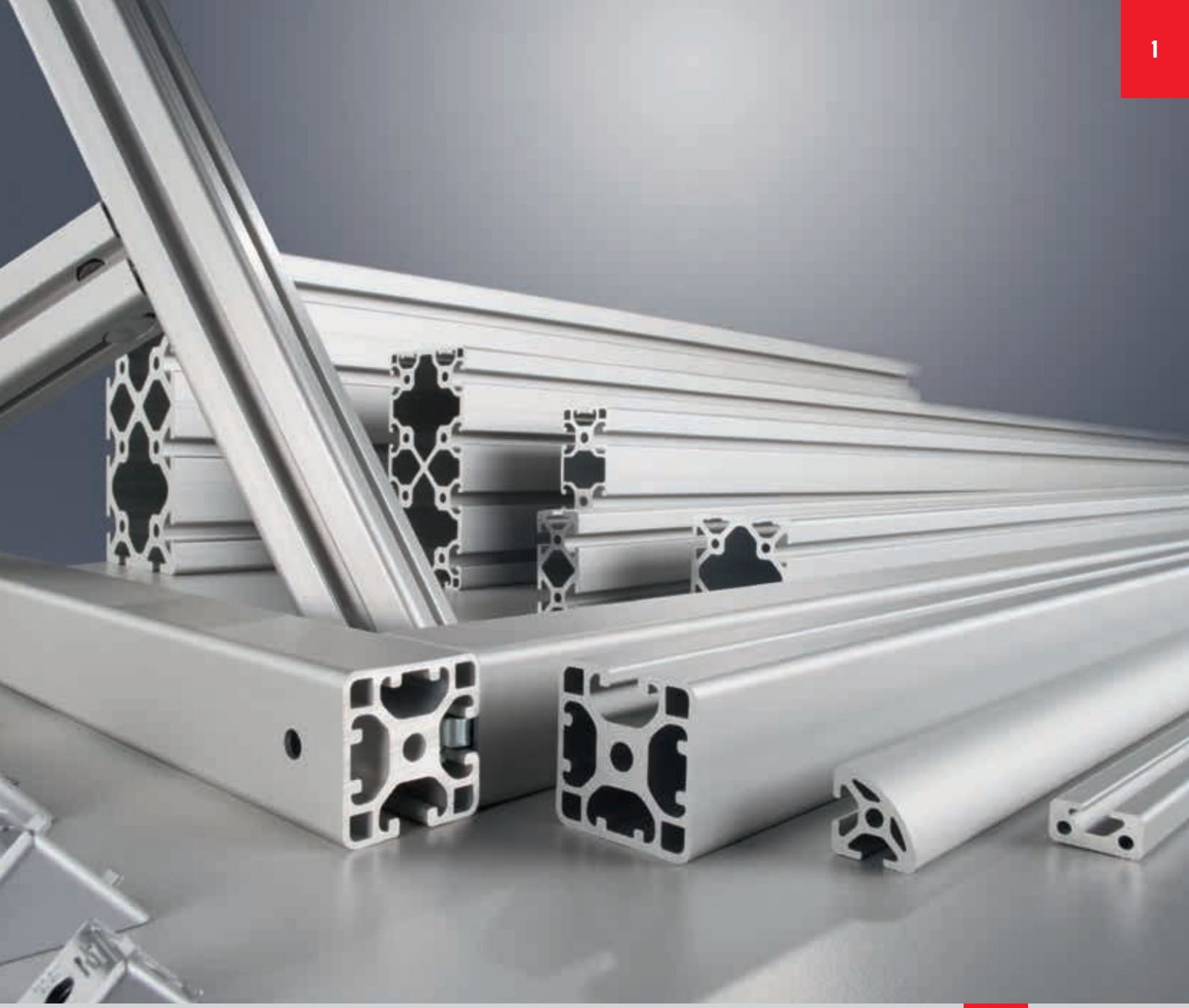
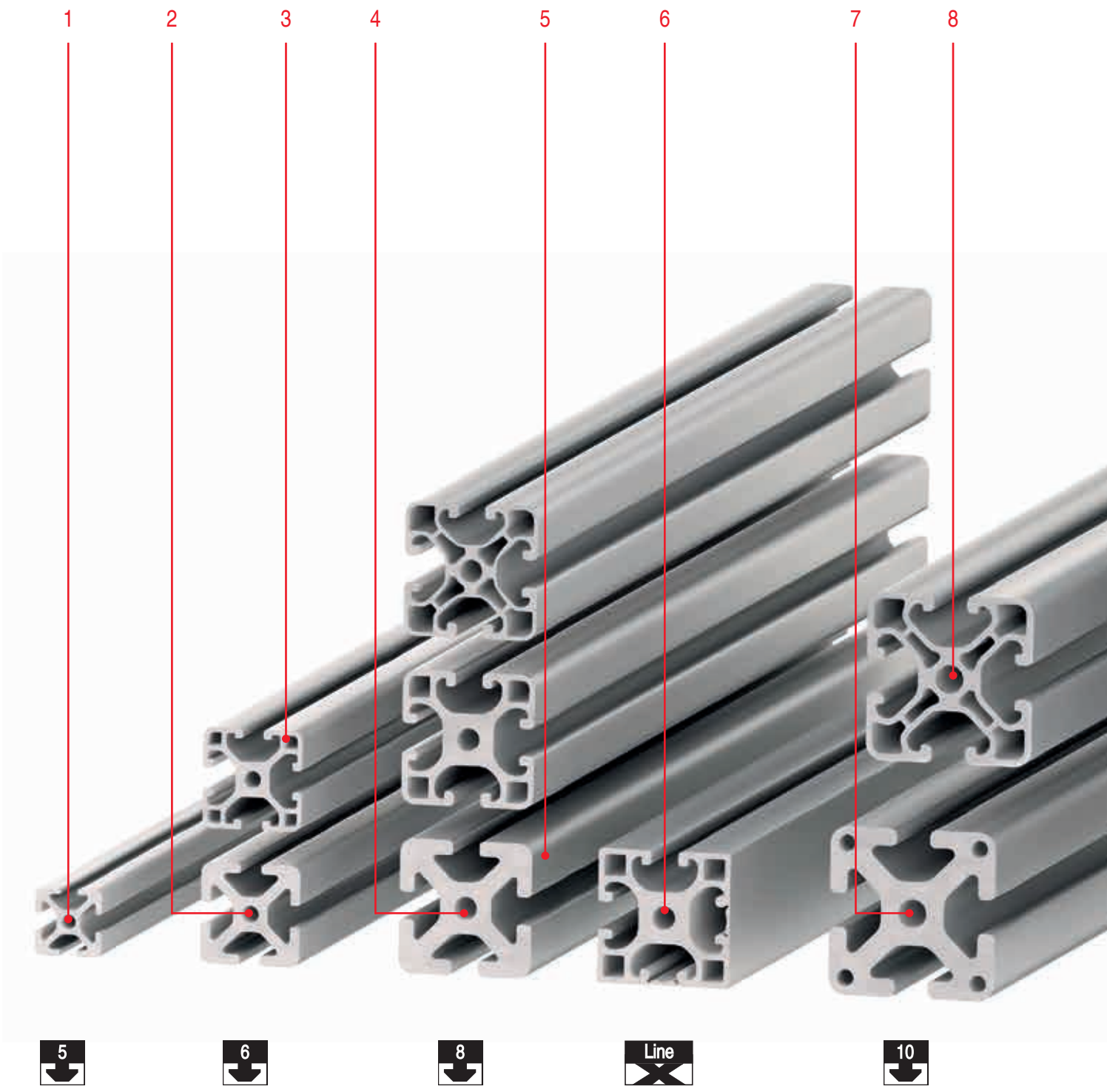
