	
E	= 70000 N/mm ²	Modulus of elasticity E
75 HB		Brinell hardness
$\alpha_{(-50...+20\text{ °C})}$	= 21.8 x 10 ⁻⁶ 1/K	Longitudinal expansion coefficient
$\alpha_{(+20...100\text{ °C})}$	= 23.4 x 10 ⁻⁶ 1/K	

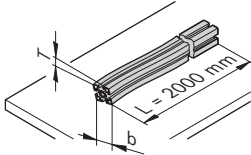
μ	= 0.34	Poisson's ratio
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E6/EV1 – 12 μ m – 300 HV	Anodizing process – layer thickness – layer hardness
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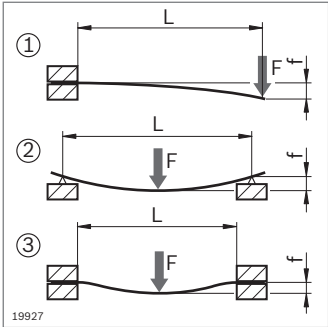
L_{max}	11–20	22,5–30	40	45–60	Permitted dimensional tolerance t (mm) for profiles from different deliveries
t	±0.15	±0.2	+0.6	±0.3	
L_{max}	80	90	120	160	
t	+0.8	±0.4	+1.0	+1.6	
L_{max}	180	270	360		
t	±0.6	±1.0	±1.5		
L2	6	8	10		 00109370
t	+0.3	+0.3	+0.4		
Ø	5.5	7.3	10	15	
t	-0.1	-0.1	±0.15	±0.15	
	+0.2	+0.2			

Deviation limits and form tolerances according to DIN EN 12020-2
Rexroth profiles generally fall well within the generally applicable tolerances specified in the standard. They are specifically defined for the individual products.

	Longitudinal straightness tolerance of profile
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 00126465	Longitudinal torsional tolerance of profile
b (mm)	T (mm)
≤ 100	1.2
100 ... 150	1.5
150 ... 200	1.8
200 ... 350	2.5

Profile deflection

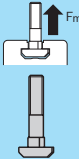
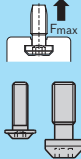
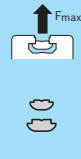
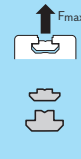
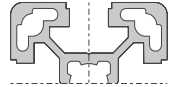
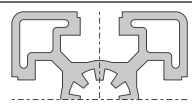
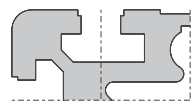


$f_{①} = \frac{F \times L^3}{3 E \times I \times 10^4}$ $f_{②} = \frac{F \times L^3}{48 E \times I \times 10^4}$ $f_{③} = \frac{F \times L^3}{192 E \times I \times 10^4}$	Profile deflection due to force F for static load cases ①②③
$f_{①} = \frac{m' \times g \times L^4}{8 E \times I \times 10^4}$ $f_{②} = \frac{5 \times m' \times g \times L^4}{384 E \times I \times 10^4}$ $f_{③} = \frac{m' \times g \times L^4}{384 E \times I \times 10^4}$	Profile deflection due to the profile's own weight
$\sigma_{①} = \frac{(m' \times g \times L + F) \times L}{W \times 10^3}$ $\sigma_{②} = \frac{(m' \times g \times L + F) \times L}{4 W \times 10^3}$ $\sigma_{③} = \frac{(m' \times g \times L + F) \times L}{8 W \times 10^3}$	Control of max. occurring bending stress $\sigma_{b \max}$
$\sigma_{b \max} < \sigma_{b \text{ zul.}}!$ $\sigma_{b \text{ zul.}} = \frac{R_{p0,2}}{S_{F \text{ erf.}}}$	$S_{F \text{ req}}$: Safety value required to avoid deformation (flow) $\sigma_{b \text{ zul.}}$: Max. permissible bending stress

f (mm)	W (cm³)
F (N)	E = 70000 N/mm²
L (mm)	m' (kg/mm); m' = m/1000; m (p. 2-3 ... 2-6)
I (cm⁴)	g = 9.81 m/s² ≈ 10 m/s²

Profile slot load-bearing capacity

Static load limit values of slot (beginning of plastic deformation) **for connectors with the largest thread in each case**

