

Section 3: Profile Connectors

Overview

One of the greatest strengths of the Bosch Rexroth structural aluminum framing system is the wide choice of connection methods, and the ability to provide the right connection regardless of whether your concern is strength, flexibility, or aesthetics, or a combination of all those advantages.

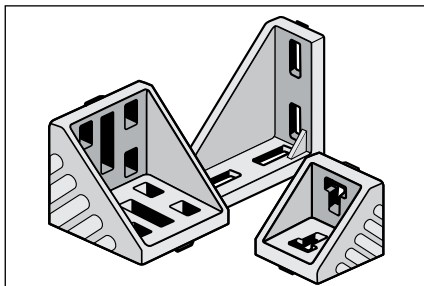
New! *designLINE* - quality and performance with appeal

Need a way to make your already appealing structures even more attractive? Do you value an attractive design? Then look for the new *designLINE* versions of our standard connectors throughout this section.

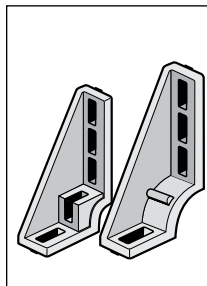
A new surface treatment with special silver paint ensures that *designLINE* components seamlessly match the aluminum frame. The paint is scratch proof, preserving the connector's ESD compatibility.

For added convenience all *designLINE* connectors are available as a kit with fasteners and caps (where provided).

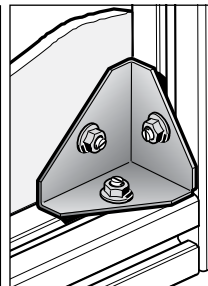
90° Right Angle Connectors



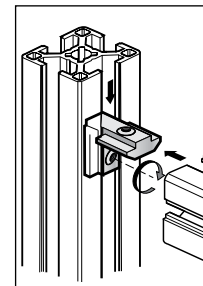
Die-Cast Gussets
 20-Series 3-3 • 30-Series 3-4
 40-Series 3-5 • 45-Series 3-6
 50-Series 3-7 • 60-Series 3-8
 80-Series 3-8 • 90-Series 3-9
 100-Series 3-9



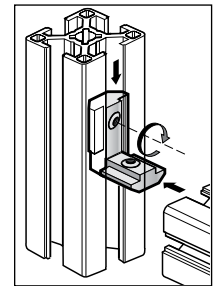
Die-Cast Foundation Brackets
 3-10 & 3-11



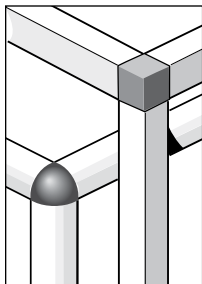
42x60 Sheet Metal Gusset
 3-12



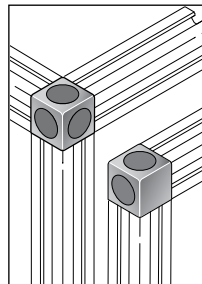
Inside-to-Outside Gussets
 3-12



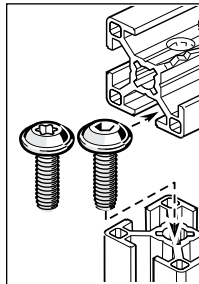
Inside-to-Inside Gussets
 3-13



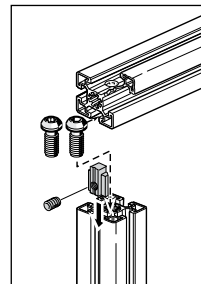
Corner Brackets
 3-14



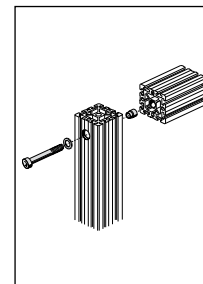
Corner Cube Kits
 3-15



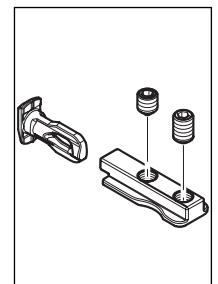
S6, S8, & S12 Self-Tapping Connection Screws
 3-16



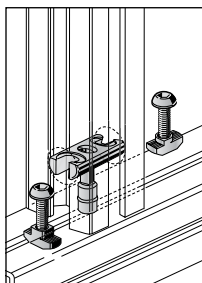
M12 Connection Screws and Anti-Rotation T-Blocks
 3-17



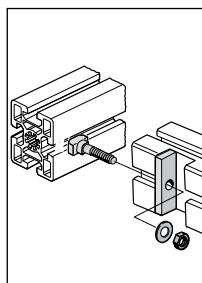
M16 Connection Screw
 3-18



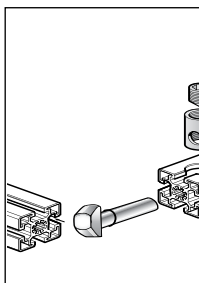
Tension Connector
 3-18



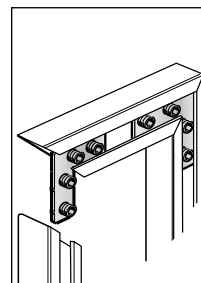
Bolt Connector Kits
 3-19 & 3-20



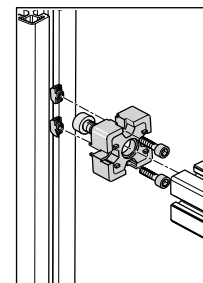
Cross Connector Kit
 3-20



Quick Connectors/Rigid
 3-21



Mitered Corner Connectors
 3-22

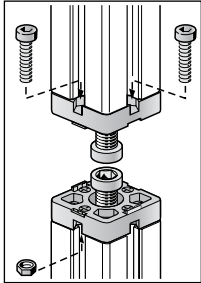


T-Connector Kits
 3-23

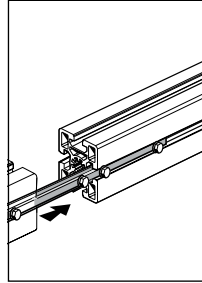
Section 3: Profile Connectors

3

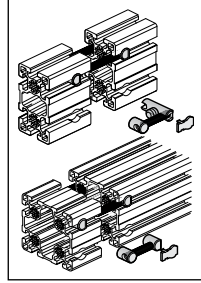
45° Angle Connectors



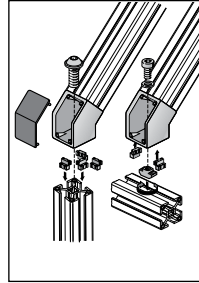
End Connector
Kits
3-24



8mm & 10mm
Connection Link
Kits
3-25

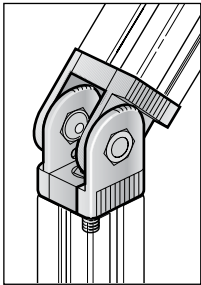


End-to-End Bolt
Connector Kits
3-25

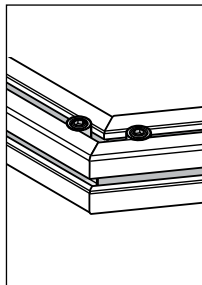


45° Angle Con-
nector
Kits – 30mm,
40mm & 45mm
3-26 & 3-27

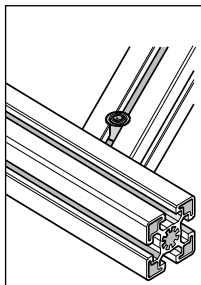
Multi-Angle Connectors



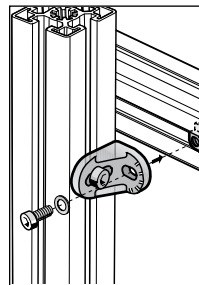
Multi-Angle Con-
nector Kits
3-28 & 3-29



End-to-End Vari-
able Angle Bolt
Connector
3-30

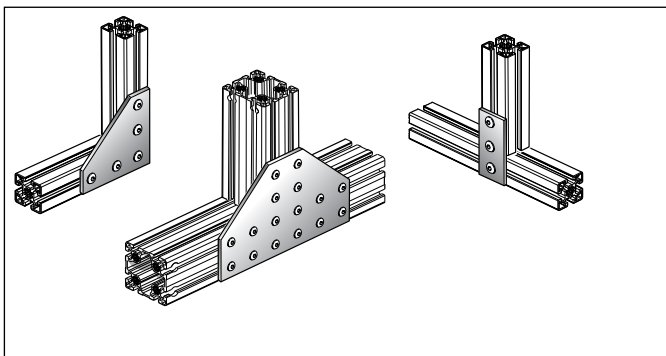


End-to-Side Vari-
able Angle Bolt
Connector
3-31



Adjustable Angle
Gusset Kits
3-32

Joining Plates



Corner, T-Junction, Rectangular, and
Cross Junction Joining Plates
3-33 to 3-35

Section 3: Profile Connectors

Die-Cast Gussets and Foundation Brackets

Die-cast aluminum gussets are available for connecting a wide range of profile sizes and applications, from 20x20 to 100x100, as well as special "foundation bracket" sizes such as 30x120 and 45x180. Elongated holes allow gussets to be adjusted for position on the profile, while guide tabs assure proper alignment of gusset in the profile's T-slot. Tabs can be easily removed with a flat-tip screwdriver for cross-connection of profiles. All gussets are designed to accept optional cover caps.

Features:

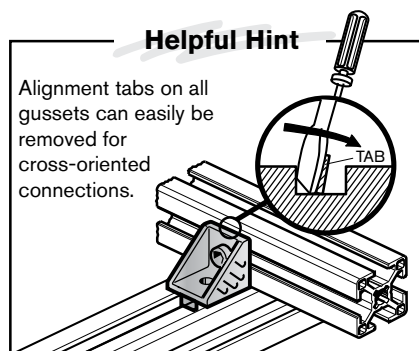
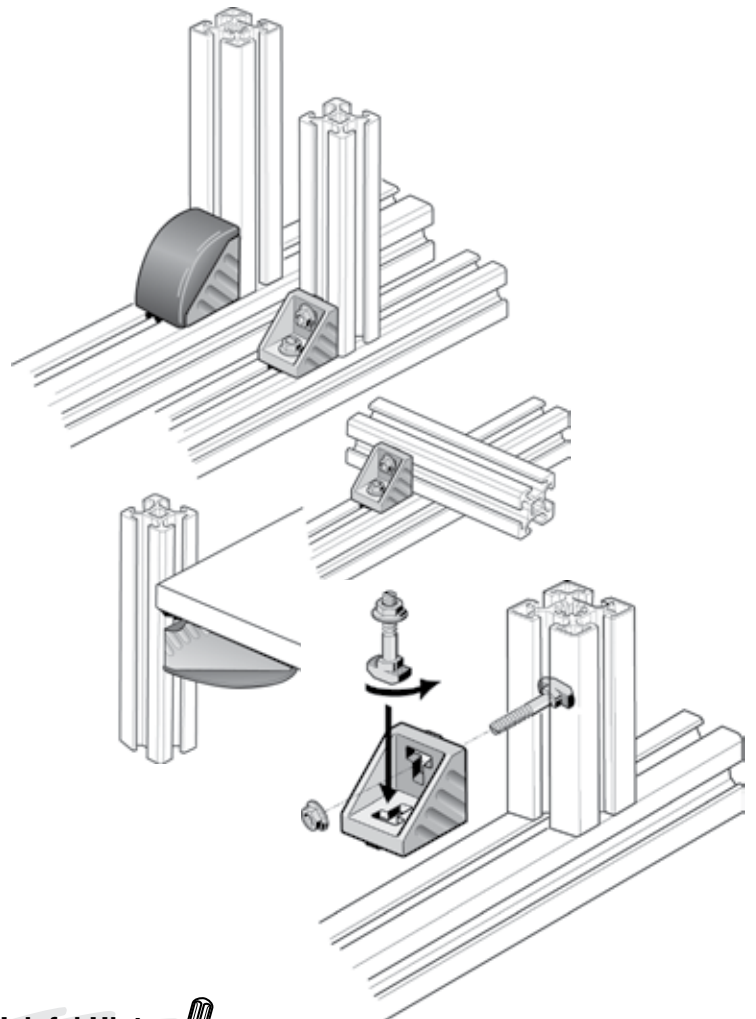
- T-slot alignment tabs for easy positioning and reduced assembly time
- Clean, professional appearance
- Connects anywhere on the profile's T-slot
- Gusset and connecting hardware available as separate components
- Close tolerances on gusset edges provide flush, tight fit
- Alignment tabs can easily be removed for cross-oriented connections
- Optional cover caps available

Machining required:

- None

Material:

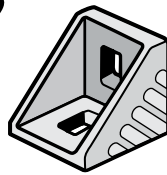
- Gusset: die-cast aluminum
- Fasteners: zinc-plated steel
- Cover cap: black polyamide 6



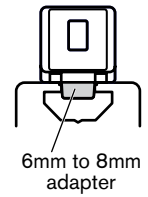
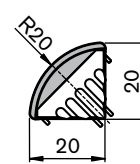
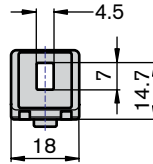
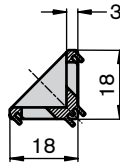
Section 3: Profile Connectors


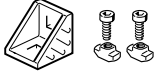


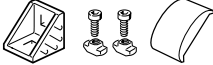
20x20 Gusset *GoTo*

6 8



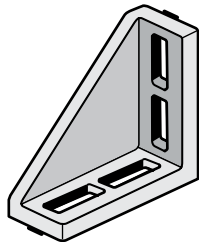
M4 x 8



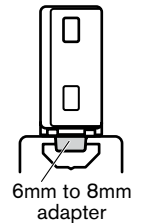
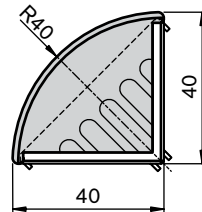
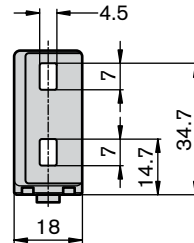
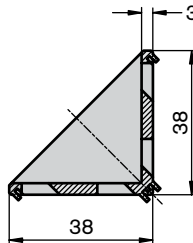
Description	Lot Size	Part Number
20x20 gusset only 	1	3 842 523 508 <i>GoTo</i>
6 20x20 gusset with fasteners 	1	3 842 523 511 <i>GoTo</i>
20x20 round cover cap 	1	3 842 523 513
6 → 8 Plastic adapter 	1	3 842 523 516
20X20 gusset kit with fastener (includes cover cap) designLINE 	1	3 842 538 707


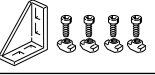



20x40 Gusset

6 8



M4 x 8



Description	Lot Size	Part Number
20x40 gusset only 	1	3 842 523 517
6 20x40 gusset with fasteners 	1	3 842 523 520
20x40 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 708
20x40 round cover cap 	1	3 842 523 522
6 → 8 Plastic adapter 	1	3 842 523 516

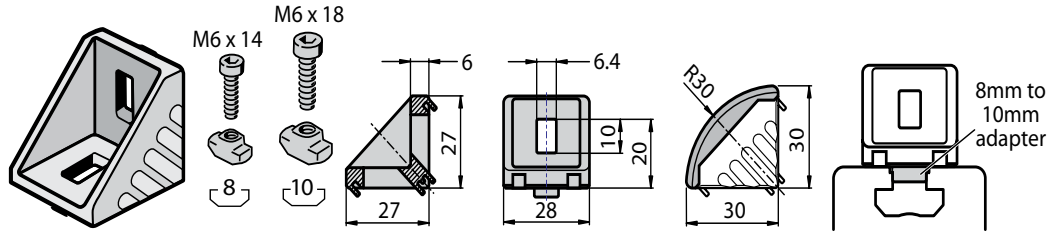
GoTo boschrexroth-us.com/framing to get these in stock items **FAST** from your local distributor

Section 3: Profile Connectors

Gussets


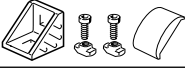
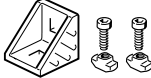
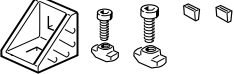
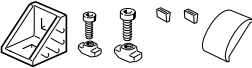