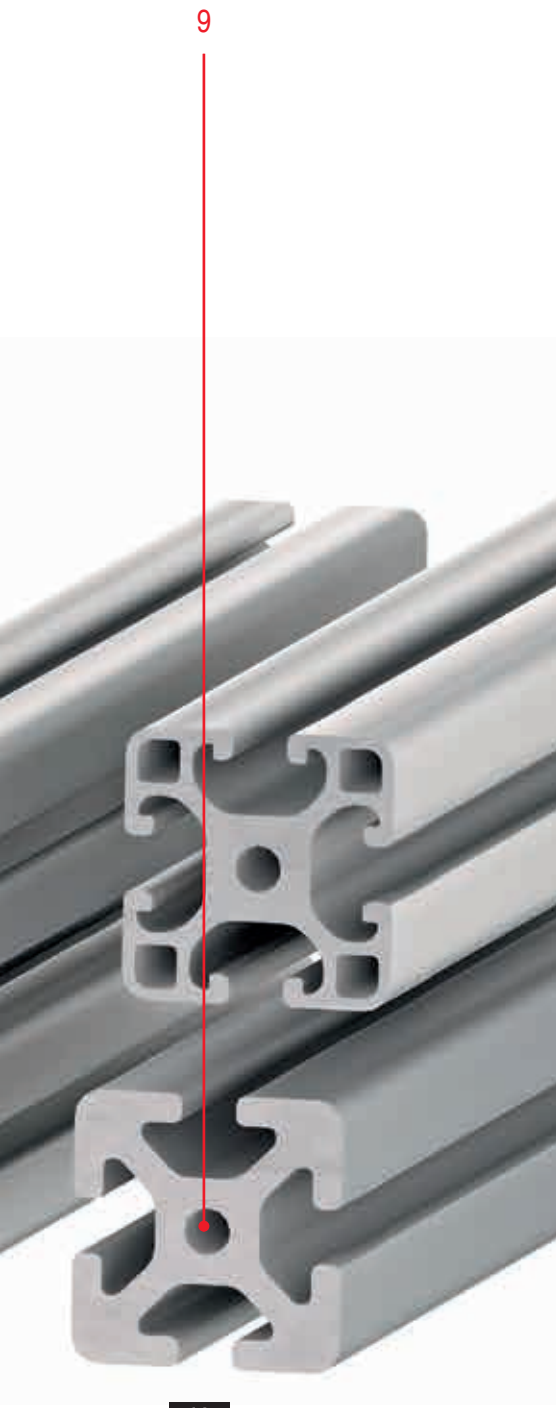