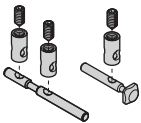
							
			T-bolt	T-nut	Central bolt	Swivel-in sliding block	Sliding block
		20x20, 20x20R 10x40 20x40, 20x60 20x40x40	1700 N	1700 N	2000 N	—	3000 N
		30x30, 30x30R 30x30°, 30x45°, 30x60° 11x20, 15x120 30x45, 30x60, 30x60x60 30x90, 30x120	4000 N	4000 N	5000 N	2200 N	6000 N
		90x90SL 40x40L, 40x40L R 40x30°, 40x45°, 40x60° 40x80L, 40x120L, 40x160L 40x80x80L 80x80L 80x120L, 80x160L 45x45L, 45x45L R 45x30°, 45x45°, 45x60° 15x22.5, 15x180, 22.5x45 45x90L, 45x90x90L 50x50L, 50x50L R 50x100L, 50x150L 100x100L, 100x200L 60x60L	6000 N 7000 N	6000 N 7000 N	9000 N 10000 N	8000 N 9000 N	11000 N 12000 N
		45x45 60x60 90x90L 22.5x180 45x60 45x90, 45x180 90x180L	12000 N	12000 N	15000 N	13000 N	17000 N
		45x270 60x90 90x90 90x180 90x360	18000 N	18000 N	22000 N	18000 N	24000 N

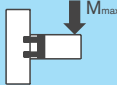
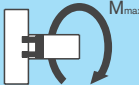
Load-bearing capacity of profile connection

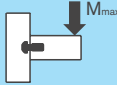
The specified tightening and loading limit values were determined as an example in (dry) trials. Safety factors and building regulations in accordance with the law and accepted engineering practices must be observed.

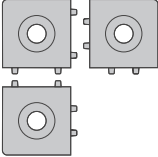
Static load limit values of the connection (beginning of plastic deformation)

6 8 10		D	Slot		F_{max}	M_{max}
	Quick connector (p. 3-54)	8	6 / 6	↻ 2.5 Nm	450 N	18 Nm
		11	8 / 8	↻ 12 Nm	500 N	40 Nm
		11	8 / 10	↻ 12 Nm	2000 N	70 Nm
		17	10 / 10	↻ 25 Nm	4000 N	140 Nm
		9.8	10 / 10	↻ 6 Nm	800 N	50 Nm

8 10		Slot			F_{max}	M_{max}	M_{max}	F_{max}	M_{max}
	Quick connector, bendable (p. 3-57)	30x30	8	↻ 12 Nm	1100 N	35 Nm	24 Nm	650 N	40 Nm
		40x40L	10	↻ 25 Nm	1500 N	110 Nm	100 Nm	1000 N	80 Nm
		45x45L	10	↻ 25 Nm	1500 N	120 Nm	110 Nm	1000 N	95 Nm
		45x45	10	↻ 25 Nm	1500 N	140 Nm	145 Nm	1100 N	180 Nm
		50x50L	10	↻ 25 Nm	1500 N	150 Nm	160 Nm	1100 N	180 Nm

		Slot					
		8	10				
	ø11, L=30	8	↻	6 Nm	2500 N	60 Nm	20 Nm
	ø17, L=40	10	↻	25 Nm	4000 N	180 Nm	40 Nm
	ø17, L=45	10	↻	25 Nm	4000 N	180 Nm	60 Nm
	ø17, L=50	10	↻	25 Nm	4000 N	200 Nm	65 Nm
	ø17, L=60	10	↻	25 Nm	4000 N	200 Nm	80 Nm
	ø17, L=80	10	↻	25 Nm	5000 N	800 Nm	170 Nm
	ø17, L=90	10	↻	25 Nm	5000 N	800 Nm	200 Nm
	ø17, L=100	10	↻	25 Nm	5000 N	1000 Nm	480 Nm
Bolt connector (p. 3-60)	ø28, L=22.5	10	↻	25 Nm	2000 N	–	–

		Slot				
		6	8	10		
	S6	6	↻	10 Nm	500 N	8 Nm
	S8	8	↻	25 Nm	800 N	43 Nm
	S12	10	↻	35 Nm	1300 N	80 Nm
	M12	10	↻	35 Nm	3000 N	80 Nm
Central bolt (p. 3-41)						

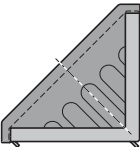
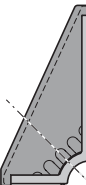
6 8 10		Slot				M_{max}	M_{max} 2 M_{max} 2
	20/2	6	↻	10 Nm		18 Nm	
	20/3	6	↻	10 Nm			23 Nm
	30/2	8	↻	25 Nm		80 Nm	
	30/3	8	↻	25 Nm			85 Nm
	40/2	10	↻	35 Nm		60 Nm	
	40/3	10	↻	35 Nm			70 Nm
	45/2	10	↻	35 Nm	45x45L	150 Nm	
					45x45	200 Nm	
	45/3	10	↻	35 Nm	45x45L		170 Nm
					45x45		240 Nm
Cubic connector (p. 3-43)	50/2	10	↻	35 Nm		120 Nm	
	50/3	10	↻	35 Nm			140 Nm