30x30 Gusset *GoTo*

8 10



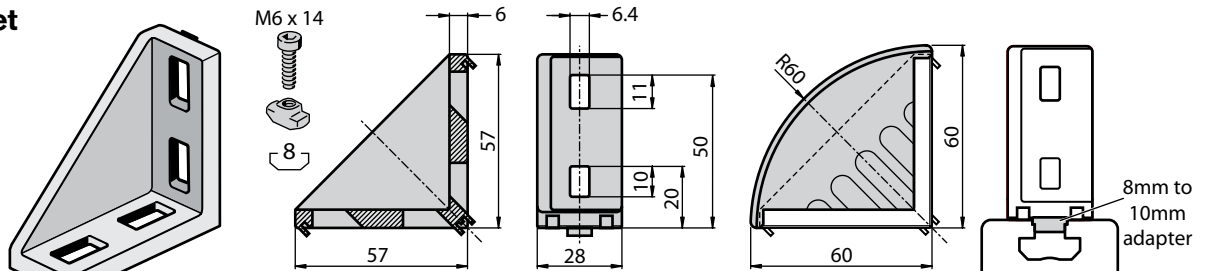
Description

Lot Size Part Number

30x30 gusset only 	1	3 842 523 525 <i>GoTo</i>
30x30 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 709
30x30 gusset with fasteners 	1	3 842 523 528 <i>GoTo</i>
30x30 gusset with fasteners 	1	3 842 523 530 <i>GoTo</i>
30x30 gusset kit (includes cover cap) designLINE 	1	3 842 538 711
30x30 gusset with fasteners for 10mm T-slots	1	3 842 523 532
30x30 gusset kit with fasteners for 10mm T-slots (includes cover cap) designLINE 	1	3 842 538 710
30x30 round cover cap 	1	3 842 523 534
Plastic adapter 	1	3 842 523 537


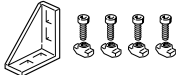



30x60 Gusset

8 10



Description

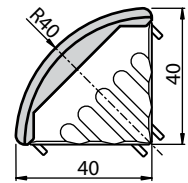
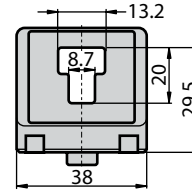
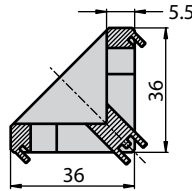
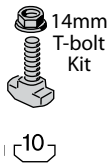
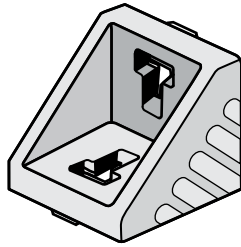
Lot Size Part Number

30x60 gusset only 	1	3 842 523 538
30x60 gusset with fasteners 	1	3 842 523 541
30x60 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 712
30x60 round cover cap 	1	3 842 523 543
Plastic adapter 	1	3 842 523 537

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40x40 Gusset



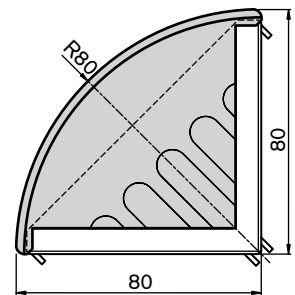
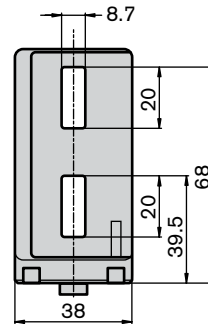
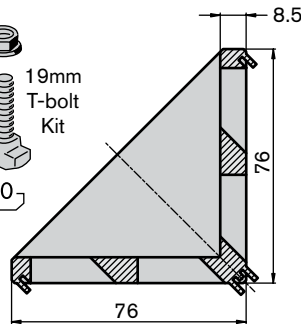
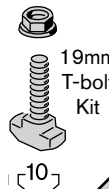
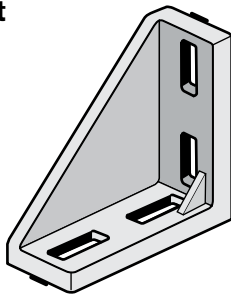
Description

Lot Size

Part Number

40x40 gusset only 	1	3 842 528 967
40x40 gusset with fasteners 	1	3 842 529 383
40x40 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 716
40x40 round cover cap 	1	3 842 529 007


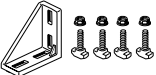
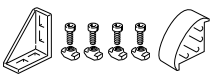

40x80 Gusset



Description

Lot Size

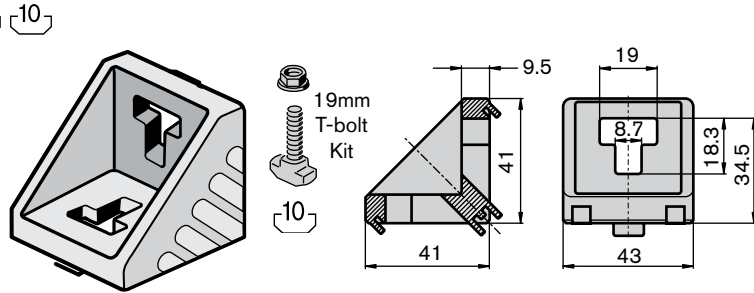
Part Number

40x80 gusset only 	1	3 842 529 005
40x80 gusset with fasteners 	1	3 842 529 386
40x80 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 717
40x80 round cover cap 	1	3 842 529 008

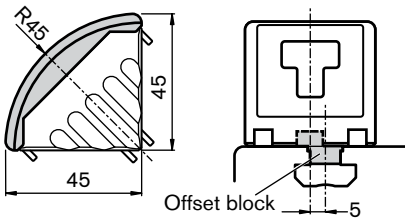
Section 3: Profile Connectors


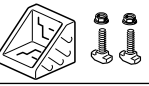
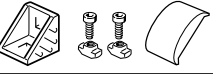


Gussets

45x45 Gusset *GoTo*

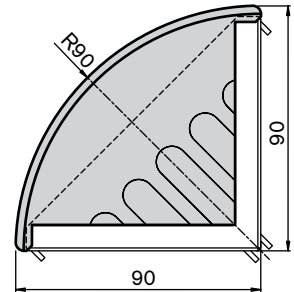
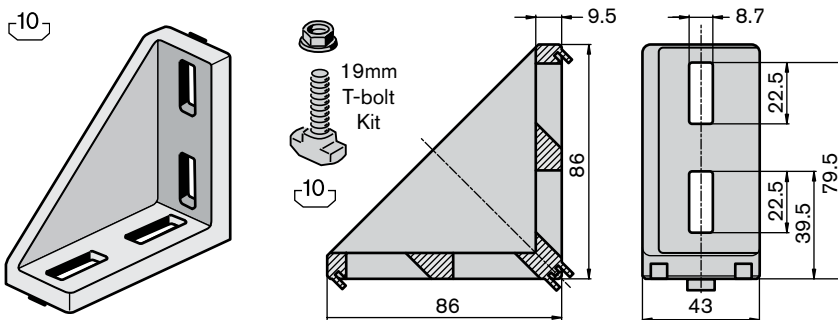



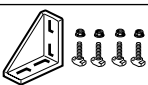
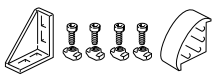

When connecting two profiles with 60mm side dimensions, order offset blocks to help align gusset with outer edge of profiles.



Description	Lot Size	Part Number
45x45 gusset only 	1	3 842 523 558 <i>GoTo</i>
45x45 gusset with fasteners 	1	3 842 523 561 <i>GoTo</i>
45x45 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 719
45x45 round cover cap 	1	3 842 523 563 <i>GoTo</i>
Offset block 10mm T-slot-5mm offset 	1	3 842 523 593

45x90 Gusset

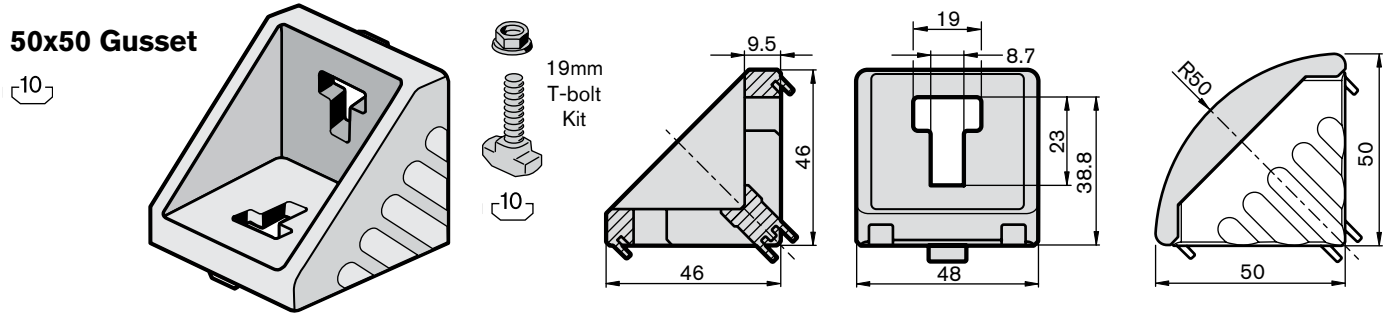



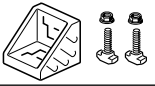


Description	Lot Size	Part Number
45x90 gusset only 	1	3 842 523 567 <i>GoTo</i>
45x90 gusset with fasteners 	1	3 842 523 570 <i>GoTo</i>
45x90 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 720
45x90 round cover cap 	1	3 842 523 572

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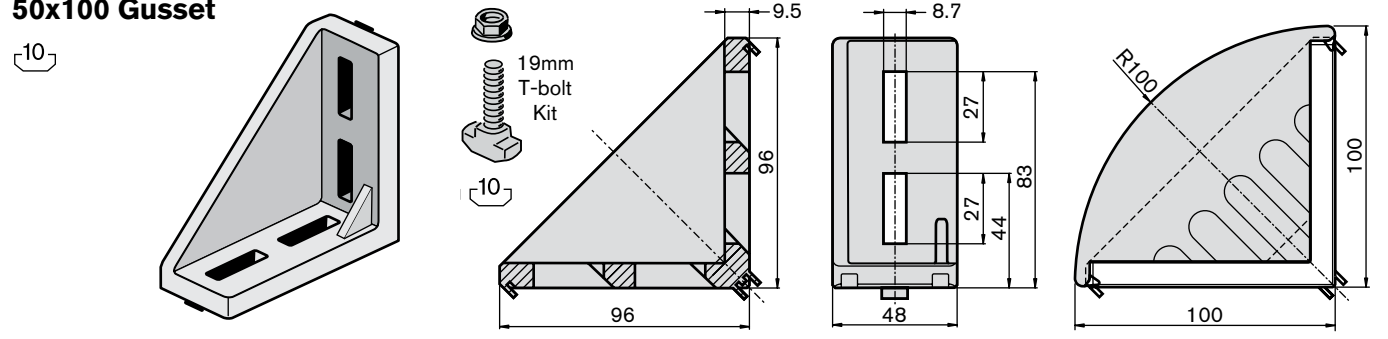
Section 3: Profile Connectors


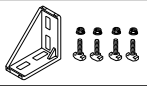
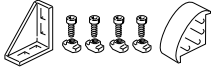

50x50 Gusset



Description	Lot Size	Part Number
50x50 gusset only 	1	3 842 530 381
50x50 gusset with fasteners 	1	3 842 530 259
50x50 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 722
50x50 round cover cap 	1	3 842 530 383

50x100 Gusset



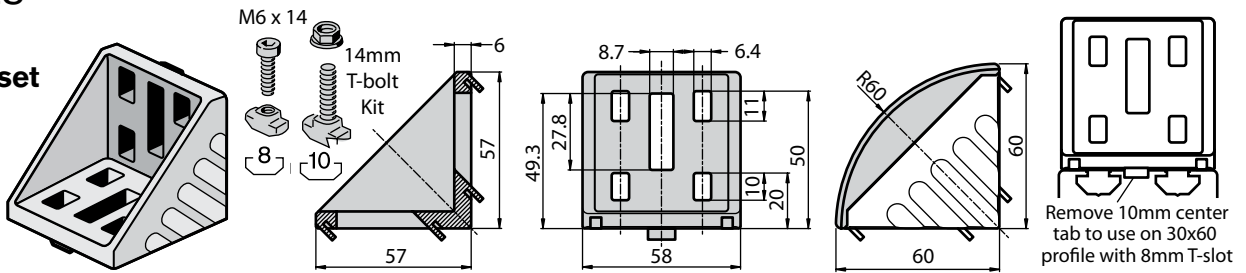
Description	Lot Size	Part Number
50x100 gusset only 	1	3 842 530 382
50x100 gusset with fasteners 	1	3 842 530 260
50x100 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 723
50x100 round cover cap 	1	3 842 530 384





















Section 3: Profile Connectors

Gussets

60x60 Gusset

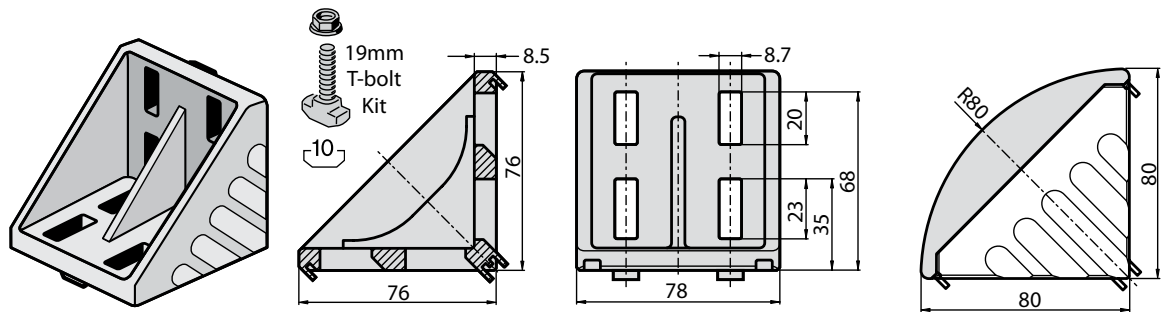
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






Description	Lot Size	Part Number
60x60 gusset only 	1	3 842 523 546 GoTo
60x60 gusset with fasteners for   	1	3 842 523 549
60x60 gusset kit with fasteners (includes cover cap) designLINE   	1	3 842 538 713
60x60 gusset with fasteners for   	1	3 842 523 551
60x60 gusset kit with fasteners (includes cover cap) designLINE   	1	3 842 538 714
60x60 gusset with fasteners for   	1	3 842 523 553
60x60 gusset kit with fasteners (includes cover cap) designLINE   	1	3 842 538 715
60x60 round cover cap 	1	3 842 523 555

80x80 Gusset



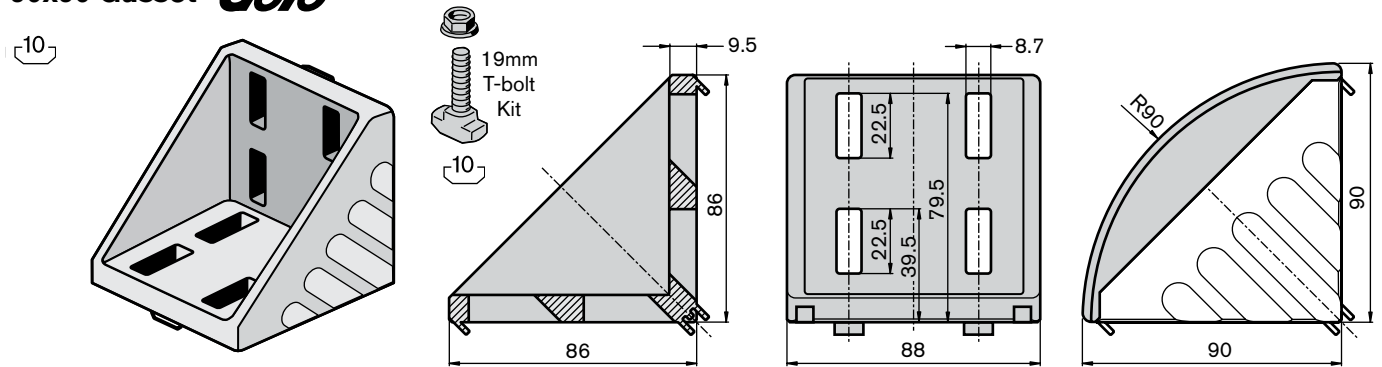



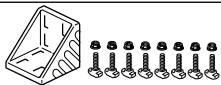


Description	Lot Size	Part Number
80x80 gusset only 	1	3 842 530 231
80x80 gusset kit with fasteners (includes cover cap) designLINE   	1	3 842 538 718
80x80 gusset with fasteners   	1	3 842 530 360
80x80 round cover cap  	1	3 842 530 232