1

PROFILES AND ACCESSORIES

Overview – item profile lines





1 Profiles 5

- Our most compact aluminium profiles
- Modular dimension of 20 mm
- Full functionality, low bulk
- For applications where space is limited

17 Section 1

2 Profiles 6

- Economical use of materials, generous performance
- High carrying capacity despite low dead weight
- For systems with a compact design

21 Section 1

3 Lightweight profiles

- Additional cavities help reduce weight
- Profile core offers full load-carrying capacity
- Available in Lines 6, 8 and 12

21 Section 1

4 Profiles 8

- The standard material for design engineers
- Huge selection of accessories and enhancements
- Robust and strong despite small dimensions

27 Section 1

5 Special materials

- The alternatives to aluminium – stainless steel or 70 percent wood composite material
- For special applications
- Available as Profiles 8

639 Section 17

6 Profiles X

- Minimised edge radii make this line ideal for building systems with closed surfaces
- Compatible with Line 8
- For constructions with a high-end look that are easy to clean

33 Section 1

7 Profiles 10

- Greater load-carrying capacity thanks to reinforced profile walls
- Exceptional reliability against pre-tension losses

47 Section 1

8 Profiles E

- Exceptionally light due to minimal use of materials
- Profile groove remains fully functional
- Available in Lines 8 and 10

27 Section 1

9 Profiles 12

- The strongest profile line in the MB Building Kit System
- Highest load-carrying capacity and maximum tensile loading
- Stable basis for extremely strong frames

49 Section 1

Key: See page | 0 Products in this section | 0 Products in other sections

Profiles and accessories
Products in this section

Profiles 5 – modular dimension 20 mm

- Extremely compact dimensions
- For refined, stable and flexible applications

17

Profiles 5 – flat cross-sections

- Particularly flat profiles
- Full functionality at a height of just 8.5 to 14 mm

19

Profiles 5 R

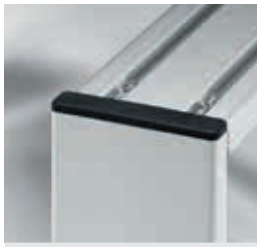
- Closed on two sides, rounded surface
- Available in various angles

20

Profiles 6 – modular dimension of 30 mm

- The weight-optimised profile line
- Ideal for slimline, robust design

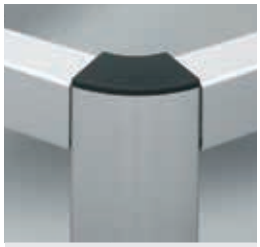
21



Profiles 6 – flat cross-sections

- Low installation height
- For fastening lightweight components

24



Profiles 6 R

- Ideal for building protective hoods, frames and tables
- Closed on two sides, rounded surface
- Available in various angles

26

Profiles 8 – modular dimension of 40 mm

- The universal and robust all-rounder
- Three variants for constructions with optimised load-carrying capacity

27

Profiles 8 – Line X

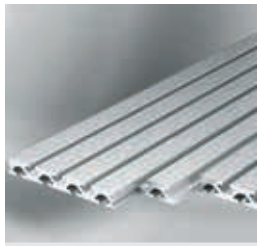
- Exceptionally elegant
- Ideal for closed surfaces (cleanroom)

33

Profiles 8 – flat cross-sections

- Reduced construction height with full groove
- Suitable for use as a frame, support or strut

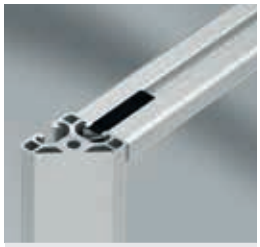
35



Bed Plate Profile 8

- For creating panels in any size
- As a cover or fastener

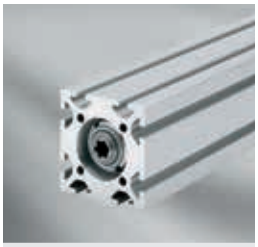
38



Profiles 8 – 45° Angle

- Elegant connection options for up to three profiles
- Ideal for display cases, tables and systems with an elegant aesthetic appeal

39



Profiles 8 D

- Large central bore
- Ideal for accommodating shafts, spindles and axles

41

Profiles 8 W

- Angled profiles for mounting components
- For use as a panel fixing strip

44

Profiles 8 D40

- Profiles with a cylindrical cross-section
- Covered grooves can be opened up

45

Profiles 10 – modular dimension 50 mm

- Higher load-carrying capacity for constructions under heavy loads
- Particularly secure fastenings

47

Profiles 10 – flat cross-sections

- Reduced construction height for space-saving frames and supports
- With full Line 10 groove

48

Profiles 12 – modular dimension of 60 mm

- The strongest profile line in the MB system
- For particularly stable, heavy-duty constructions

49

Solid profiles and profile edging

- Profiles without grooves for use as grip rails or edging
- For edging any panel elements

52

Caps

- Suitable for all profiles
- Made from plastic or metal

54

Caps for bores

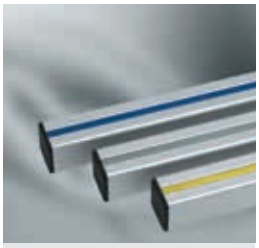
- Dust-tight seal for profile bores
- Available in two colours

65

Cover Profiles Al

- Creates a closed surface
- Covers cables running through the groove

67



Cover Profiles PP

- One profile in various colours with two applications
- For covering the profile groove or fixing panel elements in place

68

Protective Profiles

- Safe impact protection thanks to hollow-chambered profiles
- Prevent damage and injuries

466

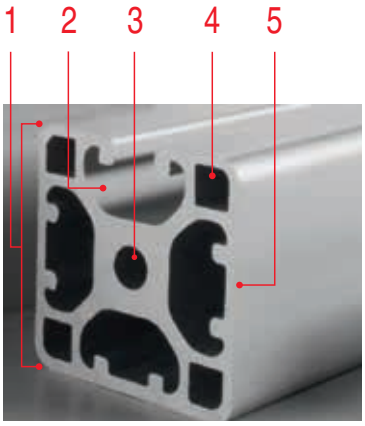
13

Note:

Technical data on the profiles can be found in Section 19.

Overview – finding the right profile fast

Key features of the item profiles



1 Modular dimension

Each line is based on square profiles with external dimensions of 20, 30, 40, 50 or 60 mm. Continuous grooves run along all four sides.

2 Profile groove

The size and load-carrying capacity of the groove increases in line with the modular dimension. Most profile connections are anchored in the groove. The groove also serves as an anchor point for panel elements, etc.

3 Core bore

The core bore offers a stable fastening point at the end faces of the profiles. It can also be used as a conduit for compressed air.

