



MTS

automation
components

HLINÍKOVÉ PROFILY BOSCH REXROTH

Spojovacie prvky

výdyma



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.

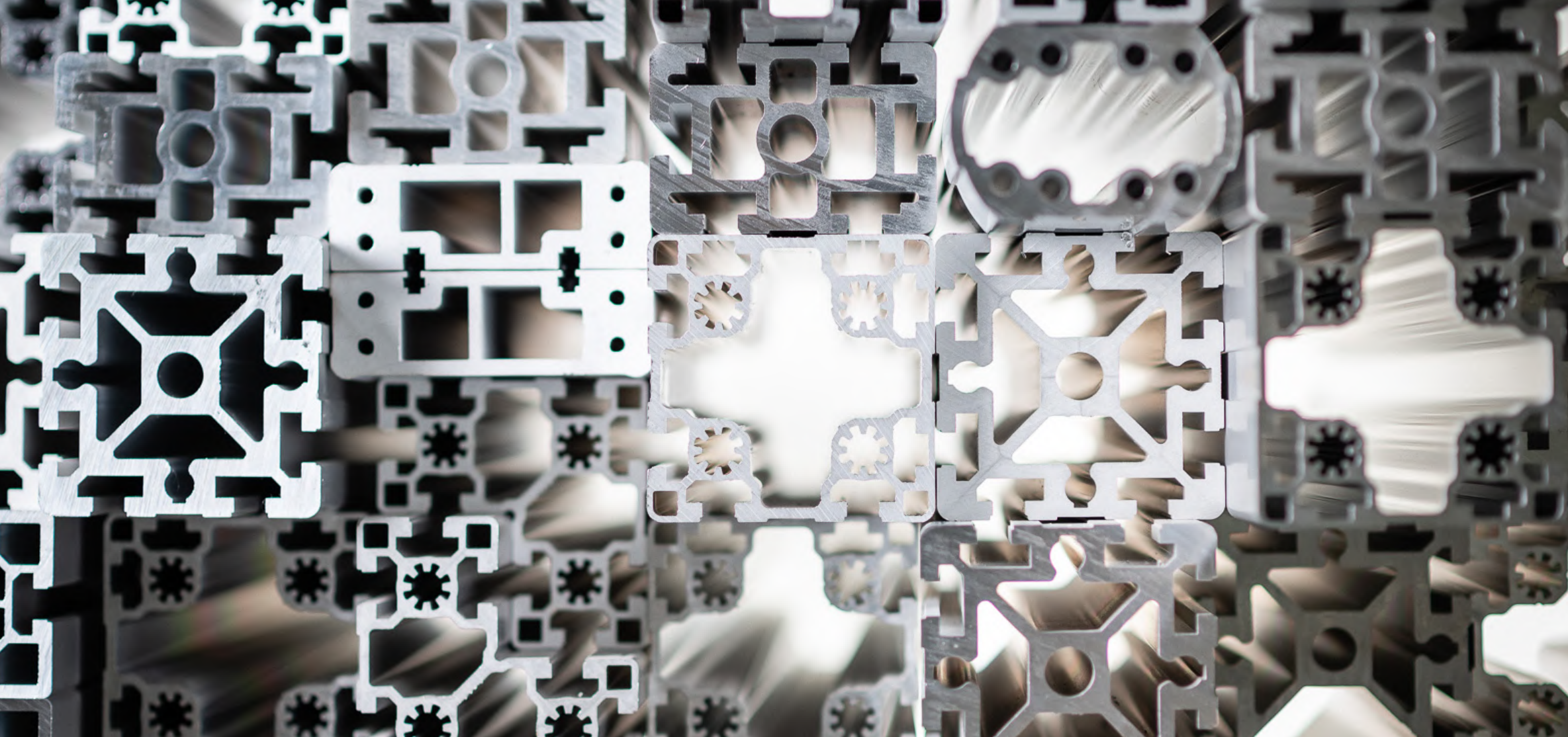
Tento stavebnicový systém sa stal vo viacerých priemyselných podnikoch medzinárodným štandardom nosných konštrukcií pre zariadenia, výrobné linky a stroje. V porovnaní s konkurenciou, hliníkové profily od Bosch Rexroth poskytujú širokú škálu príslušenstva. Profily majú viac rozmerových rád. Medzi nimi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

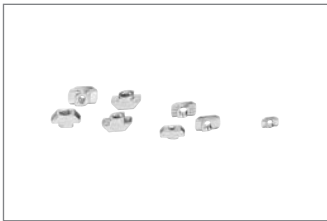
- Jednoduchá projekcia
- Rýchla montáž
- Málo potrebných nástrojov
- Priestorová nenáročnosť
- Opakovane využiteľné komponenty
- Odolnosť proti korózii
- Flexibilná stavba a prestavba

OBSAH KATALÓGU

Spojovacie prvky	5
Technické dáta	67
Kontakt	88



Connection elements



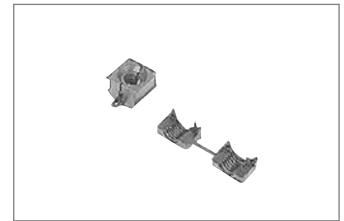
T-nut (p. 3-4)
Collar screw (p. 3-5)



Flange nut, T-bolt (p. 3-6)



Sliding block (p. 3-7)



Expanding nut (p. 3-10)



Parallel connector (p. 3-11)



Tensioning connector
(p. 3-12)



Slot connector (p. 3-13)



Inner bracket (p. 3-14)
Inner bracket R (p. 3-15)



Miter bracket (p. 3-17)



Bracket (p. 3-18)



Bracket R (p. 3-30)



Steel bracket (p. 3-32)



Metal bracket, supporting
bracket (p. 3-33)



Foundation bracket
(p. 3-34)



Holder (p. 3-35)



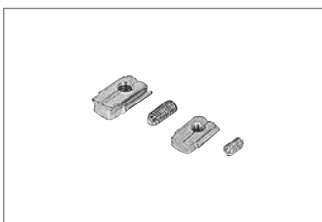
Supporting bracket
(p. 3-37)



Profile connector (p. 3-39)



Central bolt (p. 3-41)



Anti-torsion element
(p. 3-42)



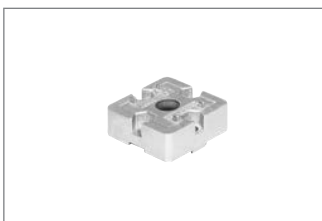
Cubic connector (p. 3-43)



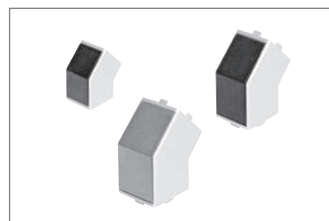
Corner bracket (p. 3-47)



End connector (p. 3-49)



T-connector (p. 3-51)



Connector 45° (p. 3-53)



Quick connector (p. 3-54)



Quick connector, bendable
(p. 3-57)



Longitudinal end connector
(p. 3-59)

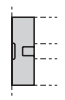
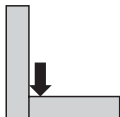
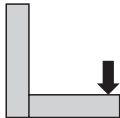
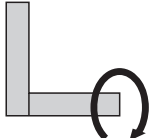
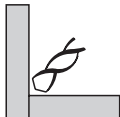
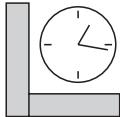
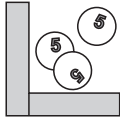
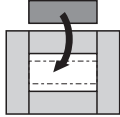
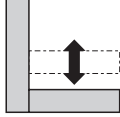
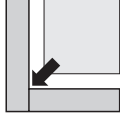
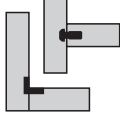


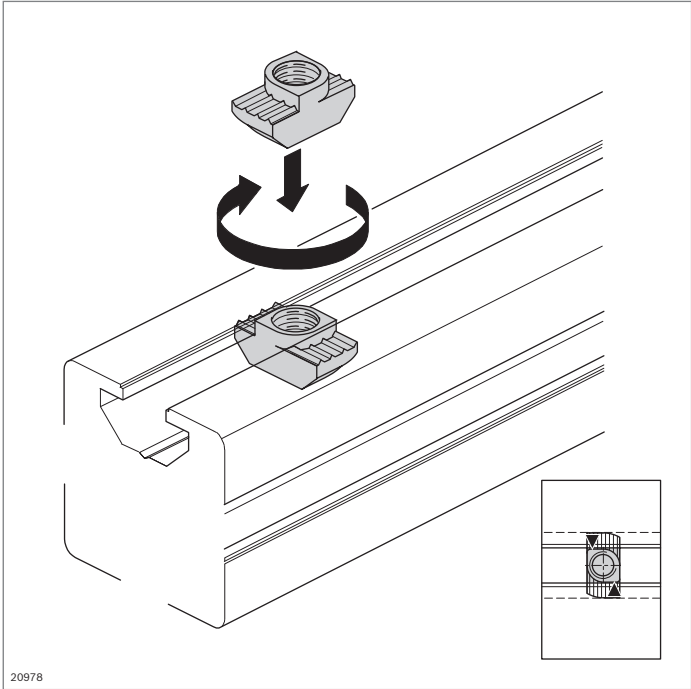
Bolt connector (p. 3-60)



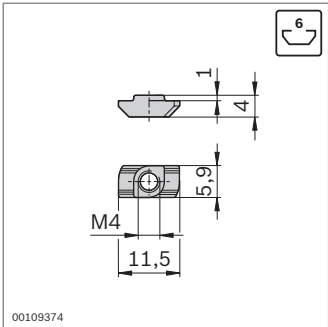
QV mounting kit (p. 3-62)

Connection elements, selection criteria

		       								
		Tensioning connector	Slot connector	Inner bracket	Bracket	Central bolt	T-connector	Quick connector	Bolt connector	
	High feed force									
	High moment									
	High torsional moment	 	 							
	Minimal finishing	 	 	 	 	  M12 9,8	 	  D17	  D17	
	Minimal assembly									
	Low parts costs									
	Subsequent mounting in closed frame									
	Adjustment possible									
	Mounting of panel elements									
	Internal connection (concealable)									

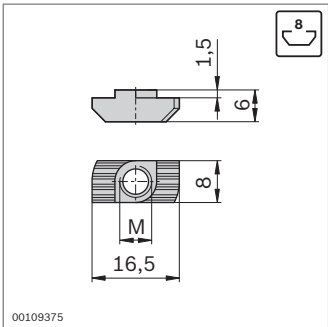


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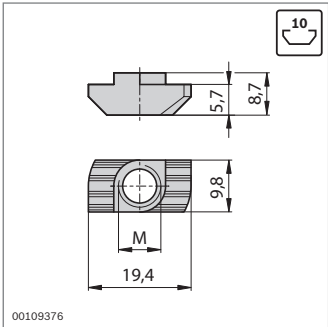
00109374

Slot	
6	1700 N



00109375

Slot	
8 (M6)	4000 N



00109376

Slot	
10 (M8)	6000 ... 18000 N ¹⁾

¹⁾ Depending on profile (p. 19-5)

T-nut



- Standard element for a secure and conductive connection
- End stop for correct positioning in the profile slot
- Stainless steel T-nut, e.g. for outdoor or cleanroom applications
- Profile finishing: Not required

Technical data (p. 18-15)

Accessories:
Insulating cap (p. 3-5)

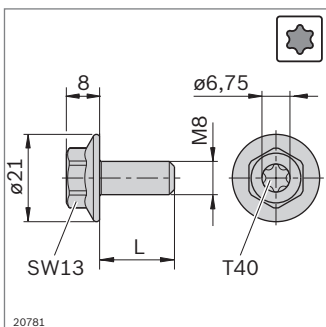
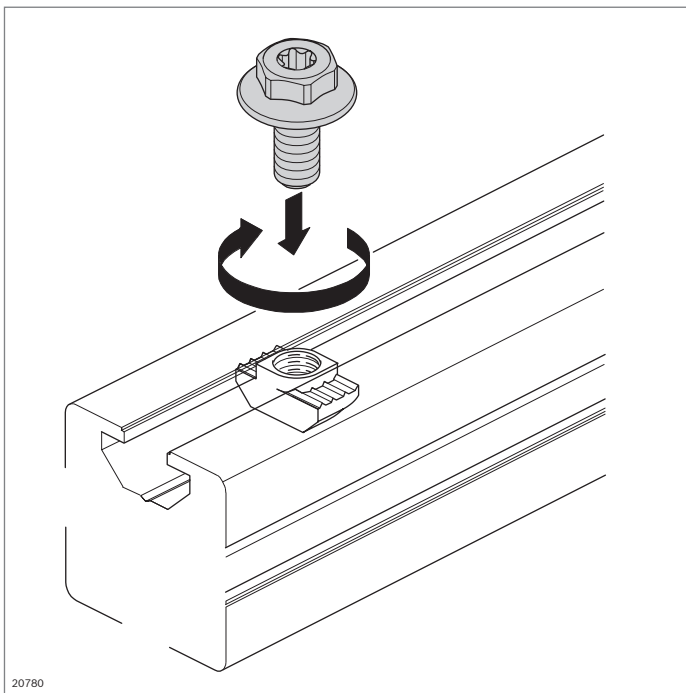
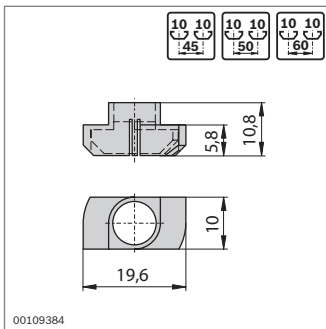
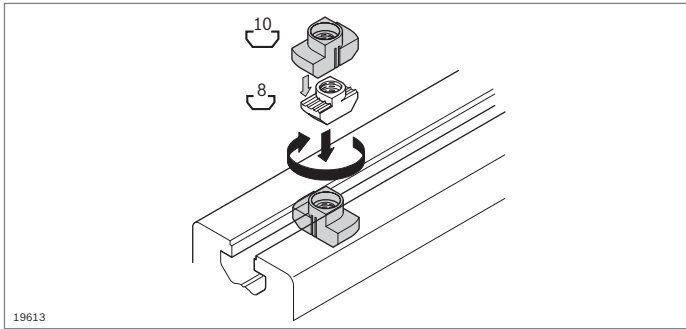
T-nut, 6 mm slot	Slot	M	ESD		No.
Steel; galvanized	6	M4		100	3 842 523 135
Stainless steel	6	M4		100	3 842 536 599

T-nut, 8 mm slot	Slot	M	ESD		No.
Steel; galvanized	8	M4		100	3 842 501 751
		M5*		100	3 842 501 752
		M6*		100	3 842 501 753
Stainless steel	8	M4		100	3 842 536 600
		M5		100	3 842 536 601
		M6		100	3 842 536 602

* Suitable for standard screws. **Attention:** T-nuts have driving torque for safe turning in the base of the slot.

T-nut, 10 mm slot	Slot	M	ESD		No.
Steel; galvanized	10	M4		100	3 842 530 281
		M5*		100	3 842 530 283
		M6*		100	3 842 530 285
		M8*		100	3 842 530 287
Stainless steel	10	M4		100	3 842 536 606
		M5		100	3 842 536 605
		M6		100	3 842 536 604
		M8		100	3 842 536 603

* Suitable for standard screws. **Attention:** T-nuts have driving torque for safe turning in the base of the slot.



- ▶ Insulating cap for decoupling directly grounded components; for use with T-nuts for 8 mm slots in a 10 mm slot

Insulating cap for T-nut, 8 mm slot	Slot		No.
	10	10	3 842 524 012

Material:	PA; high-strength, black
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Collar screw



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

Tools:

Offset screwdriver (p. 14-5)

Accessories:

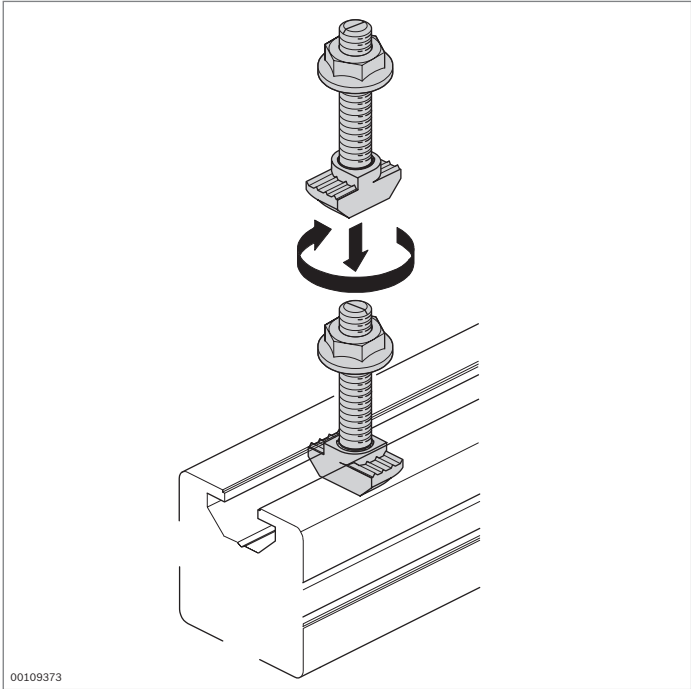
T-nut (p. 3-4)

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

1) For 40/40 and 60/60 brackets

2) For all other brackets for 10 mm slot

Material: Steel; galvanized

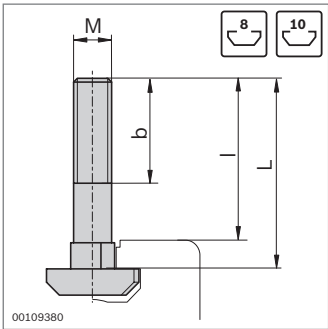
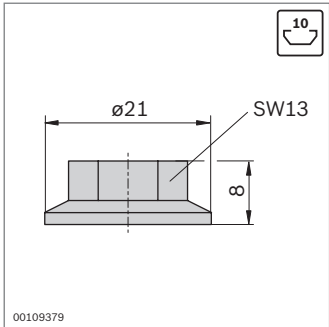
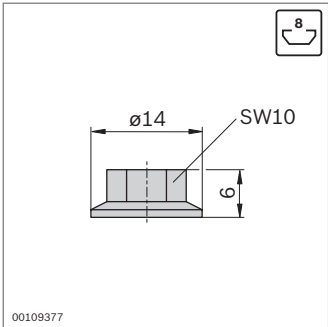


Flange nut T-bolt



- Secure and conductive connection
- Notch at bolt end as marker for correct position recognition
- Profile finishing: Not required

Technical data (p. 18-15)



Slot	
8	4000 N
10	6000 ... 18000 N ¹⁾

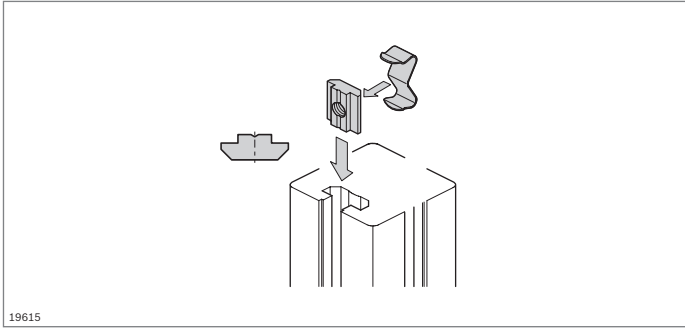
¹⁾ Depending on profile (p. 18-15)

Flange nut	Slot	M	ESD	No.
	8	M6		100 3 842 523 925
	10	M8		100 3 842 345 081

Material: Steel; galvanized

T-bolt	Slot	MxL	b (mm)	l (mm)	ESD	No.
	8	M6x16	10	14		100 3 842 523 920
		M6x20	14	18		100 3 842 523 921
		M6x25	18	23		100 3 842 523 922
	10	M8x20	14	14		100 3 842 528 715
		M8x25	19	19		100 3 842 528 718
		M8x30	24	24		100 3 842 528 721
		M8x40	22	34		100 3 842 528 724
		M8x50	22	44		100 3 842 528 727
		M8x60	22	54		100 3 842 528 730

Material: Steel; galvanized



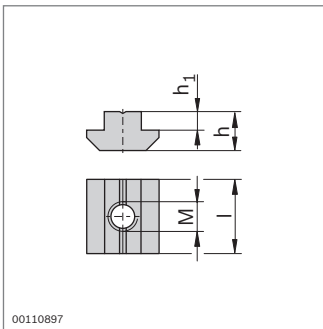
19615

Sliding block, sliding block profile

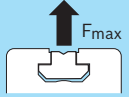


- ▶ Sliding block for reliable absorption of high forces
- ▶ Sliding block profile for self-assembly of individual fastening elements
- ▶ Profile finishing: Not required
- ▶ The spring assists with the assembly and positioning of the sliding block and swivel-in sliding block (p. 3-8)

Technical data (p. 18-15)



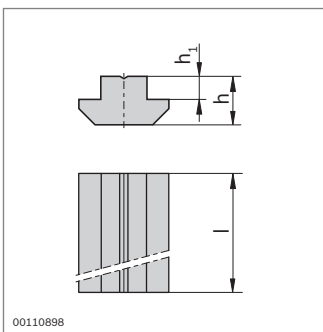
00110897

Slot	
6 (M5)	3000 N
8 (M8)	6000 N
10 (M8)	8000 ... 24000 N ¹⁾

¹⁾ Depending on profile (p. 18-15)

Sliding block	Slot	M	h (mm)	h ₁ (mm)	l	ESD 	No.
Steel; galvanized	6	M4	4.0	1.0	12		100 3 842 542 692
		M5	4.0	1.0	12		100 3 842 542 693
	8	M4	6.0	2.0	16	100	3 842 514 928
		M5	6.0	2.0	16	100	3 842 514 929
		M6	6.0	2.0	16	100	3 842 514 930
		M8	6.0	2.0	16	100	3 842 514 931
	10	M5	10.5	5.0	20	100	3 842 528 741
		M6	10.5	5.0	20	100	3 842 528 738
		M8	10.5	5.0	20	100	3 842 528 735
Steel; stainless	6	M4	4.0	1.0	12		100 3 842 523 140
		M5	4.0	1.0	12		100 3 842 523 142
	8	M4	6.0	2.0	16		100 3 842 547 817
		M5	6.0	2.0	16		100 3 842 547 816
		M6	6.0	2.0	16		100 3 842 547 815
		M8	6.0	2.0	16		100 3 842 547 814
	10	M5	10.5	5.0	20		100 3 842 547 813
		M6	10.5	5.0	20		100 3 842 547 812
		M8	10.5	5.0	20		100 3 842 547 811

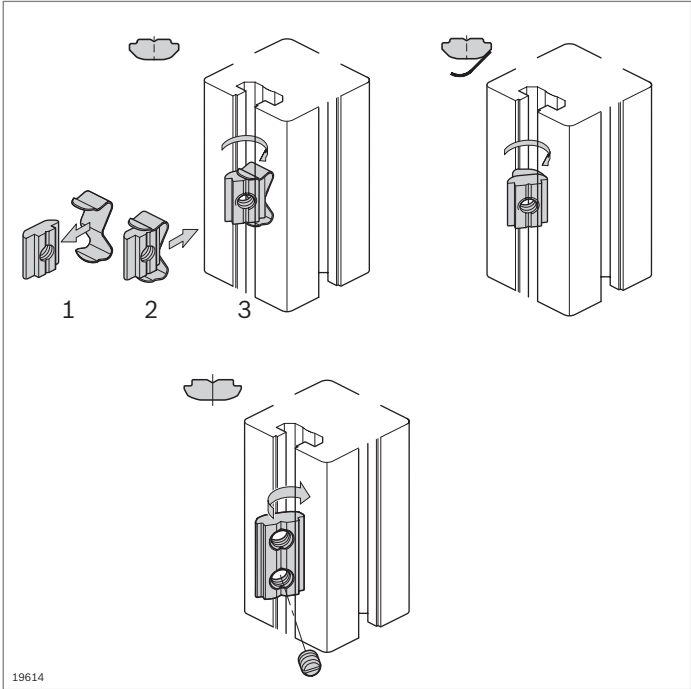
Accessories: Spring (p. 3-9)



00110898

Sliding block profile	Slot	h (mm)	h ₁ (mm)	l (mm)	No.
Steel; galvanized	6	4.0	1.0	1000	3 842 542 694
	8	6.0	2.0	1000	3 842 510 078
	10	10.5	5.0	1000	3 842 528 744
Steel; stainless	6	4.0	1.0	1000	3 842 523 438

Accessories: Spring (p. 3-9)

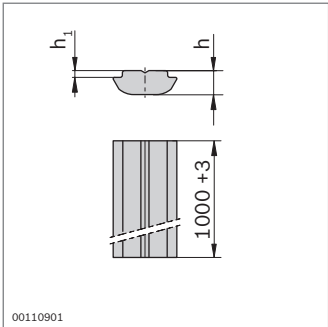


Swivel-in sliding block
Swivel-in sliding block profile
Spring



- ▶ Swivel-in sliding block profile for self-assembly of individual fastening elements
- ▶ The swivel-in sliding block can be inserted directly at the assembly point for easy assembly
- ▶ The swivel-in sliding block with spring can be inserted directly at the assembly point and fixed in position thanks to attached springs
- ▶ Swivel-in sliding block with headless setscrews for shake-proof fixing in all positions
- ▶ Profile finishing: Not required

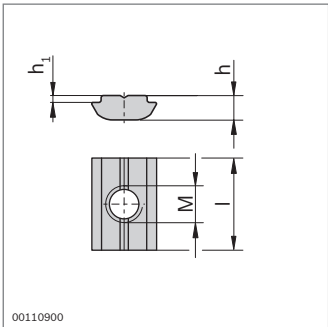
Technical data (p. 18-15)



Slot	
8 (M8)	2200 N
10 (M8)	8000 ... 18000 N ¹⁾

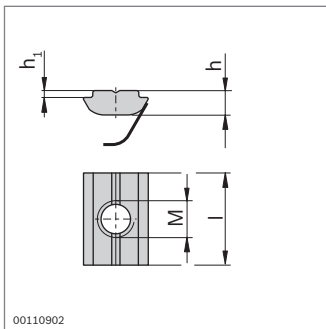
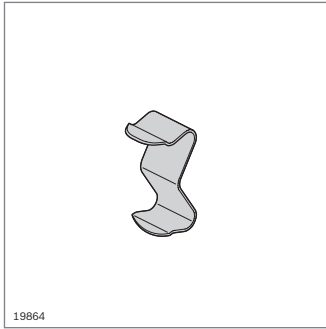
¹⁾ Depending on profile (p. 18-15)

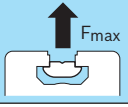
Swivel-in sliding block profile	Slot	h (mm)	h ₁ (mm)	l (mm)	No.
Steel; galvanized	8	4.8	1.0	1000	3 842 529 327
	10	5.3	1.5	1000	3 842 529 325



Swivel-in sliding block	Slot	M	h (mm)	h ₁ (mm)	l (mm)	ESD	No.
Steel; galvanized	8	M5	4.8	1.0	16		3 842 529 319
		M6	4.8	1.0	16		3 842 529 320
		M8	4.8	1.0	16		3 842 529 321
	10	M6	5.3	1.5	20		3 842 529 323
		M8	5.3	1.5	20		3 842 529 324
		M10	5.3	1.5	20		3 842 529 325
Steel; stainless	6	M3	3.0	0.9	12		3 842 547 826
		M4	3.0	0.9	12		3 842 536 669
		M5	3.0	0.9	12		3 842 547 825
	8	M6	4.8	1.0	16		3 842 530 321
		M8	5.3	1.5	20		3 842 530 316
		M10	5.3	1.5	20		3 842 530 317

Accessories: spring (p. 3-9)



Slot	
8 (M8)	2200 N
10 (M8)	8000 ... 18000 N ¹⁾

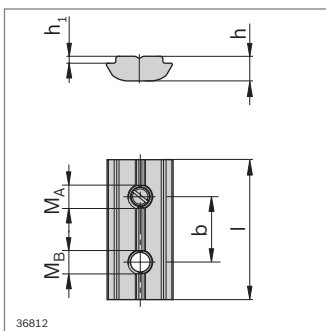
¹⁾ Depending on profile (p. 18-15)

- The spring assists with the assembly and positioning of the sliding block and swivel-in sliding block

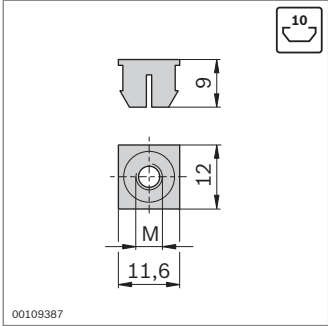
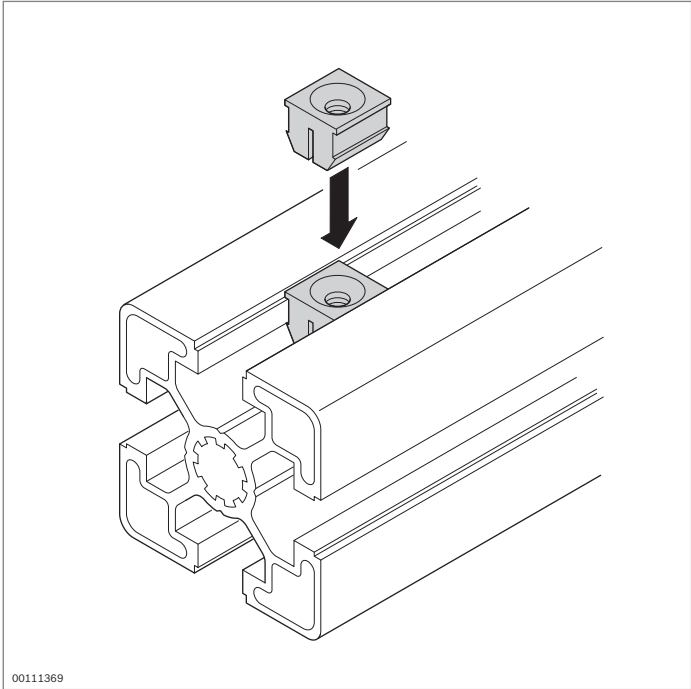
Spring	Slot		No.
Spring steel; stainless	6	100	3 842 523 145
	8	100	3 842 516 685
	10	100	3 842 516 669