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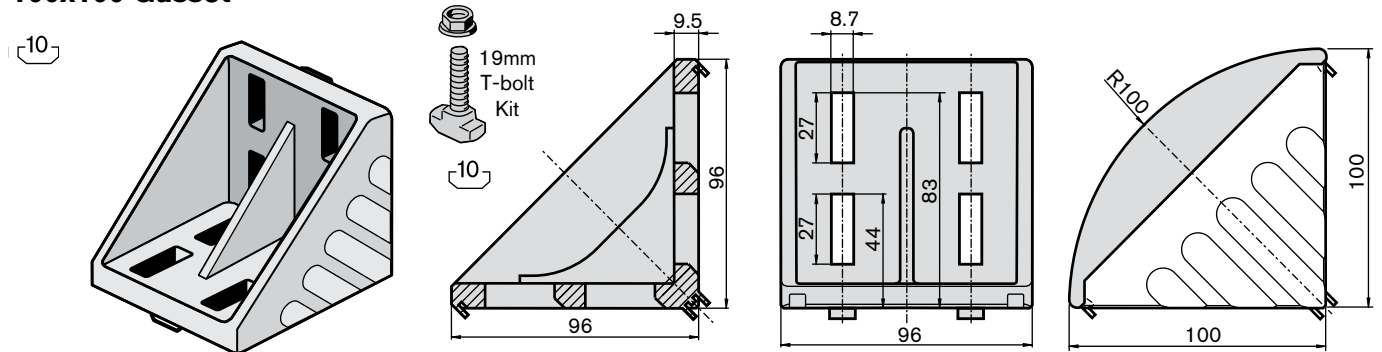
Section 3: Profile Connectors


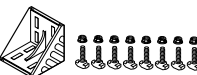


90x90 Gusset **GoTo**



Description	Lot Size	Part Number
90x90 gusset only 	1	3 842 523 575 GoTo
90x90 gusset with fasteners 	1	3 842 523 578 GoTo
90x90 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 721
90x90 round cover cap 	1	3 842 523 580

100x100 Gusset



Description	Lot Size	Part Number
100x100 gusset only 	1	3 842 530 460
100x100 gusset with fasteners 	1	3 842 530 361
100x100 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 724
100x100 round cover cap 	1	3 842 530 461

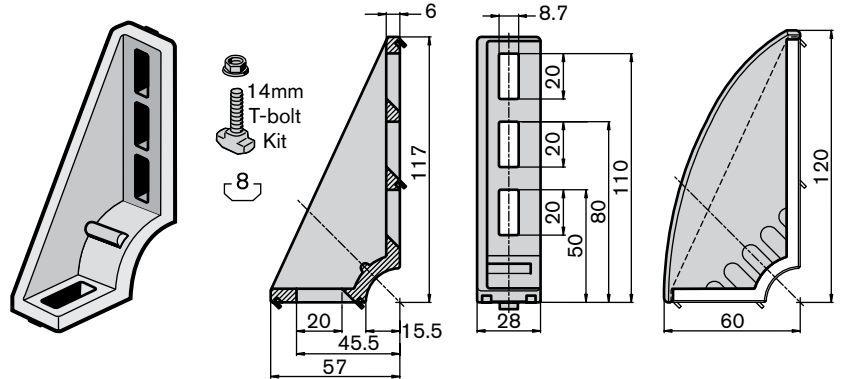
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Section 3: Profile Connectors

Die-Cast Foundation Brackets

30x120 Foundation Bracket

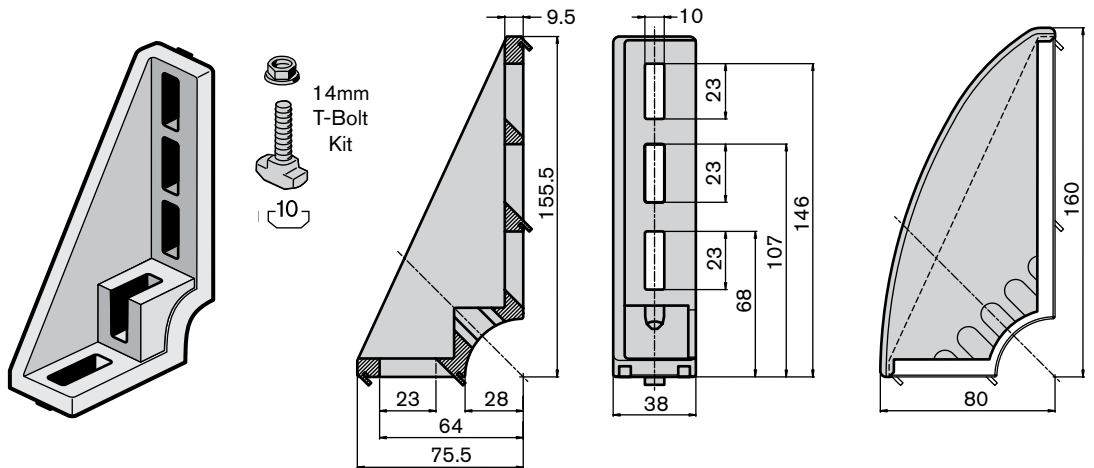
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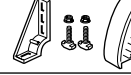



Description	Lot Size	Part Number
30x120 foundation bracket only 	1	3 842 523 587
30x120 foundation bracket with fasteners 	1	8 981 021 023
30x120 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 748
30x120 round cover cap 	1	3 842 523 589

40x160 Foundation Bracket

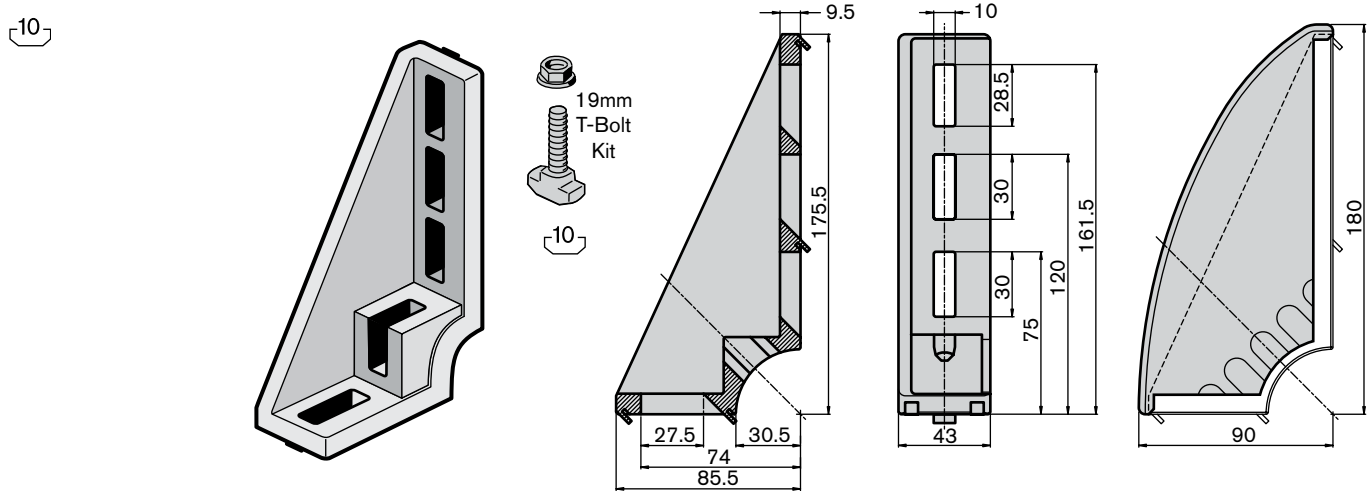
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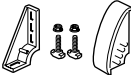



Description	Lot Size	Part Number
40x160 foundation bracket only 	1	3 842 529 006
40x160 foundation bracket with fasteners 	1	8 981 021 348
40x160 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 749
40x160 round cover cap 	1	3 842 529 009

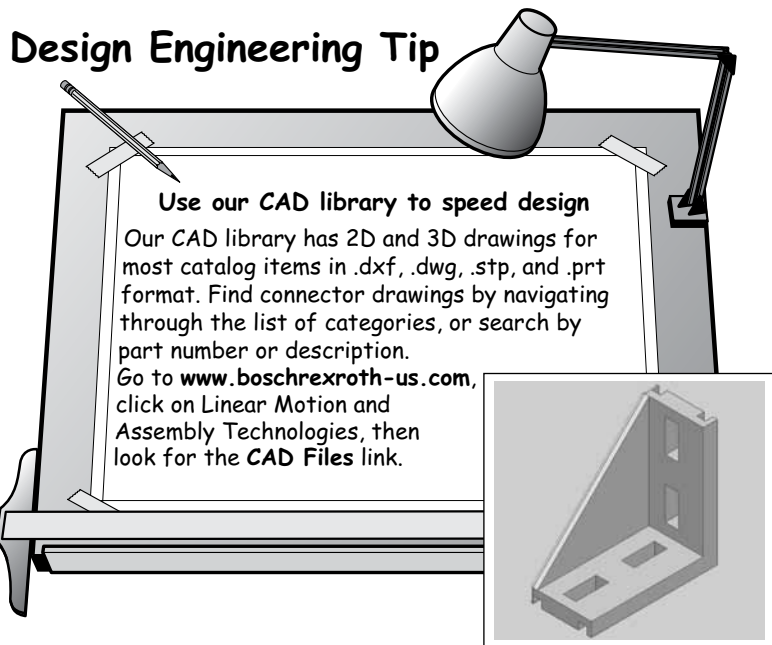
Section 3: Profile Connectors

45x180 Foundation Bracket



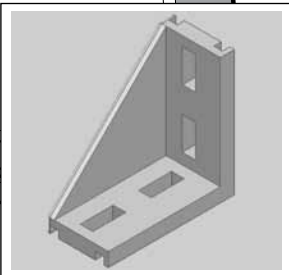
Description	Lot Size	Part Number
45x180 foundation bracket only 	1	3 842 523 583
45x180 foundation bracket with fasteners 	1	3 842 527 535
45x180 gusset kit with fasteners (includes cover cap) designLINE 	1	3 842 538 750
45x180 round cover cap 	1	3 842 523 585

Design Engineering Tip



Use our CAD library to speed design

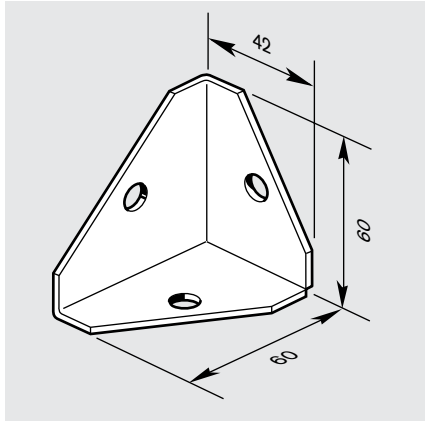
Our CAD library has 2D and 3D drawings for most catalog items in .dxf, .dwg, .stp, and .prt format. Find connector drawings by navigating through the list of categories, or search by part number or description. Go to www.boschrexroth-us.com, click on Linear Motion and Assembly Technologies, then look for the **CAD Files** link.



Section 3: Profile Connectors

Other 90° Right-Angle Connectors

Sheet Metal Gusset—42x60 10

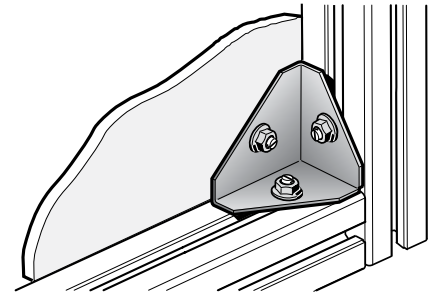


Features:

- Used with 45-series profile to create a right-angle connection
- Hole in side can be used for attaching panels, tabletops, etc.

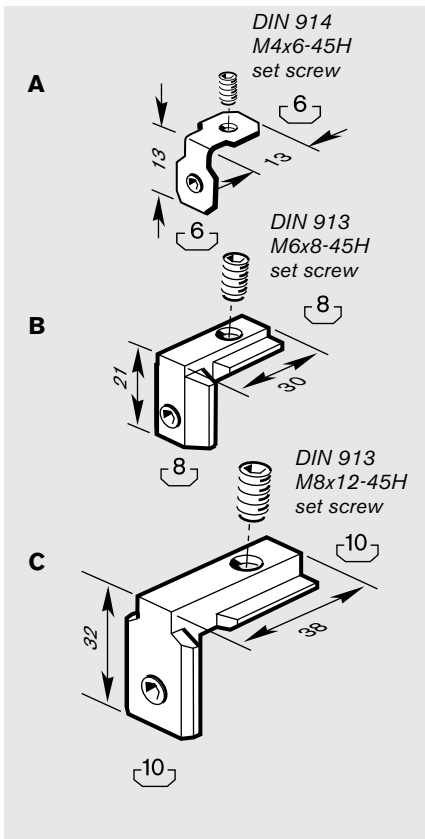
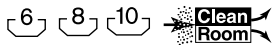
Material:

- Zinc-plated sheet steel



Description	Lot Size	Part Number
42x60 sheet metal gusset	1	3 842 146 813

6mm, 8mm, & 10mm Inside-to-Outside Gussets

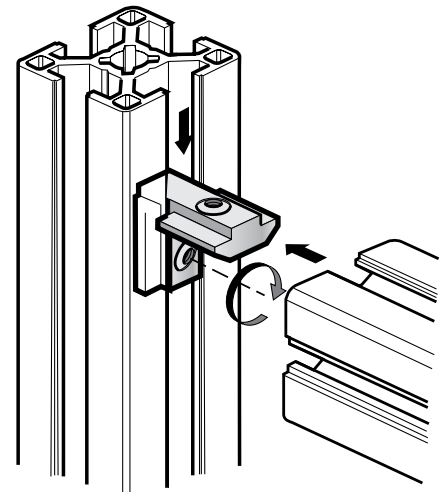
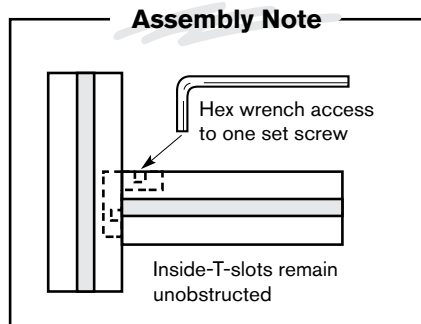


Features:

- Clean appearance
- Easy set screw installation
- Does not obstruct T-slot
- Includes set screws

Material:

- Die-cast brass



Description	Lot Size*	Part Number
A 6mm inside-to-outside gusset and set screws 6→6	10	3 842 535 574
B 8mm inside-to-outside gusset and set screws 8→8	10	3 842 535 578
C 10mm inside-to-outside gusset and set screws 10→10	10	3 842 535 572

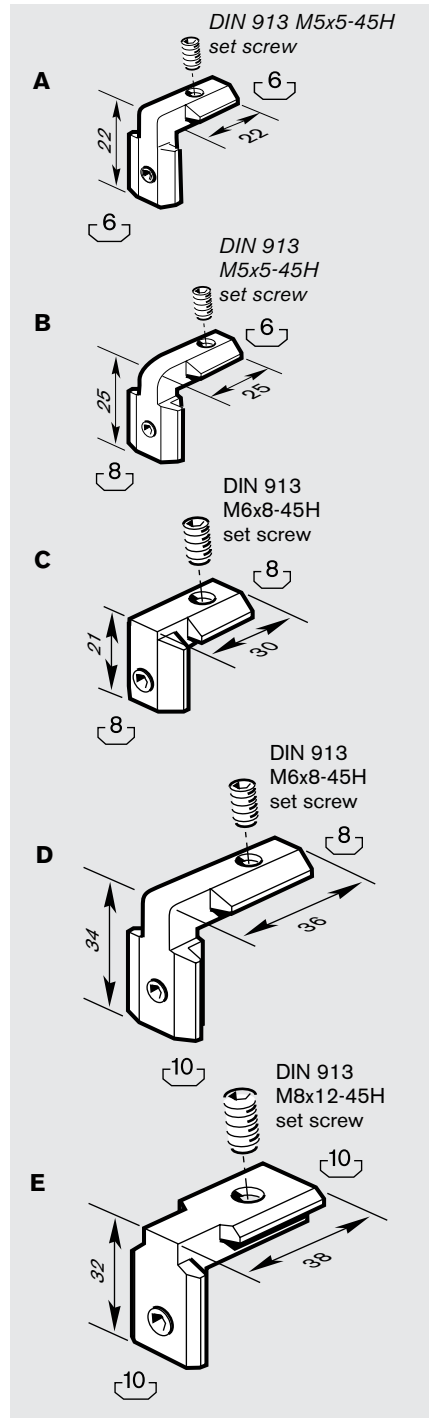
* For smaller quantities, please contact your local distributor.