4 Lightweight profiles

Additional cavities reduce weight but also lower maximum tensile loading. Lightweight profiles use profile grooves in the relevant modular dimension.

5 Closed grooves

Profile variants with closed surfaces offer more than just aesthetic advantages. They are also easy to clean and eliminate the problem of dirt accumulation in grooves.

6 Line X

Thanks to its smooth, closed outer surfaces, Line X has a particularly elegant appearance. It has the same dimensions as Line 8 and can be used to create dust and dirt-tight constructions.

Side-by-side comparison of the profile lines	1 Modular dimension	2 Max. tensile loading	5 Closed groove	6 Line X
				
Profiles 5 – the compact profile for precision work 17 5 ▪ Extremely compact dimensions ▪ For refined, stable and flexible applications	20 mm	500 N	Yes	No
Profiles 6 – the lightweight alternative 21 6 ▪ The weight-optimised profile line ▪ Ideal for slimline, robust design	30 mm	1,750 N	Yes	No
Profiles 8 – the standard material for design engineers 27 8 ▪ The universal and robust all-rounder ▪ Three variants for constructions with optimised load-carrying capacity	40 mm	5,000 N	Yes	Yes
Profiles 10 – the added-value profile with increased load-carrying capacity 47 10 ▪ The Line for constructions under heavier loads ▪ Reliability against pre-tension losses	50 mm	7,000 N	No	No
Profiles 12 – the robust option for load-carrying applications 49 12 ▪ The strongest profile line in the MB system ▪ For particularly stable, heavy-duty frame structures	60 mm	10,000 N	No	No

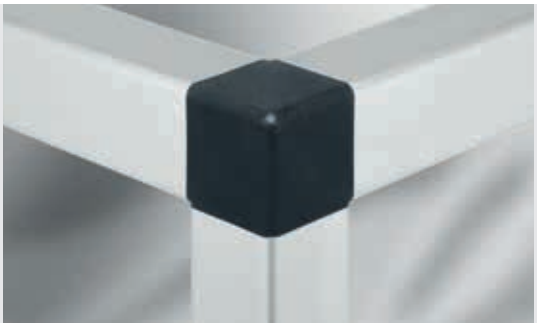
Key: See page

Profiles 5 – modular dimension of 20 mm

The compact profile for precision work

- Extremely compact dimensions
- Available with open or closed grooves
- Low material usage safeguards resources
- For refined, stable and flexible applications

5



Closed grooves make systems easier to clean and create a more elegant appearance.

Materials used in all the following products:
Al, anodized

Profile 5 20x20

5

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
1.80	0.48	0.72	0.72	0.07	0.72	0.72	
natural, cut-off max. 6000 mm							0.0.370.03
natural, 1 pce., length 6000 mm							0.0.611.45
natural, 1 pce., length 3000 mm							0.0.448.04
black, cut-off max. 3000 mm							0.0.370.15
black, 1 pce., length 3000 mm							0.0.448.05

Profile 5 20x20 1N

5

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
1.85	0.50	0.74	0.77	0.18	0.74	0.74	
natural, cut-off max. 3000 mm							0.0.437.74
natural, 1 pce., length 3000 mm							0.0.437.99

Profile 5 20x20 2N90

5

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
1.91	0.51	0.78	0.78	0.34	0.76	0.76	
natural, cut-off max. 3000 mm							0.0.437.66
natural, 1 pce., length 3000 mm							0.0.464.01

Profile 5 20x20 2N180

5

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
1.90	0.51	0.74	0.82	0.30	0.74	0.82	
natural, cut-off max. 3000 mm							0.0.437.67
natural, 1 pce., length 3000 mm							0.0.464.02

Profile 5 20x20 3N

5

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
1.92	0.52	0.77	0.80	0.51	0.76	0.80	
natural, cut-off max. 3000 mm							0.0.464.83
natural, 1 pce., length 3000 mm							0.0.448.33

Profile 5 40x20

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
3.32	0.89	1.41	5.14	0.62	1.41	2.57

natural, cut-off max. 6000 mm	0.0.370.04
natural, 1 pce., length 6000 mm	0.0.631.00
natural, 1 pce., length 3000 mm	0.0.448.07
black, cut-off max. 3000 mm	0.0.370.16
black, 1 pce., length 3000 mm	0.0.448.08

Profile 5 40x20 2N

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
3.38	0.91	1.47	5.21	1.32	1.44	2.61

natural, cut-off max. 3000 mm	0.0.437.75
natural, 1 pce., length 3000 mm	0.0.464.03

Profile 5 40x20 2N180

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
3.38	0.91	1.40	5.46	1.09	1.40	2.73

natural, cut-off max. 3000 mm	0.0.437.76
natural, 1 pce., length 3000 mm	0.0.464.04

Profile 5 40x20 3N90

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
3.42	0.92	1.48	5.37	1.53	1.44	2.66

natural, cut-off max. 3000 mm	0.0.437.77
natural, 1 pce., length 3000 mm	0.0.464.05

Profile 5 40x20 4N180

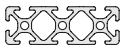
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
3.46	0.93	1.56	5.30	1.93	1.56	2.65

natural, cut-off max. 3000 mm	0.0.437.78
natural, 1 pce., length 3000 mm	0.0.464.06

Profile 5 40x40

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
5.14	1.39	9.30	9.30	5.38	4.65	4.65

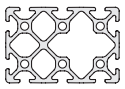
natural, cut-off max. 6000 mm	0.0.370.05
natural, 1 pce., length 6000 mm	0.0.448.09



Profile 5 60x20

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
4.76	1.28	2.06	16.09	1.61	2.06	5.36

natural, cut-off max. 3000 mm	0.0.425.44
natural, 1 pce., length 3000 mm	0.0.448.11



Profile 5 60x40

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
7.67	2.07	13.52	28.14	11.05	6.76	9.09

natural, cut-off max. 6000 mm	0.0.425.45
natural, 1 pce., length 6000 mm	0.0.448.12

Profile 5 80x20

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
6.19	1.67	2.72	36.08	2.38	2.72	9.02

natural, cut-off max. 3000 mm	0.0.370.86
natural, 1 pce., length 3000 mm	0.0.448.14

Profiles 5 – flat cross-sections

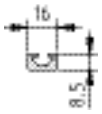
- Particularly flat profiles
- Full functionality at a height of just 8.5 to 14 mm
- Suitable as support profiles or anchor points
- For lightweight clamping and mounting surfaces

5

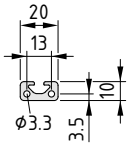
Flat profiles from item can be used to make handles of virtually any length.