Swivel-in sliding block with spring	Slot	M	h (mm)	h ₁ (mm)	l (mm)	ESD 	No.
Steel; galvanized	8	M4	4.8	1.0	16		100 3 842 529 294
		M5	4.8	1.0	16		100 3 842 529 295
		M6	4.8	1.0	16		100 3 842 529 296
		M8	4.8	1.0	16		100 3 842 529 297
	10	M4	5.3	1.5	20		100 3 842 541 393
		M5	5.3	1.5	20		100 3 842 529 298
		M6	5.3	1.5	20		100 3 842 529 299
		M8	5.3	1.5	20		100 3 842 529 300
Steel; stainless	8	M4	4.8	1.0	16		100 3 842 547 824
		M5	4.8	1.0	16		100 3 842 547 823
		M6	4.8	1.0	16		100 3 842 547 822
		M8	4.8	1.0	16		100 3 842 547 821
	10	M5	5.3	1.5	20		100 3 842 547 808
		M6	5.3	1.5	20		100 3 842 547 807
		M8	5.3	1.5	20		100 3 842 547 806

Material: Spring: Spring steel; stainless



Swivel-in sliding block, with Headless setscrew (M _A)	Slot	M _A ; M _B	b (mm)	h (mm)	h ₁ (mm)	l (mm)		No.
Steel; stainless	6	M4; M4	8	3.0	0.9	15	100	3 842 536 673
Steel; galvanized	8	M5; M4	12	4.8	1.0	24	100	3 842 557 259
		M5; M5	12	4.8	1.0	24	100	3 842 536 675
		M5; M6	12	4.8	1.0	24	100	3 842 557 260
	10	M5; M5	14	5.3	1.5	30	100	3 842 536 676
		M5; M6	14	5.3	1.5	30	100	3 842 557 261
		M5; M8	14	5.3	1.5	30	100	3 842 557 262



Expanding nut

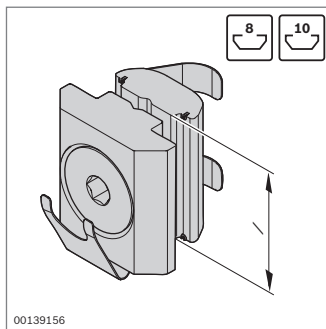
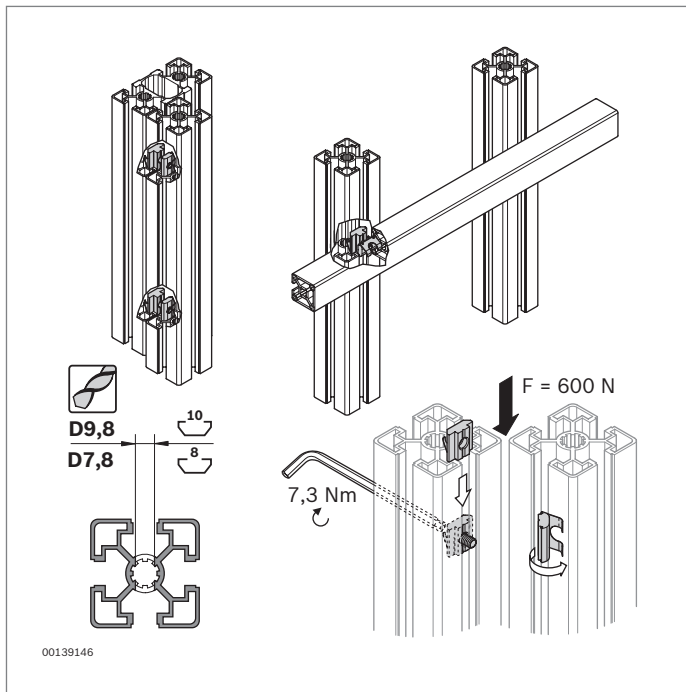


- For attaching light accessories such as cable ties or rings
- Easy assembly by clipping into the profile slot
- Profile finishing: Not required

Required accessories:
Countersunk screw

Expanding nut	Slot	M	No.
	10	M4	100 3 842 554 774
		M5	100 3 842 554 776
		M6	100 3 842 554 778

Material: PA; signal gray similar to RAL 7004



Slot	
8	600 N
10	600 N

Parallel connector

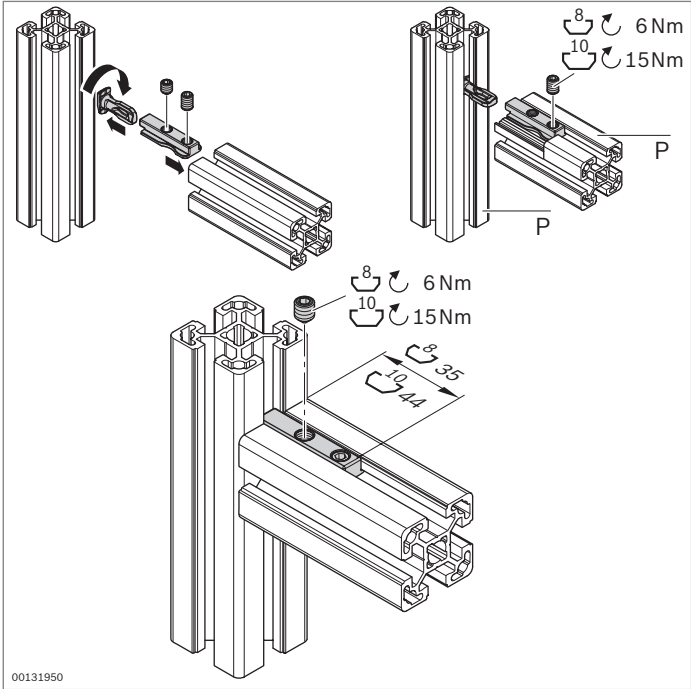


- For a gap-free connection between two strut profiles, parallel to the axis or at any angle
- Parallel connector consisting of two sliding blocks with welded springs for simple assembly
- Attractive-looking interior connection, e.g. for material shelves
- Connection possible in any position
- Transferable displacement force per parallel connector: 600 N
- Profile finishing: Through-hole

Parallel connector	Slot	I (mm)	No.
	8	16 10	3 842 542 737
	10	20 10	3 842 542 736

Material: Sliding block: Steel; galvanized
Spring: Spring steel; stainless

Scope of delivery: Sliding block with spring, swivel-in sliding block with spring, countersunk screw M5



Tensioning connector



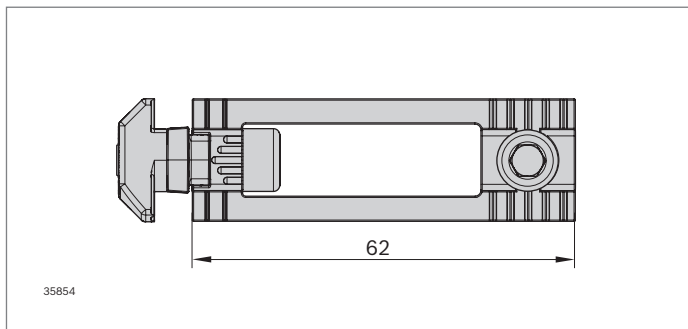
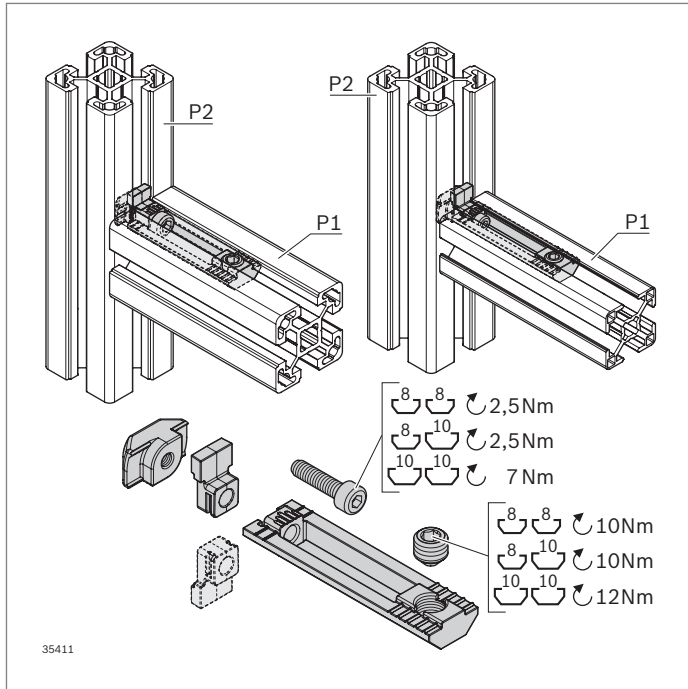
- Tensioning connector for fast assembly
- The connector can be moved within the slot
- Easily accessible screws
- Three slots are left free for mounting of panel elements
- Profile finishing: Not required

Technical data (p. 18-18)

P			
30x...	1000 N	35 Nm	15 Nm
45x...L	3500 N	110 Nm	30 Nm
40x..., 45x..., 50x..., 90x...	3500 N	110 Nm	30 Nm
60x...	3500 N	195 Nm	60 Nm

Tensioning connector	Slot	P	ESD		No.
8	8	30x...		10	3 842 538 489
10L	10	45x...L 45x90SL 90x90SL		10	3 842 538 491
10	10	40x...L, 45x..., 50x...L, 60x..., 60x...L 80x...L 90x..., 90x...L, 45x90x90L		10	3 842 538 490

Material: Steel; galvanized



Slot connector

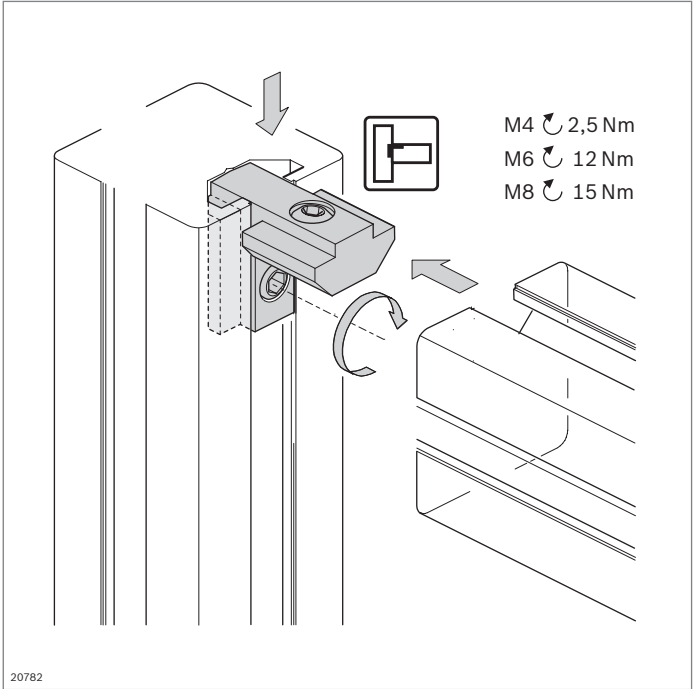


- Slot connector for fast assembly
- The connector can be moved within the slot
- Easily accessible screws
- Anti-torsion element can be removed if necessary, variable alignment (slot 10/10; 8/10)
- Headless setscrew, preassembled
- Profile finishing: Not required

Slot connector	P1	P2	ESD	No.
8/8	8	8		3 842 558 566
8/10	8	10		3 842 558 567
10/10	10	10		3 842 558 568

Material: Slot connector: Steel; galvanized
Anti-torsion element: PA6

Slot			
8 / 8	1000 N	35 Nm	15 Nm
8 / 10	1000 N	35 Nm	15 Nm
10 / 10	3000 N	110 Nm	30 Nm

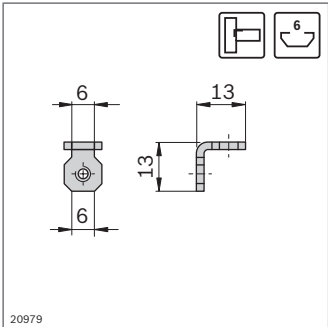


Inner bracket



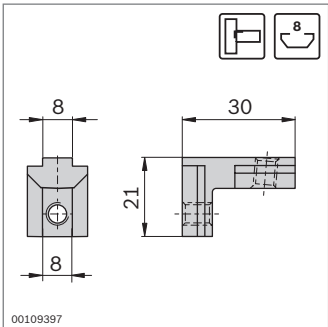
- For elegant, easy-to-assemble profile connections
- Especially suitable for constructing door frames, protective grilles, or partition walls
- The inner bracket, 6 mm slot, can also be used as an inner bracket R, 6 mm slot
- Profile finishing: Not required

Technical data (p. 18-18)



Inner bracket	Slot	ESD	No.	FS
	6 / 6		10	3 842 535 574 2xFS1

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

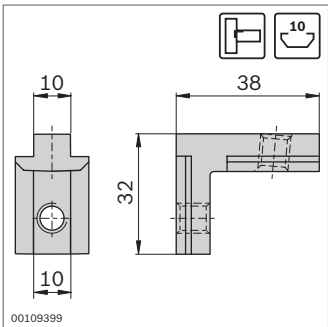


Slot	F_{max}	M_{max}
8 / 8	2200 N	50 Nm



Inner bracket	Slot	ESD	No.	FS
	8 / 8		10	3 842 535 578 2xFS2

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

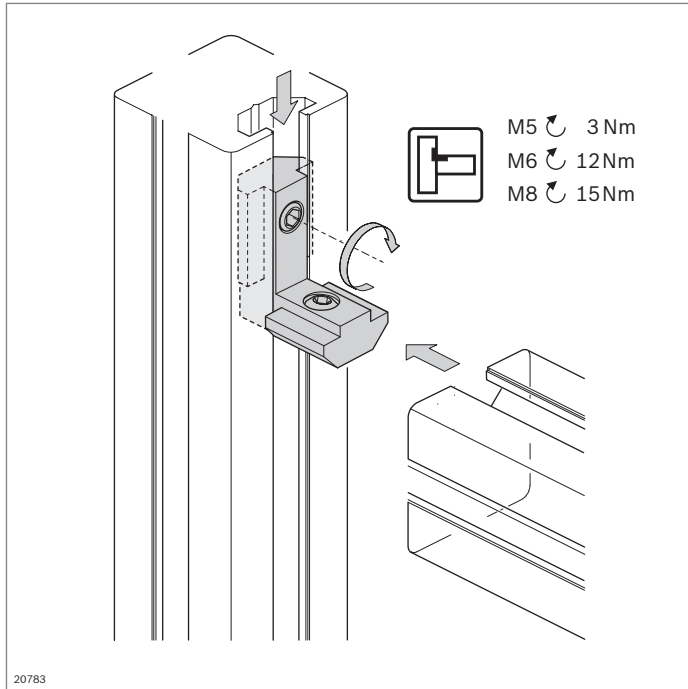


Slot	F_{max}	M_{max}
10 / 10	2800 N	100 Nm



Inner bracket	Slot	ESD	No.	FS
	10 / 10		10	3 842 535 572 2xFS3

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

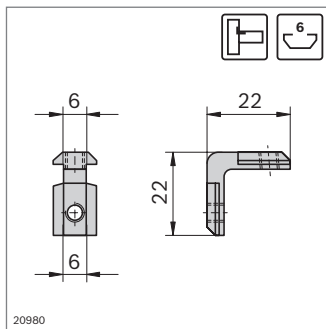


Inner bracket R



- For elegant, easy-to-assemble profile connections
- Especially suitable for constructing door frames, protective grilles, or partition walls
- Profile finishing: Not required

Technical data (p. 18-18)



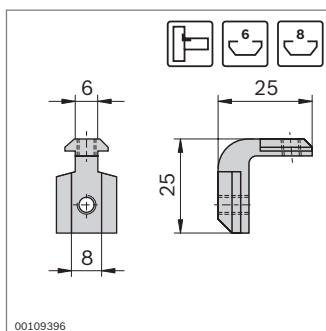
Slot		
6 / 6	600 N	10 Nm

FS1

DIN 913
M5x5

Inner bracket R	Slot	ESD	No.	FS
	6 / 6		10	3 842 535 575 2xFS1

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



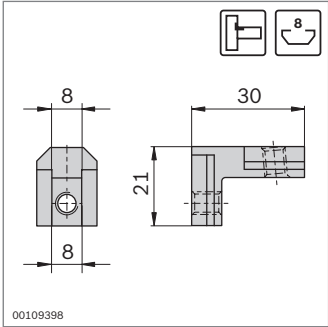
Slot		
6 / 8	600 N	10 Nm

FS1

DIN 913
M5x5

Inner bracket R	Slot	ESD	No.	FS
	6 / 8		10	3 842 535 573 2xFS1

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



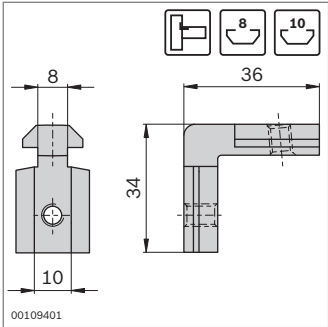
Slot		
8 / 8	2500 N	50 Nm

FS2
DIN 913 M6x8

Inner bracket R	Slot	ESD		No.	FS
	8 / 8		10	3 842 535 577	2xFS2

Material: Cast steel; galvanized
Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)



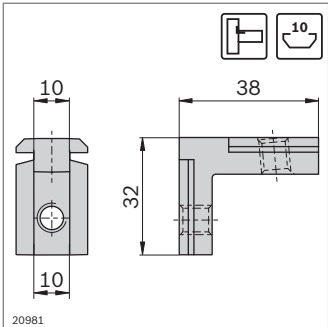
Slot		
8 / 10	2500 N	50 Nm

FS2	FS3
DIN 913 M6x8	DIN 913 M6x12

Inner bracket R	Slot	ESD		No.	FS
	8 / 10		10	3 842 535 576	FS2, FS3

Material: Cast steel; galvanized
Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)



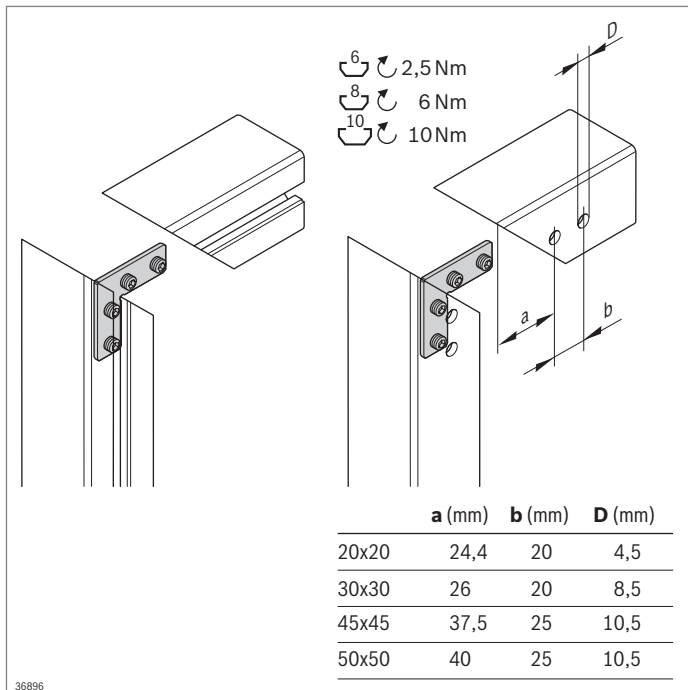
Slot		
10 / 10	3000 N	100 Nm

FS4
DIN 913 M8x12

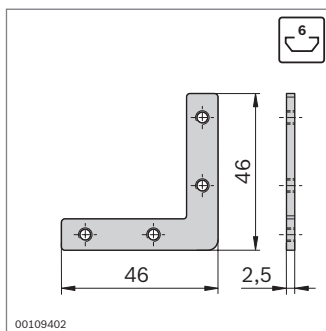
Inner bracket R	Slot	ESD		No.	FS
	10 / 10		10	3 842 535 571	2xFS4

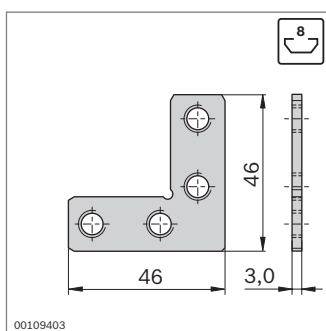
Material: Cast steel; galvanized
Fastening material: Steel; galvanized

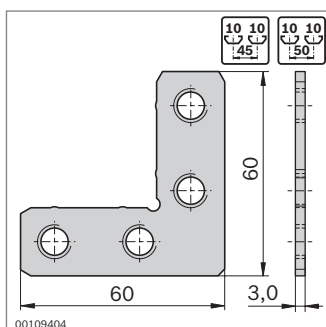
Scope of delivery: Incl. fastening material (FS)



36896


FS1

DIN EN
ISO 4027
M4x5

FS2

DIN EN
ISO 4026
M8x8

FS3

DIN EN
ISO 4026
M10x10

Miter bracket



- For right-angled connections of miter-cut profiles
- Profile finishing with open profile slots: Not required
- Profile finishing with closed profile slots: Through-holes for screwdriver

Miter bracket	Slot	ESD	No.	FS
	6		20	3 842 535 626 4xFS1

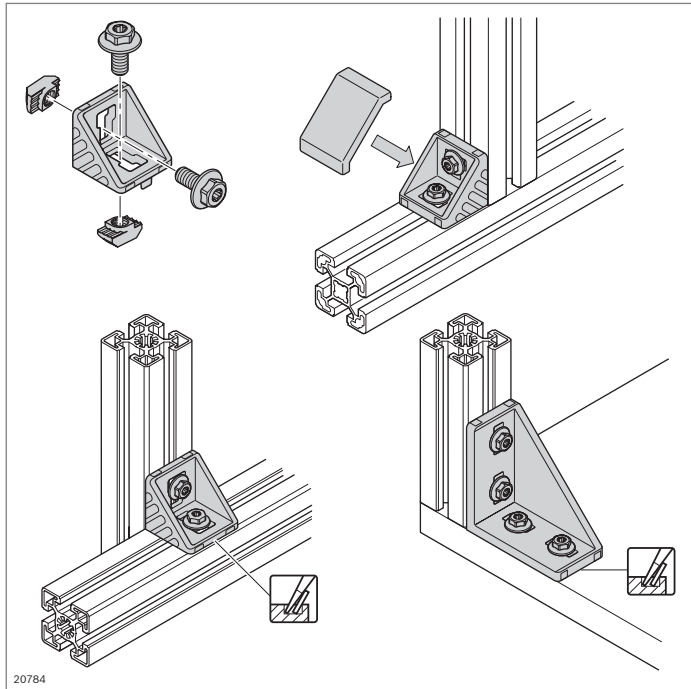
Material: Steel; stainless
Fastening material: Steel; galvanized
Scope of delivery: Incl. fastening material (FS)

Miter bracket	Slot	ESD	No.	FS
	8		20	3 842 535 627 4xFS2

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

Miter bracket	Slot	ESD	No.	FS
	10		20	3 842 535 625 4xFS3

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



Bracket

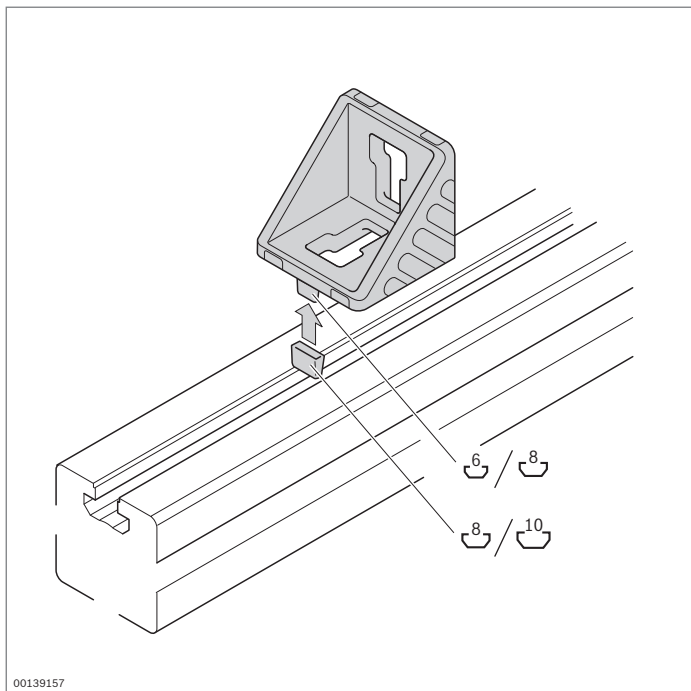


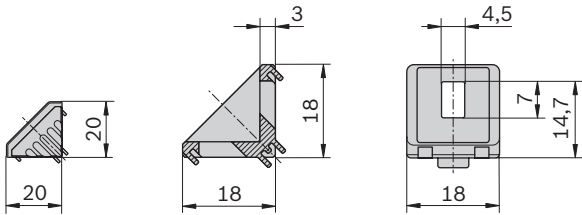
designLINE

- ▶ Brackets with centering lugs for rapid, precise assembly with protection against turning
- ▶ Centering lugs can be easily broken off for assembly on plates or at right angles to the slot
- ▶ *designLINE* version with special silver paint (RAL 9006) for an attractive, high-quality design
- ▶ Intermediate element for positioning brackets in the next largest slot
- ▶ Sliding block offset for off-center positioning of the 45/45 bracket
- ▶ For preventing dry running.
available in signal gray (RAL 7004) and black ESD (RAL 9005)
- ▶ Profile finishing: Not required

Technical data (p. 18-19)

Notice: The collar screws enable the brackets to be assembled really quickly and easily (p. 3-5)



20x20

36866

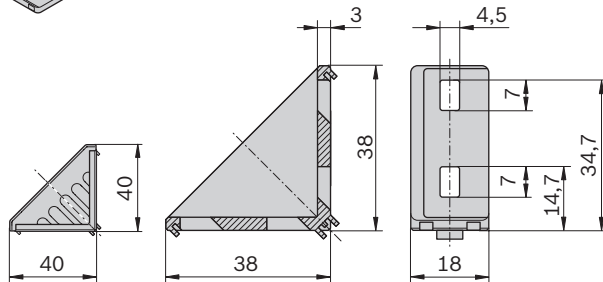
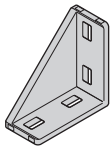
20x20	Slot	ESD	No.	FS
Set (standard)	6 / 6		1 3 842 523 511	2xFS1
<i>designLINE</i> set	6 / 6		1 3 842 551 596	2xFS1
Bracket (standard)	6		100 3 842 523 508	
Cover cap, signal gray			100 3 842 548 842	
Cover cap, black			20 3 842 548 843	
Intermediate element for 8 mm slot	6 / 8		100 3 842 523 516	

Material: Bracket: Diecast aluminum, vibratory ground
designLINE bracket: painted (RAL 9006)
 Intermediate element: PA; black
 Cover cap: PP
 Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)

Type				
20x20	700 N	6 Nm	25 Nm	—

FS1
DIN 7984 M4x8

20x40

36867

20x40	Slot	ESD	No.	FS
Set (standard)	6 / 6		1 3 842 523 520	4xFS1
<i>designLINE</i> set	6 / 6		1 3 842 551 597	4xFS1
Bracket (standard)	6		20 3 842 523 517	
Cover cap, signal gray			20 3 842 548 844	
Cover cap, black			20 3 842 548 845	
Intermediate element for 8 mm slot	6 / 8		100 3 842 523 516	

Material: Bracket: Diecast aluminum, vibratory ground
designLINE bracket: painted (RAL 9006)
 Intermediate element: PA; black
 Cover cap: PP
 Fastening material: Steel; galvanized

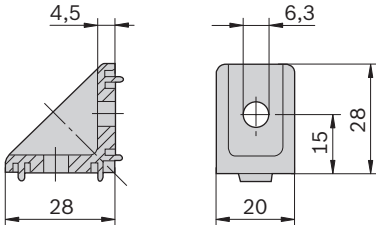
Scope of delivery: Set incl. fastening material (FS)

Type				
20x40	1400 N	15 Nm	50 Nm	8 Nm

FS1
DIN 7984 M4x8

20x28





00125983

20x28	Slot	ESD		No.	FS
Set (standard)	8 / 8		1	3 842 502 137	2xFS1
Bracket (standard)	8		100	3 842 501 587	
Material: Diecast zinc					
Fastening material: Steel; galvanized					
Scope of delivery: Set incl. fastening material (FS)					

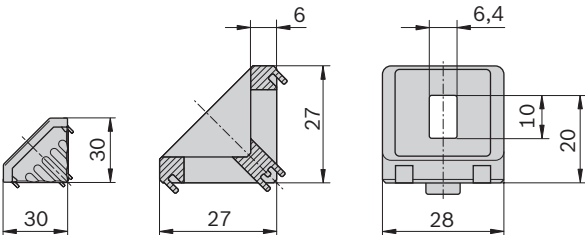
FS1



DIN 7984
M6x12

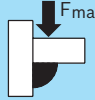
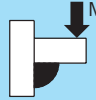
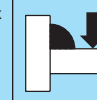
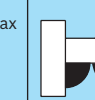
30x30