Section 3: Profile Connectors

6mm, 8mm, & 10mm Inside-to-Inside Gussets



3

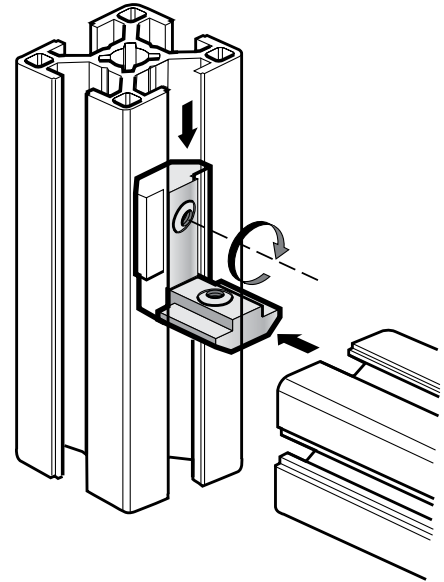
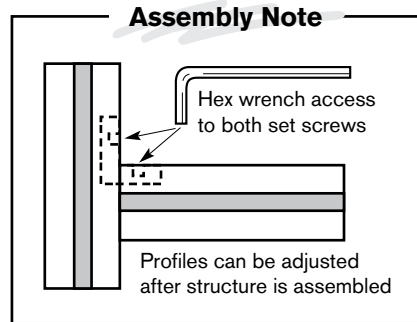


Features:

- Clean appearance
- Easy set screw installation
- Includes set screws

Material:

- Die-cast brass



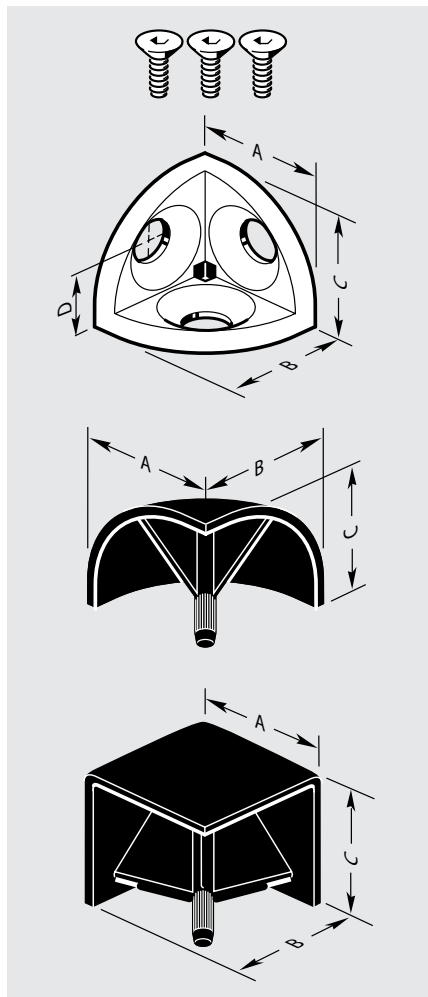
Description	Lot Size*	Part Number
A 6mm inside-to-inside gusset and set screws (6→6)	10	3 842 535 575
B 6mm to 8mm inside-to-inside gusset and set screws (6→8)	10	3 842 535 573
C 8mm inside-to-inside gusset and set screws (8→8)	10	3 842 535 577
D 8mm to 10mm inside-to-inside gusset and set screws (8→10)	10	3 842 535 576
E 10mm inside-to-inside gusset and set screws (10→10)	10	3 842 535 571 GoTo

* For smaller quantities, please contact your local distributor.

Section 3: Profile Connectors

Other 90° Right-Angle Connectors

Corner Brackets

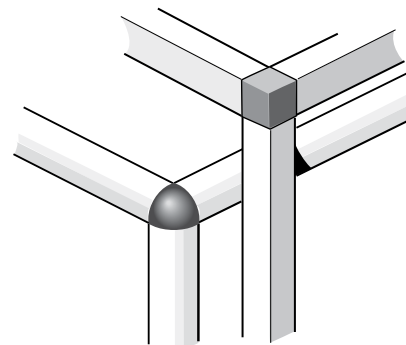












Features:

- One bracket connects two or three profiles
- Compatible with square or radius profiles
- Provides neat, finished appearance

Material:

- Bracket: die-cast zinc
- Cover caps: black polyamide 6
- Screws: zinc-plated steel



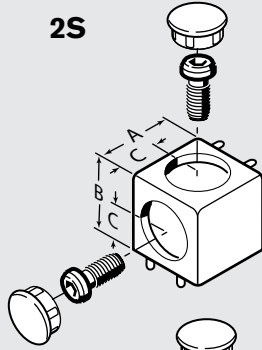
Description	Lot Size	Part Number
20mm corner bracket with fasteners  	1	3 842 519 318
20mm radius cover cap	1	3 842 517 146
20mm square cover cap	1	3 842 517 147
30mm corner bracket with fasteners  	1	3 842 519 319
30mm radius cover cap	1	3 842 517 281
30mm square cover cap	1	3 842 517 282
40mm corner bracket with fasteners  	1	3 842 529 404
40mm radius cover cap	1	3 842 529 016
40mm square cover cap	1	3 842 529 018
45mm corner bracket with fasteners  	1	3 842 519 321
45mm radius cover cap	1	3 842 517 290
45mm square cover cap	1	3 842 517 291
Replacement screw for 20mm bracket   DIN 7516 S6x16 flat-head screw	1	3 842 517 132
Replacement screw for 30mm bracket: S8x25 flat-head screw	1	3 842 517 543
Replacement screw for 40mm, 45mm, or 50mm bracket: S12x30 flat-head screw	1	3 842 517 613

Bracket/ Cap Size	Dimension in mm				Screw Size
	A	B	C	D	
20mm	20	20	20	10	S6x16
30mm	30	30	30	15	S8x25
40mm	40	40	40	20	S12x30
45mm	45	45	45	22.5	S12x30
50mm	50	50	50	25	S12x30

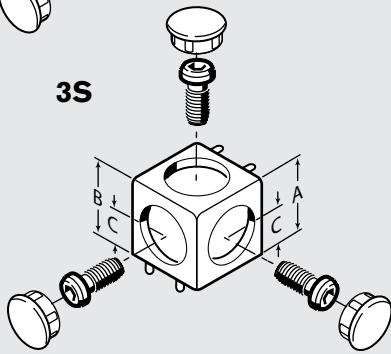
Section 3: Profile Connectors

Corner Cube Kits  

2S



3S



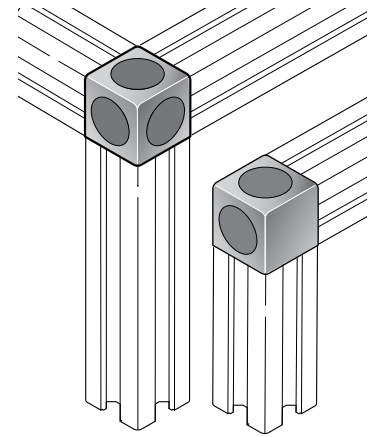
Cube Size	Dimension in mm			Screw Size
	A	B	C	
20mm	20	20	10	S6x16
30mm	30	30	15	S8x25
40mm	40	40	20	S12x30
45mm	45	45	22.5	S12x30
50mm	50	50	25	S12x30

Features:

- Use 2S version to connect two profiles, or 3S version to connect three profiles
- Includes self-tapping screws and cover caps to provide neat, finished appearance

Material:

- Corner cube: die-cast aluminum
- Cover caps: black polyamide
- Screws: steel



Description	Lot Size	Part Number
20mm corner cube kit 2S	1	3 842 524 484
20mm corner cube kit 3S	1	3 842 524 478
30mm corner cube kit 2S	1	3 842 524 485
30mm corner cube kit 3S	1	3 842 524 479
40mm corner cube kit 2S	1	3 842 529 395
40mm corner cube kit 3S	1	3 842 529 397
45mm corner cube kit 2S	1	3 842 524 486
45mm corner cube kit 3S	1	3 842 524 480
50mm corner cube kit 2S	1	3 842 529 399
50mm corner cube kit 3S	1	3 842 529 401

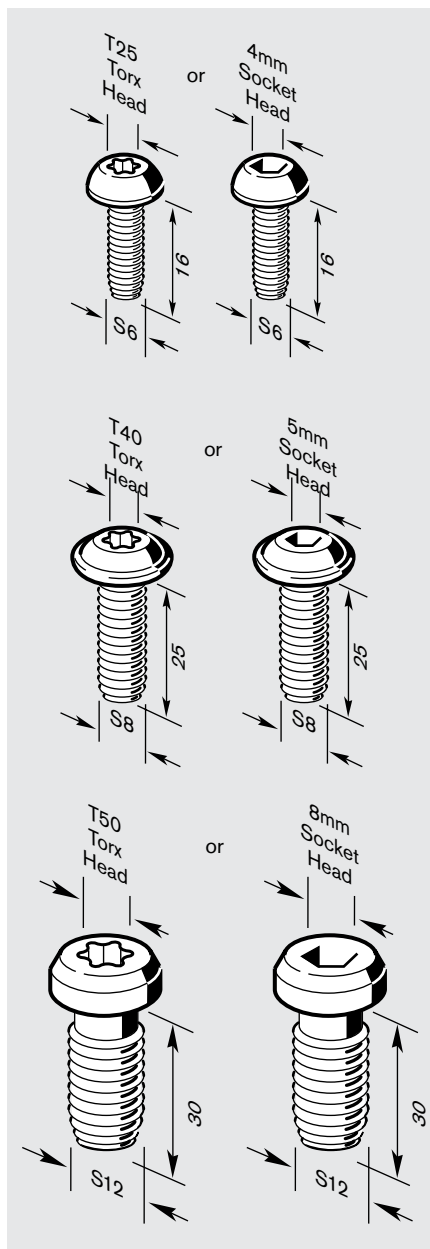
designLINE

Description	Lot Size	Part Number
20mm corner cube kit 2S designLINE	1	3 842 538 725
20mm corner cube kit 3S designLINE	1	3 842 538 726
30mm corner cube kit 2S designLINE	1	3 842 538 727
30mm corner cube kit 3S designLINE	1	3 842 538 728
40mm corner cube kit 2S designLINE	1	3 842 538 729
40mm corner cube kit 3S designLINE	1	3 842 538 730
45mm corner cube kit 2S designLINE	1	3 842 538 731
45mm corner cube kit 3S designLINE	1	3 842 538 732
50mm corner cube kit 2S designLINE	1	3 842 538 733
50mm corner cube kit 3S designLINE	1	3 842 538 734

Section 3: Profile Connectors

Other 90° Right-Angle Connectors

Self-Tapping Connection Screws



Features:

- Provides strong connection with high resistance to vibration
- Available as Torx head or standard hex socket head
- Self-threading for quick, easy installation
- Does not obstruct T-slot

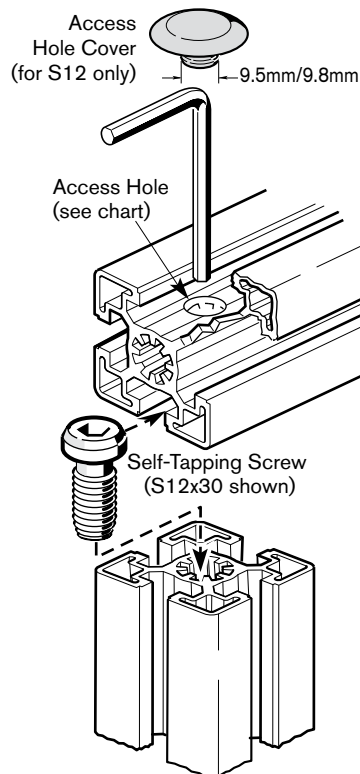
Machining Required:

- Access hole (see chart for size)

Material:

- Screw: zinc-plated industrial grade 8.8 steel
- Cover cap: black polyamide 6

Screw Size	Access Hole	Access Hole Cover (in mm)
S6x16	Ø5.8mm	N/A
S8x25	Ø7.8mm	N/A
S12x30	Ø9.8mm	9.5 / 9.8

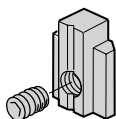


Description	Lot Size	Part Number
S6x16 self-tapping connection screw, 4mm socket head	1	3 842 523 968 <i>GoTo</i>
S6x16 self-tapping connection screw, T25 Torx head	1	3 842 528 593 <i>GoTo</i>
5.8mm access hole cover designLINE	100	3 842 538 565
S8x25 self-tapping connection screw, 5mm socket head	1	3 842 523 970 <i>GoTo</i>
S8x25 self-tapping connection screw, T40 Torx head	1	3 842 527 174 <i>GoTo</i>
8mm swivel-in anti-rotation T-block (optional), (see next page for details)	1	3 842 530 325
S12x30 self-tapping connection screw, 8mm socket head	1	8 981 021 302 <i>GoTo</i>
7.8mm access hole cover designLINE	100	3 842 538 566
S12x30 self-tapping connection screw, T50 Torx head	1	3 842 530 236
9.5/9.8mm access hole cover	1	8 981 005 306
10mm swivel-in anti-rotation T-block (optional) (see next page for details)	1	3 842 530 326
9.8mm access hole cover designLINE	100	3 842 538 567

Assembly Note

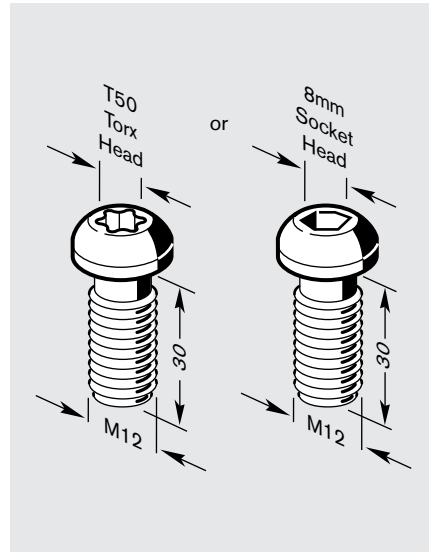
Never tap the center bore of profiles when using self-tapping screws.

When using S8 and S12 self-tapping screws, use anti-rotation T-blocks to ensure profile alignment.



Section 3: Profile Connectors

M12 Connection Screws ¹⁰



Features:

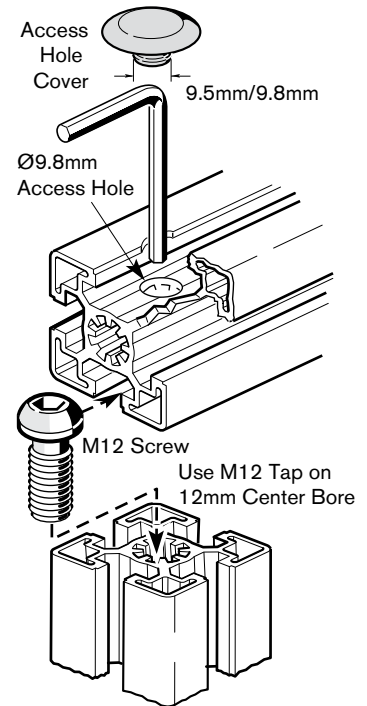
- Provides strong connection with high resistance to vibration
- Available as Torx head or standard hex socket head
- Does not obstruct T-slot

Machining Required:

- 9.8mm access hole
- Center bore of profile tapped M12

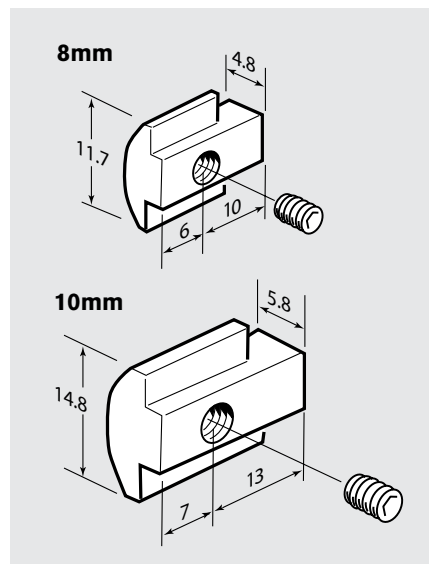
Material:

- Screw: zinc-plated industrial grade 8.8 steel
- Cover cap: black polyamide 6



Description	Lot Size	Part Number
M12x30 connection screw, 8mm socket head ¹⁰	1	8 981 021 301 <i>GoTo</i>
M12x30 connection screw, T50 Torx head ¹⁰	1	3 842 530 235
9.5/9.8mm access hole cover	1	8 981 005 306
10mm swivel-in anti-rotation T-block (optional) (see below for details)	1	3 842 530 326
9.8mm access hole cover designLINE	100	3 842 538 567

Anti-Rotation T-Block ⁸ ¹⁰

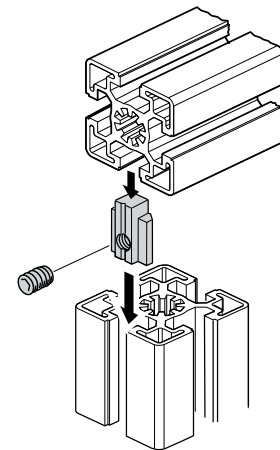


Features:

- Swivel-in installation
- Prevents rotation at connection point
- Large surface area contact with profile's T-slot ensures solid grip
- Ideal for use with connection screws