High-precision linear slides use profiles with a flat cross-section as carriage profiles.

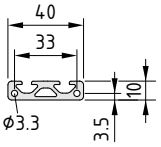
Materials used in all the following products:
Al, anodized



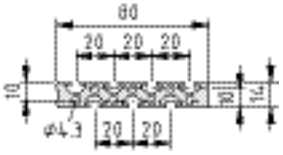
Profile 5 16x8.5							5
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
0.82	0.22	0.06	0.23	0.02	0.12	0.28	
natural, cut-off max. 3000 mm							0.0.265.91
natural, 1 pce., length 3000 mm							0.0.448.02



Profile 5 20x10							5
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
1.29	0.35	0.12	0.53	0.10	0.22	0.53	
natural, cut-off max. 3000 mm							0.0.391.02
natural, 1 pce., length 3000 mm							0.0.448.03



Profile 5 40x10							5
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
2.39	0.65	0.24	3.63	0.27	0.44	1.81	
natural, cut-off max. 3000 mm							0.0.391.06
natural, 1 pce., length 3000 mm							0.0.448.06



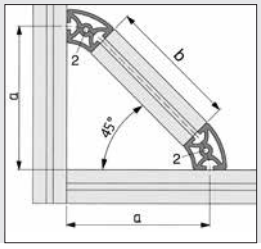
Profile 5 80x14							5
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.64	1.79	1.11	40.69	0.87	1.54	10.17	
natural, cut-off max. 3000 mm							0.0.370.85
natural, 1 pce., length 3000 mm							0.0.448.13

Profiles 5 R

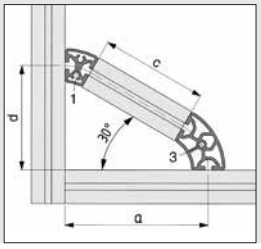
- Closed on two sides, rounded surface
- External angles of 30°, 45°, 60° and 90° available
- Ideal for building protective hoods and frames

5

Profiles R can also be used to add bracing to profile constructions. Calculating the appropriate length for the struts is easy.

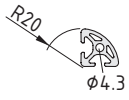


Connection at 45°	
Profile 2	Profile 5 R20/40-45°
b	$(a - 30)\cdot\sqrt{2}$



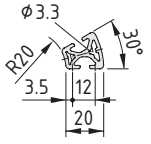
Connection at 30°	
Profile 1	Profile 5 R20/40-30°
Profile 3	Profile 5 R20/40-60°
c	$2(a - 30)/\sqrt{3}$
d	$(a - 30)/\sqrt{3} + 30$

Materials used in all the following products:
Al, anodized



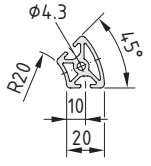
Profile 5 R20-90° 5

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
1.71	0.46	0.58	0.58	0.19	0.53	0.53	
natural, cut-off max. 3000 mm							0.0.425.43
natural, 1 pce., length 3000 mm							0.0.448.19



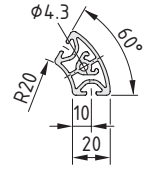
Profile 5 R20/40-30° 5

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
1.68	0.45	0.43	0.68	0.16	0.38	0.57	
natural, cut-off max. 3000 mm							0.0.425.39
natural, 1 pce., length 3000 mm							0.0.448.15



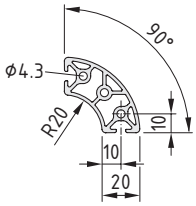
Profile 5 R20/40-45° 5

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
2.38	0.64	1.26	0.98	0.65	0.79	0.75	
natural, cut-off max. 3000 mm							0.0.425.40
natural, 1 pce., length 3000 mm							0.0.448.16



Profile 5 R20/40-60° 5

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
3.16	0.85	2.48	1.65	1.27	1.31	1.09	
natural, cut-off max. 3000 mm							0.0.425.41
natural, 1 pce., length 3000 mm							0.0.448.17



Profile 5 R20/40-90° 5

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
4.18	1.13	5.40	5.40	2.99	2.70	2.70	
natural, cut-off max. 3000 mm							0.0.425.42
natural, 1 pce., length 3000 mm							0.0.448.18

Profiles 6 - modular dimension of 30 mm

The lightweight alternative

- The weight-optimised profile line
- Ideal for slimline, robust design
- Available with open or closed grooves

6

Closed grooves are easy to clean and have a particularly elegant appearance. They create functional and attractive display cases, tables and cover hoods.