8 10		Profile	Slot				F_{max}	M_{max}	M_{max}
	SV8	30x...	8	↻	6 Nm		1000 N	35 Nm	15 Nm
	SV 10L	45x... L	10	↻	15 Nm		3500 N	110 Nm	30 Nm
	SV 10	40x..., 45x...	10	↻	25 Nm (M8)		3500 N	110 Nm	30 Nm
					5 Nm (M5)				
Tensioning connector (p. 3-12)		60x...	10	↻	15 Nm		3500 N	195 Nm	60 Nm

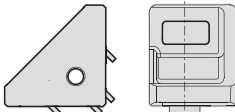
8 10		Slot				F_{max}	M_{max}	M_{max}
			8 / 8	↻	2.5 Nm (M4) 10 Nm (M8)	1000 N	35 Nm	15 Nm
			8 / 10	↻	2.5 Nm (M4) 10 Nm (M8)	1000 N	35 Nm	15 Nm
	Slot connector (p. 3-13)		10 / 10	↻	7 Nm (M6) 12 Nm (M10)	3000 N	110 Nm	30 Nm

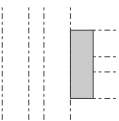
8 10		Slot				F_{max}	M_{max}
			8 / 8	↻	12 Nm	2200 N	50 Nm
	Inner bracket (p. 3-14)		10 / 10	↻	15 Nm	2800 N	100 Nm

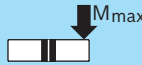
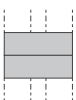
6 8 10		Slot				F_{max}	M_{max}
			6 / 6	↻	3 Nm	600 N	10 Nm
			8 / 8	↻	12 Nm	2500 N	50 Nm
	Inner bracket R (p. 3-15)		10 / 10	↻	15 Nm	3000 N	100 Nm

6 8 10			Slot	F_{max} M_{max} M_{max} M_{max}				
  	20/20	6		3 Nm	700 N	6 Nm	25 Nm	–
	20/40	6		3 Nm	1400 N	15 Nm	50 Nm	8 Nm
	30/30	8		10 Nm	1250 N	25 Nm	75 Nm	–
	30/60	8		10 Nm	2500 N	100 Nm	170 Nm	25 Nm
	30/120	8		10 Nm	3750 N	100 Nm		47 Nm
	60/60-8	8		10 Nm	5000 N	320 Nm	370 Nm	110 Nm
	60/60-10	10		25 Nm	3000 N	125 Nm	150 Nm	–
	40/40	10		25 Nm	3000 N	55 Nm	145 Nm	35 Nm
	40/80	10		25 Nm	6000 N	180 Nm	400 Nm	60 Nm
	40/160	10		25 Nm	9000 N	250 Nm		60 Nm
	80/80	10		25 Nm	14000 N	500 Nm	1000 Nm	400 Nm
	45/45	10		25 Nm	3000 N	60 Nm	160 Nm	–
	45/90	10		25 Nm	6000 N	180 Nm	400 Nm	60 Nm
	45/180	10		25 Nm	9000 N	250 Nm		65 Nm
	90/90	10		25 Nm	12000 N	370 Nm	800 Nm	200 Nm
	43x42	10		25 Nm	2000 N	–	160 Nm	–
	50/50	10		25 Nm	4000 N	125 Nm	250 Nm	38 Nm
	50/100	10		25 Nm	7500 N	300 Nm	600 Nm	73 Nm
	100/100	10		25 Nm	15000 N	550 Nm	1100 Nm	480 Nm

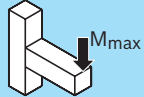
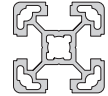
Bracket (p. 3-18)

				Slot		  			
  									
	S 20x20	6		2.5 Nm	700 N	3.6 Nm	25 Nm		
	S 30x30	8		8.5 Nm	1250 N	16 Nm	75 Nm		
	S 40x40	10		25 Nm	3000 N	36 Nm	160 Nm		
	S 45x45	10		25 Nm	3000 N	36 Nm	160 Nm		