36868

30x30	Slot	ESD		No.	FS
Set (standard)	8 / 8		1	3 842 523 528	2xFS2
	8 / 10		1	3 842 523 530	1xFS2, 2xFS3, 1xFS4
	10 / 10		1	3 842 523 532	4xFS3, 2xFS4
designLINE set	8 / 8		1	3 842 551 598	2xFS2
	8 / 10		1	3 842 551 600	1xFS2, 2xFS3, 1xFS4
	10 / 10		1	3 842 551 599	4xFS3, 2xFS4
Bracket (standard)	8		100	3 842 523 525	
Cover cap, signal gray			100	3 842 548 846	
Cover cap, black			20	3 842 548 847	
Intermediate element for 10 mm slot	8 / 10		100	3 842 523 537	
Material: Bracket: Diecast aluminum, vibratory ground					
designLINE bracket: painted (RAL 9006)					
Intermediate element: PA; black					
Cover cap: PP					
Fastening material: Steel; galvanized					
Scope of delivery: Set incl. fastening material (FS)					

Type				
30x30	1250 N	25 Nm	75 Nm	—

FS2



DIN 7984
M6x14

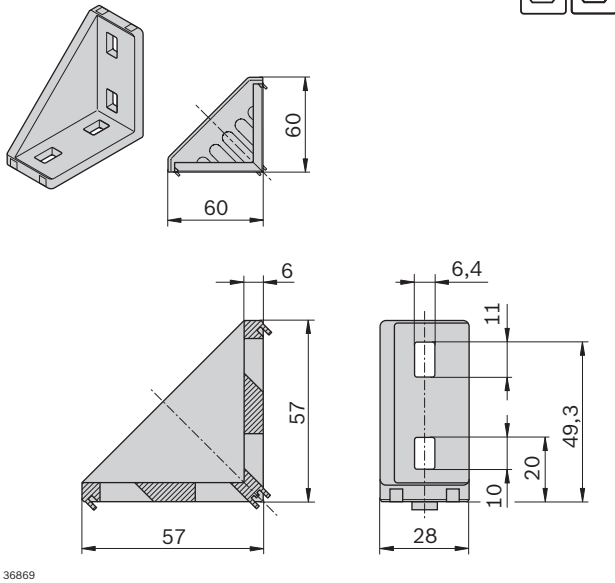
FS3



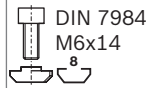
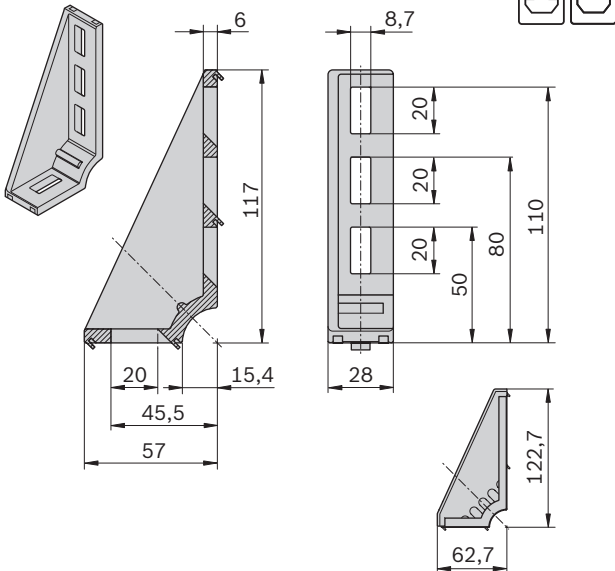
FS4



DIN 7984
M6x18

30x60


Type				
30x60	2500 N	100 Nm	170 Nm	25 Nm

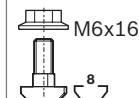
FS2

30x120


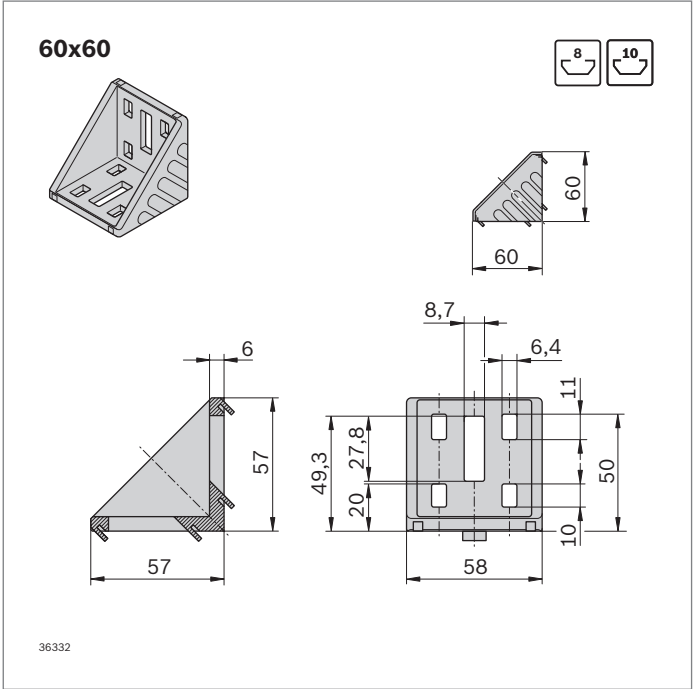
Type			
30x120	3750 N	100 Nm	47 Nm

30x120	Slot	ESD		No.	FS
<i>designLINE</i> set	8 / 8		1	3 842 551 602	2xFS6
Bracket (standard)	8		20	3 842 523 587	
Cover cap, signal gray			20	3 842 548 850	
Cover cap, black			20	3 842 548 851	
Intermediate element for 10 mm slot	8 / 10		100	3 842 523 537	

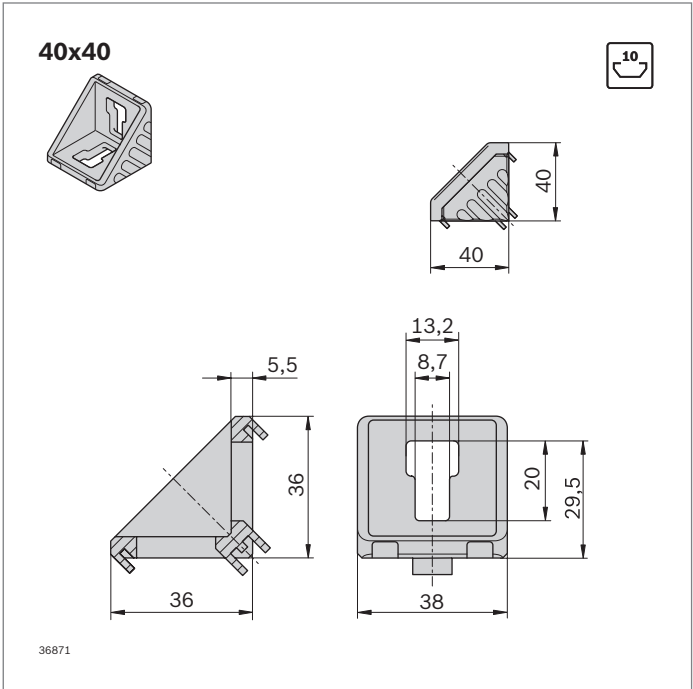
Material: Bracket: Diecast aluminum, vibratory ground
designLINE bracket: painted (RAL 9006)
 Intermediate element: PA; black
 Cover cap: PP
 Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)

FS6




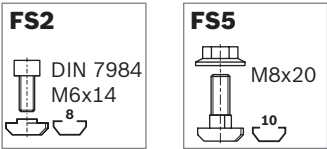
Type	Slot		F_{max}		M_{max}		M_{max}		M_{max}
60x60	8		5000 N		320 Nm		370 Nm		110 Nm
	10		3000 N		125 Nm		150 Nm		-



Type		F_{max}		M_{max}		M_{max}		M_{max}
40x40		3000 N		55 Nm		145 Nm		35 Nm

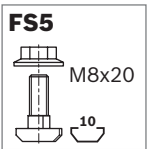
60x60	Slot	ESD		No.	FS
Set (standard)	8 / 8		1	3 842 523 549	8xFS2
	8 / 10		1	3 842 523 551	4xFS2, 1xFS5
	10 / 10		1	3 842 523 553	2xFS5
designLINE set	8 / 8		1	3 842 551 609	8xFS2
	8 / 10		1	3 842 551 610	4xFS2, 1xFS5
	10 / 10		1	3 842 551 611	2xFS5
Bracket (standard)	8		20	3 842 523 546	
Cover cap, signal gray			20	3 842 548 852	
Cover cap, black			20	3 842 548 853	
Intermediate element for 10 mm slot	10		100	3 842 523 537	

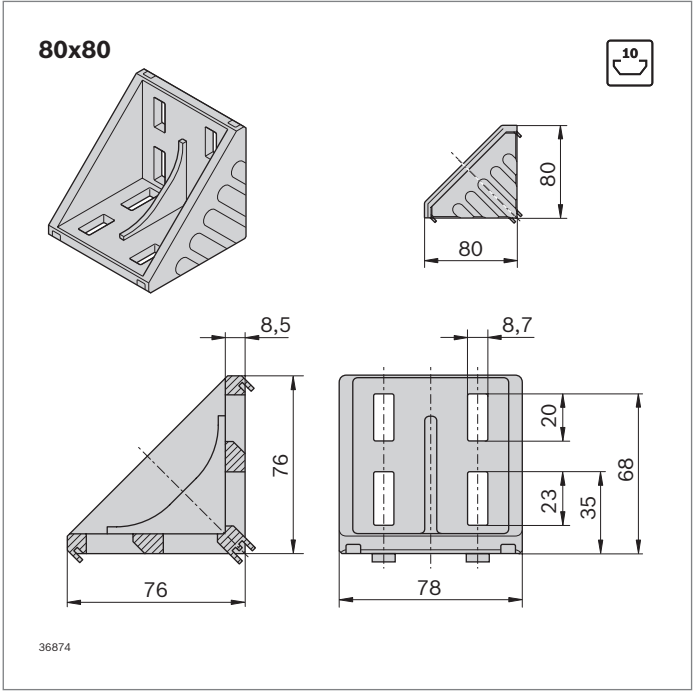
Material: Bracket: Diecast aluminum, vibratory ground
designLINE bracket: painted (RAL 9006)
Intermediate element: PA; black
Cover cap: PP
Fastening material: Steel; galvanized
Scope of delivery: Set incl. fastening material (FS)



40x40	Slot	ESD		No.	FS
Set (standard)	10 / 10		1	3 842 529 383	2xFS5
designLINE set	10 / 10		1	3 842 551 603	2xFS5
Bracket (standard)	10		100	3 842 528 967	
Cover cap, signal gray			100	3 842 548 854	
Cover cap, black			20	3 842 548 855	

Material: Bracket: Diecast aluminum, vibratory ground
designLINE bracket: painted (RAL 9006)
Cover cap: PP
Fastening material: Steel; galvanized
Scope of delivery: Set incl. fastening material (FS)





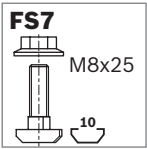
Type				
80x80	14000 N	500 Nm	1000 Nm	400 Nm

80x80	Slot	ESD		No.	FS
Set (standard)	10 / 10		1	3 842 530 360	8xFS7
<i>designLINE</i> set	10 / 10		1	3 842 551 612	8xFS7
Bracket (standard)	10		20	3 842 530 231	
Cover cap, signal gray			20	3 842 548 860	
Cover cap, black			20	3 842 548 861	

Material:

Bracket: Diecast aluminum, vibratory ground
designLINE bracket: painted (RAL 9006)
Cover cap: PP
Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)

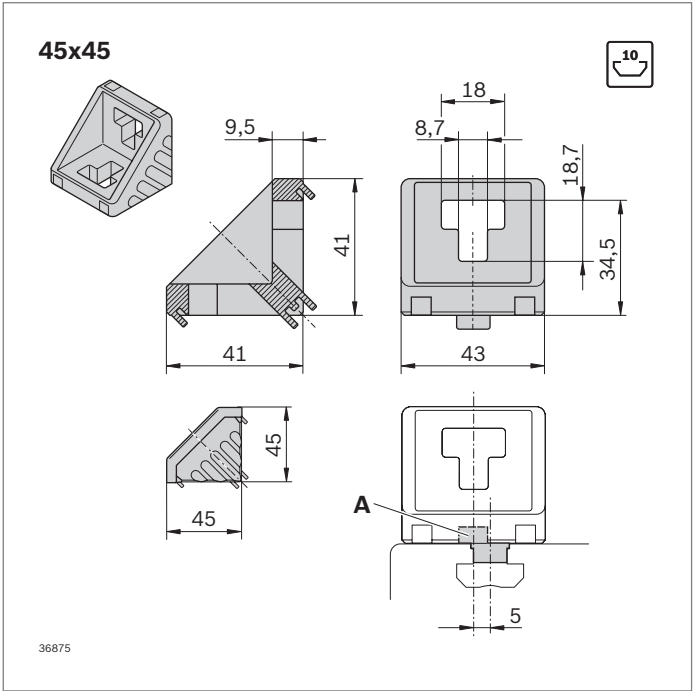


45x45	Slot	ESD		No.	FS
Set (standard)	10 / 10		1	3 842 523 561	2xFS7
<i>designLINE</i> set	10 / 10		1	3 842 551 606	2xFS7
Bracket (standard)	10		100	3 842 523 558	
Cover cap, signal gray			100	3 842 548 862	
Cover cap, black			20	3 842 548 863	
Sliding block, offset (A)	10		100	3 842 523 593	

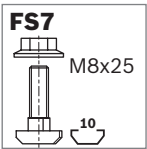
Material:

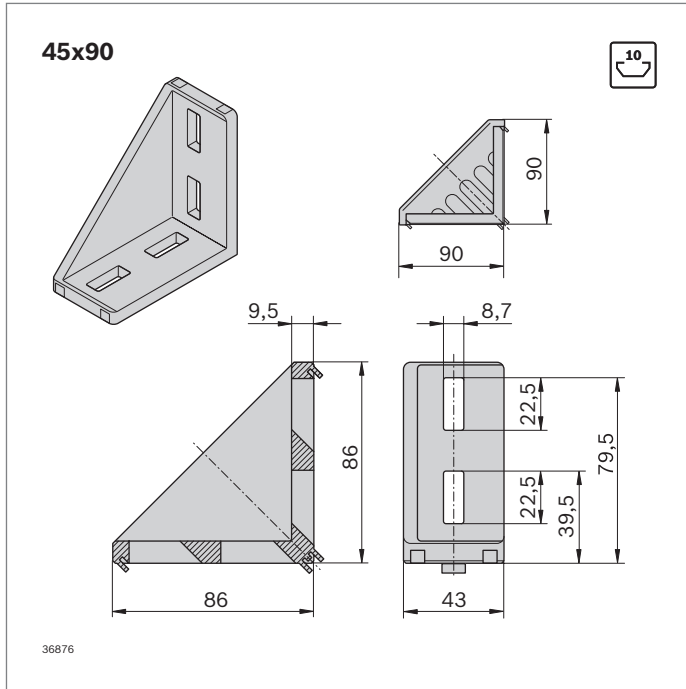
Bracket: Diecast aluminum, vibratory ground
designLINE bracket: painted (RAL 9006)
Sliding block, offset: PA; black
Cover cap: PP
Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)



Type				
45x45	3000 N	60 Nm	160 Nm	—

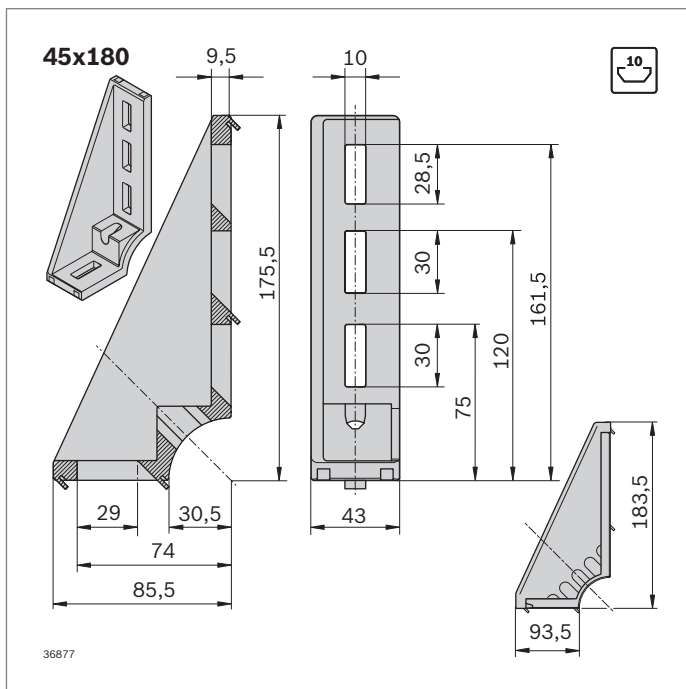
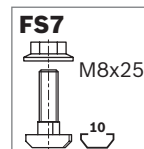




45x90	Slot	ESD	No.	FS
Set (standard)	10 / 10	1	3 842 523 570	4xFS7
<i>designLINE</i> set	10 / 10	1	3 842 551 607	4xFS7
Bracket (standard)	10	100	3 842 523 567	
Cover cap, signal gray		20	3 842 548 864	
Cover cap, black		20	3 842 548 865	

Material: Bracket: Diecast aluminum, vibratory ground
designLINE bracket: painted (RAL 9006)
 Cover cap: PP
 Fastening material: Steel; galvanized
 Scope of delivery: Set incl. fastening material (FS)

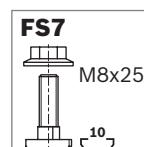
Type	F_{max}	M_{max}	M_{max}	M_{max}
45x90	6000 N	180 Nm	400 Nm	60 Nm

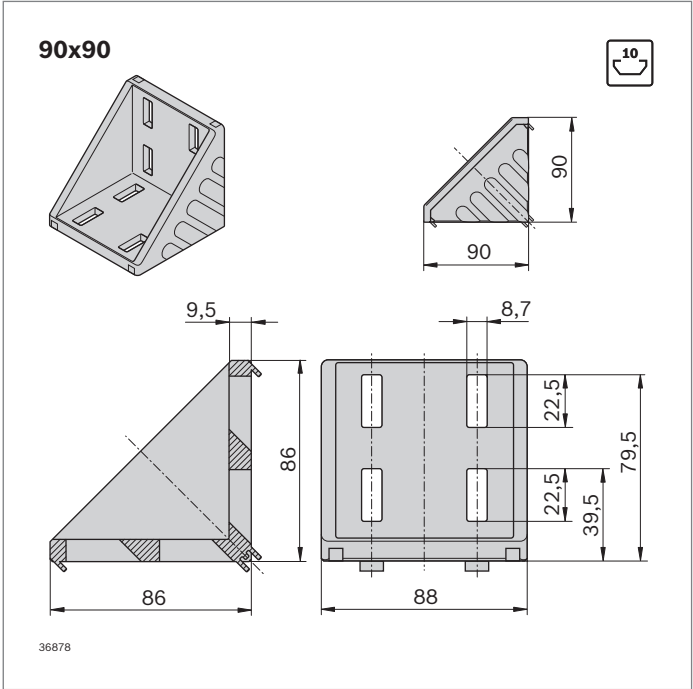


45x180	Slot	ESD	No.	FS
<i>designLINE</i> set	10 / 10	1	3 842 551 608	2xFS7
Bracket (standard)	10	20	3 842 523 583	
Cover cap, signal gray		20	3 842 548 866	
Cover cap, black		20	3 842 548 867	

Material: Bracket: Diecast aluminum, vibratory ground
designLINE bracket: painted (RAL 9006)
 Cover cap: PP
 Fastening material: Steel; galvanized
 Scope of delivery: Set incl. fastening material (FS)

Type	F_{max}	M_{max}	M_{max}
45x180	9000 N	250 Nm	65 Nm

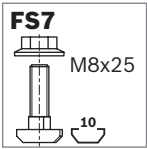




Type				
90x90	12000 N	370 Nm	800 Nm	200 Nm

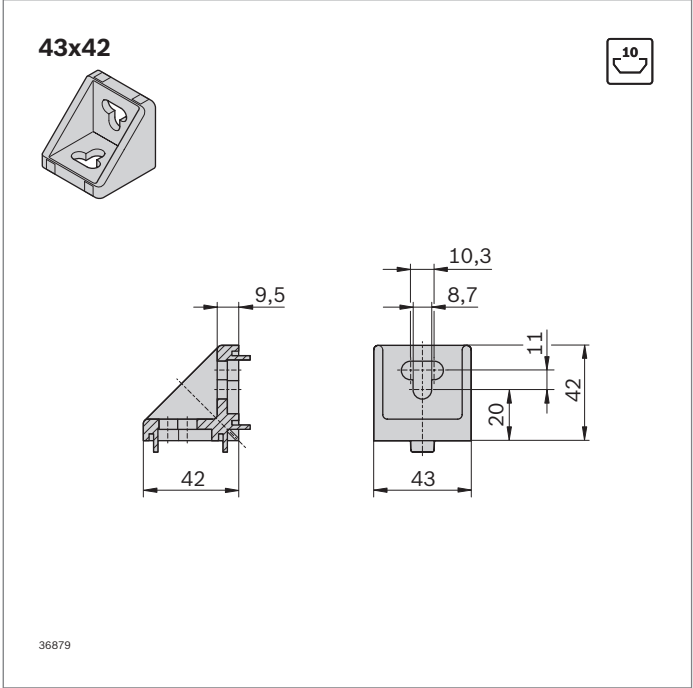
90x90	Slot	ESD		No.	FS
Set (standard)	10 / 10		1	3 842 523 578	8xFS7
<i>designLINE</i> set	10 / 10		1	3 842 551 613	8xFS7
Bracket (standard)	10		20	3 842 523 575	
Cover cap, signal gray			20	3 842 548 868	
Cover cap, black			20	3 842 548 869	

Material: Bracket: Diecast aluminum, vibratory ground
designLINE bracket: painted (RAL 9006)
Cover cap: PP
Fastening material: Steel; galvanized
Scope of delivery: Set incl. fastening material (FS)

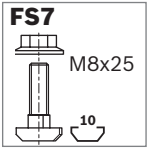


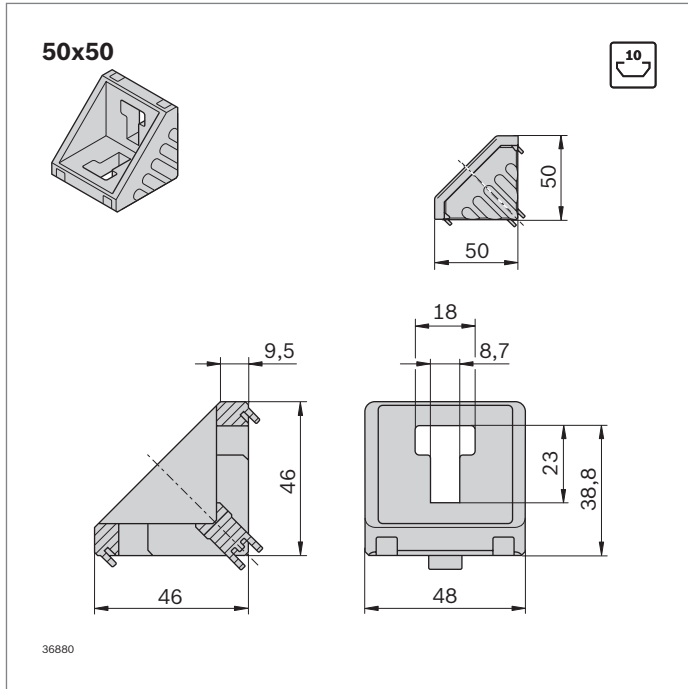
43x42	Slot	ESD		No.	FS
Set (standard)	10 / 10		1	3 842 352 009	2xFS7
Bracket (standard)	10		100	3 842 348 526	

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



Type				
43x42	2000 N	–	160 Nm	–



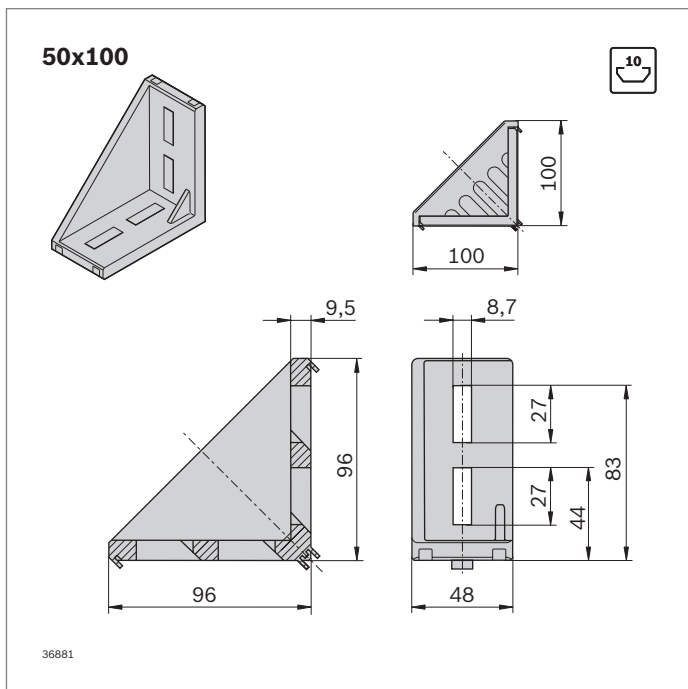
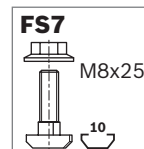


50x50	Slot	ESD	No.	FS
Set (standard)	10 / 10		1	3 842 530 259 2xFS7
Bracket (standard)	10		20	3 842 530 381
Cover cap, signal gray			20	3 842 548 870
Cover cap, black			20	3 842 548 871

Material: Bracket: Diecast aluminum, vibratory ground
Cover cap: PP
Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)

Type				
50x50	4000 N	125 Nm	250 Nm	38 Nm

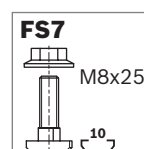


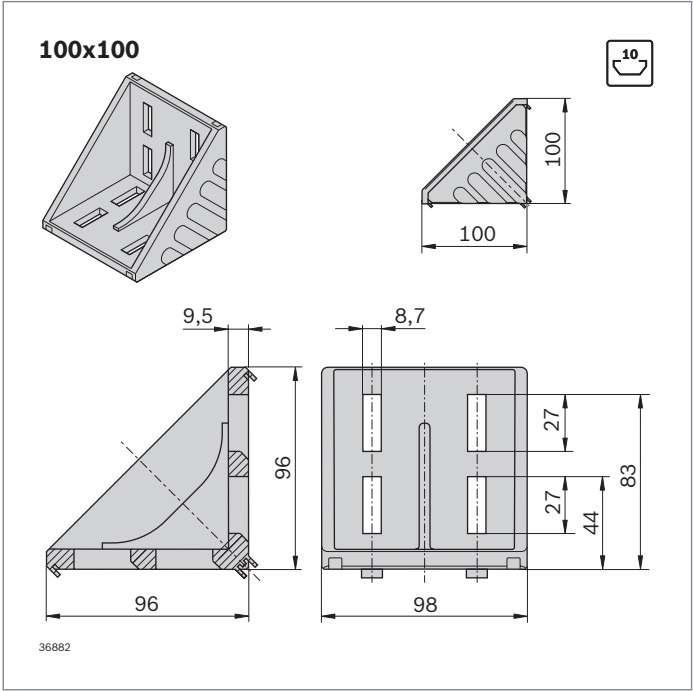
50x100	Slot	ESD	No.	FS
Set (standard)	10 / 10		1	3 842 530 260 4xFS7
Bracket (standard)	10		20	3 842 530 382
Cover cap, signal gray			20	3 842 548 872
Cover cap, black			20	3 842 548 873

Material: Bracket: Diecast aluminum, vibratory ground
Cover cap: PP
Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)

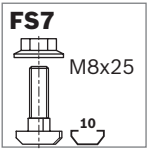
Type				
50x100	7500 N	300 Nm	600 Nm	73 Nm

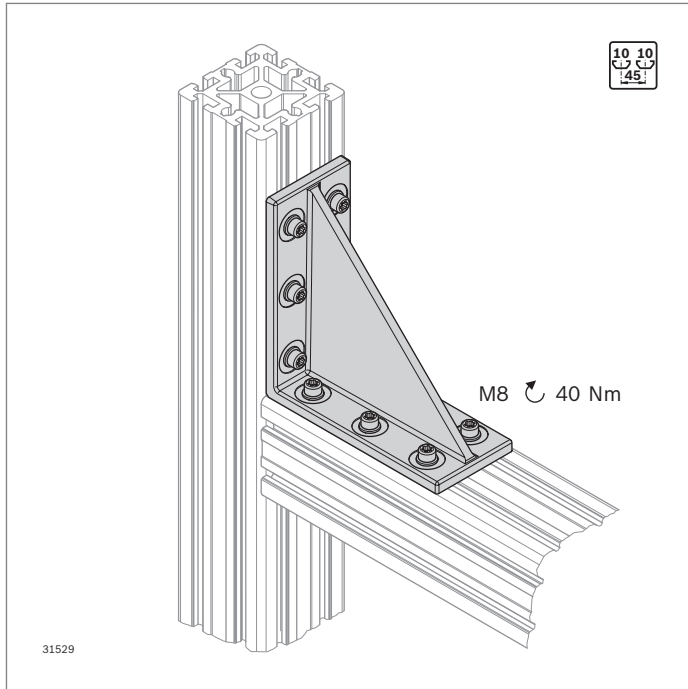




Type				
100x100	15000 N	550 Nm	1100 Nm	480 Nm

100x100	Slot	ESD		No.	FS
Set (standard)	10 / 10		1	3 842 530 361	8xFS7
Bracket (standard)	10		20	3 842 530 460	
Cover cap, signal gray			20	3 842 548 874	
Cover cap, black			20	3 842 548 875	
Material:	Bracket: Diecast aluminum, vibratory ground Cover cap: PP Fastening material: Steel; galvanized				
Scope of delivery:	Set incl. fastening material (FS)				