Materials used in all the following products:
Al, anodized

Profile 6 30x30 light 6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
3.43	0.93	2.90	2.90	0.30	1.94	1.94	
natural, cut-off max. 6000 mm							0.0.419.06
natural, 1 pce., length 6000 mm							0.0.451.07

Profile 6 30x30 6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
4.67	1.26	4.15	4.15	0.41	2.77	2.77	
natural, cut-off max. 6000 mm							0.0.419.01
natural, 1 pce., length 6000 mm							0.0.451.03

Profile 6 30x30 1N light 6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
3.49	0.94	2.91	3.01	0.78	1.94	1.98	
natural, cut-off max. 6000 mm							0.0.439.43
natural, 1 pce., length 6000 mm							0.0.451.04

Profile 6 30x30 2N90 light 6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
3.54	0.96	3.02	3.02	1.48	1.98	1.98	
natural, cut-off max. 6000 mm							0.0.439.45
natural, 1 pce., length 6000 mm							0.0.451.06

Profile 6 30x30 2N180 light 6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
3.54	0.96	2.90	3.14	1.29	1.93	2.09	
natural, cut-off max. 6000 mm							0.0.439.44
natural, 1 pce., length 6000 mm							0.0.451.05

Profile 6 30x30 3N light 6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
3.60	1.00	3.02	3.14	2.23	1.98	2.09	
natural, cut-off max. 6000 mm							0.0.478.27
natural, 1 pce., length 6000 mm							0.0.451.67

Profile 6 60x30 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
6.13	1.65	5.54	21.22	3.18	3.69	7.07

natural, cut-off max. 6000 mm	0.0.419.07
natural, 1 pce., length 6000 mm	0.0.451.14

Profile 6 60x30

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
8.47	2.29	7.92	29.30	4.87	5.28	9.77

natural, cut-off max. 6000 mm	0.0.419.02
natural, 1 pce., length 6000 mm	0.0.451.09

Profile 6 60x30 2N light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
6.24	1.68	5.77	21.47	5.23	3.78	7.16

natural, cut-off max. 6000 mm	0.0.439.46
natural, 1 pce., length 6000 mm	0.0.451.10

Profile 6 60x30 2N180 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
6.24	1.69	5.54	22.21	4.18	3.69	7.40

natural, cut-off max. 6000 mm	0.0.439.49
natural, 1 pce., length 6000 mm	0.0.451.11

Profile 6 60x30 3N90 light

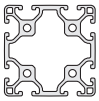
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
6.30	1.70	5.77	21.97	6.04	3.78	7.26

natural, cut-off max. 6000 mm	0.0.439.48
natural, 1 pce., length 6000 mm	0.0.451.12

Profile 6 60x30 4N180 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
6.36	1.72	6.01	21.74	7.68	4.00	7.25

natural, cut-off max. 6000 mm	0.0.439.47
natural, 1 pce., length 6000 mm	0.0.451.13



Profile 6 60x60 light

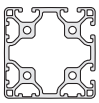
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
10.01	2.70	39.47	39.47	21.54	13.16	13.16

natural, cut-off max. 6000 mm	0.0.419.09
natural, 1 pce., length 6000 mm	0.0.451.16

Profile 6 60x60

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
13.33	3.60	53.77	53.77	33.63	17.92	17.92

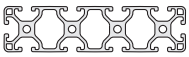
natural, cut-off max. 6000 mm	0.0.419.03
natural, 1 pce., length 6000 mm	0.0.451.15



Profile 6 60x60 4N90 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
10.24	2.76	40.71	40.71	30.17	13.43	13.43

natural, cut-off max. 6000 mm	0.0.491.31
natural, 1 pce., length 6000 mm	0.0.491.30



Profile 6 120x30 light

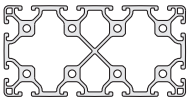
6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
11.53	3.11	10.82	152.65	8.97	7.21	25.44	
natural, cut-off max. 6000 mm							0.0.419.08
natural, 1 pce., length 6000 mm							0.0.451.39

Profile 6 120x30

6

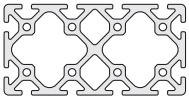
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
16.00	4.32	15.42	210.94	14.16	10.28	35.16	
natural, cut-off max. 6000 mm							0.0.419.04
natural, 1 pce., length 6000 mm							0.0.451.17



Profile 6 120x60 light

6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
18.70	5.05	76.61	259.65	64.07	25.54	43.27	
natural, cut-off max. 6000 mm							0.0.419.10
natural, 1 pce., length 6000 mm							0.0.451.19



Profile 6 120x60

6

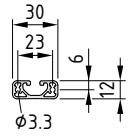
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
24.84	6.71	102.71	347.62	105.69	34.24	57.94	
natural, cut-off max. 6000 mm							0.0.419.05
natural, 1 pce., length 6000 mm							0.0.451.18

Profiles 6 – flat cross-sections

- Low installation height
- For fastening lightweight components

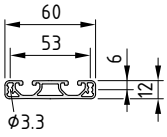
Line 6

Materials used in all the following products:
Al, anodized



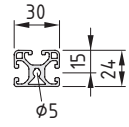
Profile 6 30x12 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
1.58	0.43	0.25	1.46	0.17	0.39	0.98	
natural, cut-off max. 3000 mm							0.0.478.05
natural, 1 pce., length 3000 mm							0.0.451.63



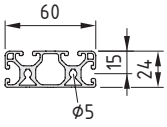
Profile 6 60x12 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
2.98	0.81	0.53	10.00	0.49	0.83	3.34	
natural, cut-off max. 3000 mm							0.0.478.07
natural, 1 pce., length 3000 mm							0.0.451.65



Profile 6 30x24 light

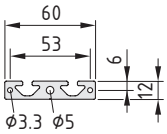
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
2.82	0.76	1.69	2.27	0.31	1.36	1.51	
natural, cut-off max. 6000 mm							0.0.608.88
natural, 1 pce., length 6000 mm							0.0.608.87



Profile 6 60x24 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
4.98	1.34	3.14	17.10	2.74	2.53	5.70	
natural, cut-off max. 6000 mm							0.0.608.91
natural, 1 pce., length 6000 mm							0.0.608.90

Line



Profile X 6 60x12

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
4.82	1.30	0.71	15.56	0.81	1.11	5.18	
natural, cut-off max. 3000 mm							0.0.609.32
natural, 1 pce., length 3000 mm							0.0.609.20

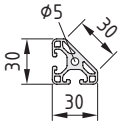
Profiles 6 – 45° Angle

- Create stylish designs
- For hoods, tables and display cases

6

item supplies Fastening Set 6 30x30-45° specifically for use with these 45° profiles. It combines two or three profiles to form an attractive right-angled corner unit.