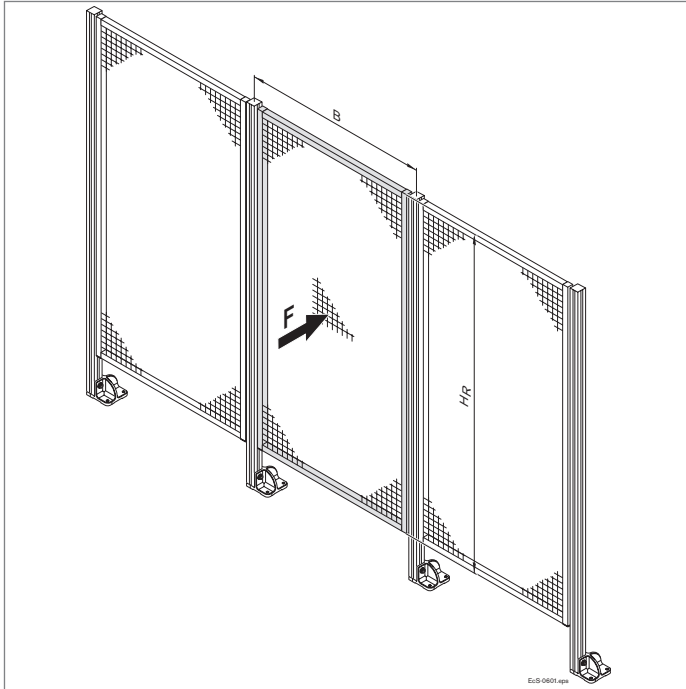
 		Slot				
	30x30	8	↻	25 Nm (M8) / 5 Nm (M5)	4000 N	80 Nm
	40x40	10	↻	35 Nm (S12) / 10 Nm (M6)	9000 N	150 Nm
	45x45	10	↻	35 Nm (S12) / 10 Nm (M6)	9000 N	200 Nm
	50x50	10	↻	35 Nm (S12) / 10 Nm (M6)	10000 N	170 Nm
T-connector (p. 3-51)						

		Slot			
	30x30	8	↻	25 Nm (M8) / 5 Nm (M5)	81 Nm
	40x40	10	↻	35 Nm (S12) / 10 Nm (M6)	170 Nm
	45x45	10	↻	35 Nm (S12) / 10 Nm (M6)	200 Nm
	50x50	10	↻	35 Nm (S12) / 10 Nm (M6)	180 Nm
End connector (p. 3-49)					

Profile connection load-bearing capacity with radial compensation (p. 2-85)

		Slot					
	30x30		S8	8	↻ 25 Nm	600 N	37 Nm
				8 / 8	↻ 12 Nm	600 N	37 Nm
	40x40		M12 S12	10	↻ 30 Nm	1000 N	47 Nm
				10 / 10	↻ 22 Nm	1000 N	47 Nm
	45x45		S12 M12	10	↻ 35 Nm	1200 N	53 Nm
				10 / 10	↻ 25 Nm	1200 N	53 Nm

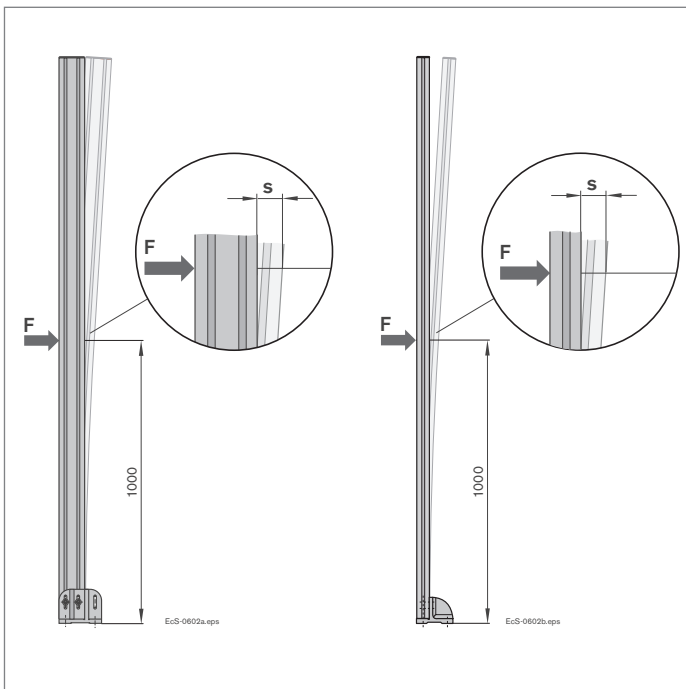
Load-bearing capacity data for EcoSafe protective frame and EcoSafe support



EcoSafe protective frames withstand high loadings. The permissible forces which act on the protective grille have been determined in series of tests.

Test structure: In the case of a protective fence consisting of 3 frames, the woven wire grille in the middle frame is exposed to a maximum load force acting on its center.