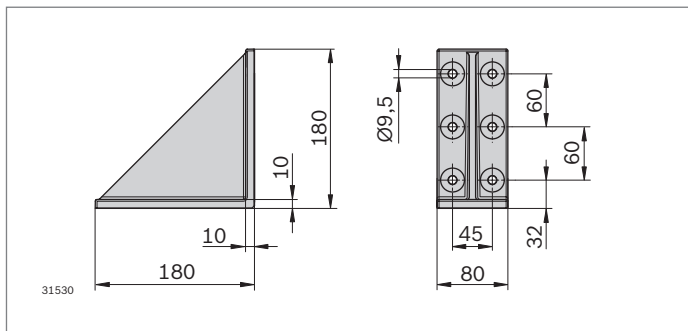
Heavy-duty connector 180x180 dynamic load



- Heavy-duty connector for reliable absorption of high forces
- Can be used for both static and dynamic forces
- Connection possible in any position
- Profile finishing: Not required
- Calculation program for static and dynamic forces included in MTpro planning software
- Focus profile: 90x90, 90x180, 90x360

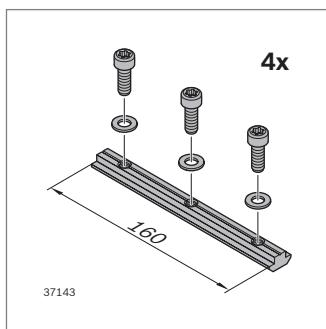
Required accessories:

Mounting kit



180x180	Slot	ESD	No.
	10		3 842 555 616
Material: Cast iron; galvanized			
Scope of delivery: Bracket			

Type				
180x180	30000 N	5600 Nm	5600 Nm	1400 Nm

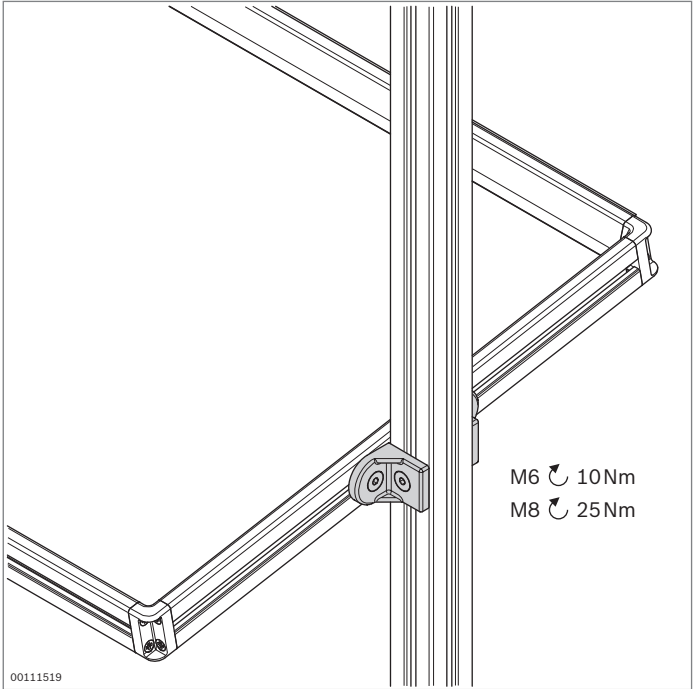


Slot	
10 (M8)	6000 ... 18000 N

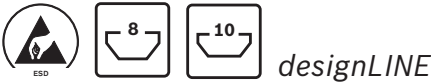
Mounting kit

- For connecting a heavy-duty angle to a profile
- Set consists of 4 sliding blocks and 12 screws with washers

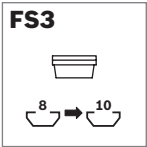
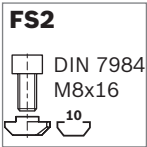
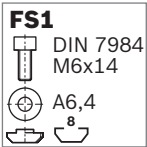
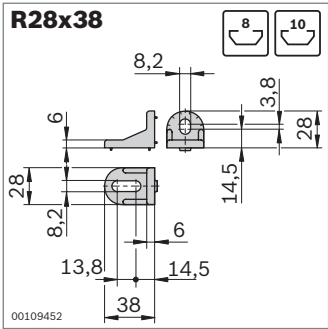
Mounting kit	Slot	M	ESD		No.
	10	8		Set	3 842 548 955
Material: Screws: Steel; galvanized					
Sliding block: Steel; galvanized					
Scope of delivery: 4 x sliding blocks, 12 x washers, 12 x screws M8 10.9 microencapsulated					



Bracket R



- For connecting profiles at any angle
- No interfering edges thanks to rounded bracket
- Brackets with centering lugs for rapid, precise assembly with protection against turning
- Centering lugs can be easily broken off for assembly on plates or at right angles to the slot
- *designLINE* version with special silver paint (RAL 9006) for an attractive, high-quality design
- Profile finishing: Not required



R28x38	Slot	ESD		No.	FS
Set (standard)	8 / 10		1	3 842 515 547	FS1, FS2, 2xFS3
	10 / 10		1	3 842 521 580	2xFS2, 4xFS3
<i>designLINE</i> set	8 / 10		1	3 842 538 703	FS1, FS2, 2xFS3
	10 / 10		1	3 842 538 704	2xFS2, 4xFS3
Bracket (standard)	8 / 10		100	3 842 515 473	

Material:

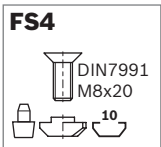
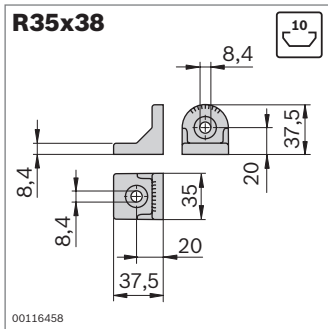
Bracket: Diecast zinc

designLINE bracket: painted (RAL 9006)

Intermediate element: PA; black

Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)



R35x38	Slot	ESD		No.	FS
Set (standard)	10 / 10		1	3 842 532 274	2xFS4
<i>designLINE</i> set	10 / 10		1	3 842 538 705	2xFS4
Bracket (standard)	10		100	3 842 529 020	

Material:

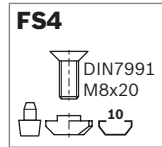
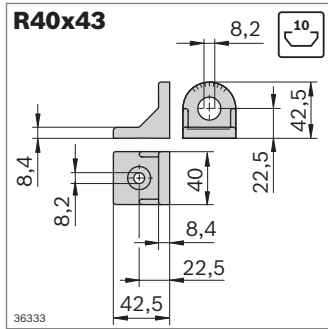
Bracket: Diecast aluminum

designLINE bracket: painted (RAL 9006)

Centering bolts: PA6, black

Fastening material: Steel; galvanized

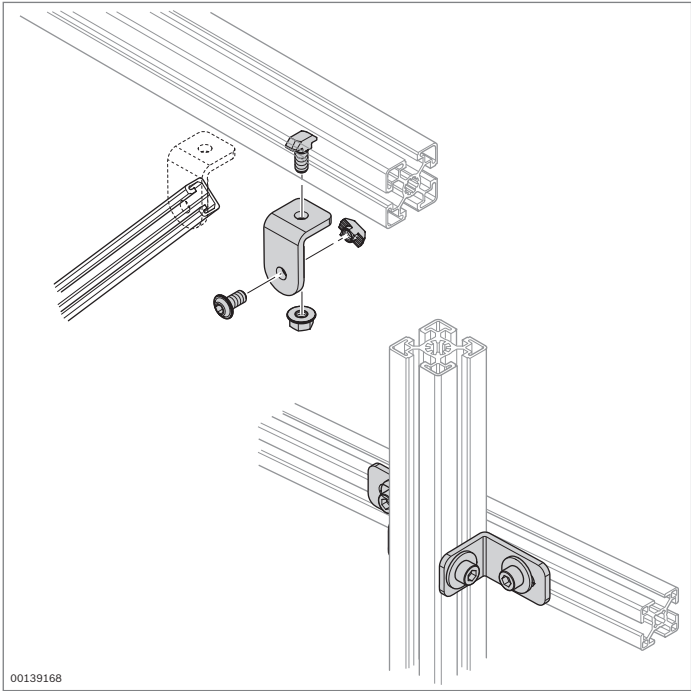
Scope of delivery: Set incl. fastening material (FS)



R40x43	Slot	ESD		No.	FS
Set (standard)	10 / 10		1	3 842 518 424	2xFS4
<i>designLINE</i> set	10 / 10		1	3 842 538 706	2xFS4
Bracket (standard)	10		100	3 842 504 760	

Material: Bracket: Diecast zinc
designLINE bracket: painted (RAL 9006)
 Centering bolts: PA6, black
 Fastening material: Steel; galvanized

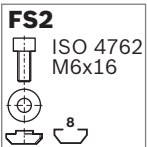
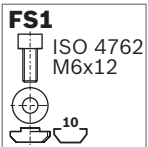
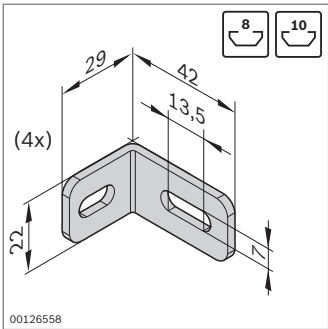
Scope of delivery: Set incl. fastening material (FS)



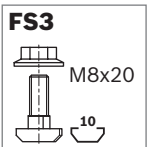
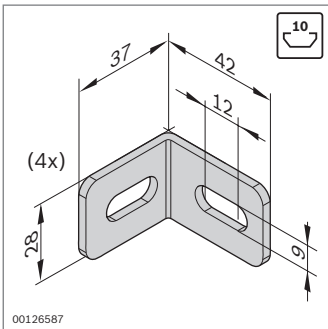
Steel bracket



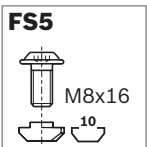
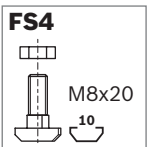
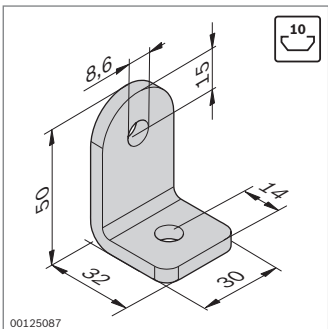
- ▶ Steel bracket without centering lugs for fastening at any angle
- ▶ Profile finishing: Not required



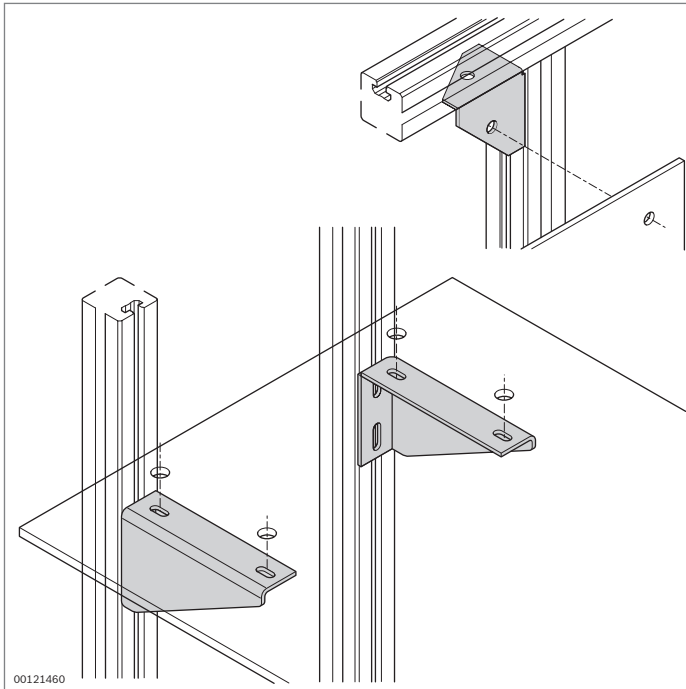
Bracket set	Slot	ESD	No.	FS
	8 / 10		4	3 842 537 862 4xFS1, 4xFS2
Material:	Steel; galvanized			
	Fastening material: Steel; galvanized			
Scope of delivery:	Set incl. fastening material (FS)			



Bracket set	Slot	ESD	No.	FS
	10 / 10		4	3 842 537 861 8xFS3
Material:	Steel; galvanized			
	Fastening material: Steel; galvanized			
Scope of delivery:	Set incl. fastening material (FS)			



Bracket set	Slot	ESD	No.	FS
	10 / 10		20	3 842 536 729 FS4, FS5
Material:	Steel; galvanized			
	Fastening material: Steel; galvanized			
Scope of delivery:	Set incl. fastening material (FS)			



Metal bracket Supporting bracket

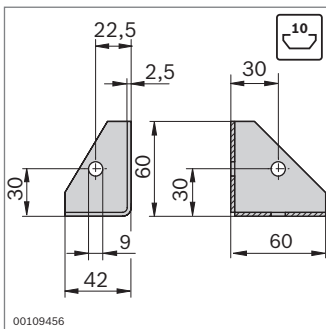


Metal bracket

- ▶ Metal bracket for right-angled profile connections
- ▶ Screw fitting of panel elements in the stiffening fin bore
- ▶ Profile finishing: Not required

Supporting bracket

- ▶ Supporting bracket for fastening panel elements to profiles, e.g. for shelves
- ▶ Profile finishing: Not required



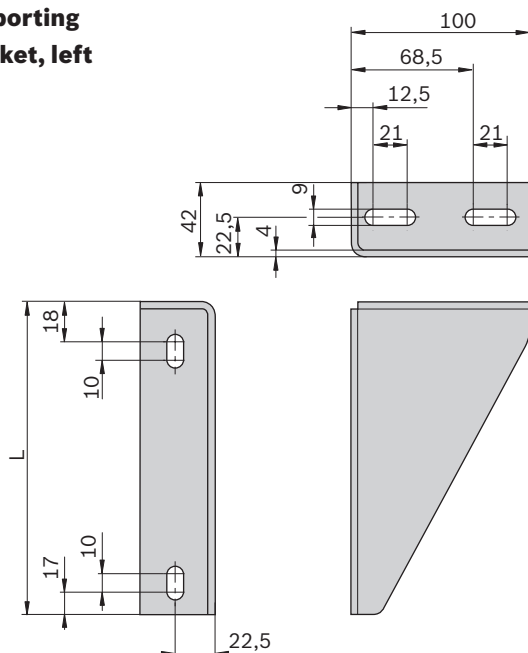
Metal bracket	ESD	No.
	20	3 842 146 813

Material: Sheet steel; galvanized

Required accessories:

- ▶ T-bolt M8x20, 10 mm slot, **3 842 528 715** (p. 3-6)
- ▶ Flange nut M8, **3 842 345 081** (p. 3-6)

Supporting bracket, left

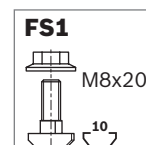


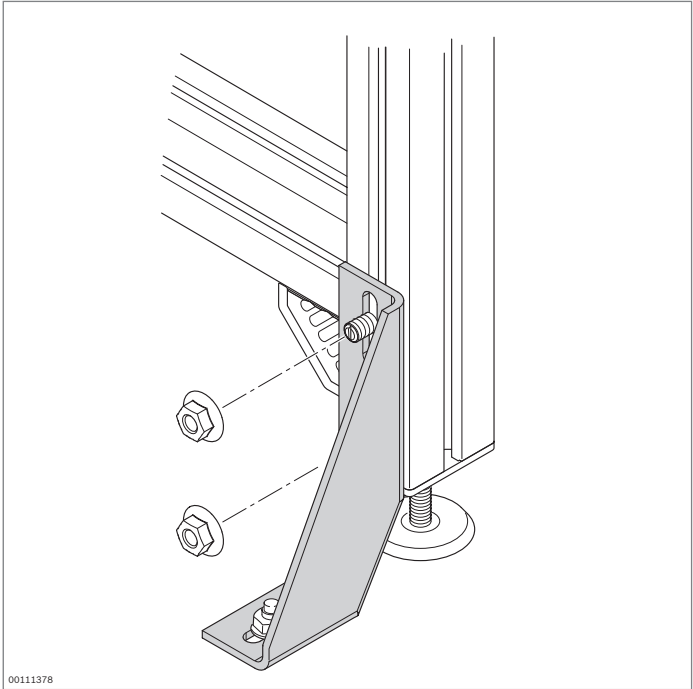
Supporting bracket	L (mm)	ESD	No.	FS
left	255		3 842 536 119	2xFS1
	335		3 842 536 121	2xFS1
	415		3 842 536 123	2xFS1
	495		3 842 536 125	2xFS1
right	255		3 842 536 120	2xFS1
	335		3 842 536 122	2xFS1
	415		3 842 536 124	2xFS1
	495		3 842 536 126	2xFS1

Material: Sheet steel; powder-coated, RAL 7037

Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)





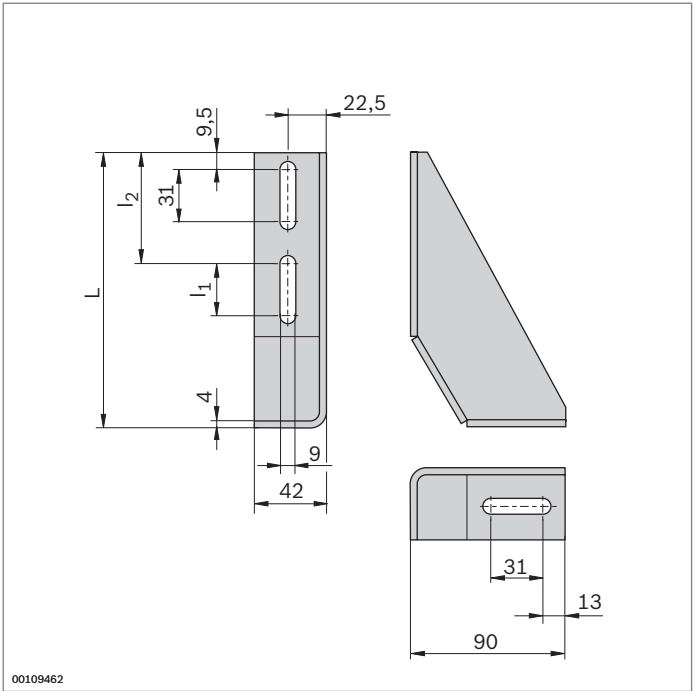
Foundation bracket



- Foundation bracket for securing frames to the floor
- The drilled hole for the floor dowel can be created without removing the foundation bracket
- Profile finishing: Not required

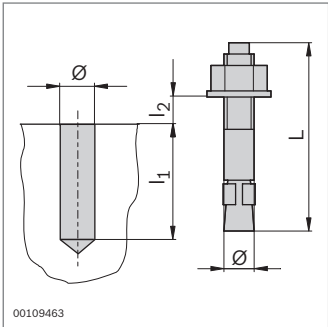
Required accessories:

- T-bolt M8x20, 10 mm slot, **3 842 528 715** (p. 3-6)
- Flange nut M8, **3 842 345 081** (p. 3-6)
- Floor dowel



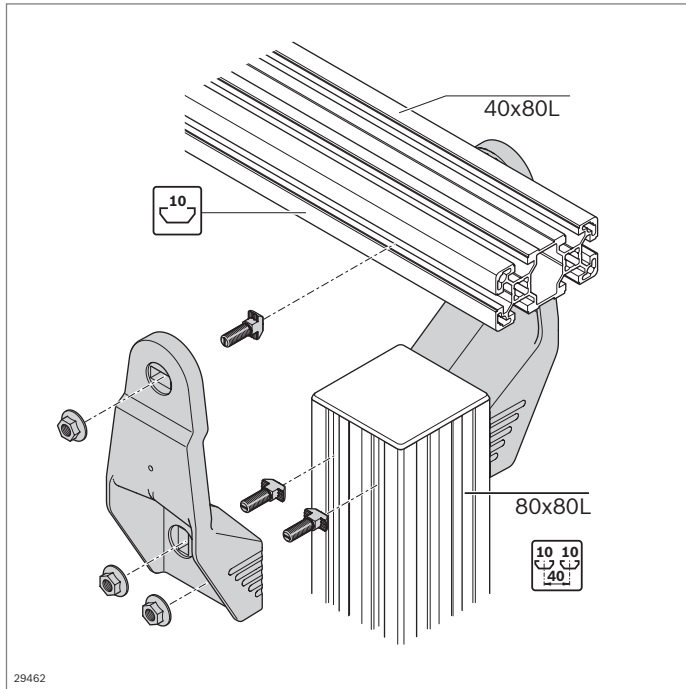
Foundation bracket	L (mm)	I ₁ (mm)	I ₂ (mm)	No.
	160	31	64.5	20 3 842 146 815
	210	91	54.5	20 3 842 146 848

Material: Sheet steel; galvanized



Floor dowel	Ø	L (mm)	I ₁ (mm)	I _{2 max} (mm)	No.
	8	80	65	15 100	3 842 526 560

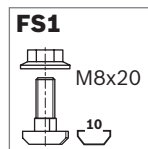
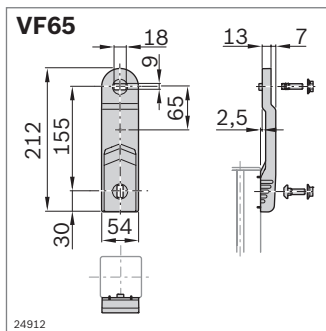
Material: Steel; galvanized



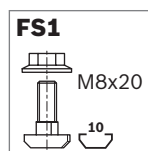
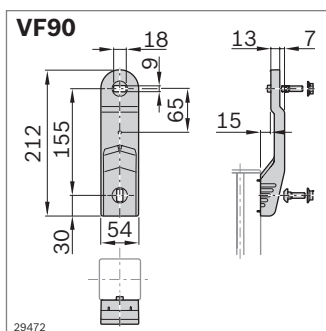
Holder AL



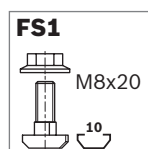
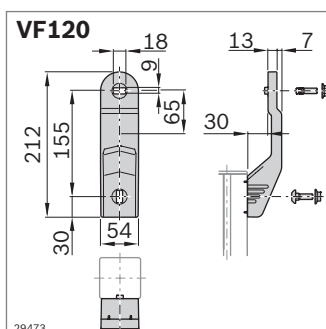
- For connecting profiles at right-angles to each other and with defined spacing, e.g. for floor supports made of 80x80L or 60x60 profiles
- Longitudinal connection possible in all profiles with 10 mm slot
- Transverse connection possible with 40 mm slot spacing
- Profile finishing: Not required



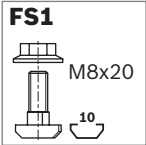
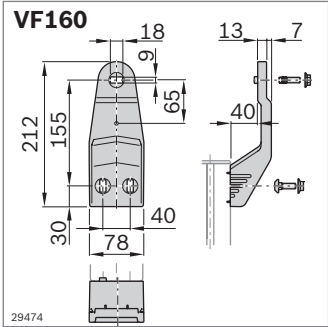
Holder	No.	FS
VFplus 65	Set 3 842 546 625	8xFS1
Material:	Holder: Diecast aluminum; powder-coated (RAL 9006) Fastening material: Steel; galvanized	
Scope of delivery:	2 x holder, fastening material (FS)	



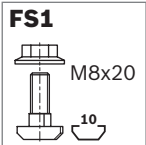
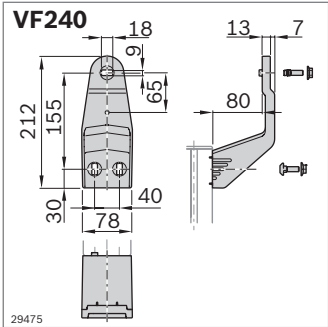
Holder	No.	FS
VFplus 90	Set 3 842 546 626	8xFS1
Material:	Holder: Diecast aluminum; powder-coated (RAL 9006) Fastening material: Steel; galvanized	
Scope of delivery:	2 x holder, fastening material (FS)	



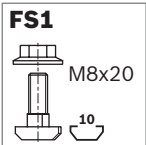
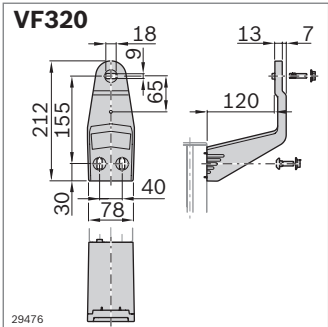
Holder	No.	FS
VFplus 120	Set 3 842 546 627	8xFS1
Material:	Holder: Diecast aluminum; powder-coated (RAL 9006) Fastening material: Steel; galvanized	
Scope of delivery:	2 x holder, fastening material (FS)	



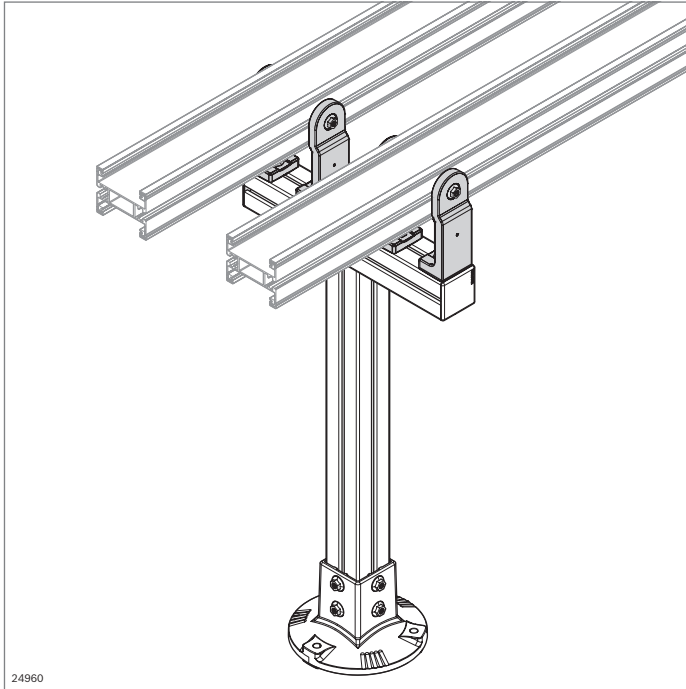
Holder		No.	FS
VFplus 160	Set	3 842 546 628	8xFS1
Material:	Holder: Diecast aluminum; powder-coated (RAL 9006) Fastening material: Steel; galvanized		
Scope of delivery:	2 x holder, fastening material (FS)		



Holder		No.	FS
VFplus 240	Set	3 842 546 629	8xFS1
Material:	Holder: Diecast aluminum; powder-coated (RAL 9006) Fastening material: Steel; galvanized		
Scope of delivery:	2 x holder, fastening material (FS)		



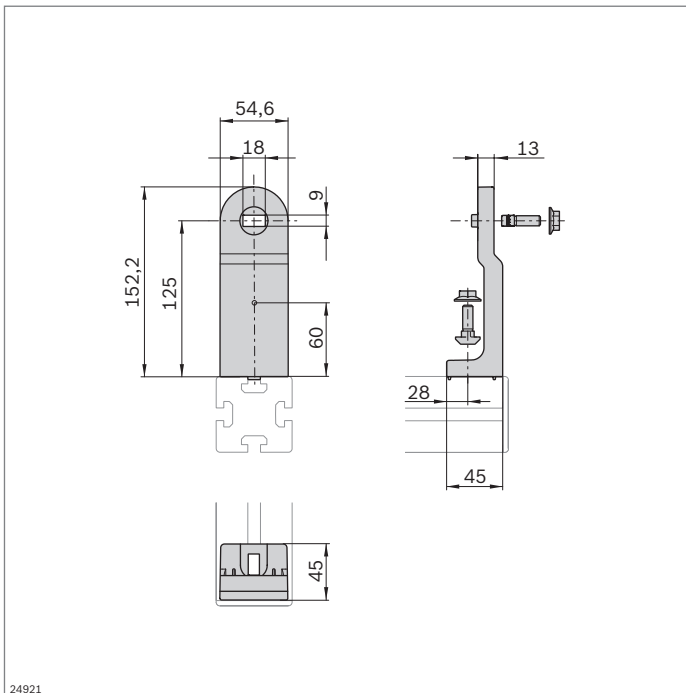
Holder		No.	FS
VFplus 320	Set	3 842 546 630	8xFS1
Material:	Holder: Diecast aluminum; powder-coated (RAL 9006) Fastening material: Steel; galvanized		
Scope of delivery:	2 x holder, fastening material (FS)		



Supporting bracket AL



- ▶ Supporting bracket for connecting two profiles with defined spacing (approx. 2–3 m)
- ▶ Profile finishing: Not required
- ▶ Centering lugs make centering the supporting brackets in the slot easy
- ▶ If the centering lugs are removed, the supporting bracket can also be used for upward and downward sloping sections (up to approx. 45° depending on the return chain)
- ▶ Very simple assembly thanks to pluggable screwed connection
- ▶ Easy-to-clean design with draining surfaces