Fastening Set 6 30x30-45° 107



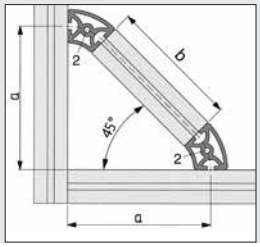
Profile 6 30x30-45° light							6
Al, anodized							
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
3.12	0.84	2.21	2.21	0.61	1.33	1.33	
natural, cut-off max. 3000 mm							0.0.434.72
natural, 1 pce., length 3000 mm							0.0.451.08

Profiles 6 R

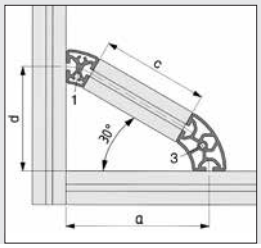
- Closed on two sides, rounded surface
- Various external angles available
- Ideal for building protective hoods, frames and tables

6

Profiles R can also be used to add bracing to profile constructions. Calculating the appropriate length for the struts is easy.

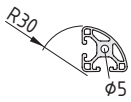


Connection at 45°	
Profile 2	Profile 6 R30/60-45°
b	$(a-45)\cdot\sqrt{2}$



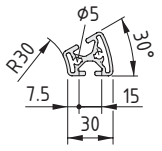
Connection at 30°	
Profile 1	Profile 6 R30/60-30°
Profile 3	Profile 6 R30/60-60°
c	$2(a-45)/\sqrt{3}$
d	$(a-45)/\sqrt{3}+45$

Materials used in all the following products:
Al, anodized



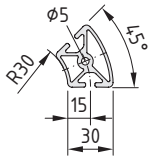
Profile 6 R30-90° light 6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
3.07	0.83	2.16	2.16	0.74	1.32	1.32	
natural, cut-off max. 3000 mm							0.0.434.73
natural, 1 pce., length 3000 mm							0.0.451.20



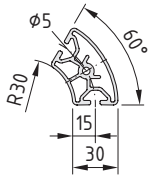
Profile 6 R30/60-30° 6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
3.27	0.88	1.95	2.77	0.78	1.16	1.57	
natural, cut-off max. 6000 mm							0.0.459.54
natural, 1 pce., length 6000 mm							0.0.451.62



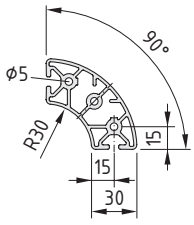
Profile 6 R30/60-45° 6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
4.52	1.22	5.81	4.15	2.78	2.42	2.31	
natural, cut-off max. 6000 mm							0.0.459.57
natural, 1 pce., length 6000 mm							0.0.451.64



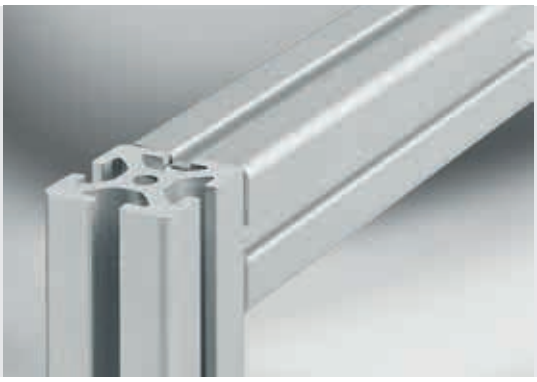
Profile 6 R30/60-60° 6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
5.28	1.43	10.01	6.34	4.82	3.48	2.86	
natural, cut-off max. 6000 mm							0.0.459.35
natural, 1 pce., length 6000 mm							0.0.451.66



Profile 6 R30/60-90° 6

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
8.06	2.18	22.94	22.94	12.58	7.57	7.57	
natural, cut-off max. 6000 mm							0.0.459.38
natural, 1 pce., length 6000 mm							0.0.451.68



Profiles 8 - modular dimension of 40 mm

The standard material for design engineers

- The universal and robust all-rounder
- Three variants for constructions with optimised load-carrying capacity
- Available with open or closed grooves
- Products from Line X also available

Line 8

The MB Building Kit System from item is a tried-and-tested basis for machines and systems of all sizes. Profiles 8 are the most frequently used profiles of all the lines worldwide. Thanks to their design, these aluminium profiles are light, robust and versatile with a service life of many years. Due to the wide selection of modules available, Profiles 8 can satisfy virtually all your construction needs.

Profiles with closed grooves are particularly easy to clean and can be combined with conventional profiles as required.

Some cross-sections incorporate closed grooves that can be easily opened.

The profiles in Line X can be built into elegant constructions with closed surfaces. The minimised edge radius results in a seamless connection between profiles and eliminates protruding edges. As a result, dirt and deposits have no chance of ruining the striking aesthetic appeal of Line X.

The profiles in Line X use Line 8 grooves, ensuring they are compatible with all the accessories in that line.