Material:

- Screw: zinc-plated industrial grade 8.8 steel



Description	Lot Size	Part Number
8mm swivel-in anti-rotation T-block ⁸	1	3 842 530 325
10mm swivel-in anti-rotation T-block ¹⁰	1	3 842 530 326

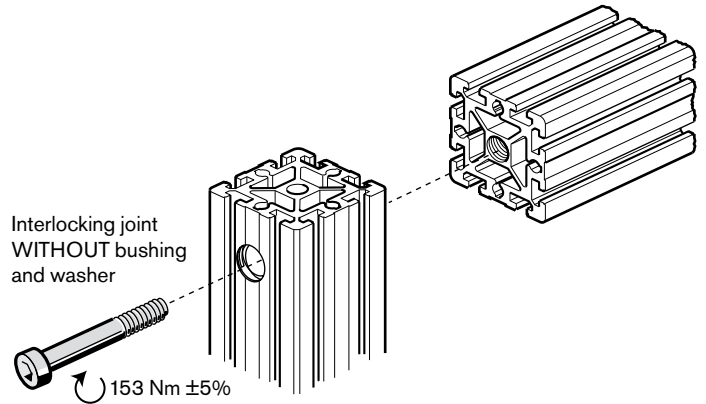
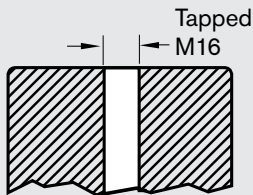
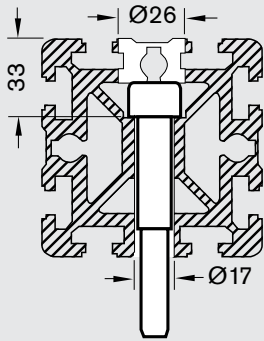
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Section 3: Profile Connectors

Other 90° Right-Angle Connectors

M16 Connection Screw 10

Connection using M16 connection screw
WITHOUT bushing and washer



Features:

- Connects profiles with 16mm center bore at right angles

Machining Required:

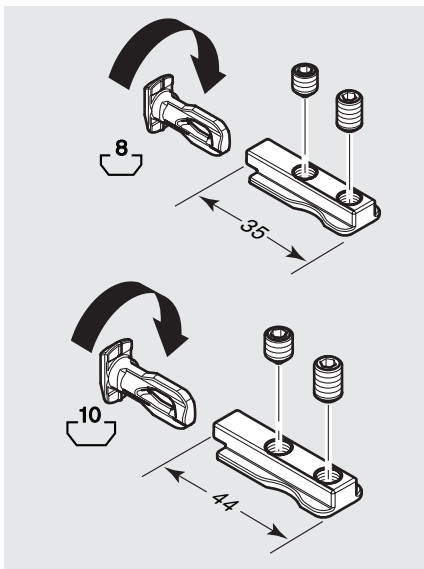
- See diagram at left

Material:

- Screw: zinc-plated industrial grade 8.8 steel

Description	Lot Size	Part Number
M16 connection screw M16x100-8.8 10	1	2 910 141 454

Tension Connector 8 10

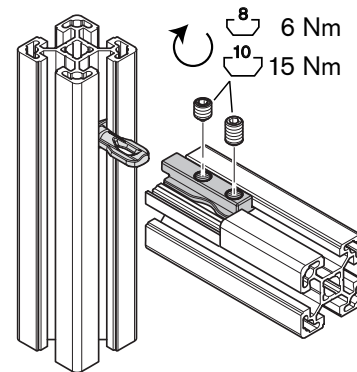


Features:

- Provides fast assembly without profile machining
- T-head is easily positioned in the T-slot, even on existing structures
- Clean appearance with easy setscrew installation


Material:

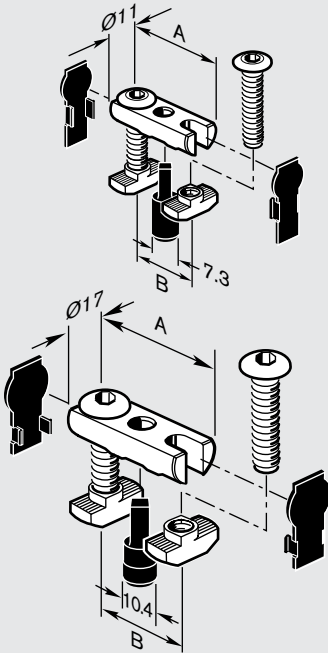
- Die-cast Steel



Description	Lot Size	Part Number
SV8 Tension Connector, 30 series profiles 8	10	3 842 538 489
SV10L Tension Connector, 45 series profiles 10	10	3 842 538 491
SV10 Tension Connector, 40H, 45H, 60H, series profiles 10	10	3 842 538 490

Section 3: Profile Connectors

Bolt Connector Kits - Type 1  **GoTo**



Bolt Connector Size	Dimension in mm			
	A	B	ØC	D
30mm	30	18	11	18
40mm	40	23	17	22.5
45mm	45	28	17	22.5
50mm	50	33	17	22.5
60mm	60	43	17	22.5
80mm	80	63	17	22.5
90mm	90	73	17	22.5
100mm	100	83	17	22.5

Features:

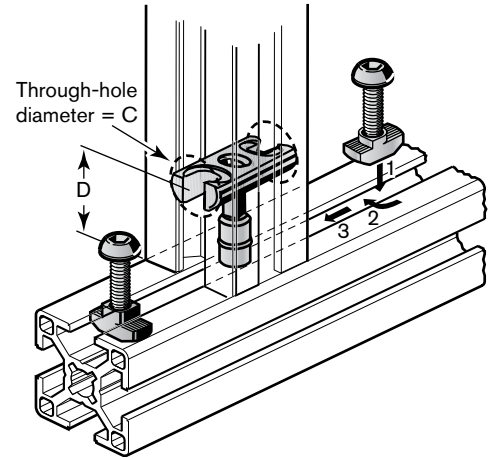
- Provides strongest right-angle connection
- Centering pin eases alignment and assembly
- Includes two cover caps to create neat, finished appearance
- Obscures profile T-slot: panels or panes must be trimmed










Machining Required:

- Through hole in one profile: see chart

Material:

- Bolt connector: zinc-plated 8.8 steel
- Cover caps and alignment pin: black polyamide 6



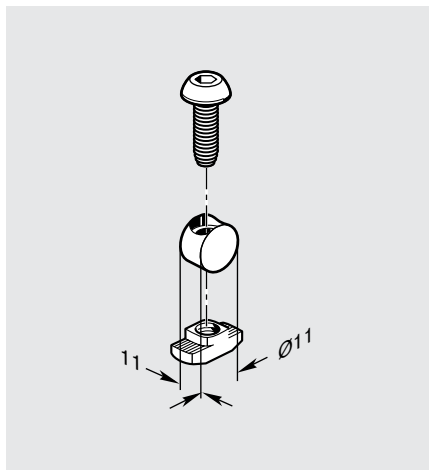
Description	Lot Size*	Part Number
30mm bolt connector kit for 	10	3 842 535 624
30mm bolt connector kit for 	10	3 842 535 583
40mm bolt connector kit 	10	3 842 535 620
45mm bolt connector kit 	10	3 842 500 921 <i>GoTo</i>
50mm bolt connector kit 	10	3 842 535 621
60mm bolt connector kit 	10	3 842 500 922
80mm bolt connector kit 	10	3 842 535 622
90mm bolt connector kit 	10	3 842 500 923 <i>GoTo</i>
100mm bolt connector kit 	10	3 842 535 618

* For smaller quantities, please contact your local distributor.

Section 3: Profile Connectors

Other 90° Right-Angle Connectors

11x30mm Bolt Connector Kits



Features:

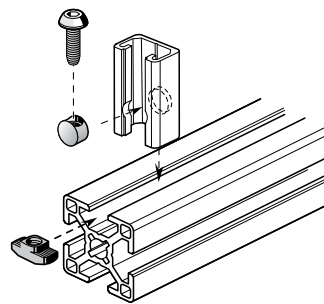
- Provides strong right-angle connection
- Versions available for attaching 11x30 profile to profiles with 8mm or 10mm T-slots


Material:

- Bolt connector, screw, and T-nut: zinc-plated steel

Machining Required:

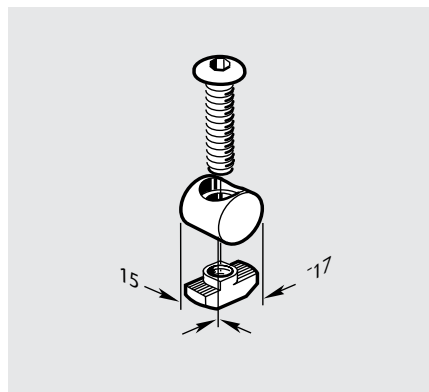
- 11mm hole through 11x30 profile



Description	Lot Size*	Part Number
11x30mm bolt connector kit 	10	3 842 535 617

* For smaller quantities, please contact your local distributor.

15x22.5mm Bolt Connector Kit



Features:

- Provides strong right-angle connection for 15x22.5 profile

Material:

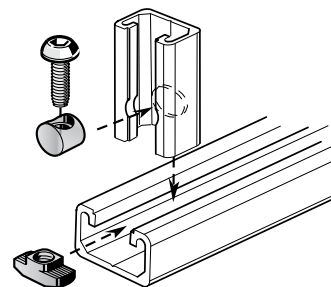
- Bolt connector, screw, and T-nut: zinc-plated steel

Machining Required:

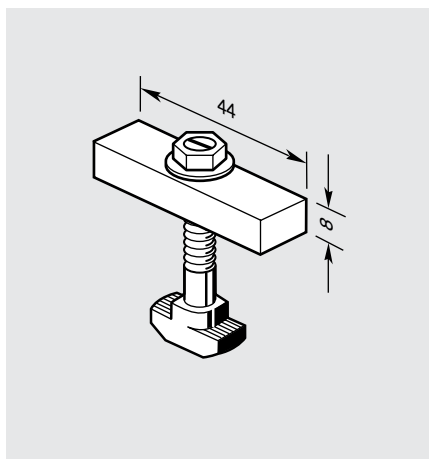
- 17mm through-hole (see drawing)

Description	Lot Size*	Part Number
15x22.5mm bolt connector kit	10	3 842 535 619

* For smaller quantities, please contact your local distributor.



Cross Connector Kit



Features:

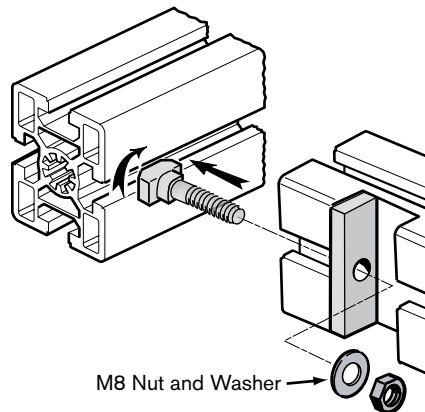
- Provides strong, torque-resistant connection to support heavy loads
- Commonly used in conveyor leg sets and machine frames
- Works with 45- and 90-series profiles, as well as 60x90H

Material:

- Zinc-plated steel

Machining Required:

- 30mm wide milled slot

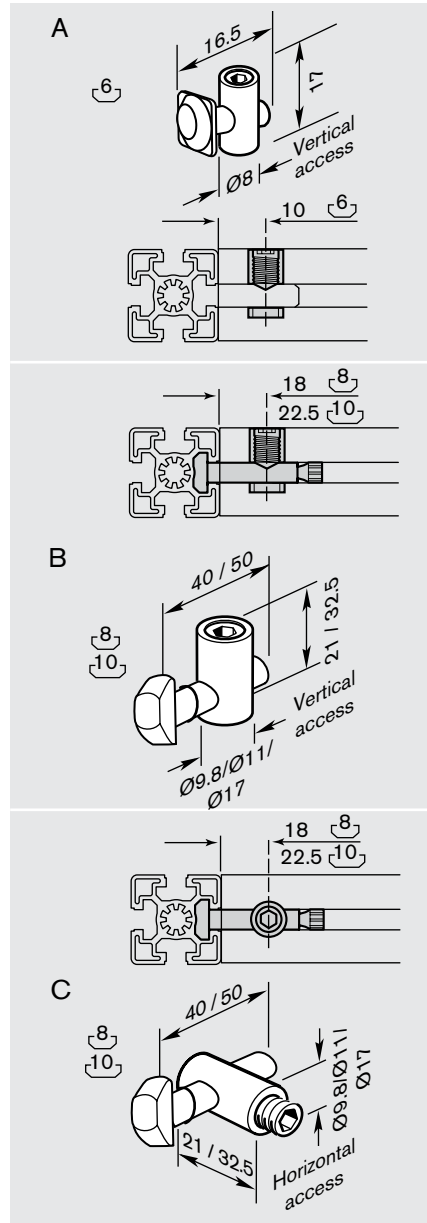


Description	Lot Size	Part Number
Cross connector kit	1	3 842 146 972

Section 3: Profile Connectors



Quick Connectors/Rigid **GoTo**



Features:

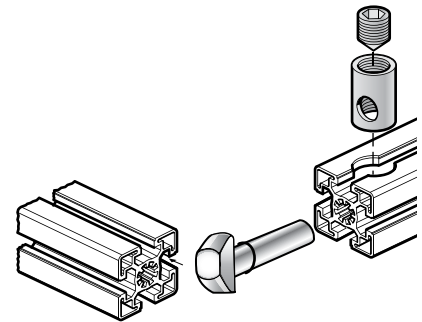
- Quickly and easily connect 6mm, 8mm and 10mm profiles at right angles
- Fast assembly and disassembly: ideal for temporary structures such as trade show displays and fixtures
- Keeps three T-slots open for mounting panels or accessories
- Choose either perpendicular or parallel options

Material:

- **A** Stainless steel
- **B & C** Zinc-plated 8.8 steel

Machining Required:

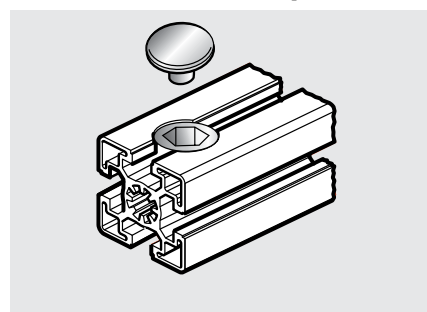
- 9.8mm barrel: 9.8mm through-hole
- 11mm barrel: 11mm through-hole
- 17mm barrel: 17mm through-hole



Description	Lot Size*	Part Number
A Quick connector/rigid for Vertical access. Includes 6mm T-bolt, 8mm barrel.	10	3 842 537 013
B Quick connector/rigid for Vertical access. Includes 8mm T-bolt, 11mm barrel.	10	3 842 535 459
B Quick connector/rigid for Vertical access. Includes 10mm T-bolt, 11mm barrel.	10	3 842 535 464
B Quick connector/rigid for Vertical access. Includes 10mm T-bolt, 17mm barrel.	10	3 842 535 458 GoTo
B Quick connector/rigid for Vertical access. Includes 10mm T-bolt, 9.8mm barrel.	10	3 842 541 412
C Quick connector/rigid for Horizontal access. Includes 8mm T-bolt, 11mm barrel.	10	3 842 535 465
C Quick connector/rigid for Horizontal access. Includes 10mm T-bolt, 17mm barrel.	10	3 842 535 466
C Quick connector/rigid for Horizontal access. Includes 10mm T-bolt, 9.8mm barrel.	10	3 842 541 410



Quick Connector Cap



Material:

- PA, light gray RAL 7035

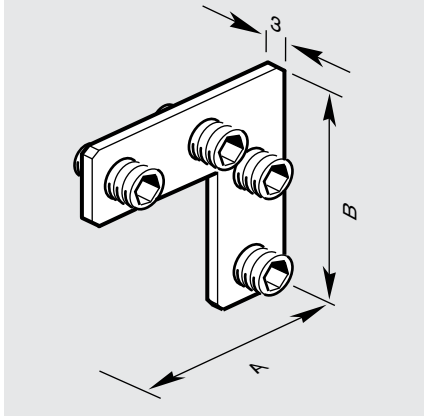
Description	Lot Size*	Part Number
Cap for quick connector, 8mm designLINE	10	3 842 538 562
Cap for quick connector, 11mm designLINE	10	3 842 538 563
Cap for quick connector, 17mm designLINE	10	3 842 538 564

* For smaller quantities, please contact your local distributor.