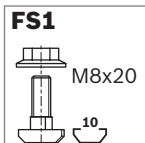


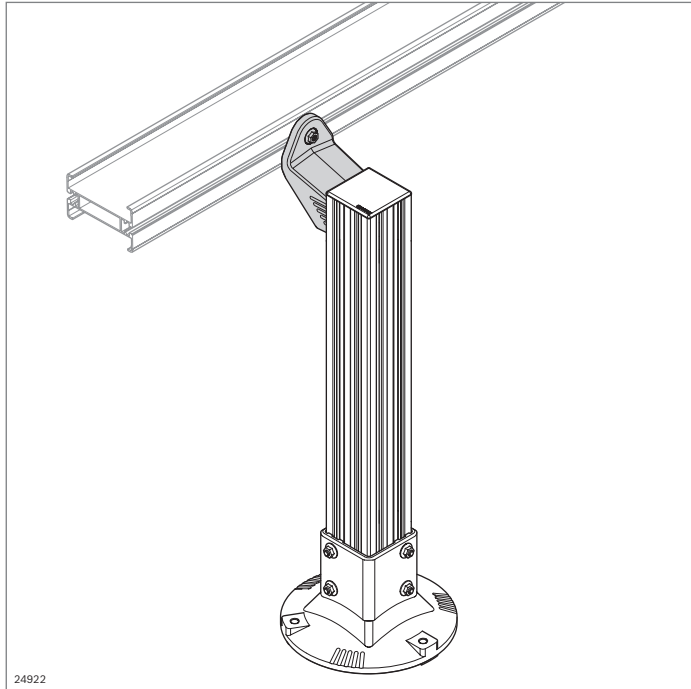
Supporting bracket VFplus AL


No.
FS

Set **3 842 546 632** 6xFS1

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

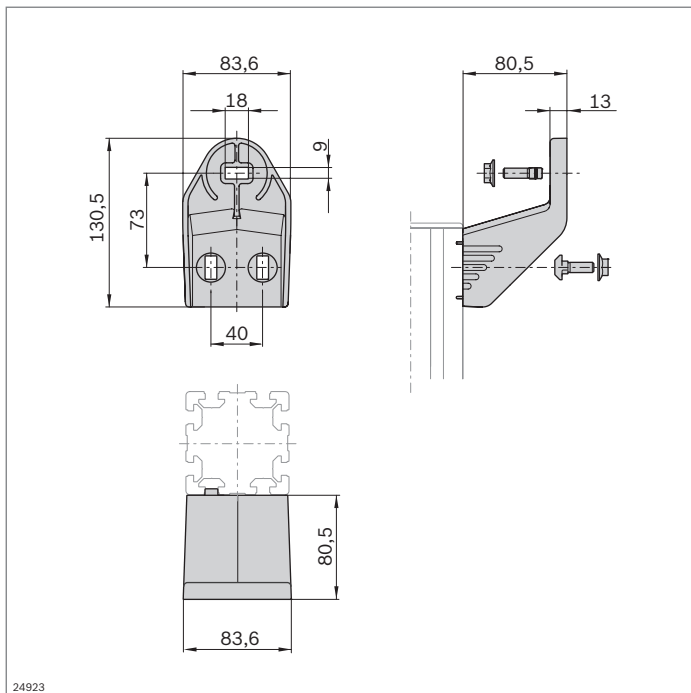




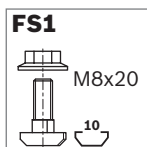
Supporting bracket AL, lateral

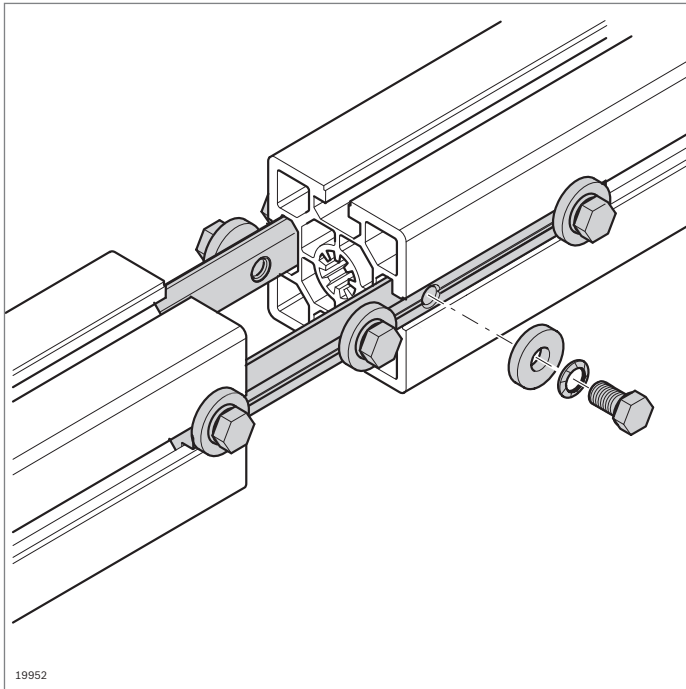


- Supporting bracket for connecting two profiles with defined spacing (approx. 2–3 m)
- Profile finishing: Not required
- Centering lugs make centering the supporting brackets in the slot easy
- If the centering lugs are removed, the supporting bracket can also be used for upward and downward sloping sections (up to approx. 45° depending on the return chain)
- Designed for attachment to a vertical 80x80 strut profile



Supporting bracket VFplus lateral AL 		No.	FS
Set		3 842 547 461	6xFS1
Material:	Holder: Diecast aluminum; powder-coated (RAL 9006)		
	Fastening material: Steel; galvanized		
Scope of delivery:	Incl. fastening material (FS)		



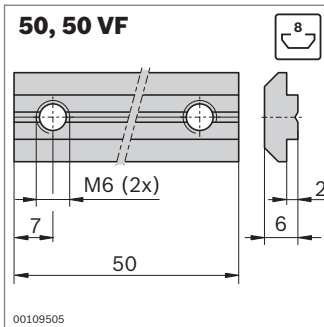


19952

Profile connector



- ▶ Profile connector for the end-face connection of any profiles
- ▶ For an especially strong connection: One profile connector per slot
- ▶ Profile finishing: Not required

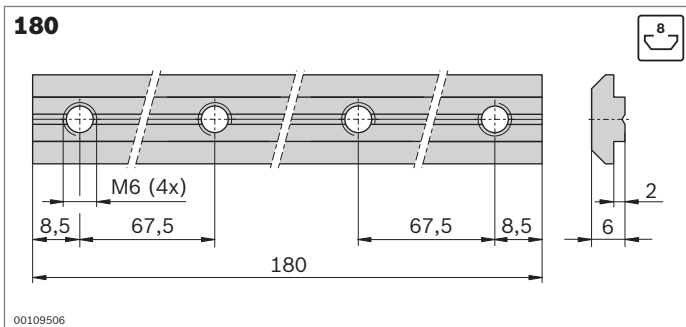
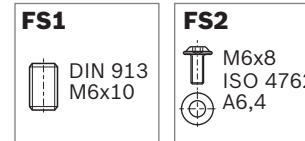


00109505

Profile connector	⌚ (Nm)	Slot	No.	FS
50 VF	10	8	10 3 842 536 787	2xFS2
50	8.5	8	1 3 842 518 427	2xFS1

Material: Steel; galvanized; fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)

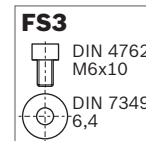


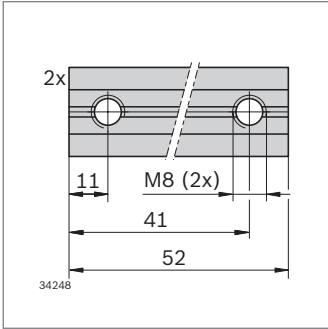
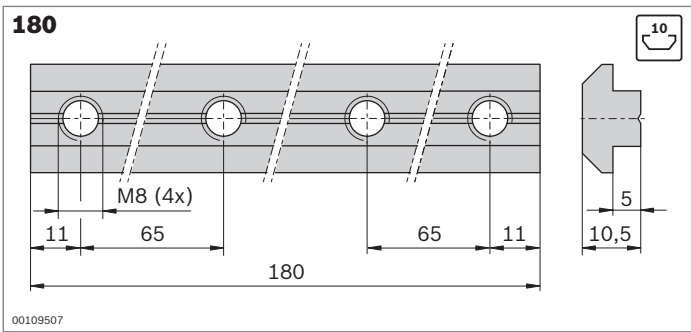
00109506

Profile connector	⌚ (Nm)	Slot	No.	FS
180	10	8	3 842 521 216	4xFS3

Material: Steel; galvanized; fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)





Profile connector	⌚ (Nm)	Slot	No.	FS
180	25	10	3 842 528 746	4xFS4

Material: Steel; galvanized; fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)

FS4

ISO 4017
M8x14
8-Fst
DIN 7394
8,4

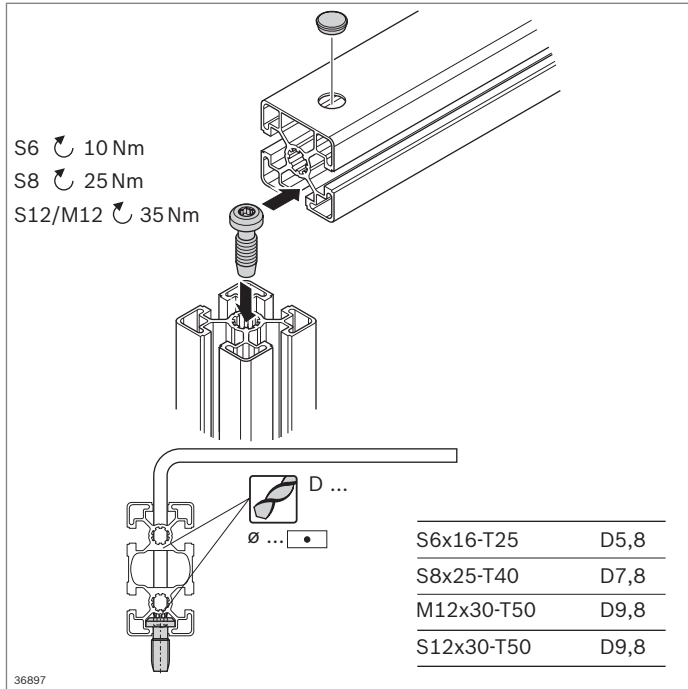
Connection kit	 (Nm)	Slot	 No.	FS
	18	10	Set	3 842 529 881 4xFS5

Material: Steel; galvanized; fastening material: Steel; galvanized

Scope of delivery: Set (2 pieces); incl. fastening material

FS5

M8x12



Central bolt, Anti-torsion element, cover cap

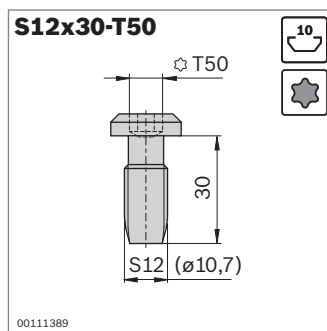
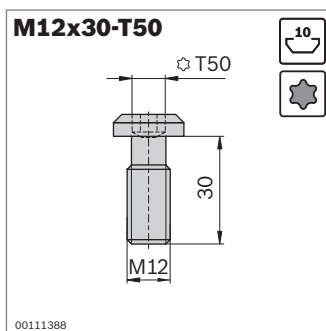
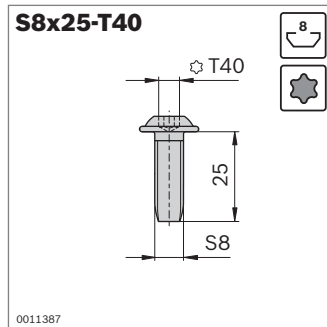
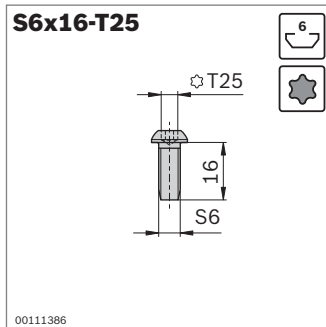


Central bolt

- ▶ Best-value connection element
- ▶ Self-tapping screw, can be mounted without profile finishing
- ▶ Profile finishing:
 - Thread cutting for M12x30 screw
 - Through-hole for screwdriver/offset screwdriver

Tools:

Offset screwdriver (p. 14-5)



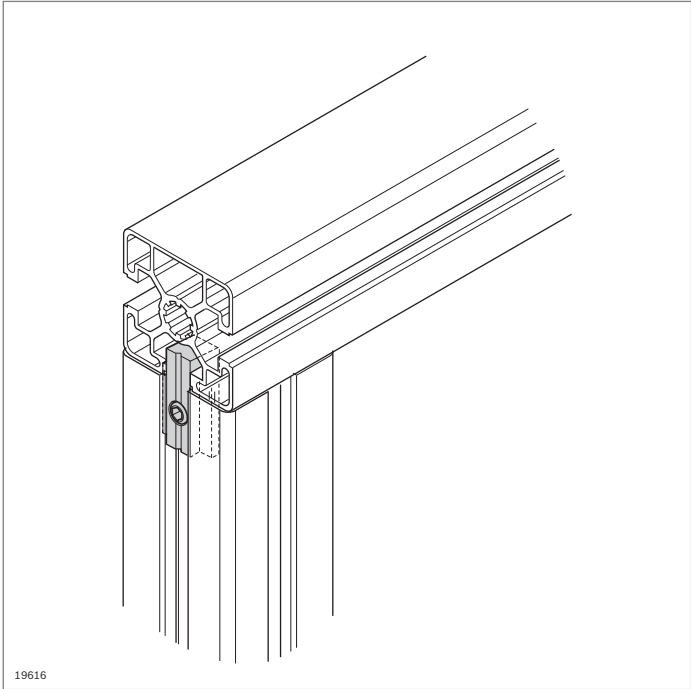
Central bolt	Slot	ESD	No.
S6x16-T25 (self-tapping)	6		100 3 842 528 593
S8x25-T40 (self-tapping)	8		100 3 842 527 174

Material: Steel; galvanized

Central bolt	Slot	ESD	No.
M12x30-T50	10		100 3 842 530 235
S12x30-T50 (self-tapping)	10		100 3 842 530 236

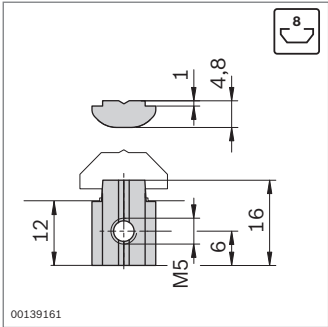
Material: Steel; galvanized

Size		
S6	500 N	8 Nm
S8	800 N	43 Nm
S12	1300 N	80 Nm
M12	3000 N	80 Nm



Anti-torsion element

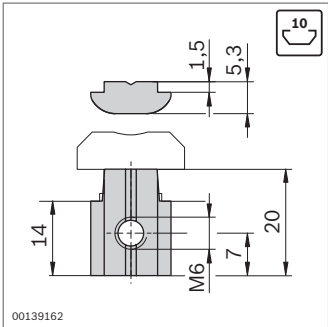
- Provides torsion resistance for profile connections with central bolts or quick connectors
- Subsequent installation in the connection possible



FS1

DIN 916
M5x8

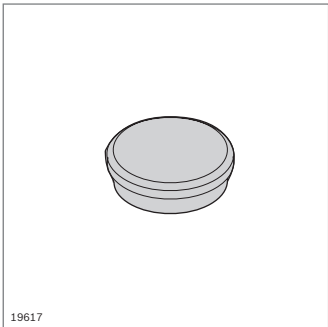
Anti-torsion element	Slot		No.	FS
	8	10	3 842 530 325	FS1
Material:	Steel; galvanized			
Fastening material:	Steel; galvanized			



FS2

DIN 916
M6x12

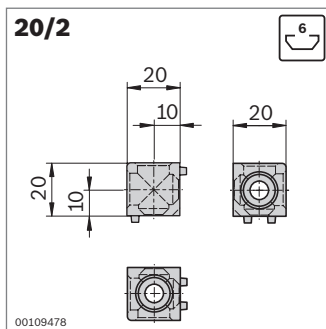
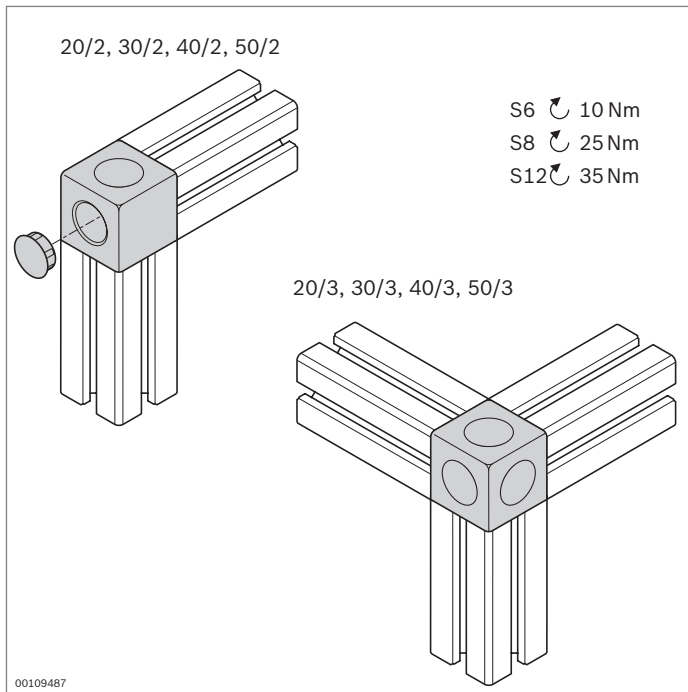
Anti-torsion element	Slot		No.	FS
	10	10	3 842 530 326	FS2
Material:	Steel; galvanized			
Fastening material:	Steel; galvanized			



Cover cap

- For sealing through-holes in closed profiles

Cover cap	D (mm)		No.
	5.8	100	3 842 551 032
	7.8	100	3 842 551 034
	9.8	100	3 842 551 036
Material:	PA; signal gray RAL 7004		



Type	
20/2	18 Nm

FS1
S6x16

Cubic connector



- For torsion-proof corner connections of profiles with equivalent cross-sections
- *designLINE* version with special silver paint (RAL 9006) for an attractive, high-quality design
- Cover caps to cover the openings
- Screw fitting on profile with self-tapping screws
- Profile finishing: Not required

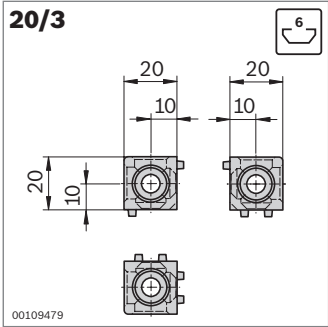
Technical data (p. 18-18)

Cubic connector 20/2	Slot	ESD	No.	FS
Set (standard), signal gray	6	*	1	3 842 549 858 2xFS1
<i>designLINE</i> set, signal gray	6	*	1	3 842 549 859 2xFS1
Cubic connector	6		20	3 842 523 875
Cover cap	signal gray (PP)		100	3 842 548 700
D12	black (PP)		100	3 842 548 704
Countersunk screw S6x16	6		100	3 842 517 132

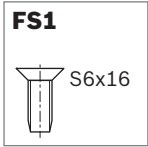
Material: Cubic connector: Diecast aluminum
designLINE cubic connector: painted (RAL 9006)
 Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), cover caps

* Cubic connector creates conductive connection, but the cover caps included in the set are not ESD-compatible.



Type	
20/3	23 Nm

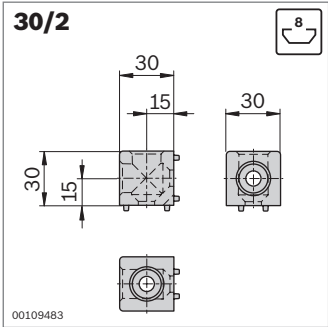


Cubic connector 20/3	Slot	ESD		No.	FS
Set (standard), signal gray	6		*	1	3 842 549 860 3xFS1
<i>designLINE</i> set, signal gray	6		*	1	3 842 549 861 3xFS1
Cubic connector	6			20	3 842 523 872
Cover cap	signal gray (PP)			100	3 842 548 700
D12	black (PP)			100	3 842 548 704
Countersunk screw S6x16	6			100	3 842 517 132

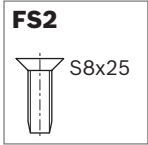
Material: Cubic connector: Diecast aluminum
designLINE cubic connector: painted (RAL 9006)
Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), cover caps

* Cubic connector creates conductive connection, but the cover caps included in the set are not ESD-compatible.



Type	
30/2	80 Nm

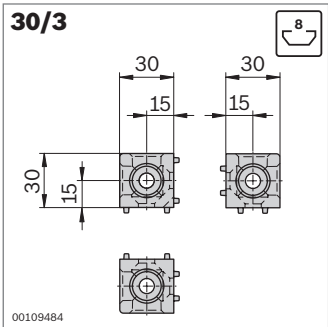


Cubic connector 30/2	Slot	ESD		No.	FS
Set (standard), signal gray	8		*	1	3 842 549 862 2xFS2
<i>designLINE</i> set, signal gray	8		*	1	3 842 549 863 2xFS2
Cubic connector	8			20	3 842 523 876
Cover cap	signal gray (PP)			100	3 842 548 701
D18	black (PP)			100	3 842 548 705
Countersunk screw S8x25	8			100	3 842 517 543

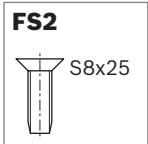
Material: Cubic connector: Diecast aluminum
designLINE cubic connector: painted (RAL 9006)
Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), cover caps

* Cubic connector creates conductive connection, but the cover caps included in the set are not ESD-compatible.



Type	
30/3	85 Nm

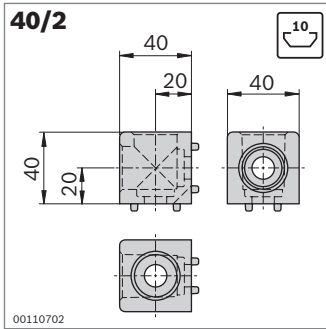


Cubic connector 30/3	Slot	ESD		No.	FS
Set (standard), signal gray	8		*	1	3 842 549 864 3xFS2
<i>designLINE</i> set, signal gray	8		*	1	3 842 549 865 3xFS2
Cubic connector	8			20	3 842 523 873
Cover cap	signal gray (PP)			100	3 842 548 701
D18	black (PP)			100	3 842 548 705
Countersunk screw S8x25	8			100	3 842 517 543

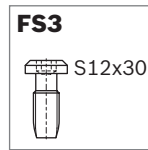
Material: Cubic connector: Diecast aluminum
designLINE cubic connector: painted (RAL 9006)
Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), cover caps

* Cubic connector creates conductive connection, but the cover caps included in the set are not ESD-compatible.



Type	
40/2	60 Nm

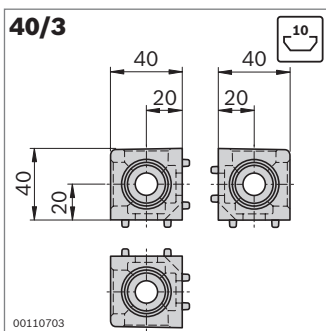


Cubic connector 40/2	Slot	ESD	No.	FS
Set (standard), signal gray	10	⚡*	1	3 842 549 866 2xFS3
<i>designLINE</i> set, signal gray	10	⚡*	1	3 842 549 867 2xFS3
Cubic connector	10	⚡	20	3 842 529 010
Cover cap signal gray (PP)			100	3 842 548 702
D24 black (PP)		⚡	100	3 842 548 706
Screw S12x30	10	⚡	100	3 842 530 236

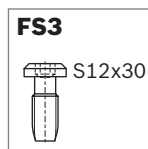
Material: Cubic connector: Diecast aluminum
designLINE cubic connector: painted (RAL 9006)
 Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), cover caps

* Cubic connector creates conductive connection, but the cover caps included in the set are not ESD-compatible.



Type	
40/3	70 Nm

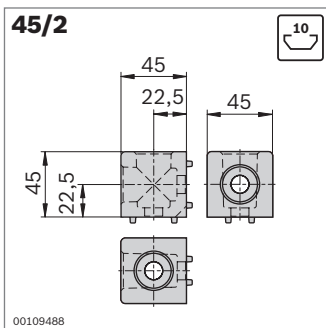


Cubic connector 40/3	Slot	ESD	No.	FS
Set (standard), signal gray	10	⚡*	1	3 842 549 868 3xFS3
<i>designLINE</i> set, signal gray	10	⚡*	1	3 842 549 869 3xFS3
Cubic connector	10	⚡	20	3 842 529 011
Cover cap signal gray (PP)			100	3 842 548 702
D24 black (PP)		⚡	100	3 842 548 706
Screw S12x30	10	⚡	100	3 842 530 236

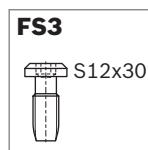
Material: Cubic connector: Diecast aluminum
designLINE cubic connector: painted (RAL 9006)
 Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), cover caps

* Cubic connector creates conductive connection, but the cover caps included in the set are not ESD-compatible.



Type	
45/2	150 Nm
45x45L	200 Nm

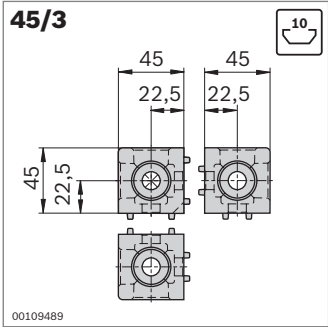


Cubic connector 45/2	Slot	ESD	No.	FS
Set (standard), signal gray	10	⚡*	1	3 842 549 870 2xFS3
<i>designLINE</i> set, signal gray	10	⚡*	1	3 842 549 871 2xFS3
Cubic connector	10	⚡	20	3 842 523 877
Cover cap signal gray (PP)			100	3 842 548 702
D24 black (PP)		⚡	100	3 842 548 706
Screw S12x30	10	⚡	100	3 842 530 236

Material: Cubic connector: Diecast aluminum
designLINE cubic connector: painted (RAL 9006)
 Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), cover caps

* Cubic connector creates conductive connection, but the cover caps included in the set are not ESD-compatible.



Type		
45/3	45x45L	170 Nm
	45x45	240 Nm

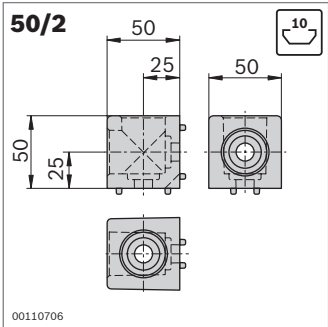


Cubic connector 45/3	Slot	ESD	No.	FS
Set (standard), signal gray	10	⚡*	1	3 842 549 872
designLINE set, signal gray	10	⚡*	1	3 842 549 873
Cubic connector	10	⚡	20	3 842 523 874
Cover cap signal gray (PP)			100	3 842 548 702
D24 black (PP)		⚡	100	3 842 548 706
Screw S12x30	10	⚡	100	3 842 530 236

Material: Cubic connector: Diecast aluminum
designLINE cubic connector: painted (RAL 9006)
Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), cover caps

* Cubic connector creates conductive connection, but the cover caps included in the set are not ESD-compatible.



Type		
50/2		120 Nm

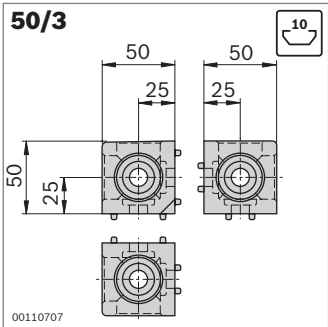


Cubic connector 50/2	Slot	ESD	No.	FS
Set (standard), signal gray	10	⚡*	1	3 842 549 874
Cubic connector	10	⚡	20	3 842 529 012
Cover cap signal gray (PP)			100	3 842 548 703
D30 black (PP)		⚡	100	3 842 548 707
Screw S12x30	10	⚡	100	3 842 530 236

Material: Cubic connector: Diecast aluminum
Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), cover caps

* Cubic connector creates conductive connection, but the cover caps included in the set are not ESD-compatible.



Type		
50/3		140 Nm

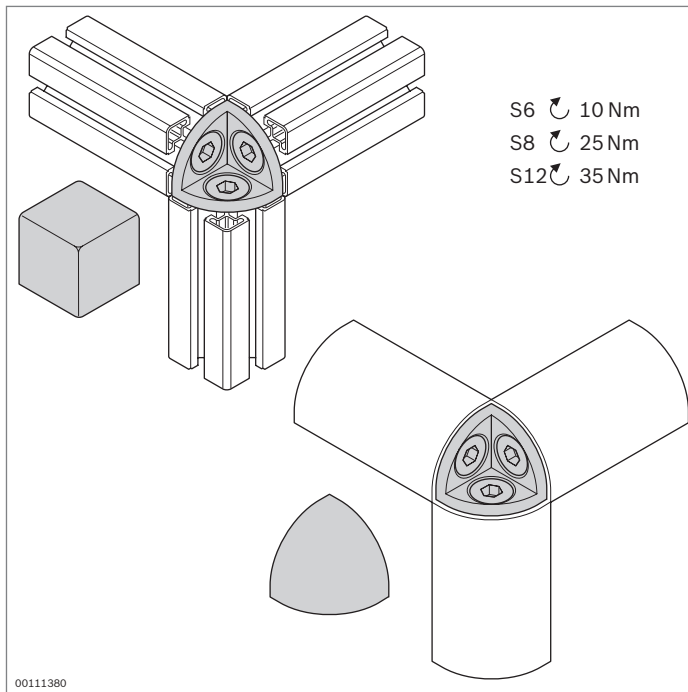


Cubic connector 50/3	Slot	ESD	No.	FS
Set (standard), signal gray	10	⚡*	1	3 842 549 876
Cubic connector	10	⚡	20	3 842 529 013
Cover cap signal gray (PP)			100	3 842 548 703
D30 black (PP)		⚡	100	3 842 548 707
Screw S12x30	10	⚡	100	3 842 530 236

Material: Cubic connector: Diecast aluminum
Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), cover caps

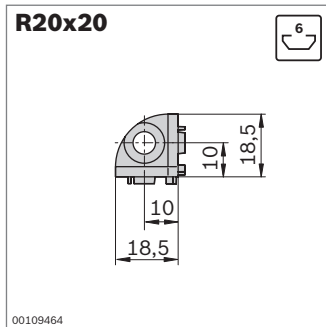
* Cubic connector creates conductive connection, but the cover caps included in the set are not ESD-compatible.