Protective frame	HR (mm)	B (mm)	F (N)	No.
	1800	750	1650	3 842 554 283
	1800	1000	1100	3 842 554 284
	1800	1500	800	3 842 554 285



The force required to deflect the EcoSafe system supports has been determined in series of tests.

Test structure: A force acts on an installed system support at a height of 1 m (spring balance).

F (N)		100	150	300	450	600
s (mm)	45x45	4	6	13	21	31
	45x90	2	3	6	12	18

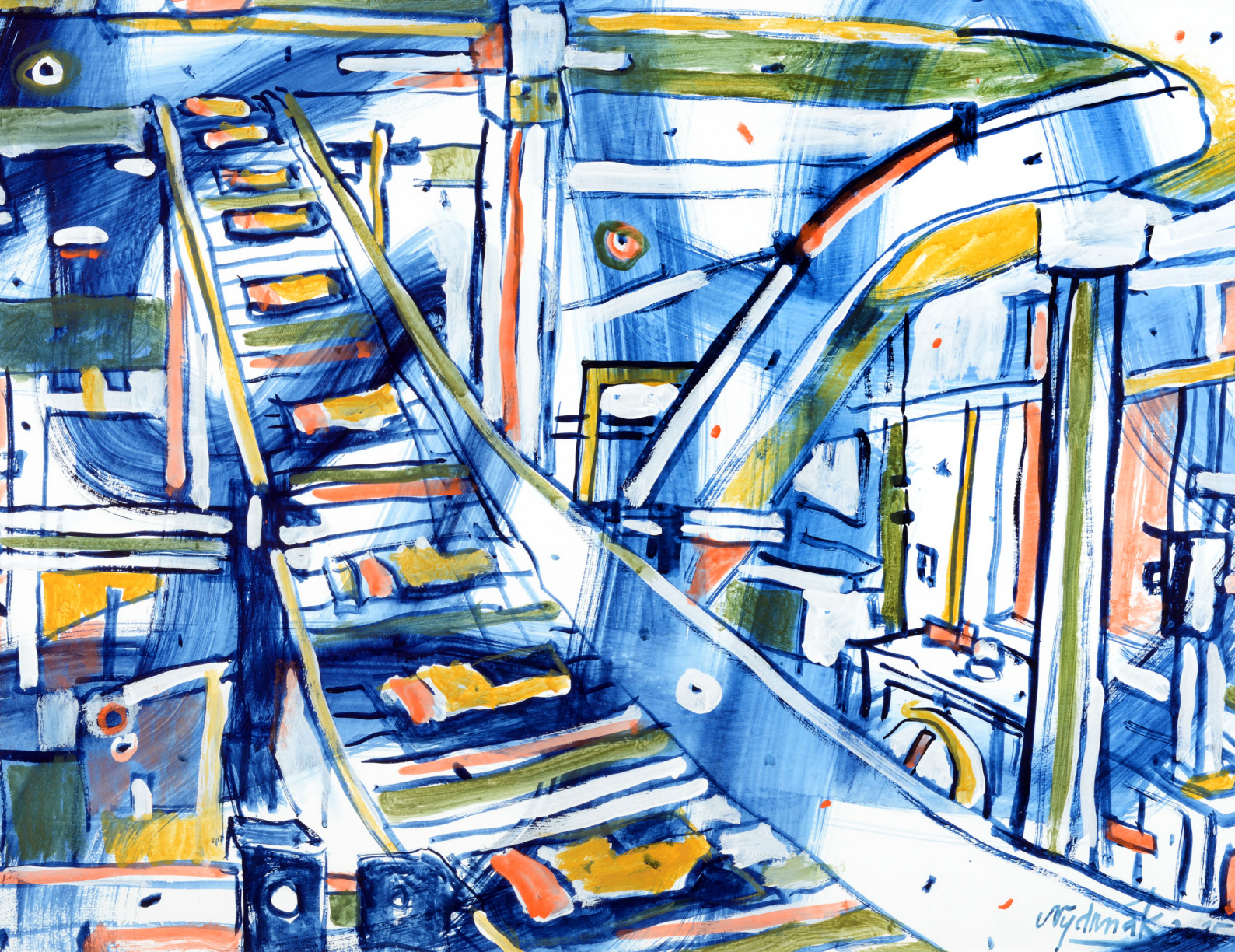
PRÍĎTE SA K NÁM POZRIEŤ

**Ozvíte sa nám a prídeme spolu
na to, ako uľahčiť vašim ľuďom
aj tú najnáročnejšiu prácu.**



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