Section 3: Profile Connectors

Other 90° Right-Angle Connectors

6mm, 8mm, & 10mm Mitered Corner Connectors



Features:

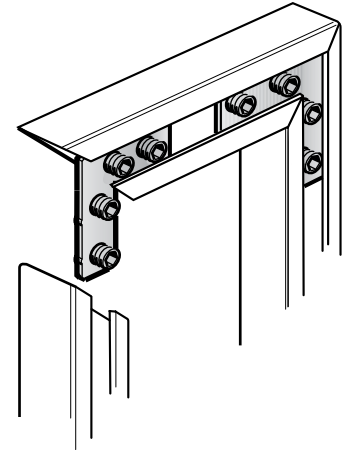
- Used to connect profiles whose ends have been cut at a 45° angle
- Applications include doors and window frames
- Includes set screws

Material:

- Zinc-plated steel

Machining Required:

- 45° miter on profile corners



3

Mitered Corner Connector Size	Dimension in mm		
	A	B	Set Screw
6mm	46	46	M4x5
8mm	46	46	M8x8
10mm	60	60	M10x10

Description

Lot Size*

Part Number

6mm mitered corner connector	4	3 842 535 626
8mm mitered corner connector	4	3 842 535 627
10mm mitered corner connector	4	3 842 535 625

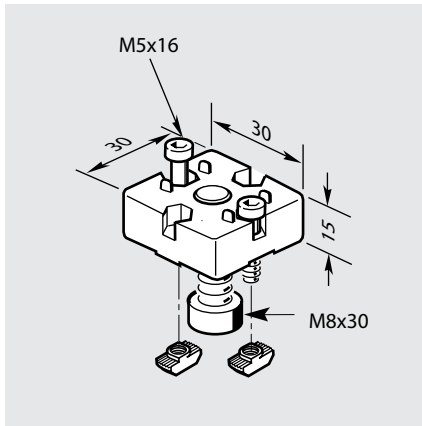
* For smaller quantities, please contact your local distributor.

Section 3: Profile Connectors

T-Connector Kits 

3

30x30 T-Connector Kit 



Features:

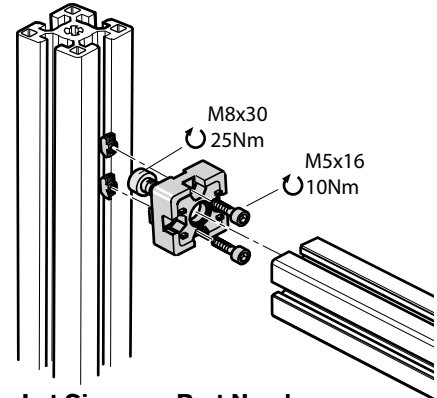
- Includes all fastening hardware
- Can be used ONLY with 30x30 profiles

Machining Required:

- M8 tap in end of one profile

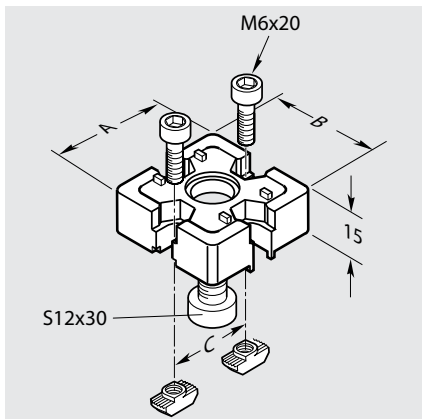
Material:

- Die-cast zinc



Description	Lot Size	Part Number
30x30 T-connector kit designLINE	1	3 842 538 696
30x30 T-connector kit	1	3 842 524 476

40x40, 45x45, & 50x50 T-Connector Kits 

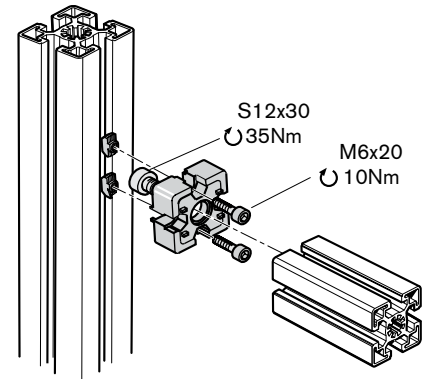


Features:

- Includes all fastening hardware
- Includes self-tapping screw; no machining required

Material:

- Die-cast zinc



Description	Lot Size	Part Number
40x40 T-connector kit designLINE	1	3 842 538 697
45x45 T-connector kit designLINE	1	3 842 538 698
50x50 T-connector kit designLINE	1	3 842 538 699
40x40 T-connector kit	1	3 842 532 195
45x45 T-connector kit	1	3 842 520 802
50x50 T-connector kit	1	3 842 532 198

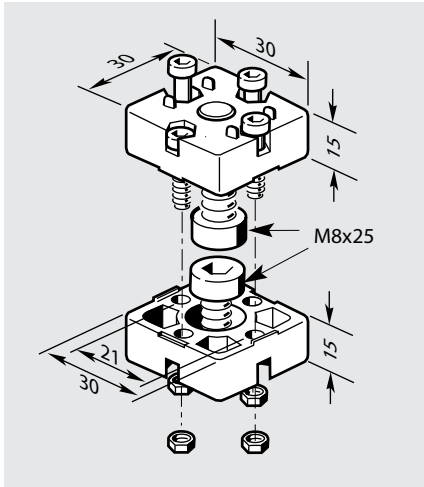
T-Connector Size	Dimension in mm		
	A	B	C
40mm	40	40	29.6
45mm	45	45	34
50mm	50	50	39

Section 3: Profile Connectors

180° Straight-Line Connectors

End Connector Kits

30x30 End Connector Kit



Features:

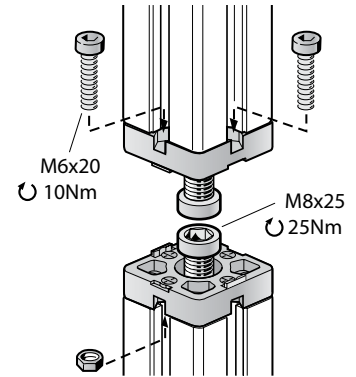
- Ideal for extending profiles beyond standard available length
- Includes all fastening hardware
- Can be used **ONLY** with 30x30 profiles

Machining Required:

- M8 tap in end of both profiles

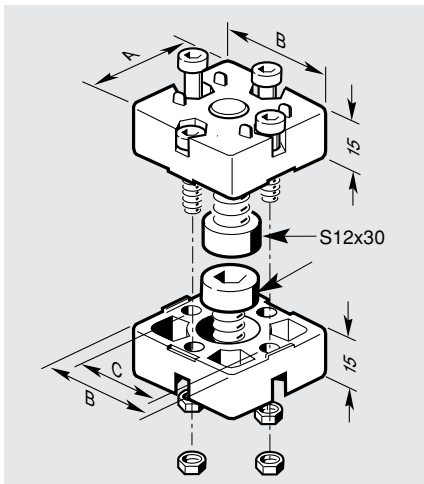
Material:

- Die-cast zinc



Description	Lot Size	Part Number
30x30 end connector kit designLINE	1	3 842 538 656
30x30 end connector kit	1	3 842 526 003

40x40, 45x45, & 50x50 End Connector Kits

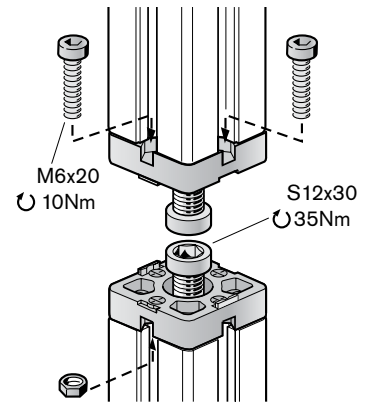


Features:

- Ideal for extending profiles beyond standard available length
- Includes all fastening hardware
- Includes self-tapping screws; no machining required

Material:

- Die-cast zinc



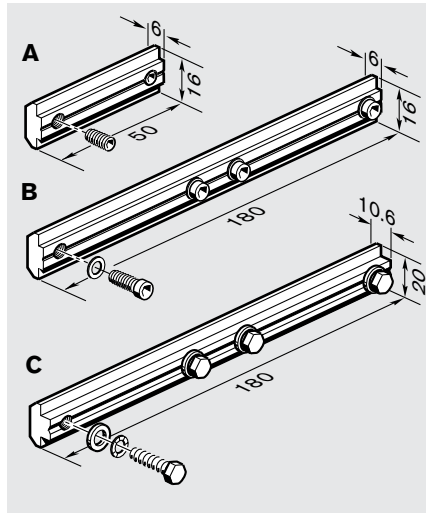
End Connector Size	Dimension in mm		
	A	B	C
40mm	40	40	29.6
45mm	45	45	34
50mm	50	50	39

Description	Lot Size	Part Number
40x40 end connector kit designLINE	1	3 842 538 657
45x45 end connector kit designLINE	1	3 842 538 658
50x50 end connector kit designLINE	1	3 842 538 659
40x40 end connector kit	1	3 842 532 196
45x45 end connector kit	1	3 842 191 175
50x50 end connector kit	1	3 842 532 199

Section 3: Profile Connectors

3

8mm & 10mm Connection Link Kits

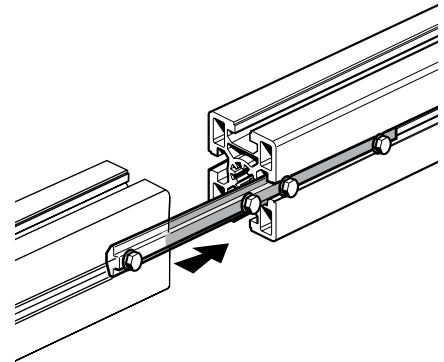


Features:

- Provide a heavy-duty connection extending profiles beyond standard available length
- Ideal for use in perimeter guarding and conveyor rails
- Includes all fastening hardware; no machining required

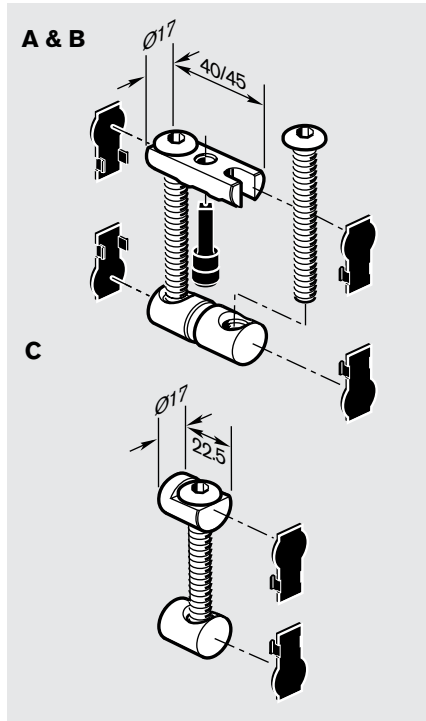
Material:

- Zinc-plated steel



Description	Lot Size	Part Number
A 8mm connection link kit, 50mm long	1	3 842 518 427
B 8mm connection link kit, 180mm long	1	3 842 521 216
C 10mm connection link kit, 180mm long	1	3 842 528 746 <i>GoTo</i>

End-to-End Bolt Connector Kits



Features:

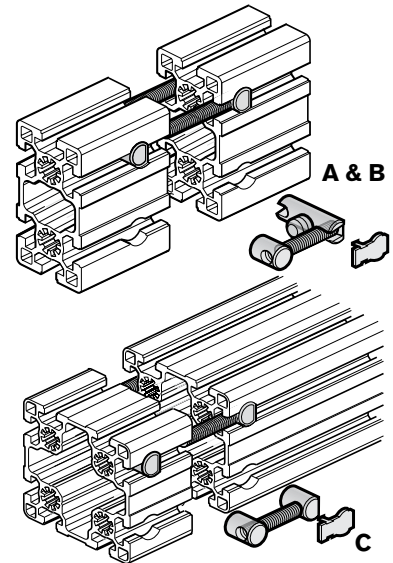
- Provide a strong end-to-end for any 10mm T-slotted profile
- Cover caps conceal through-hole and connector, and provide neat, finished appearance
- For precise positioning when drilling through-holes, use drilling/boring jig 3 842 218 960.

Machining Required:

- 17mm through-hole

Material:

- Barrels and screws: zinc-plated steel, 8.8
- Cover caps: black polyamide 6

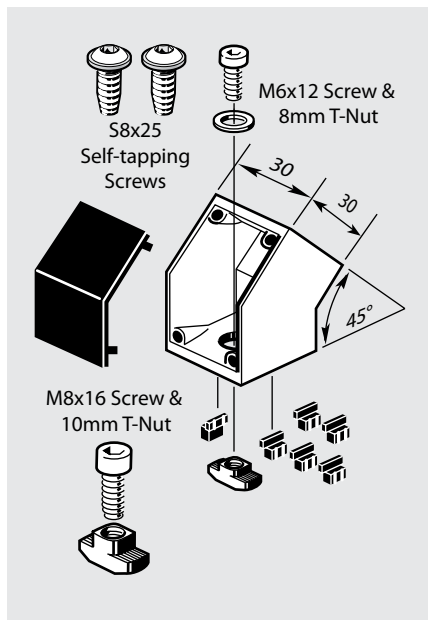


Description	Lot Size	Part Number
A End-to-end bolt connector kit, 40mm	1	3 842 529 293
B End-to-end bolt connector kit, 45mm	1	3 842 529 248
C Universal end-to-end bolt connector kit	1	3 842 529 334

Section 3: Profile Connectors

45° Angle Connectors

45° Angle Connector Kit – 30mm 8 10

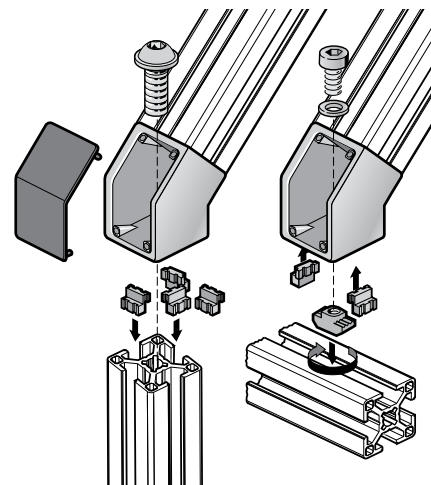


Features:

- Connects 30x30 profiles end-to-end at a 45° angle
- Make a 45° end-to-side connection between a 30x30 profile and any profile with 8mm or 10mm T-slots
- Includes all hardware, adapters, and cover cap for a neat, finished appearance

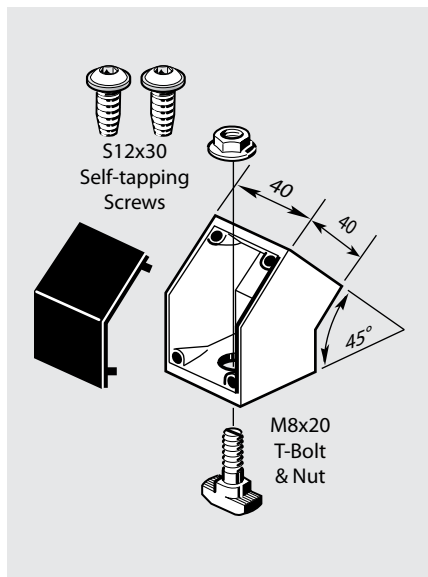
Material:

- Connector: die-cast zinc
- Adapters and cover cap: black polyamide 6



Description	Lot Size	Part Number
45° angle connector kit – 30mm designLINE	1	3 842 538 700
45° angle connector kit – 30mm	1	3 842 518 426

45° Angle Connector Kit – 40mm 10

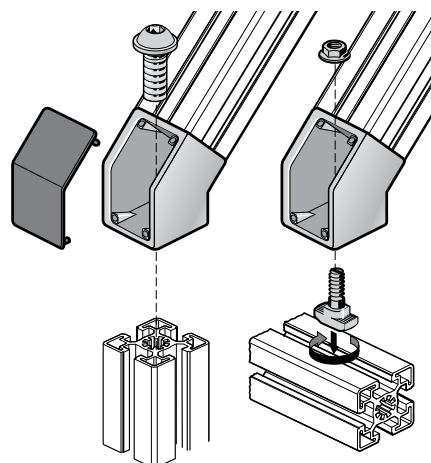


Features:

- Connects 40x40 profiles end-to-end at a 45° angle
- Make a 45° end-to-side connection between a 40x40 profile and any profile with 10mm T-slots
- Includes all hardware, adapters, and cover cap for a neat, finished appearance

Material:

- Connector: die-cast aluminum
- Adapters and cover cap: black polyamide 6



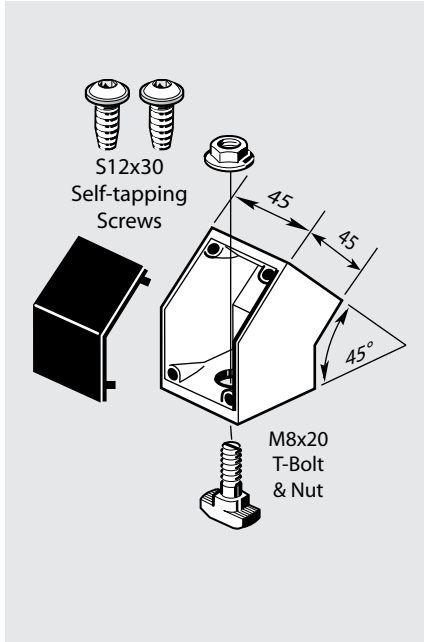
Description	Lot Size	Part Number
45° angle connector kit – 40mm designLINE	1	3 842 538 701
45° angle connector kit – 40mm	1	3 842 532 205

Section 3: Profile Connectors



3

45° Angle Connector Kit – 45mm

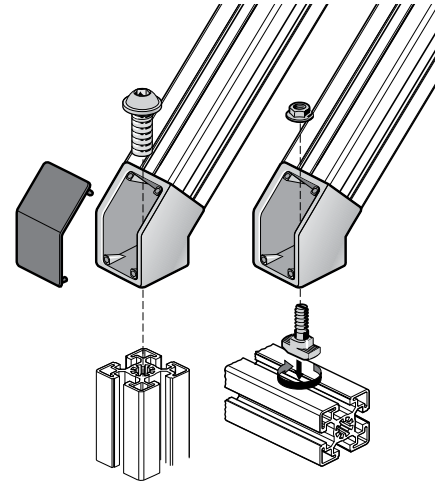


Features:

- Connects 45x45 profiles end-to-end at a 45° angle
- Make a 45° end-to-side connection between a 45x45 profile and any profile with 10mm T-slots
- Includes fasteners for several connection options
- Includes cover caps for a neat, finished appearance

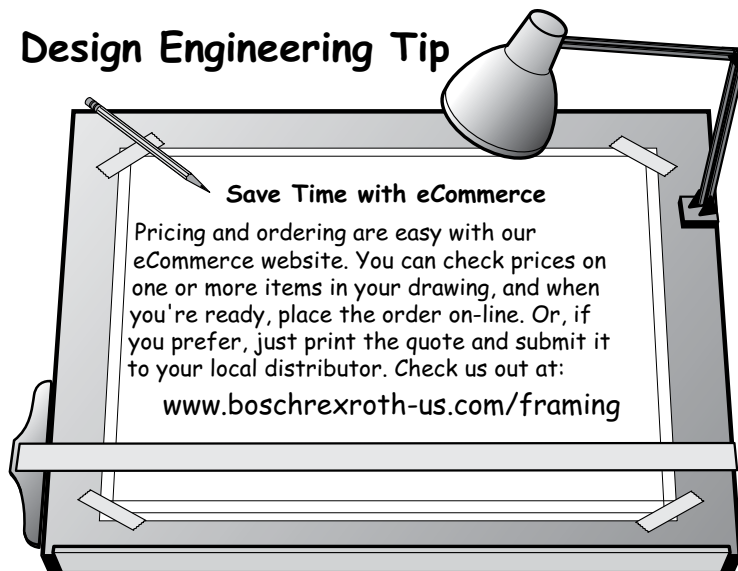
Material:

- Connector: die-cast aluminum
- Cover cap: black polyamide 6



Description	Lot Size	Part Number
45° angle connector kit – 45mm designLINE	1	3 842 538 702
45° angle connector kit – 45mm	1	3 842 535 428

Design Engineering Tip

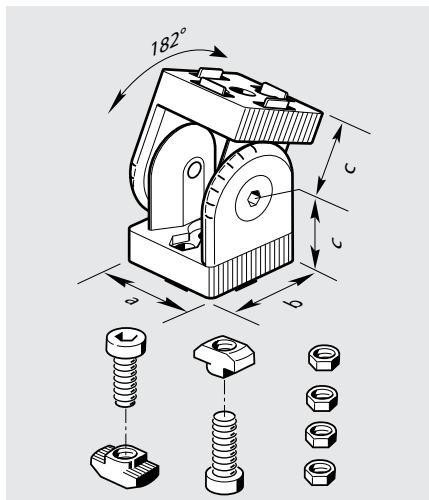


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Section 3: Profile Connectors

Multi-Angle Connector Kits

30x30 Multi-Angle Connector Kit

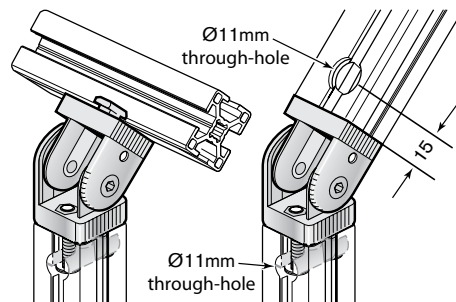


Features:

- Includes hardware to connect two profiles with 8mm T-slots side-by-side or use 10mm M6 T-nuts to connect (part number 3 842 530 285) profiles with 10mm T-slots
- Connect the end of a 30x30 profile (including 30x30 2S and 3S) to the side of a profile with 8mm or 10mm T-slots (requires one 30mm bolt connector kit, sold separately)
- Connect two 30x30 profiles end-to-end (requires two 30mm bolt connector kits, sold separately)

Material:

- Joint components: die-cast zinc



Machining Required:

- 11mm through-hole, 15mm from end of profile for each end-to-end connection

Multi-Angle Connector	Dimension in mm			max. in Nm with pin
	a	b	c	
30x30	30	30	25	15
40x40	40	40	34	15*

* Max. torque with handle is 5Nm

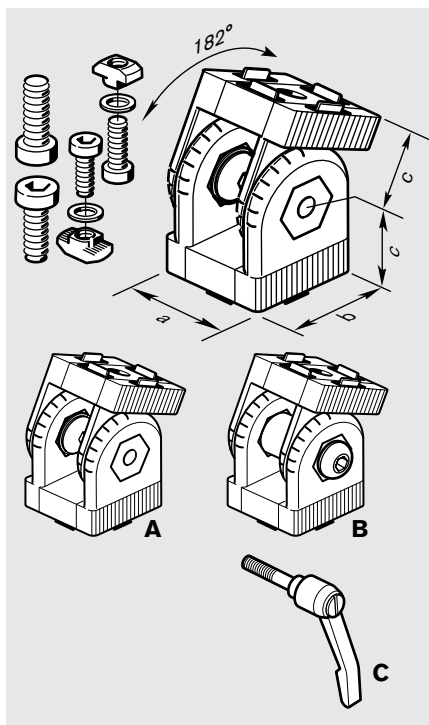
Description

Description	Lot Size*	Part Number
30x30 multi-angle connector kit designLINE	1	3 842 538 683
30x30 multi-angle connector kit	1	3 842 502 683
30mm bolt connector kit**	10	3 842 535 624

**One kit required for each end connection

* For smaller quantities, please contact your local distributor.

40x40 Multi-Angle Connector Kit

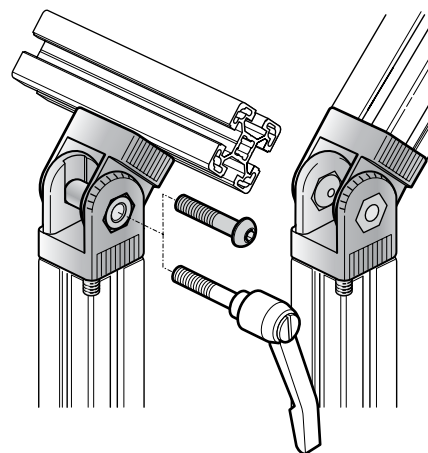


Features:

- Connect two profiles with 10mm T-slots side-by-side
- Connect the end of any 40x40 profile to the side of a profile with 10mm T-slots
- Connect any two 40x40 profiles end-to-end
- Available as standard or lockable version (locking handle sold separately below)
- Includes all fasteners, no machining required

Material:

- Joint components: die-cast zinc, nickel-plated



Description

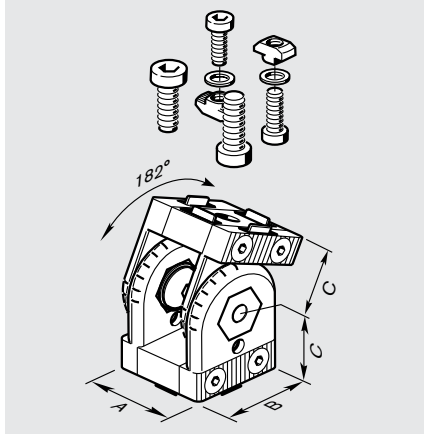
Description	Lot Size	Part Number
A 40x40 multi-angle connector kit designLINE	1	3 842 538 684
A 40x40 multi-angle connector kit	1	3 842 532 235
B 40x40 multi-angle conn. kit, lockable designLINE*	1	3 842 538 685
B 40x40 multi-angle conn. kit, lockable*	1	3 842 532 364
C Locking handle, 40mm	1	3 842 516 847

*Requires locking handle, sold separately

Section 3: Profile Connectors

45mm and 60mm Multi-Angle Connector Kit 

3

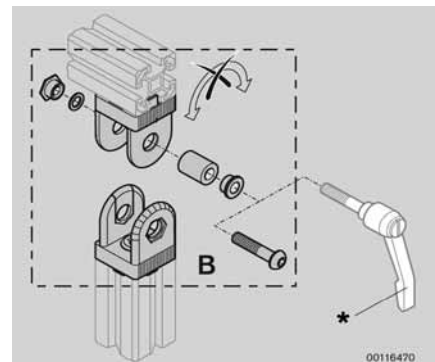
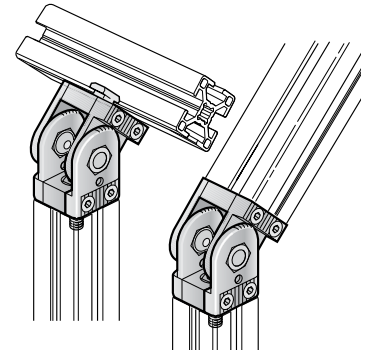


Features:

- Create a side-to-side, end-to-side, or end-to-end connection
- Allows angle to be adjusted without loosening any screws or T-nuts, or can be pinned in place for a fixed connection
- Maximum torque loading
- Includes all fasteners, no machining required

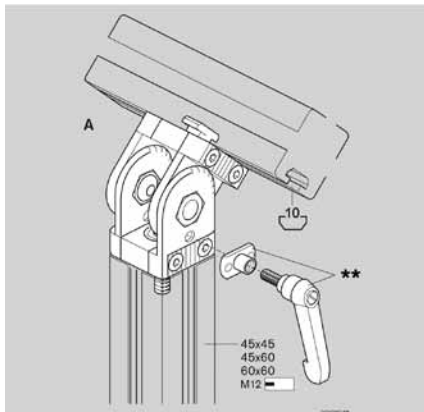
Material:

- Joint components: die-cast zinc, nickel-plated



Multi-Angle Connector	Dimension in mm			max. in Nm with pin
	A	B	C	
45x45	45	45	38	15*
45x60	60	45	38	15*
60x45	45	60	45.5	15*
60x60	60	60	45.5	15*

* Max. torque with handle is 5Nm



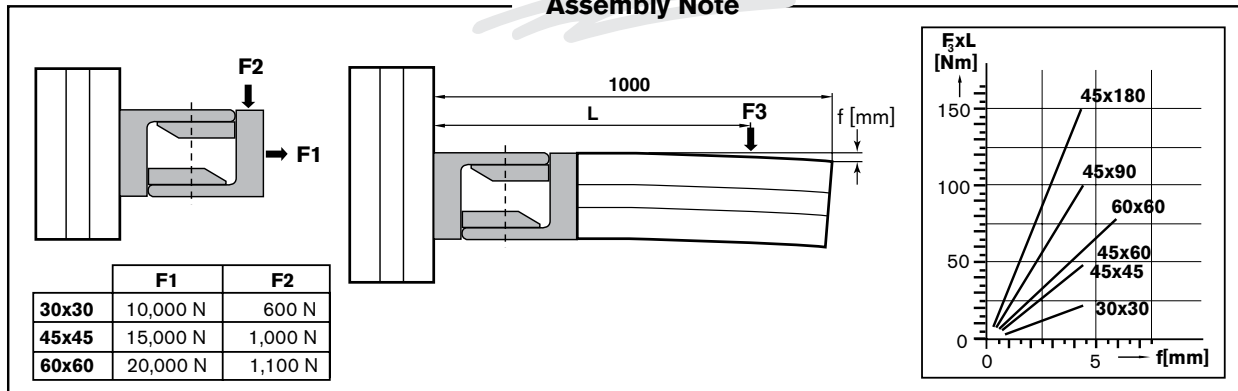
Description

Lot Size

Part Number

45x45 multi-angle connector kit designLINE	1	3 842 538 686
45x45 multi-angle conn. kit, lockable designLINE	1	3 842 538 687
Locking Handle 45mm*, sold separately	1	3 842 538 607
60x45 multi-angle connector kit designLINE	1	3 842 539 799
60x60 multi-angle connector kit designLINE	1	3 842 539 800
45x45 multi-angle connector kit	1	3 842 502 684
45x60 multi-angle connector kit	1	3 842 502 685
60x45 multi-angle connector kit	1	3 842 502 688
60x60 multi-angle connector kit	1	3 842 502 687
Locking Handle kit**, sold separately	1	3 842 505 144

Assembly Note



Section 3: Profile Connectors

Multi-Angle Connectors

Variable Angle Bolt Connectors 8 10

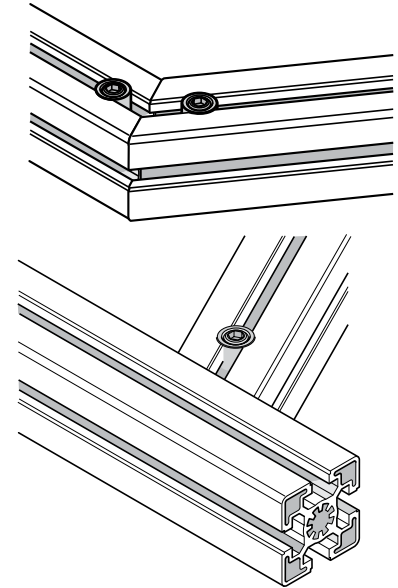
Features:

- Provide a simple and easy way to connect profiles at various angles
- Allow one-time bend to desired angle, with correction bend of up to 10°
- Keep three T-slots open for panels or accessories
- Use drilling/boring jigs (listed below) for proper through-hole spacing

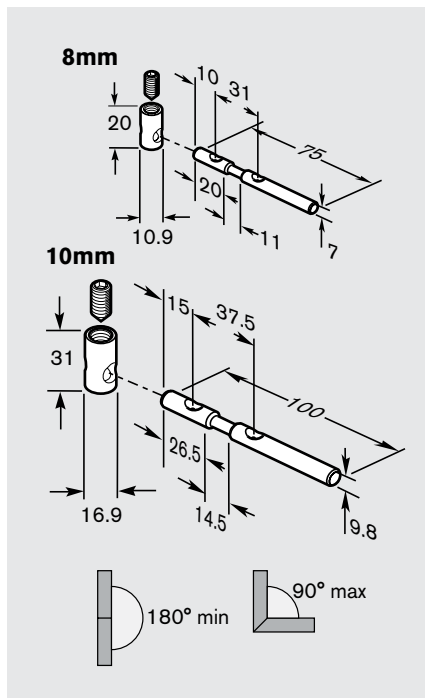
Material:

- Tie-rod: stainless steel
- Barrel: galvanized steel

	30x30	45x45	45x45H
	24 Nm	110 Nm	145 Nm
	1100 N	1500 N	1500 N
	35 Nm	120 Nm	140 Nm
	650 N	1000 N	1100 N
	40 Nm	95 Nm	180 Nm



End-to-End Variable Angle Bolt Connectors

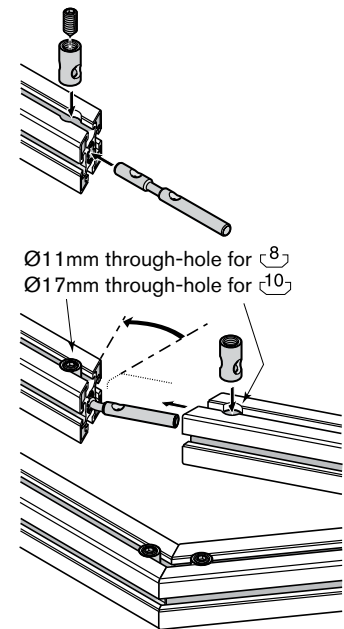


Features:

- Allowable angle up to 90°
- Connects two profiles end-to-end

Machining required:

- 11mm through-hole (8mm profiles) or 17mm through-hole (10mm profiles) in both profiles



Ø11mm through-hole for 8
Ø17mm through-hole for 10

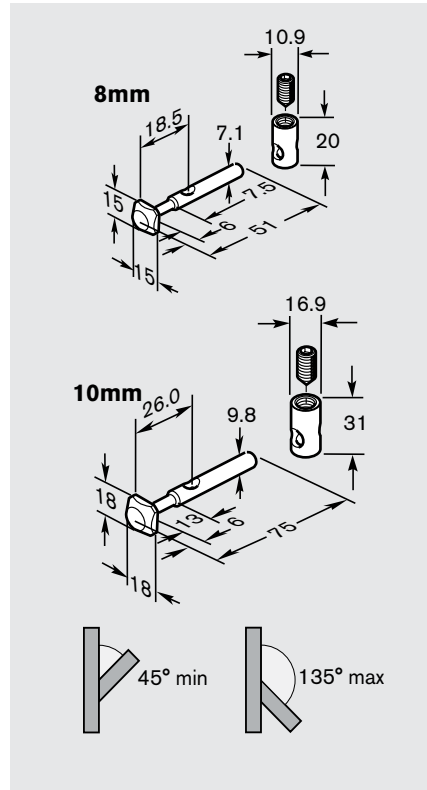
Description	Lot Size*	Part Number
8mm end-to-end variable angle bolt connector	10	3 842 535 630
10mm end-to-end variable angle bolt connector	10	3 842 535 634

* For smaller quantities, please contact your local distributor.