Corner bracket

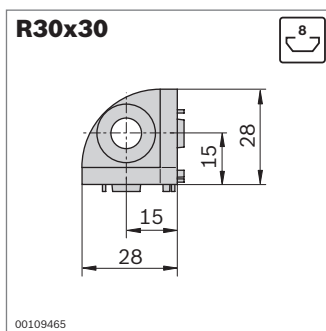


- ▶ Corner bracket for corner connection of three square or half-round profiles with equivalent cross-sections
- ▶ Screw fitting on profiles with self-tapping screws
- ▶ Ball or cubic-shaped cover caps to prevent injuries and avoid dirt
- ▶ Profile finishing: Not required



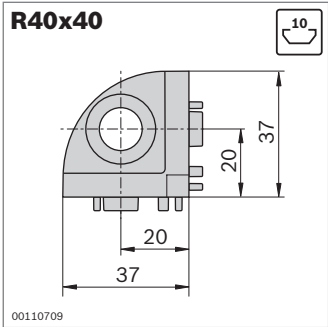
Type	
20/3	23 Nm
FS1	

R20x20	Slot	ESD	No.	FS
Corner bracket	6		1	3 842 519 318 3xFS1
Cover cap	signal gray (PP)		10	3 842 548 708
K (ball)	black (PP)		10	3 842 548 712
Cover cap	signal gray (PP)		10	3 842 548 716
W (cube)	black (PP)		10	3 842 548 720
Material: Corner bracket: Diecast zinc				
Fastening material: Steel; galvanized				
Scope of delivery: Incl. fastening material (FS)				



Type	
30/3	85 Nm
FS2	

R30x30	Slot	ESD	No.	FS
Corner bracket	8		1	3 842 519 319 3xFS2
Cover cap	signal gray (PP)		10	3 842 548 709
K (ball)	black (PP)		10	3 842 548 713
Cover cap	signal gray (PP)		10	3 842 548 717
W (cube)	black (PP)		10	3 842 548 721
Material: Corner bracket: Diecast zinc				
Fastening material: Steel; galvanized				
Scope of delivery: Incl. fastening material (FS)				



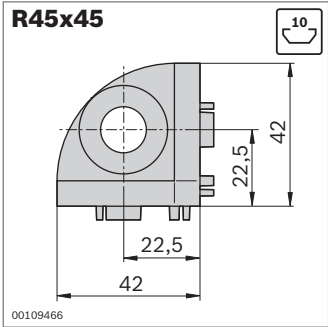
Type	
40/3	70 Nm



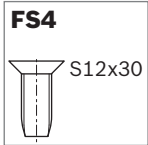
R40x40	Slot	ESD		No.	FS
Corner bracket	10		1	3 842 529 404	3xFS3
Cover cap K (ball)	signal gray (PP)		10	3 842 548 710	
	black (PP)		10	3 842 548 714	
Cover cap W (cube)	signal gray (PP)		10	3 842 548 718	
	black (PP)		10	3 842 548 722	

Material: Corner bracket: Diecast zinc
Fastening material: Steel; galvanized

Scope of delivery: Incl. fastening material (FS)



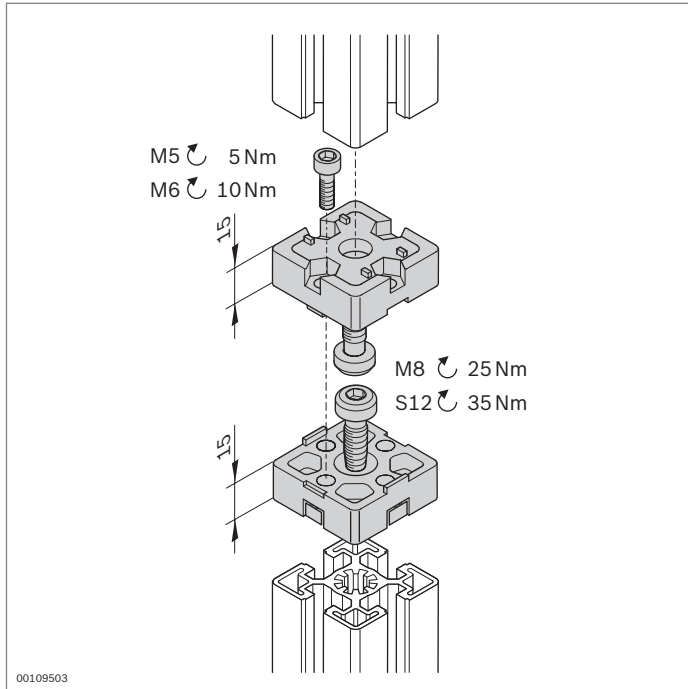
Type		
45/3	45x45L	170 Nm
	45x45	240 Nm



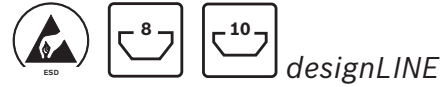
R45x45	Slot	ESD		No.	FS
Corner bracket	10		1	3 842 519 321	3xFS4
Cover cap K (ball)	signal gray (PP)		10	3 842 548 711	
	black (PP)		10	3 842 548 715	
Cover cap W (cube)	signal gray (PP)		10	3 842 548 719	
	black (PP)		10	3 842 548 723	

Material: Corner bracket: Diecast zinc
Fastening material: Steel; galvanized

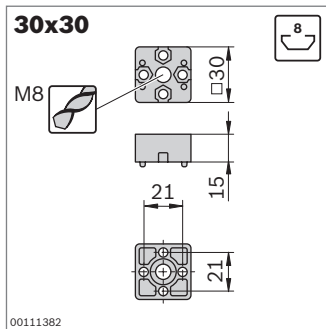
Scope of delivery: Incl. fastening material (FS)



End connector



- For end-to-end profile connections
- *designLINE* version with special silver paint (RAL 9006) for an attractive, high-quality design
- Profile finishing:
 - 30x30: M8 thread cutting in central bores
 - 40x40, 45x45, 50x50: Not required

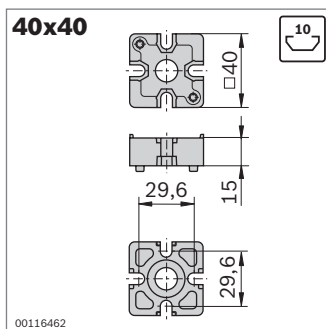


Type	
30x30	81 Nm
FS1	FS2
DIN 7984 M8x30	DIN 7984 M5x25 DIN 934 M5

End connector	Slot	ESD	No.	FS
30x30 Set (standard)	8		3 842 526 003	2xFS1, 4xFS2
<i>designLINE</i> set	8		3 842 538 656	2xFS1, 4xFS2

Material: End connector: Diecast aluminum
designLINE end connector: painted (RAL 9006)
 Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)

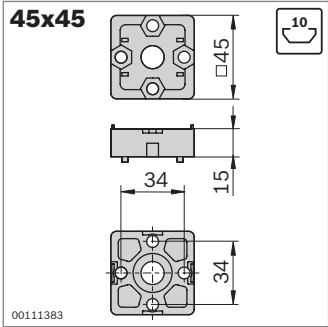


Type	
40x40	170 Nm
FS3	FS4
S12x30	DIN 7984 M6x25 DIN 4032 M6

End connector	Slot	ESD	No.	FS
40x40 Set (standard)	10		3 842 532 196	2xFS3, 4xFS4
<i>designLINE</i> set	10		3 842 538 657	2xFS3, 4xFS4

Material: End connector: Diecast aluminum
designLINE end connector: painted (RAL 9006)
 Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)



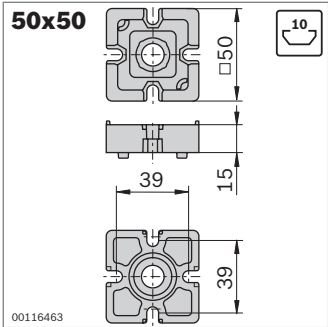
Type	
45x45	200 Nm

FS3 S12x30	FS4 DIN 7984 M6x25 DIN 4032 M6
----------------------	---

End connector	Slot	ESD	No.	FS
45x45 Set (standard)	10		3 842 191 175	2xFS3, 4xFS4
<i>designLINE</i> set	10		3 842 538 658	2xFS3, 4xFS4

Material: End connector: Diecast zinc
designLINE end connector: painted (RAL 9006)
Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)



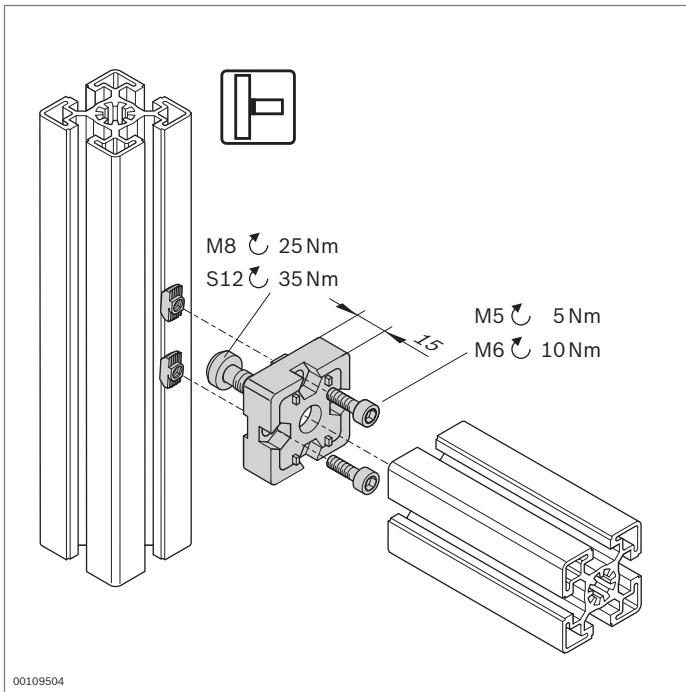
Type	
50x50	180 Nm

FS3 S12x30	FS4 DIN 7984 M6x25 DIN 4032 M6
----------------------	---

End connector	Slot	ESD	No.	FS
50x50 Set (standard)	10		3 842 532 199	2xFS3, 4xFS4

Material: End connector: Diecast zinc
Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)



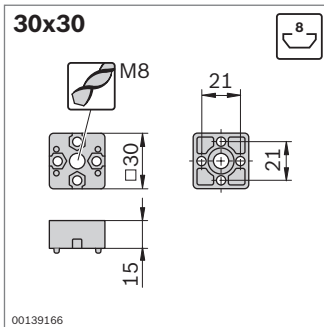
00109504

T-connector



designLINE

- For right-angled profile connections
- *designLINE* version with special silver paint (RAL 9006) for an attractive, high-quality design
- Profile finishing:
 - 30x30: M8 thread cutting in central bores
 - 40x40, 45x45, 50x50: Not required



00139166

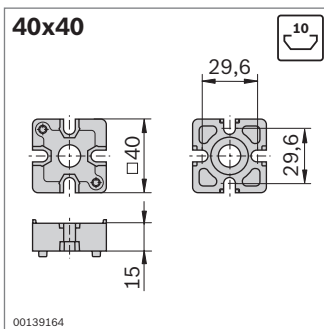
Type		
30x30	4000 N	80 Nm

FS1	FS2

T-connector	Slot	ESD	No.	FS
30x30 Set (standard)	8		3 842 524 476	1xFS1, 2xFS2
<i>designLINE</i> set	8		3 842 538 696	1xFS1, 2xFS2

Material: T-connector: Diecast aluminum
designLINE T-connector: painted (RAL 9006)
 Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)



00139164

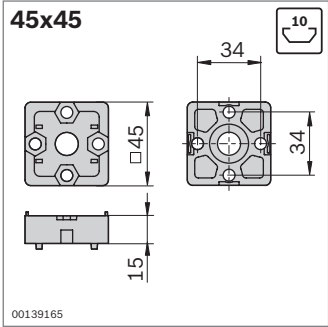
Type		
40x40	9000 N	150 Nm

FS3	FS4

T-connector	Slot	ESD	No.	FS
40x40 Set (standard)	10		3 842 532 195	1xFS3, 2xFS4
<i>designLINE</i> set	10		3 842 538 697	1xFS3, 2xFS4

Material: T-connector: Diecast aluminum
designLINE T-connector: painted (RAL 9006)
 Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)



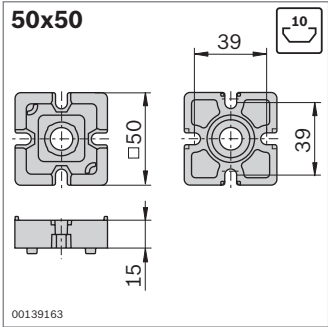
Type		
45x45	9000 N	200 Nm

FS3	FS4
S12x30	DIN 7984 M6x20

T-connector	Slot	ESD	No.	FS
45x45 Set (standard)	10		3 842 520 802	1xFS3, 2xFS4
<i>designLINE</i> set	10		3 842 538 698	1xFS3, 2xFS4

Material: T-connector: Diecast zinc
designLINE T-connector: painted (RAL 9006)
 Fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS)



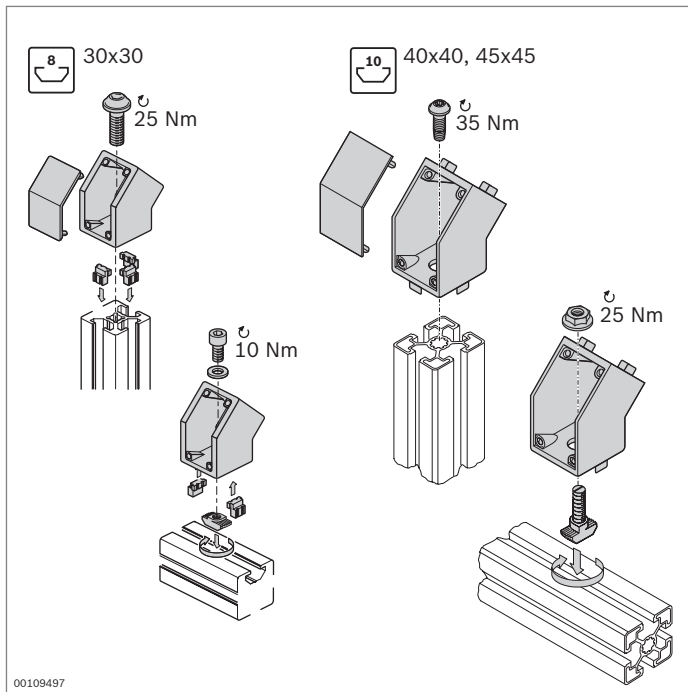
Type		
50x50	10000 N	170 Nm

FS3	FS4
S12x30	DIN 7984 M6x20

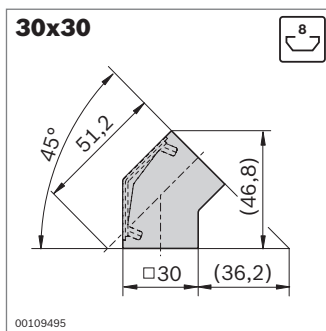
T-connector	Slot	ESD	No.	FS
50x50 Set (standard)	10		3 842 532 198	1xFS3, 2xFS4

Material: T-connector: Diecast zinc
 Fastening material: Steel; galvanized

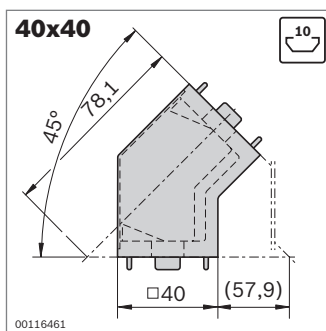
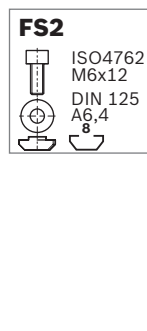
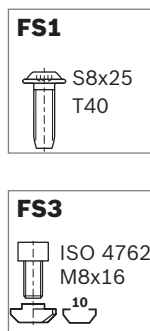
Scope of delivery: Set incl. fastening material (FS)



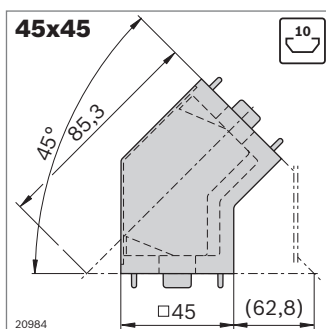
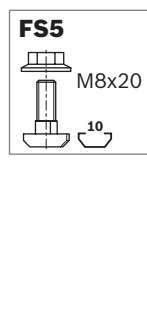
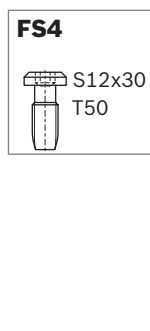
00109497



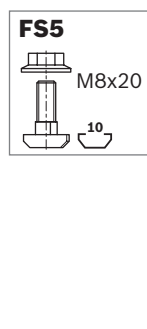
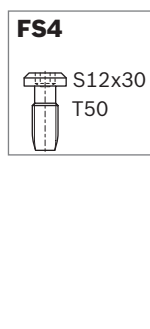
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00116461



20984



Connector 45°



designLINE

- For connecting profiles at an angle of less than 45°
- Suitable for reinforcing frames
- Suitable for connections at the end-face or in the profile slot
- Connectors 45° 40x40 and 45x45 with centering lugs for easy positioning (centering lugs can simply be broken off for installation in the profile slot)
- *designLINE* version with special silver paint (RAL 9006) for an attractive, high-quality design
- Profile finishing: Not required

* Connector 45° creates conductive connection, but the cover caps included in the set are not ESD-compatible.

Connector 45°	Color	Slot	ESD	No.	FS
30x30 Set (standard)	Signal gray	8	⚡*	3 842 554 446	2xFS1,
	Black	8	⚡	3 842 554 447	FS2, FS3
	Signal gray	8	⚡*	3 842 554 452	2xFS1,
	Black	8	⚡	3 842 554 453	FS2, FS3

Material: Connector 45°: Diecast zinc; connector 45° *designLINE*: painted (RAL 9006); centering piece, cover cap: PP; fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), 6 x centering piece, cover cap

Connector 45°	Color	Slot	ESD	No.	FS
40x40 Set (standard)	Signal gray	10	⚡*	3 842 554 448	2xFS4,
	Black	10	⚡	3 842 554 449	FS5
	Signal gray	10	⚡*	3 842 554 454	2xFS4,
	Black	10	⚡	3 842 554 455	FS5

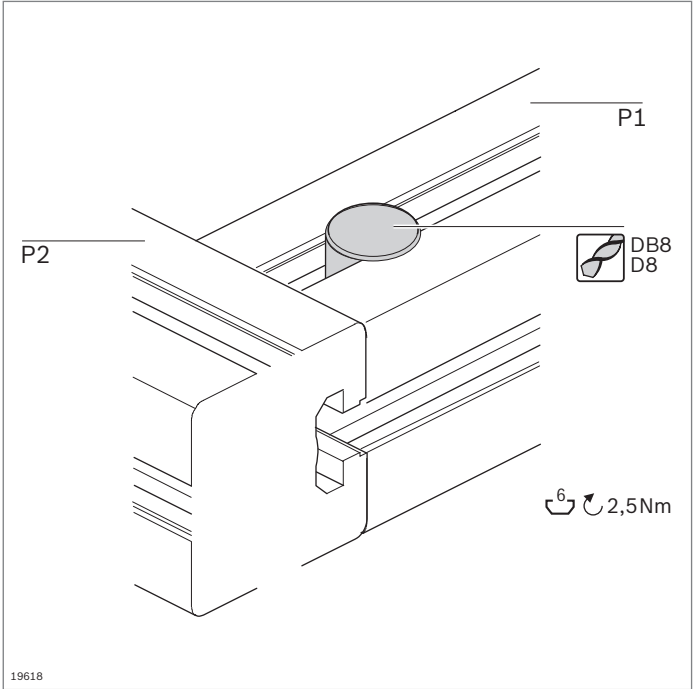
Material: Connector 45°: Cast aluminum; connector 45° *designLINE*: painted (RAL 9006); centering piece, cover cap: PP; fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), cover cap

Connector 45°	Color	Slot	ESD	No.	FS
45x45 Set (standard)	Signal gray	10	⚡*	3 842 554 450	2xFS4,
	Black	10	⚡	3 842 554 451	FS5
	Signal gray	10	⚡*	3 842 554 456	2xFS4,
	Black	10	⚡	3 842 554 457	FS5

Material: Connector 45°: Cast aluminum; connector 45° *designLINE*: painted (RAL 9006); centering piece, cover cap: PP; fastening material: Steel; galvanized

Scope of delivery: Set incl. fastening material (FS), cover cap



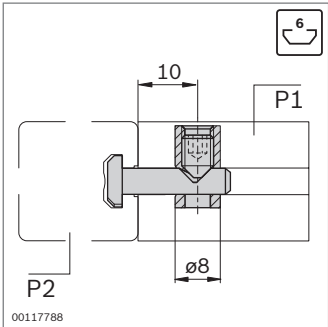
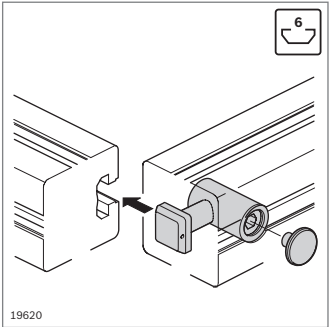
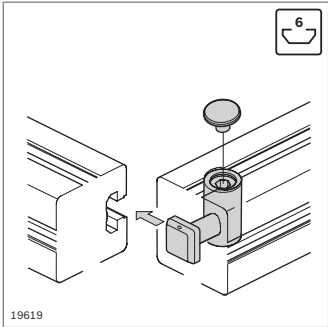
Quick connector, 6 mm slot, 0°, 90°

Cover cap



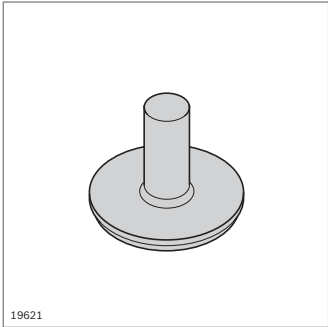
- For the right-angled connecting of two profiles
- Excellent accessibility for tools during mounting
- Quick connector for 6 mm slot with square head; can be used as a 0° or 90° connector
- Profile finishing:
Blind hole DB8 or through-hole D8

Optional accessories:
Drilling jig (p. 14-2)



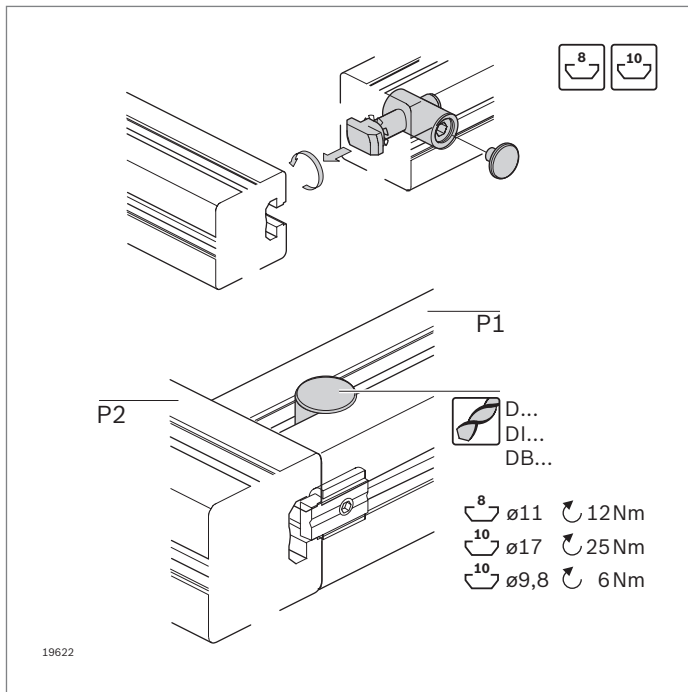
Slot	F_{max}	M_{max}
6 / 6	450 N	18 Nm

Quick connector 0° / 90°	P1 / P2	D ESD (mm)	No.
	6 / 6	8	3 842 537 013
Material:		Steel; stainless	



- Cover cap for connector sleeves

Cover cap	D (mm)	No.
	8	3 842 551 038
Material:		PE; signal gray RAL 7004



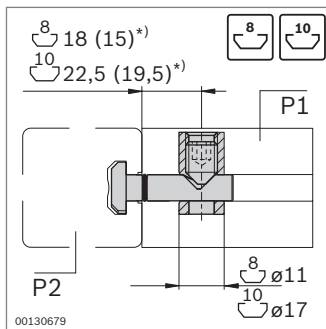
Quick connector, 8/10 mm slot, 0°



- For the right-angled connecting of two profiles
- Excellent accessibility for tools during mounting
- O-ring for fixing allows overhead assembly
- Quick connectors can be pivoted into the profile slot at the mounting location
- Profile finishing:
Blind hole DI, DB11, DB17 or
Through-hole DI, D11, D17
- Note differing drilling intervals and load-bearing capacities when using with radial compensation ("Technical data" p. 18-16)

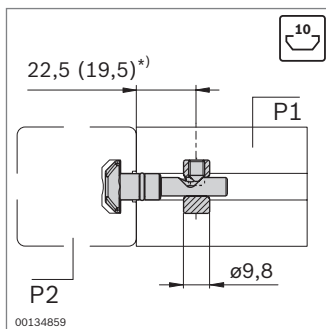
Optional accessories:

- Anti-torsion element (p. 3-42)
- Radial compensation (p. 2-85)
- Drilling jig (p. 14-2)
- Cover cap (p. 3-54)



Slot	F_{max}	M_{max}
8 / 8	500 N	40 Nm
8 / 10	2000 N	70 Nm
10 / 10	4000 N	140 Nm

*) With the use of a radial compensation



Slot	F_{max}	M_{max}
10 / 10	800 N	50 Nm

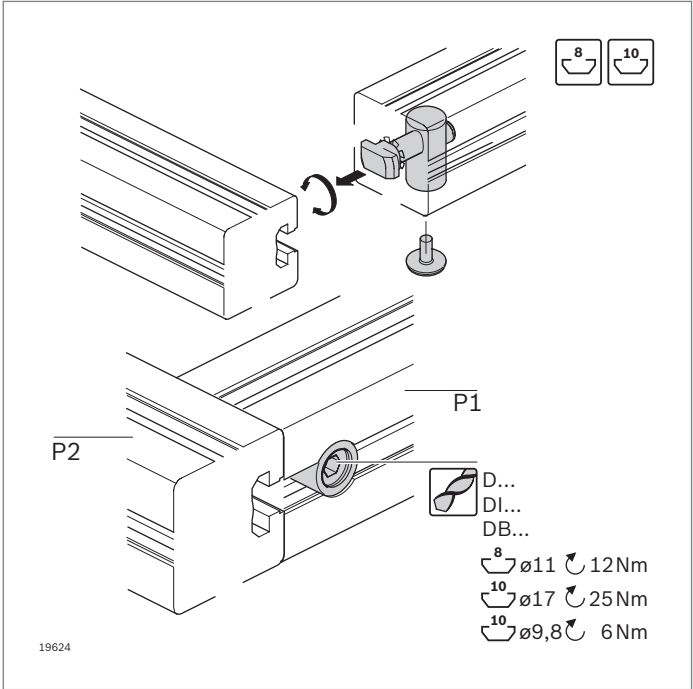
*) With the use of a radial compensation

Quick connector 0°	P1 / P2	D ESD	No.
	(mm)		
Steel; galvanized	8 / 8	11	3 842 535 459
	8 / 10	11	3 842 535 464
	10 / 10	17	3 842 535 458
Steel; stainless	8 / 8	11	3 842 548 934
	8 / 10	11	3 842 548 935
	10 / 10	17	3 842 548 936

- Quick connector 9.8 with smaller connector sleeve
- The hole for the connector sleeve does not make contact with the slot flanks. This permits a visually attractive connection; the slot can be completely closed with the cover profile

Quick connector 0°, connector sleeve D = 9.8	P1 / P2	D ESD	No.
	(mm)		
Steel; galvanized	10 / 10	9.8 ¹⁾	3 842 541 412

¹⁾ No standard hole in modular dimensions 40, 50 and 60
Target distance from profile end: 22.5 mm



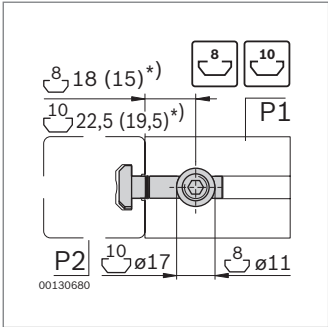
Quick connector, 8/10 mm slot, 90°
Cover cap



- ▶ Tie rod head rotated at a 90° angle to the connector sleeve
- ▶ Profile finishing:
Blind hole DI, DB11, DB17 or
Through-hole DI, D11, D17

Optional accessories:

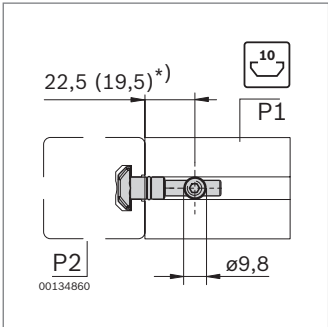
- ▶ Anti-torsion element (p. 3-42)
- ▶ Radial compensation (p. 2-85)
- ▶ Drilling jig (p. 14-2)
- ▶ Cover cap



Slot	F_{max}	M_{max}
8 / 8	500 N	40 Nm
10 / 10	4000 N	140 Nm

*) With the use of a radial compensation

Quick connector 90°	P1 / P2	D	ESD	No.
		(mm)		
Steel; galvanized	8 / 8	11	⚡	3 842 535 465
	10 / 10	17	⚡	3 842 535 466
Steel; stainless	8 / 8	11	⚡	3 842 548 937
	10 / 10	17	⚡	3 842 548 938

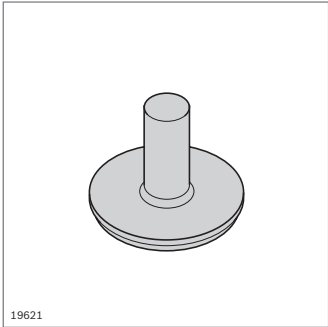


Slot	F_{max}	M_{max}
10 / 10	800 N	50 Nm

*) With the use of a radial compensation

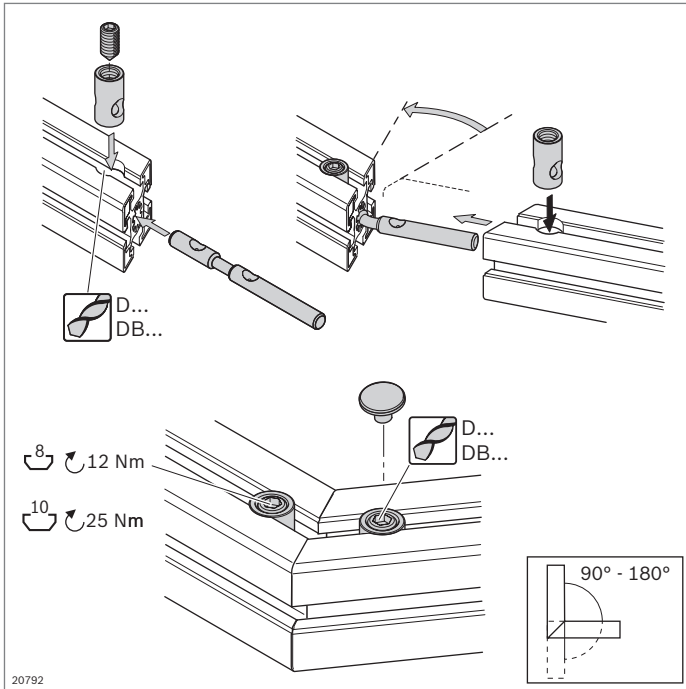
Quick connector 90°, connector sleeve D = 9.8	P1 / P2	D	ESD	No.
		(mm)		
Steel; galvanized	10 / 10	9.8 ¹⁾	⚡	3 842 541 410

¹⁾ No standard hole in modular dimensions 40, 50 and 60
Target distance from profile end: 22.5 mm



Cover cap	D	No.
	(mm)	
	11	100 3 842 551 040
	17	100 3 842 551 042

Material: PE; signal gray RAL 7004



Quick connector, bendable – end-to-end

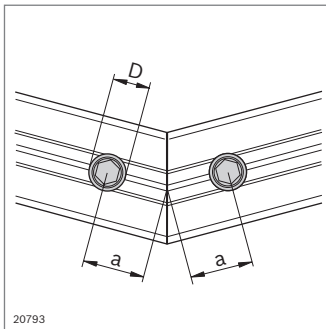


- For end-to-end connecting of two profiles with equal cross-sections and at any angle, e.g. for frames
- Profile finishing:
 - Blind hole DB11, DB17 or through-hole D11, D17
 - Miter cut

Technical data (p. 18-16)

Accessories:

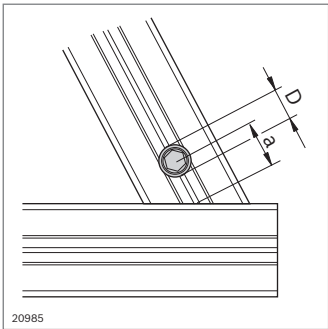
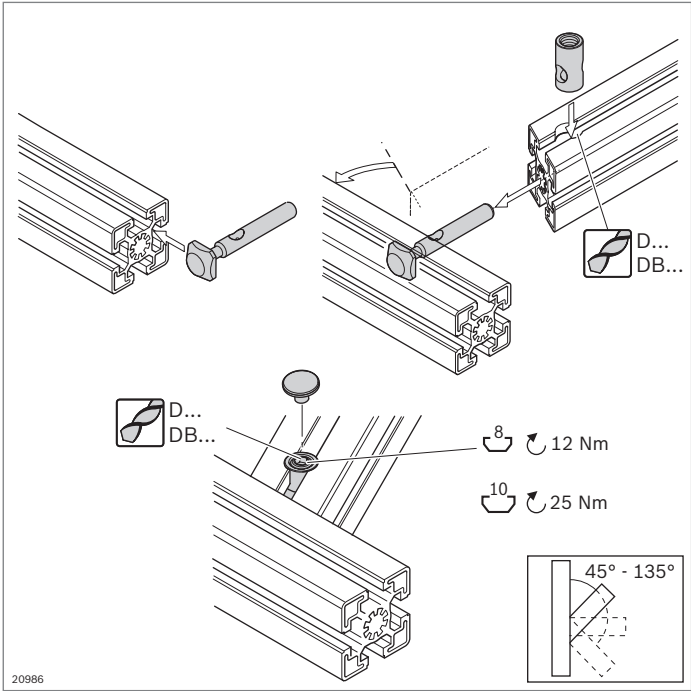
- Drilling jig (p. 14-2)
- Cover cap (p. 3-54)



Profile	$M_{\max}$
30x30	24 Nm
40x40L	100 Nm
45x45L	110 Nm
45x45	145 Nm
50x50L	160 Nm

Quick connector, bendable	P1 / P2	a (mm)	D (mm)	ESD	No.
End-to-end	8 / 8	18	11		10 3 842 535 630
	10 / 10	22.5	17		10 3 842 535 634

Material: Tie rod: Steel; stainless
Socket: Steel; galvanized



Quick connector, bendable – end-to-slot



- For end-to-slot connecting of two profiles at any angle, e.g. for framework constructions
- Profile finishing:
 - Blind hole DB11, DB17 or through-hole D11, D17
 - Miter cut

Technical data (p. 18-16)

Accessories:

- Drilling jig (p. 14-2)
- Cover cap (p. 3-54)

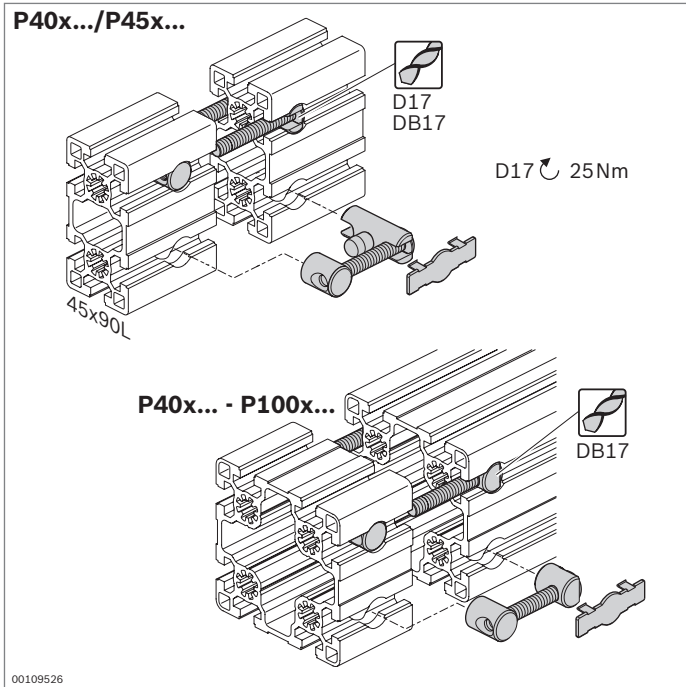
Quick connector, bendable	P1 / P2	a (mm)	D (mm)	ESD	No.
End-to-slot	8 / 8	18	11		3 842 535 629
	10 / 10	22.5	17		3 842 535 635

Material:

Tie rod: Steel; stainless

Socket: Steel; galvanized

Profile				
30x30	1100 N	35 Nm	650 N	40 Nm
40x40L	1500 N	110 Nm	1000 N	80 Nm
45x45L	1500 N	120 Nm	1000 N	95 Nm
45x45	1500 N	140 Nm	1100 N	180 Nm
50x50L	1500 N	150 Nm	1100 N	180 Nm



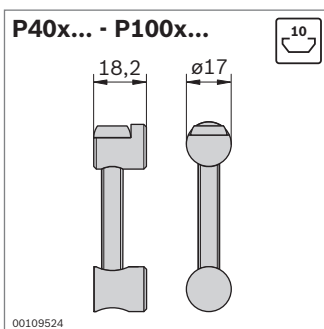
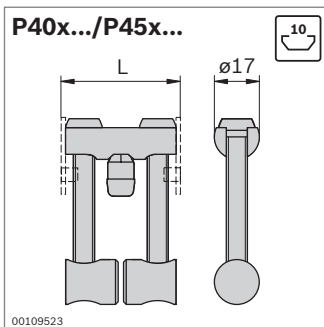
Longitudinal end connector



- For the end-to-end connecting of two profiles
- Standard profile finishing:
 - Through-hole D17 (longitudinal end connector on both sides)
 - Blind hole DB17 or through-hole D17 (longitudinal end connector on one side)

Optional accessories:

Cover cap D17 x 44.6; ESD (p. 3-61)



Longitudinal end connector, two-sided	L (mm)	ESD	No.
Profile 40x...	40	⚡*	3 842 554 442
Profile 45x...	45	⚡*	3 842 554 440

Material: Longitudinal end connector: screw steel; galvanized
Centering pin, cover caps: PP, signal gray

Scope of delivery: Incl. 4 x cover cap

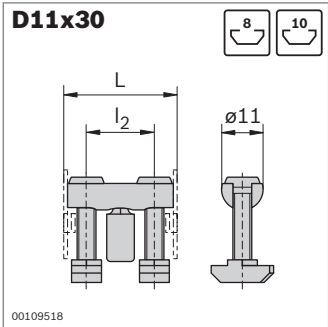
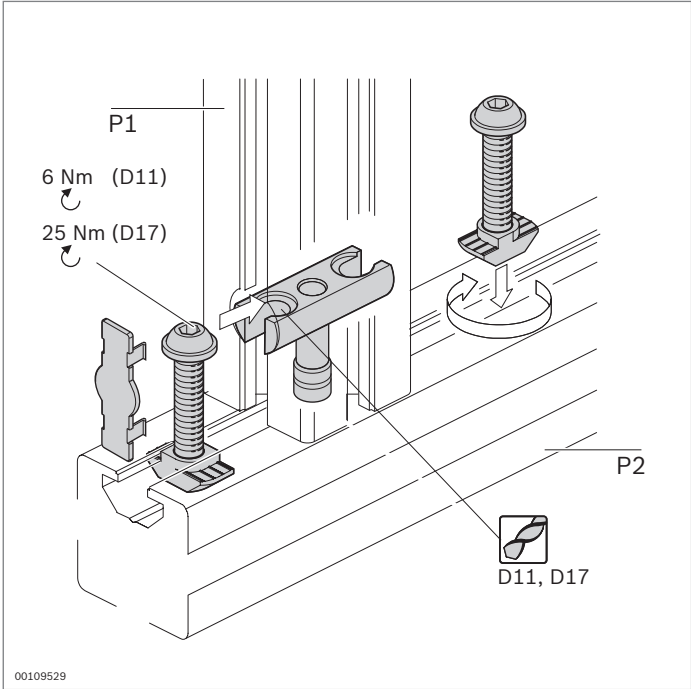
* Longitudinal end connector establishes conductive connection.
Cover caps included in the set are not ESD-compatible.

Longitudinal end connector, one-sided	ESD	No.
Profile 40x... - 100x...	⚡*	3 842 554 444

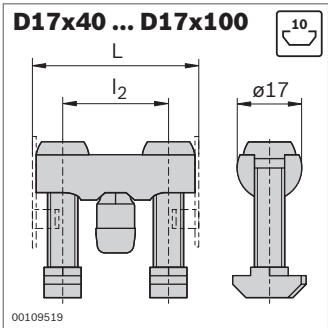
Material: Longitudinal end connector: screw steel; galvanized
Centering pin, cover caps: PP, signal gray

Scope of delivery: Incl. 2 x cover cap

* Longitudinal end connector establishes conductive connection.
Cover caps included in the set are not ESD-compatible.



Size			
30	2500 N	60 Nm	20 Nm



Size			
40	4000 N	180 Nm	40 Nm
45	4000 N	180 Nm	60 Nm
50	4000 N	200 Nm	65 Nm
60	4000 N	200 Nm	80 Nm
80	5000 N	800 Nm	170 Nm
90	5000 N	800 Nm	200 Nm
100	5000 N	1000 Nm	480 Nm

Bolt connector



- For the right-angled connecting of two profiles
- Suitable for heavy loads, including torsional loads
- Can be mounted in closed frames
- Profile finishing: Through-hole D11, D17

Technical data (p. 18-17)

Accessories:
 Drilling jig (p. 14-2)

Optional accessories:
 Cover cap ESD (p. 3-61)

Bolt connector	P1 / P2	L (mm)	l ₂ (mm)	ESD	No.
D11x30	8 / 8	30	18		10 3 842 554 402
	8 / 10	30	18		10 3 842 555 590

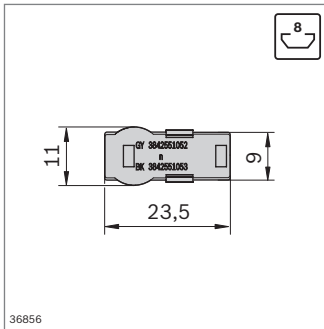
Material: Bolt connector: Steel; galvanized
 Centering pin, cover caps: PP, signal gray
 * Bolt connector creates conductive connection, but the cover caps included in the set are not ESD-compatible.

Scope of delivery: Incl. 2 x cover cap

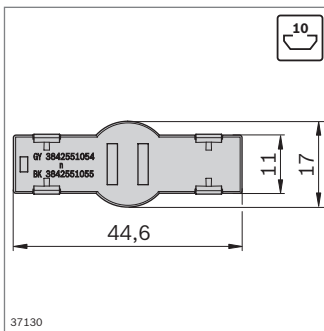
Bolt connector	P1 / P2	L (mm)	l ₂ (mm)	ESD	No.
D17x40	10 / 10	40	23		10 3 842 555 594
D17x45	10 / 10	45	28		10 3 842 555 584
D17x50	10 / 10	50	33		10 3 842 555 596
D17x60	10 / 10	60	43		10 3 842 555 586
D17x80	10 / 10	80	63		10 3 842 555 598
D17x90	10 / 10	90	73		10 3 842 555 588
D17x100	10 / 10	100	83		10 3 842 555 592

Material: Bolt connector: Steel; galvanized
 Centering pin, cover caps: PP, signal gray
 * Bolt connector creates conductive connection, but the cover caps included in the set are not ESD-compatible.

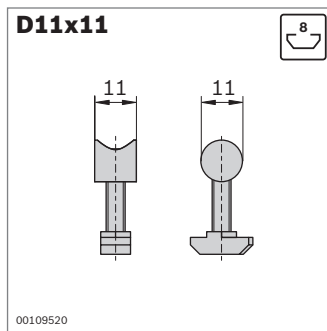
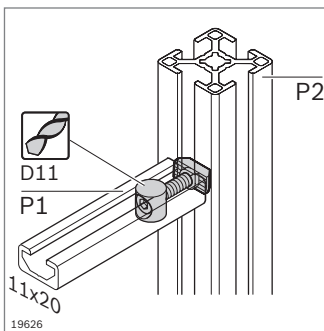
Scope of delivery: Incl. 2 x cover cap



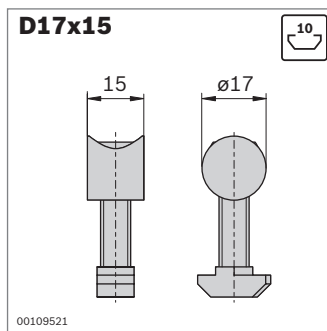
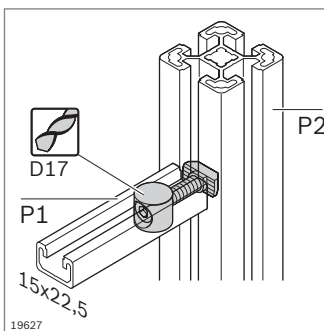
Cover cap	Color	ESD	No.
D11 x 23.5	Signal gray	100	3 842 551 052
D11 x 23.5	Black	100	3 842 551 053
Material:		PP	



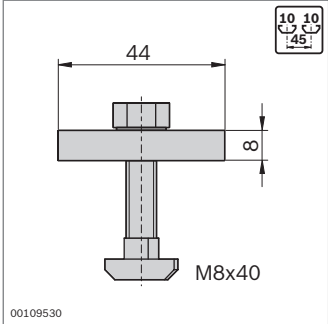
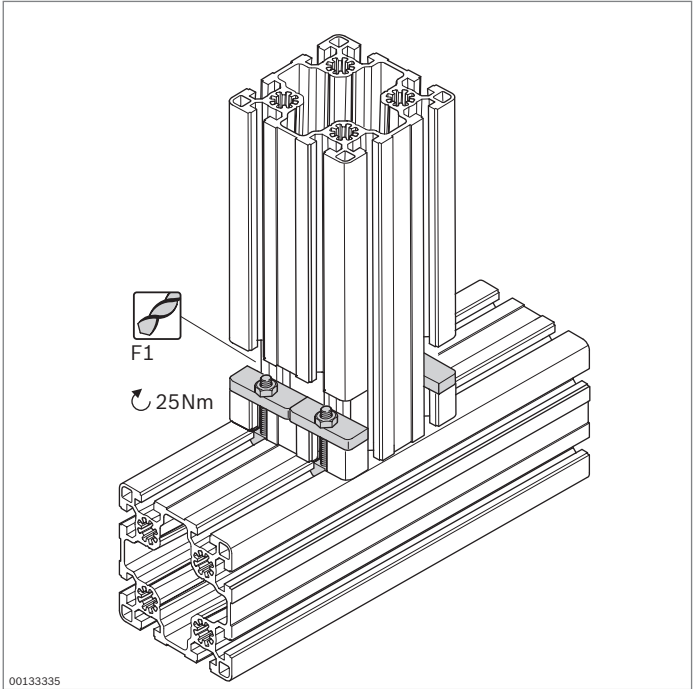
Cover cap	Color	ESD	No.
D17 x 44.6	Signal gray	100	3 842 551 054
D17 x 44.6	Black	100	3 842 551 055
Material:		PP	



Bolt connector	P1 / P2	ESD	No.
D11x11	8 / 8	10	3 842 535 617
Material:		Steel; galvanized	



Bolt connector	P1 / P2	ESD	No.
D17x15	10 / 10	10	3 842 535 619
Material:		Steel; galvanized	



Slot	
10	1000 N

QV mounting kit



- For the right-angled connecting of two profiles
- Excellent accessibility for tools during mounting
- Profile finishing: Standard milling F1
- Bending moments must be avoided

QV mounting kit		No.
Material: Steel; galvanized		10 3 842 146 972

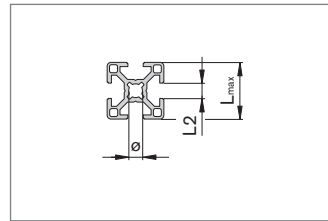
Technical data



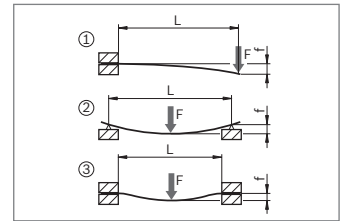
Standard profile finishing
(Quick & Easy) (p. 18-2)



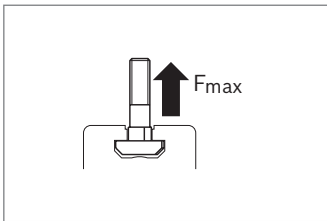
Individual profile finishing
(Quick & Easy) (p. 18-7)



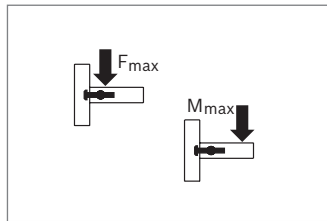
Technical data for strut
profiles (p. 18-12)



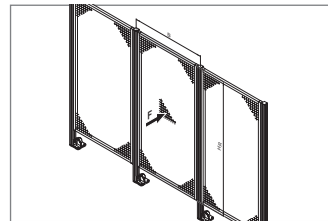
Profile deflection (p. 18-14)



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.

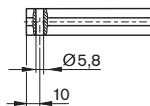
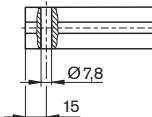
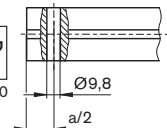
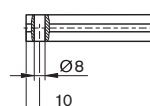
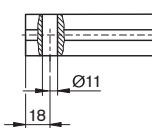
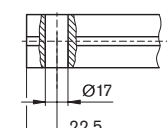
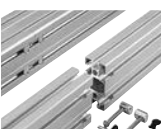
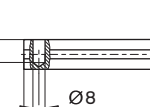
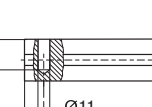
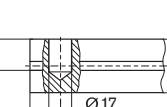
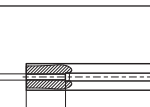
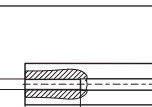
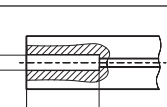
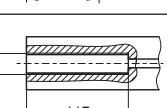
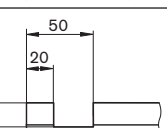
For information on slot designations and available standard profile finishing, please refer to chapter 2.

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  <table><tr><td>p</td><td>40</td><td>45</td><td>50</td><td>60</td></tr><tr><td>HT</td><td>31</td><td>34</td><td>36</td><td>41</td></tr></table>	p	40	45	50	60	HT	31	34	36	41
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 										



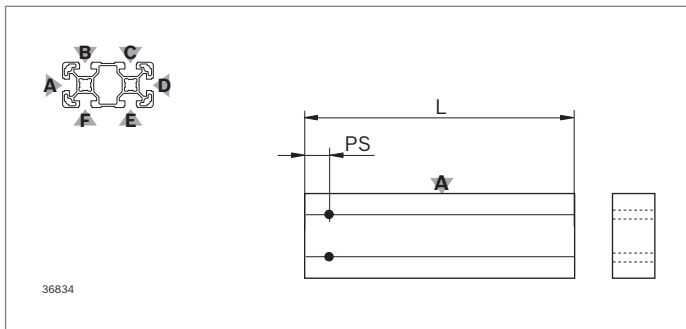
Through-hole Dx

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:

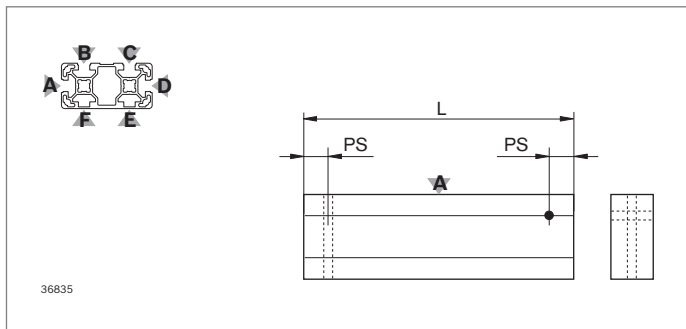
3 842 993 728 / 255 / B=D17/-; C=D17/-

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 /

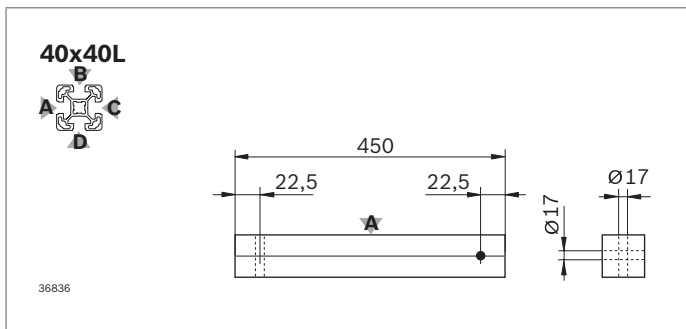
Slot B: Without finishing at profile start /

Through-hole D17 at profile end;

Slot D: Through-hole D17 at profile start / without finishing at profile end

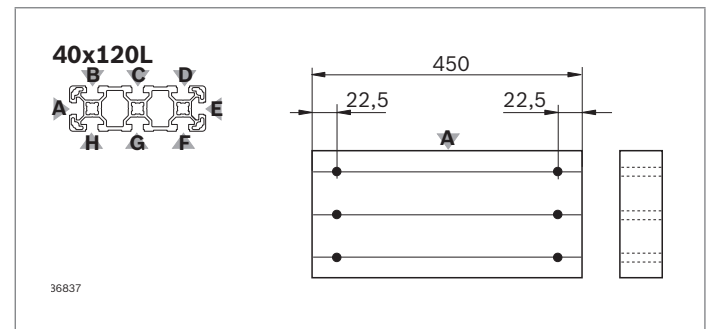
Fixed: PS = 22.5 mm (p. 18-2)

Other examples



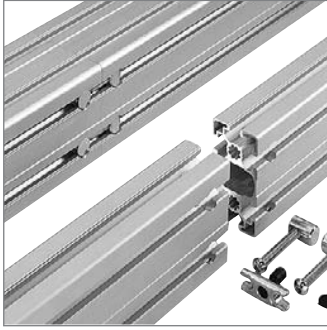
Example:

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:

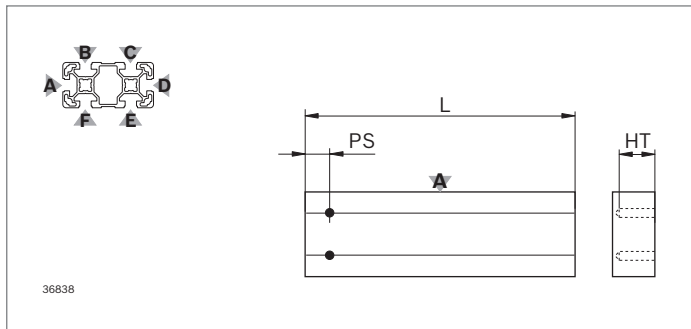
DB8; DB11; DB17 for quick connectors in closed profiles and longitudinal end connectors

Advantages:

In case of closed slots, the profile surface is not broken.