Section 3: Profile Connectors

3

End-to-Side Variable Angle Bolt Connectors

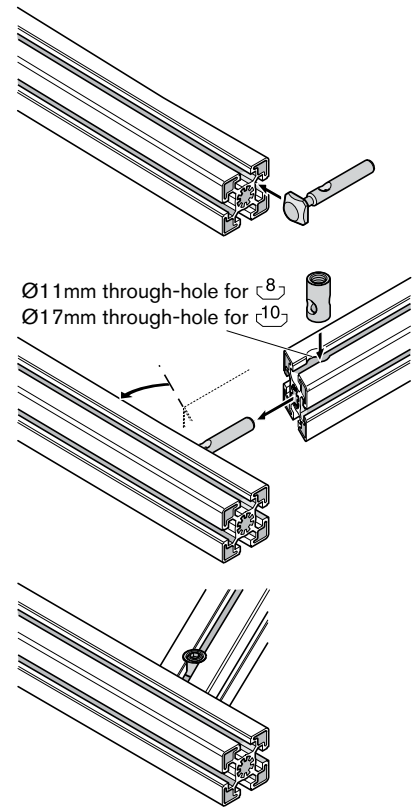


Features:

- Allows angles from 45° to 135°
- Connects the end of one profile to the side of another

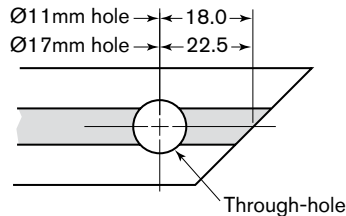
Machining required:

- 11mm through-hole (8mm profiles) or 17mm through-hole (10mm profiles) in both profiles



Assembly Note

When making angled connections, locate through-holes in the profiles as specified below. Use the 8mm or 10mm drilling/boring jig (sold at right, or see the Tools section for details) for proper spacing.



Prior to installation, bend connector to within ±10° of desired angle

Description	Lot Size*	Part Number
8mm end-to-side variable angle bolt connector	10	3 842 535 629
10mm end-to-side variable angle bolt connector	10	3 842 535 635

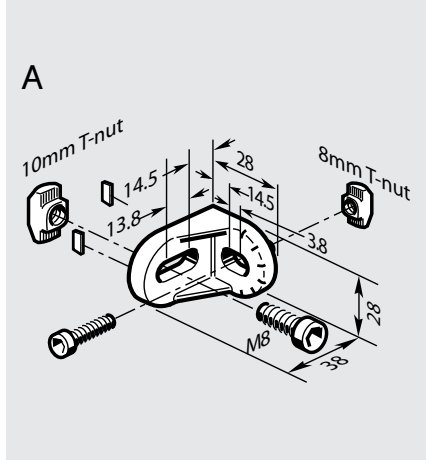
* For smaller quantities, please contact your local distributor.

Description	Lot Size	Part Number
8mm drilling/boring jig	1	3 842 516 729
10mm drilling/boring jig	1	3 842 516 731

Section 3: Profile Connectors

Joining Plates

Adjustable Angle Gusset Kits

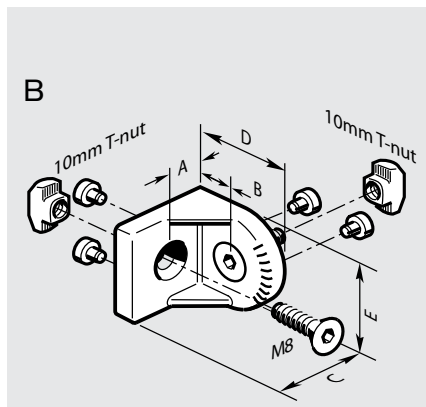
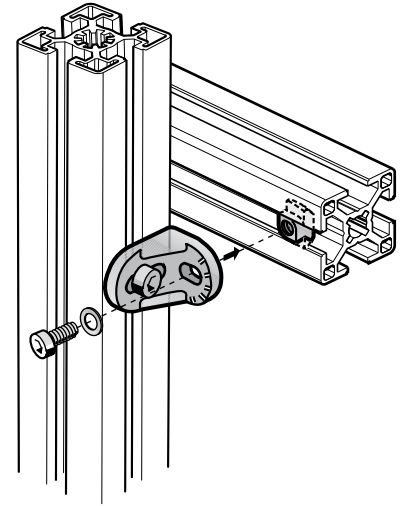


Features:

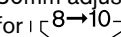
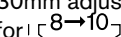
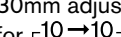
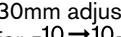
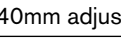
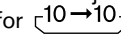
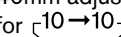
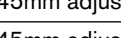
- Allows quick adjustment to any angle
- Connects anywhere along profile T-slots
- Optional T-slot alignment pins simplify positioning and assembly
- Available as gusset only or as a kit with mounting hardware

Material:

- Gusset: die-cast zinc
- Mounting hardware: zinc-plated steel
- Alignment pins and adapters: black polyamide 6



Adjustable Angle Gusset Size	Dimension in mm				
	A	B	C	D	E
40mm	20	20	37.5	37.5	35
45mm	22.5	22.5	42.5	43	40

Description	Lot Size	Part Number
A 30mm adjustable angle gusset only	1	3 842 515 473
A 30mm adjustable angle gusset kit for  designLINE	1	3 842 538 703
A 30mm adjustable angle gusset kit for 	1	3 842 515 547
A 30mm adjustable angle gusset kit for  designLINE	1	3 842 538 704
A 30mm adjustable angle gusset kit for 	1	3 842 521 580
B 40mm adjustable angle gusset only	1	3 842 529 020
B 40mm adjustable angle gusset kit for  designLINE	1	3 842 538 705
B 40mm adjustable angle gusset kit for 	1	3 842 532 274
B 45mm adjustable angle gusset only	1	3 842 504 760
B 45mm adjustable angle gusset kit for  designLINE	1	3 842 538 706
B 45mm adjustable angle gusset kit for 	1	3 842 518 424

Section 3: Profile Connectors

3

Features:

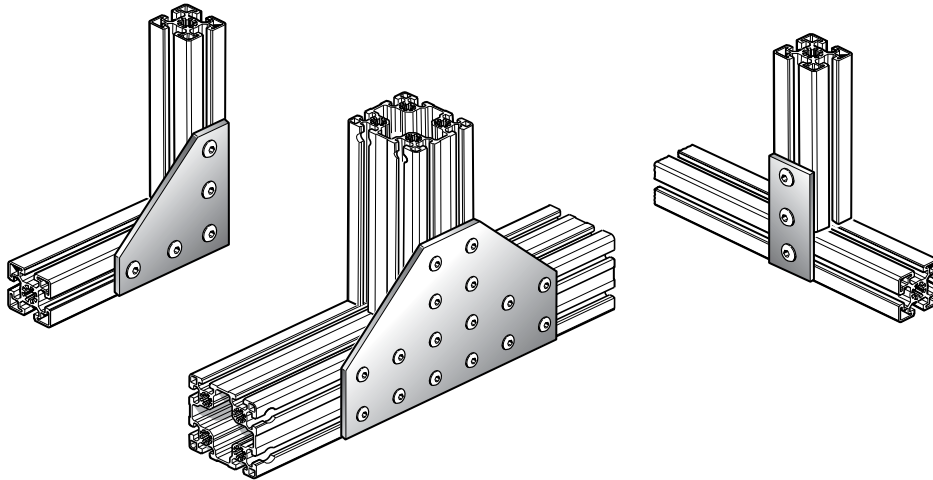
- Fasten to the outside faces of the profiles, leaving the inner T-slots free for panels or accessories.
- Can be added to reinforce a structure after initial assembly
- Three different styles available in a variety of sizes

Material:

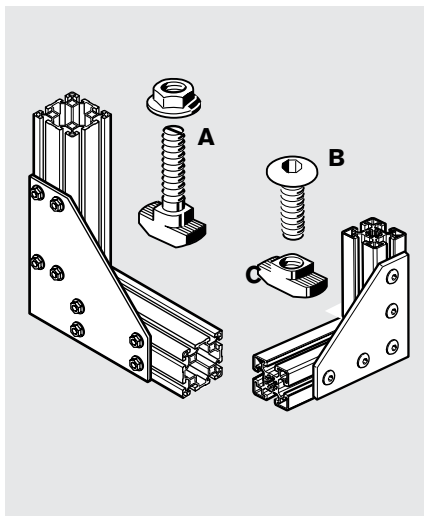
- 30-, 45-, and 90-series: clear anodized 6063-T6 aluminum

Recommended fasteners (order below):

- 30-series (8mm T-slots): M6x12 BHCS DIN 9427 and M6 8mm T-nut OR 8mm T-bolt fastening kit, L=23mm
- 45-, and 90-series (10mm T-slots): M8x16 BHCS DIN 9427 and M8 10mm T-nut OR 10mm T-bolt fastening kit, L=24mm



Fasteners for Joining Plates 8 10



Features:

- Use 8mm fasteners for attaching joining plates to 30-series profiles
- Use 10mm fasteners for attaching joining plates to 45-, and 90-series profiles
- Use button-head cap screws and T-nuts to create a high-tech, smooth "riveted" look, or use T-bolt kits for a more rugged look

Material:

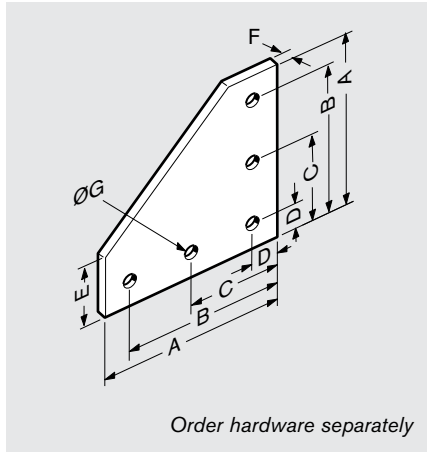
- Zinc-plated steel

Description	Lot Size	Part Number
A 8mm T-bolt fastening kit, L=23mm 8	1	8 981 019 579
B M6x12 BHCS, DIN 9427 8	1	3 842 507 071
C 8mm M6 T-nut 8	1	3 842 501 753
A 10mm T-bolt fastening kit, L=24mm 10	1	8 981 021 344
B M8x16 BHCS, DIN 9427 10	1	3 842 509 423
C 10mm M8 T-nut 10	1	3 842 530 287

Section 3: Profile Connectors

Joining Plates

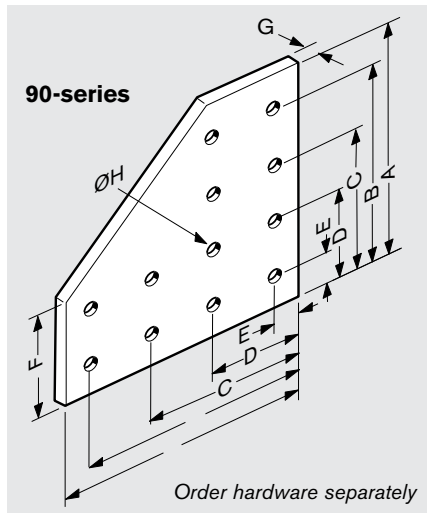
Corner Joining Plates for 30- and 45-series profiles 8 10



Corner Joining Plate	Dimension in mm						
	A	B	C	D	E	F	ØG
30-series	84	72	42	12	24	5	6.2
45-series	129	109.5	64.5	19.5	39	6.5	8.3

Description	Lot Size	Part Number
30-series corner joining plate 8	1	8 981 019 457
45-series corner joining plate 10	1	8 981 019 448

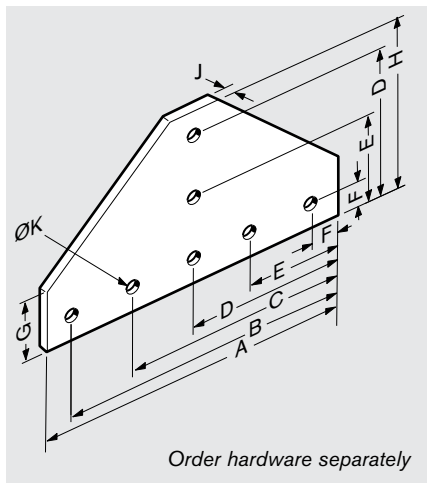
Corner Joining Plates for 90 series profiles 10



Corner Joining Plate	Dimension in mm							
	A	B	C	D	E	F	G	ØH
90-series	174	154.5	109.5	64.5	19.5	84	6.5	8.3

Description	Lot Size	Part Number
90-series corner joining plate 10	1	8 981 019 452

T-Junction Joining Plates for 30- and 45-series profiles 8 10



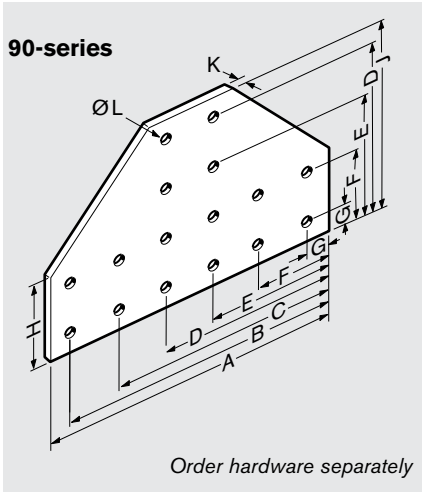
T-Junction Joining Plate	Dimension in mm									
	A	B	C	D	E	F	G	H	J	ØK
30-series	144	132	102	72	42	12	24	84	5	6.2
45-series	219	199.5	154.5	109.5	64.5	19.5	39	129	6.5	8.3

Description	Lot Size	Part Number
30-series T-junction joining plate 8	1	8 981 019 461
45-series T-junction joining plate 10	1	8 981 019 450



Section 3: Profile Connectors

3

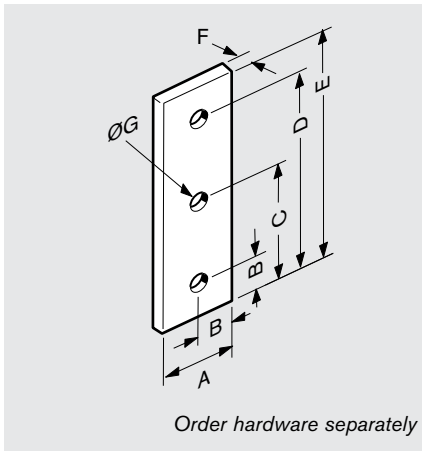
T-Junction Joining Plates for 90 series profiles  






T-Junction Joining Plate	Dimension in mm											
	A	B	C	D	E	F	G	G ₁	H	J	K	ØL
90-series	264	244.5	199.5	154.5	109.5	64.5	19.5	-	84	174	6.5	8.3

Description	Lot Size	Part Number
90-series T-junction joining plate  	1	8 981 019 455

Rectangular Joining Plates for 30- and 45-series profiles  



Rectangular Joining Plate	Dimension in mm						
	A	B	C	D	E	F	ØG
30-series	24	12	42	72	84	5	6.2
45-series	39	19.5	64.5	109.5	129	6.5	8.3

Description	Lot Size	Part Number
30-series rectangular joining plate 	1	8 981 019 458
45-series rectangular joining plate  	1	8 981 019 449