Fixed specifications:

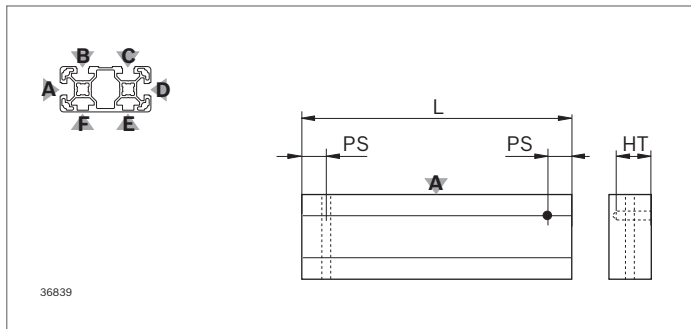
- ▶ Distance from profile end (PS)
- ▶ Depth of blind hole (HT)



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)



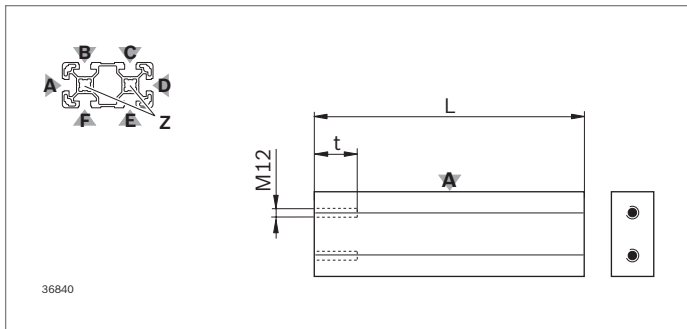
Thread Mx

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



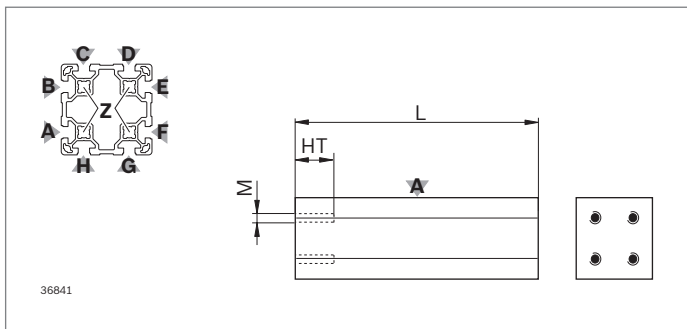
Example:

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:

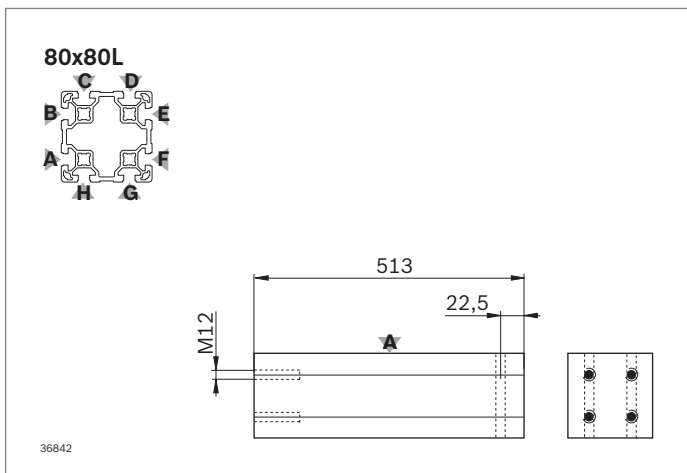
3 842 993 674 / 255 / Z=M12/-

Profile 80x80L / L = 255 mm /

Thread M12 in all core holes at profile start /
no finishing at profile end

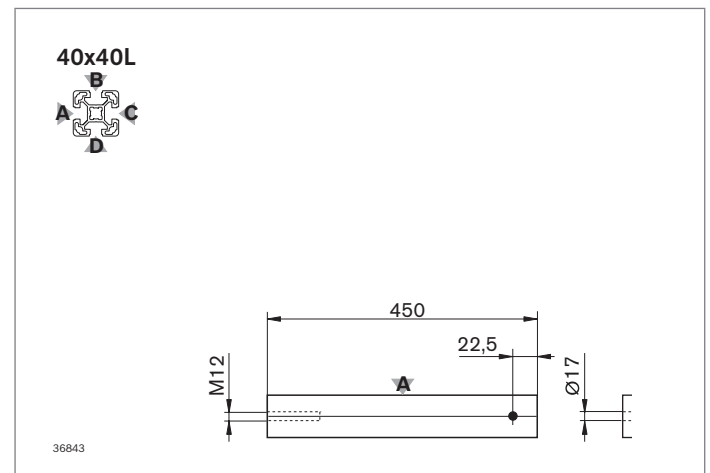
Fixed: Thread depth HT = 55 mm (p. 18-2)

Other examples



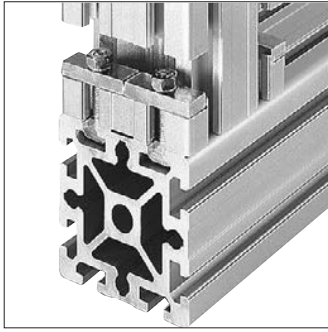
Example:

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)

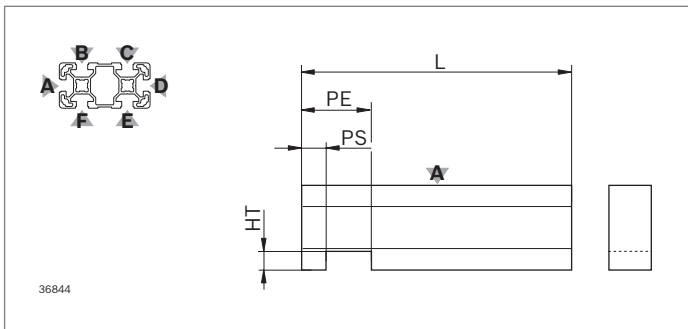
Example:

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:

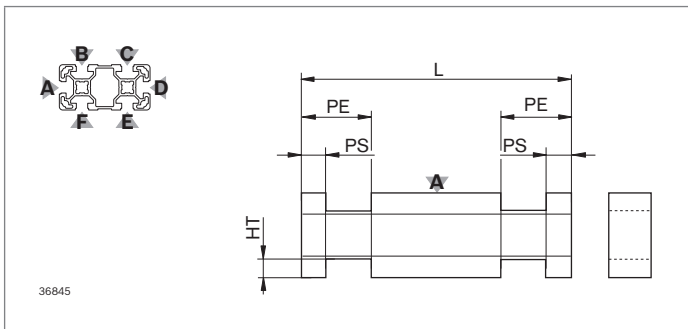
3 842 993 729 / 383 / A=F1/F1; D=F1/F1

Profile 40x80L 4N / L = 383 mm /

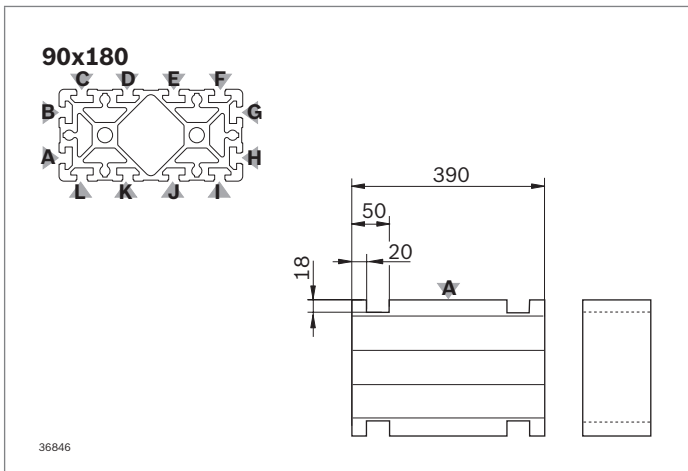
Slot A: Cross milling at profile start / cross milling at profile end

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)

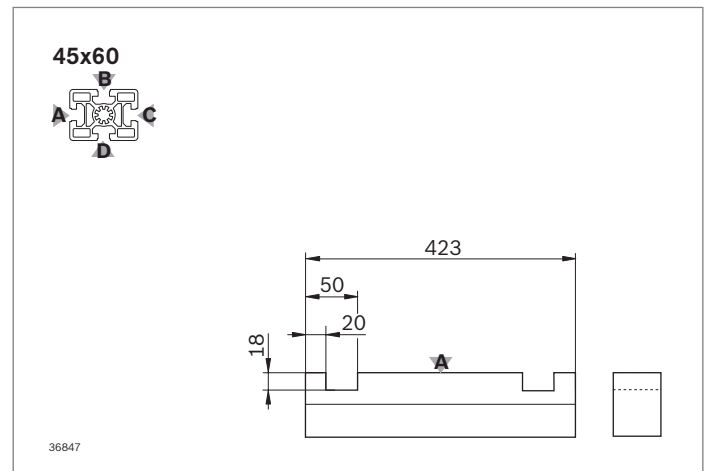


Other examples



Example:

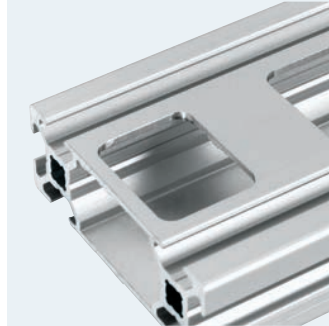
3 842 993 676 / 390 / A=F1/F1; G=F1/F1



Example:

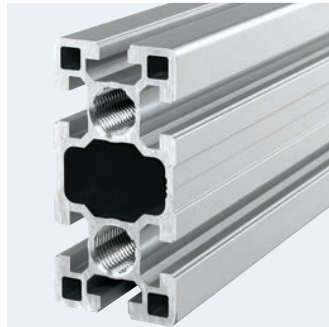
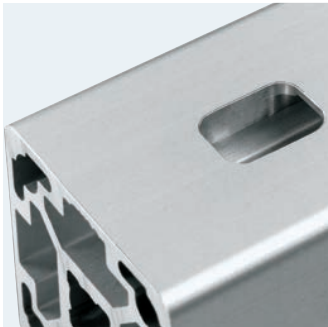
3 842 993 743 / 423 / A=F1/F1

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

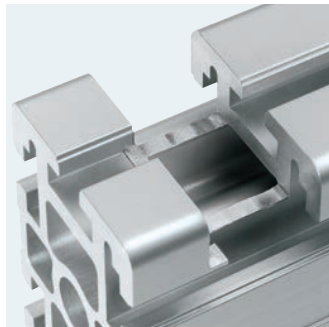


The following finishing options are available:

- ▶ Through-hole
- ▶ Blind holes
- ▶ Stepped drilling
- ▶ Cross milling (transversely to the longitudinal axis)
- ▶ Lengthwise milling (in longitudinal axis)
- ▶ Miter cuts

Notice:

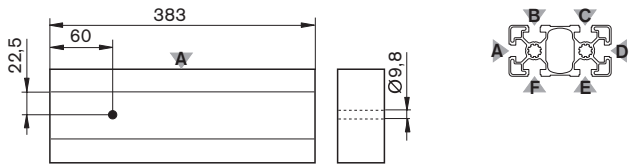
Depending on the selected finishing options, minimum and maximum lengths must be observed when ordering.



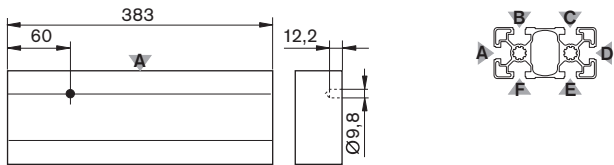


Oder examples for profile 45x90, L = 383 mm

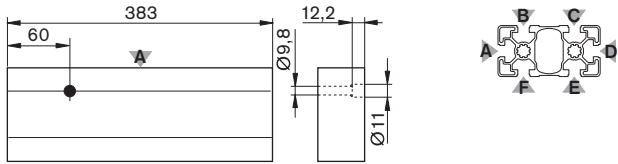
DI Through-hole next to the slot
3 842 993 661 / 383 / [B=DI; PS=60; OS=22.5; DM=9.8]



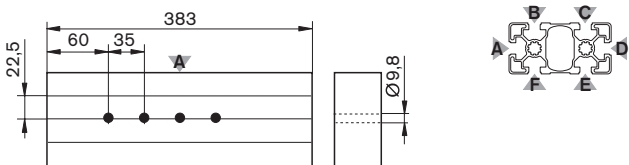
Blind hole
3 842 993 661 / 383 / [B=DI; PS=60; DM=9.8; HT=12.2]



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)

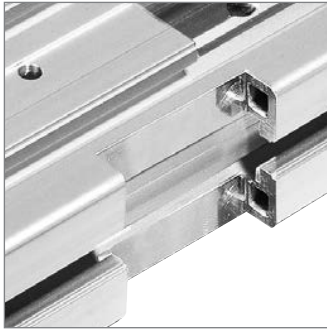
DM	5.8	6.4	7.8	8.0	8.4	9.8	11.0	17.0
HT _{max}	40.0	45.0	45.0	45.0	45.0	50.0	60.0	75.0

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})!

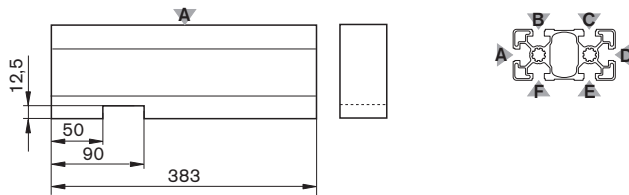
Cross milling sequence MTS

- Regular sequence of identical cross milling (**SN**, **SD**)
- Observe required minimum wall thickness (SD_{min})!

Order examples for profile 45x90, L = 383 mm

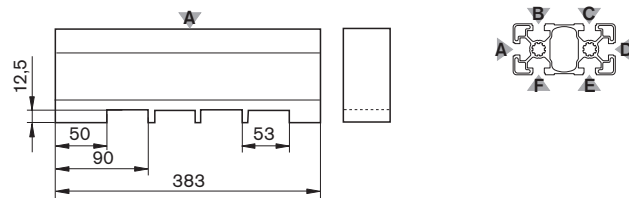
MT Cross milling on profile side slot D

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	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	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:

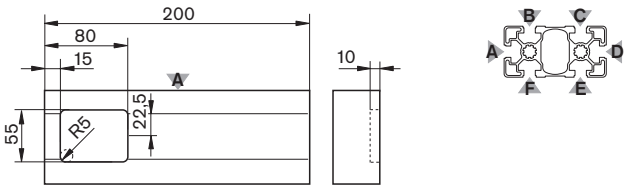
Material number / length / [slot designation=MT; PS=...; HT=...; PE=...]; [...]

Material number / length / [slot designation=MTS; PS=...; HT=...; PE=...; SN=...; SD=...]; [...]

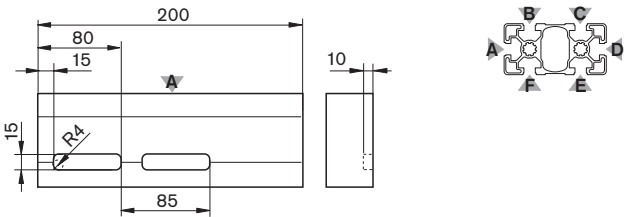


Oder examples for profile 45x90, L = 200 mm

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]



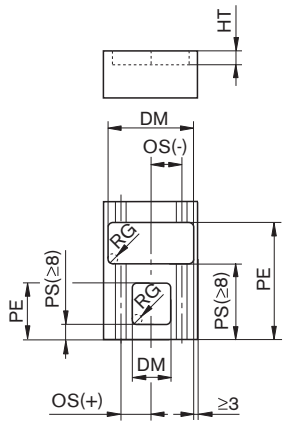
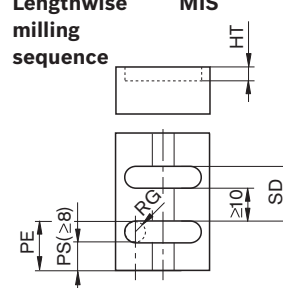
Lengthwise milling

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

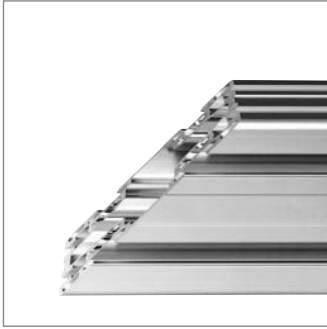
- ▶ Regular sequence of identical lengthwise milling (**SN, SD**)
- ▶ Observe required minimum wall thickness! (SD_{min})

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
		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 mm; 4 mm; 5 mm; 8 mm
Lengthwise milling sequence 	MIS	PS, OS, DM, HT, PE, RG As for lengthwise milling MI
		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

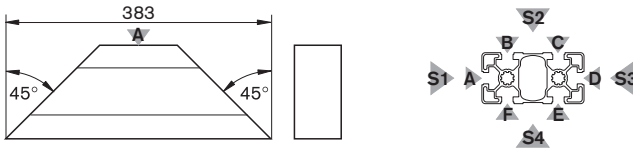
Miter cut

- ▶ 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

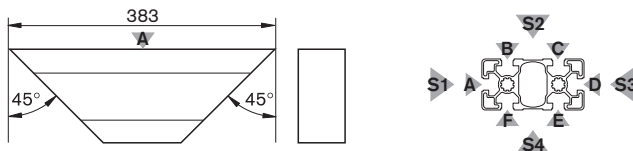
MT Miter cut on both sides through side S3 (side with slot D)

3 842 993 661 / 383 / [FS=S3; DG=45]; [BS=S3; DG=45]



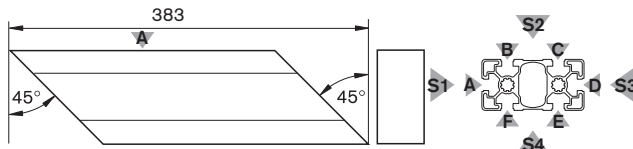
Miter cut on both sides through side S1 (side with slot A)

3 842 993 661 / 383 / [FS=S1; DG=45]; [BS=S1; DG=45]

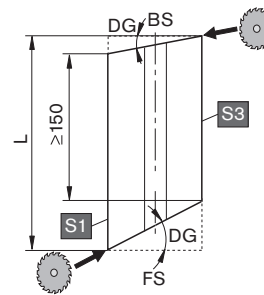


Miter cut on through side S1 (FS) and S3 (BS)

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]

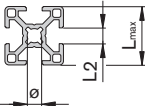
Technical data for strut profiles

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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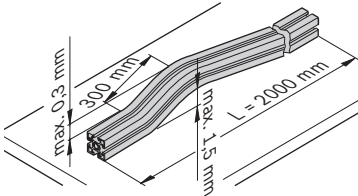
E6/EV1 – 12 μm – 300 HV	Anodizing process – layer thickness – layer hardness
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Permitted dimensional tolerance t (mm) for profiles from different deliveries				
L_{max}	11–20	22,5–30	40	45–60
t	±0.15	±0.2	+0.6	±0.3
L_{max}	80	90	120	160
t	+0.8	±0.4	+1.0	+1.6
L_{max}	180	270	360	
t	±0.6	±1.0	±1.5	
L2	6	8	10	
t	+0.3	+0.3	+0.4	
$\varnothing$	5.5	7.3	10	15
t	-0.1 +0.2	-0.1 +0.2	±0.15	±0.15

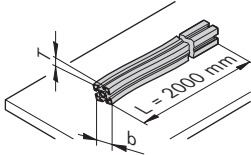


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Deviation limits and form tolerances according to DIN EN 12020-2
Rexroth profiles generally fall well within the generally applicable tolerances specified in the standard. They are specifically defined for the individual products.

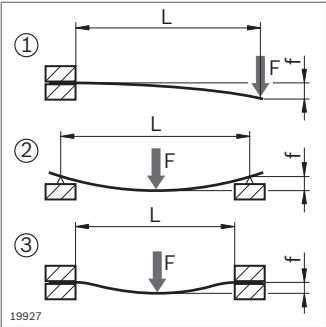
	Longitudinal straightness tolerance of profile
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Longitudinal torsional tolerance of profile	
b (mm)	T (mm)
≤ 100	1.2
100 ... 150	1.5
150 ... 200	1.8
200 ... 350	2.5



00126465

Profile deflection

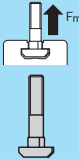
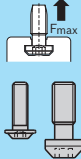
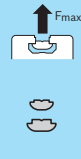
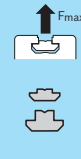
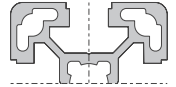
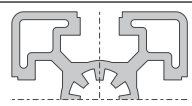
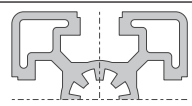
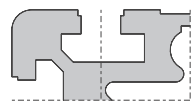
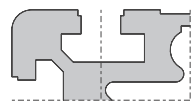


$f_{①} = \frac{F \times L^3}{3 E \times I \times 10^4}$ $f_{②} = \frac{F \times L^3}{48 E \times I \times 10^4}$ $f_{③} = \frac{F \times L^3}{192 E \times I \times 10^4}$	Profile deflection due to force F for static load cases ①②③
$f_{①} = \frac{m' \times g \times L^4}{8 E \times I \times 10^4}$ $f_{②} = \frac{5 \times m' \times g \times L^4}{384 E \times I \times 10^4}$ $f_{③} = \frac{m' \times g \times L^4}{384 E \times I \times 10^4}$	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**

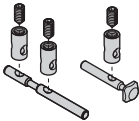
							
			T-bolt	T-nut	Central bolt	Swivel-in sliding block	Sliding block
		20x20, 20x20R 10x40 20x40, 20x60 20x40x40	1700 N	1700 N	2000 N	—	3000 N
		30x30, 30x30R 30x30°, 30x45°, 30x60° 11x20, 15x120 30x45, 30x60, 30x60x60 30x90, 30x120	4000 N	4000 N	5000 N	2200 N	6000 N
		90x90SL 40x40L, 40x40L R 40x30°, 40x45°, 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

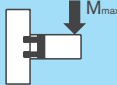
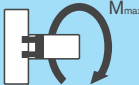
Load-bearing capacity of profile connection

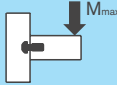
The specified tightening and loading limit values were determined as an example in (dry) trials. Safety factors and building regulations in accordance with the law and accepted engineering practices must be observed.

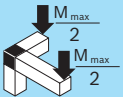
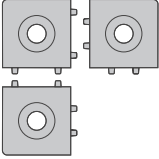
Static load limit values of the connection (beginning of plastic deformation)

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

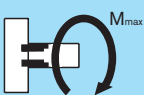
8 10		Slot			F_{max}	M_{max}	M_{max}	F_{max}	M_{max}
	Quick connector, bendable (p. 3-57)	30x30	8	↻ 12 Nm	1100 N	35 Nm	24 Nm	650 N	40 Nm
		40x40L	10	↻ 25 Nm	1500 N	110 Nm	100 Nm	1000 N	80 Nm
		45x45L	10	↻ 25 Nm	1500 N	120 Nm	110 Nm	1000 N	95 Nm
		45x45	10	↻ 25 Nm	1500 N	140 Nm	145 Nm	1100 N	180 Nm
		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
Central bolt (p. 3-41)	M12	10	↻	35 Nm	3000 N	80 Nm

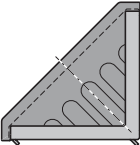
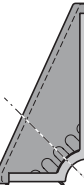
6 8 10		Slot			 	
	20/2	6		10 Nm	18 Nm	
	20/3	6		10 Nm		23 Nm
	30/2	8		25 Nm	80 Nm	
	30/3	8		25 Nm		85 Nm
	40/2	10		35 Nm	60 Nm	
	40/3	10		35 Nm		70 Nm
	45/2	10		35 Nm	45x45L	150 Nm
					45x45	200 Nm
	45/3	10		35 Nm	45x45L	170 Nm
					45x45	240 Nm
Cubic connector (p. 3-43)	50/2	10		35 Nm	120 Nm	
	50/3	10		35 Nm		140 Nm

		Profile		Slot				
								
	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) 5 Nm (M5)	3500 N	110 Nm	30 Nm
Tensioning connector (p. 3-12)		60x...	10		15 Nm	3500 N	195 Nm	60 Nm

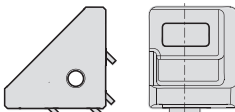
8 10		Slot					
		8 / 8		2.5 Nm (M4) 10 Nm (M8)	1000 N	35 Nm	15 Nm
		8 / 10		2.5 Nm (M4) 10 Nm (M8)	1000 N	35 Nm	15 Nm
	Slot connector (p. 3-13)	10 / 10		7 Nm (M6) 12 Nm (M10)	3000 N	110 Nm	30 Nm

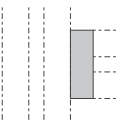
8 10		Slot				
		8 / 8		12 Nm	2200 N	50 Nm
		10 / 10		15 Nm	2800 N	100 Nm
Inner bracket (p. 3-14)						

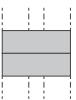
6 8 10			Slot			
		6 / 6		3 Nm	600 N	10 Nm
		8 / 8		12 Nm	2500 N	50 Nm
	Inner bracket R (p. 3-15)	10 / 10		15 Nm	3000 N	100 Nm

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

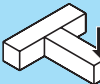
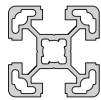
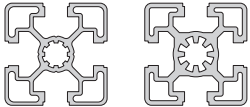
Bracket (p. 3-18)

				Slot		  			
				6	8	10			
	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		

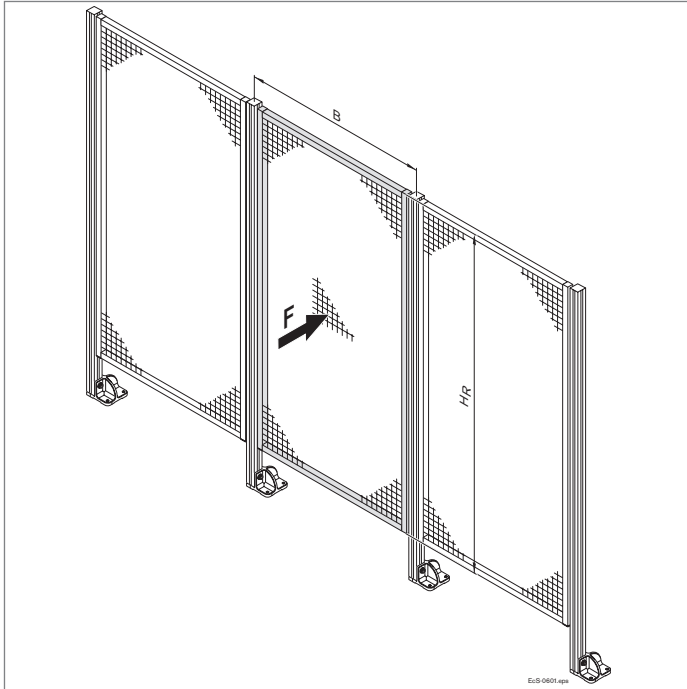
 		Slot		 	
	30x30	8	↻ 25 Nm (M8) / 5 Nm (M5)	4000 N	80 Nm
	40x40	10	↻ 35 Nm (S12) / 10 Nm (M6)	9000 N	150 Nm
	45x45	10	↻ 35 Nm (S12) / 10 Nm (M6)	9000 N	200 Nm
	50x50	10	↻ 35 Nm (S12) / 10 Nm (M6)	10000 N	170 Nm
T-connector (p. 3-51)					

 		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	28 Nm
				8 / 8	 12 Nm	600 N	37 Nm	28 Nm
	40x40		M12 S12	10	 30 Nm	1000 N	47 Nm	55 Nm
				10 / 10	 22 Nm	1000 N	47 Nm	55 Nm
	45x45		S12 M12	10	 35 Nm	1200 N	53 Nm	59 Nm
				10 / 10	 25 Nm	1200 N	53 Nm	59 Nm

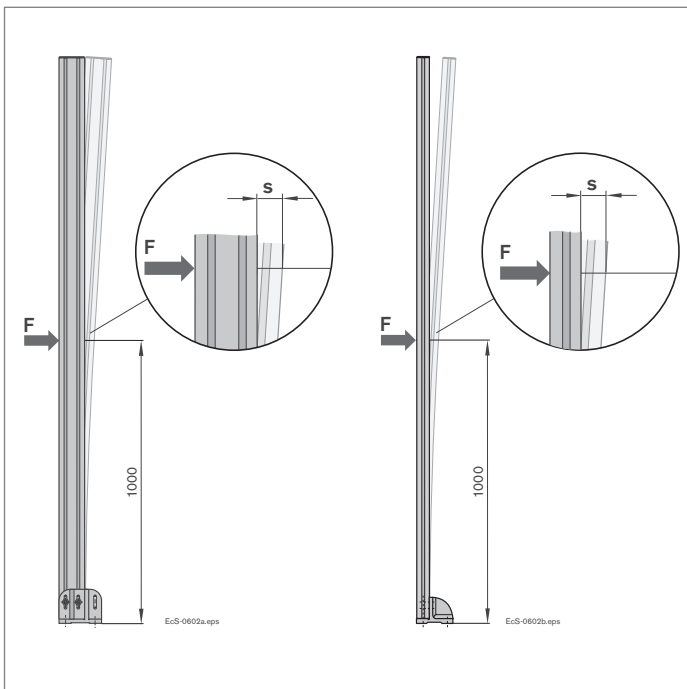
Load-bearing capacity data for EcoSafe protective frame and EcoSafe support



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

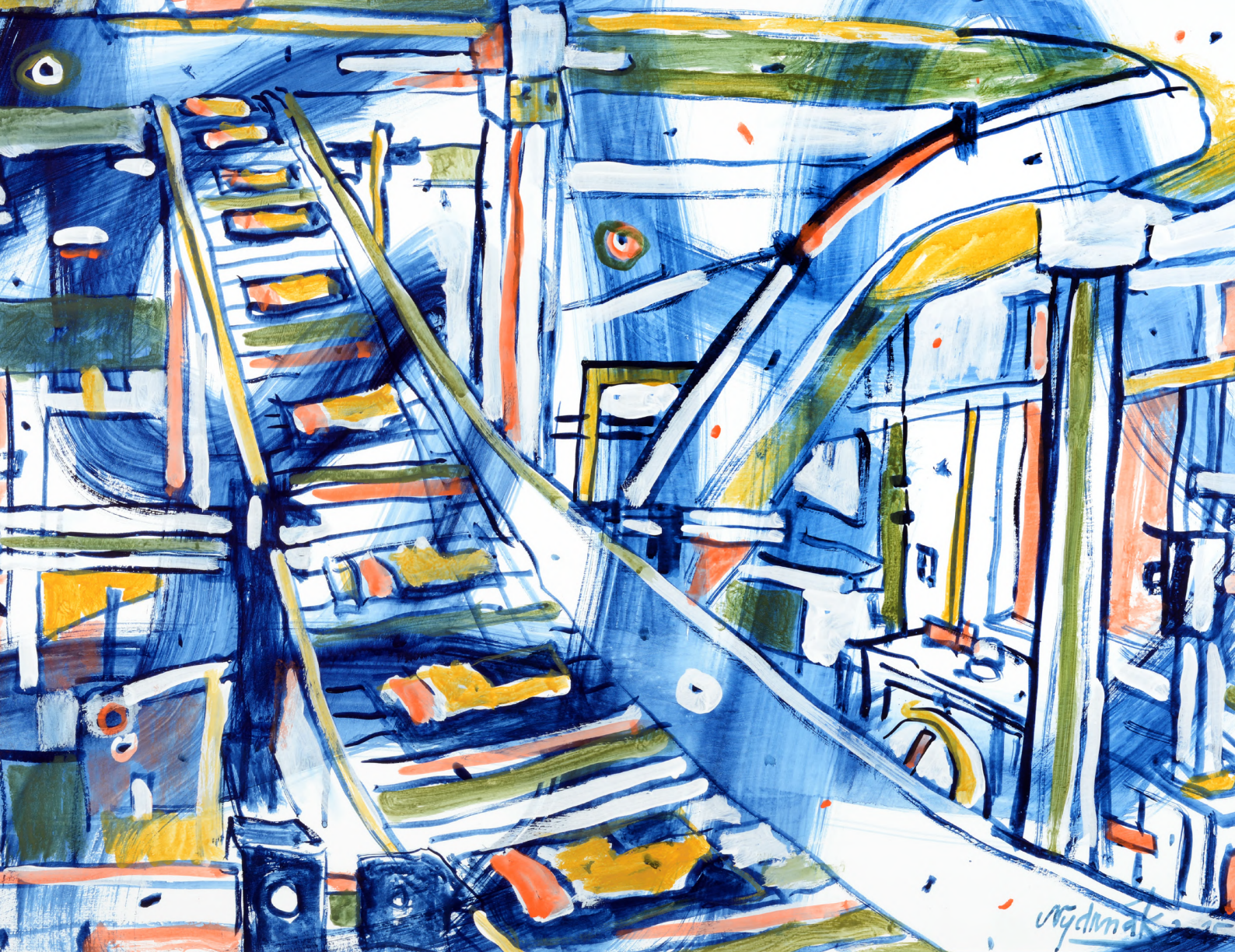
PRÍDTE SA K NÁM POZRIEŤ

**Ozvíte sa nám a prídeme spolu
na to, ako uľahčiť vašim ľuďom
aj tú najnáročnejšiu prácu.**



Michal Bučka
produktový manažér

KONTAKTY
mail: michal.bucka@mts.sk
tel.č.: +421 918 880 904



Sídlo spoločnosti:
MTS, spol. s r.o.
027 55 Krivá 53
Slovak Republic

+421 43 5502 111
mts@mts.sk

www.mts.sk