Materials used in all the following products:
Al, anodized

Profile 8 40x40 E — 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
5.07	1.37	7.38	7.38	1.09	3.69	3.69	
natural, cut-off max. 6000 mm							7.0.000.09
natural, 1 pce., length 6000 mm							0.0.452.79

Profile 8 40x40 light — 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.46	1.74	9.00	9.00	1.36	4.50	4.50	
natural, cut-off max. 6000 mm							0.0.026.33
natural, 1 pce., length 6000 mm							0.0.452.81
natural, 1 pce., length 3000 mm							0.0.452.80
black, cut-off max. 6000 mm							0.0.026.35
black, 1 pce., length 6000 mm							0.0.452.83

Profile 8 40x40 — 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
9.16	2.47	13.96	13.96	1.88	6.98	6.98	
natural, cut-off max. 6000 mm							0.0.026.03
natural, 1 pce., length 6000 mm							0.0.452.65
natural, 1 pce., length 3000 mm							0.0.452.66

Profile 8 40x40 1N light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
6.64	1.79	9.54	9.01	3.14	4.66	4.50

natural, cut-off max. 6000 mm	0.0.422.72
natural, 1 pce., length 6000 mm	0.0.452.68

Profile 8 40x40 2N90 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
4.83	1.30	8.06	8.06	4.82	3.87	3.87

natural, cut-off max. 6000 mm	7.0.000.06
natural, 1 pce., length 6000 mm	0.0.452.69

Profile 8 40x40 2N90 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
6.75	1.82	9.50	9.50	5.41	4.65	4.65

natural, cut-off max. 6000 mm	0.0.404.50
natural, 1 pce., length 6000 mm	0.0.452.71
black, cut-off max. 6000 mm	0.0.406.43
black, 1 pce., length 6000 mm	0.0.452.73

Profile 8 40x40 2N180 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
4.95	1.33	8.05	8.63	4.64	4.02	4.30

natural, cut-off max. 6000 mm	7.0.000.03
natural, 1 pce., length 6000 mm	0.0.452.74

Profile 8 40x40 2N180 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
6.78	1.83	10.12	9.12	4.99	5.05	4.55

natural, cut-off max. 6000 mm	0.0.404.51
natural, 1 pce., length 6000 mm	0.0.452.76

Profile 8 40x40 3N light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
6.96	1.90	9.62	10.22	8.27	4.70	5.11

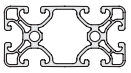
natural, cut-off max. 6000 mm	0.0.480.26
natural, 1 pce., length 6000 mm	0.0.454.37

Profile 8 40x40 4N light

Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
6.86	1.86	9.79	9.79	8.02	4.89	4.89

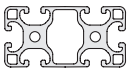
natural, cut-off max. 6000 mm	0.0.489.11
natural, 1 pce., length 6000 mm	0.0.488.88



Profile 8 80x40 E

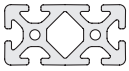
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]
8.93	2.42	15.15	57.81	9.42	7.58	14.45

natural, cut-off max. 6000 mm	7.0.000.26
natural, 1 pce., length 6000 mm	0.0.452.39



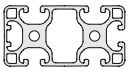
Profile 8 80x40 light 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
11.38	3.04	16.60	69.54	9.94	8.30	17.38	
natural, cut-off max. 6000 mm							0.0.026.34
natural, 1 pce., length 6000 mm							0.0.452.41
natural, 1 pce., length 3000 mm							0.0.452.40
black, cut-off max. 6000 mm							0.0.026.36
black, 1 pce., length 6000 mm							0.0.452.43



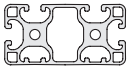
Profile 8 80x40 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
16.76	4.53	26.87	101.19	18.83	13.44	25.29	
natural, cut-off max. 6000 mm							0.0.026.04
natural, 1 pce., length 6000 mm							0.0.452.95
natural, 1 pce., length 3000 mm							0.0.452.94



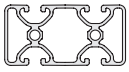
Profile 8 80x40 1N light 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
11.53	3.11	16.92	72.13	12.07	8.46	17.81	
natural, cut-off max. 6000 mm							0.0.607.75
natural, 1 pce., length 6000 mm							0.0.607.26



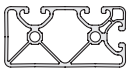
Profile 8 80x40 2N light 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
11.60	3.13	17.73	70.87	16.79	8.63	17.72	
natural, cut-off max. 6000 mm							0.0.422.75
natural, 1 pce., length 6000 mm							0.0.452.97



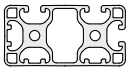
Profile 8 80x40 2N180 E 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
8.44	2.28	15.85	54.51	13.14	7.93	13.63	
natural, cut-off max. 6000 mm							7.0.000.23
natural, 1 pce., length 6000 mm							0.0.452.98



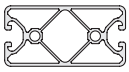
Profile 8 80x40 3N90 E 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
8.24	2.22	15.32	54.69	17.95	7.51	13.40	
natural, cut-off max. 6000 mm							7.0.000.20
natural, 1 pce., length 6000 mm							0.0.452.99



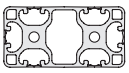
Profile 8 80x40 3N90 light 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
11.75	3.17	17.70	73.25	19.61	8.65	18.09	
natural, cut-off max. 6000 mm							0.0.674.52
natural, 1 pce., length 6000 mm							0.0.674.51



Profile 8 80x40 4N180 E 8

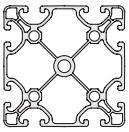
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
8.04	2.17	15.12	55.41	21.90	7.56	13.85	
natural, cut-off max. 6000 mm							7.0.000.17
natural, 1 pce., length 6000 mm							0.0.452.34



Profile 8 80x40 6N light

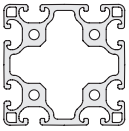
Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
11.87	3.20	18.09	74.31	25.23	9.04	18.58	
natural, cut-off max. 6000 mm							0.0.489.18
natural, 1 pce., length 6000 mm							0.0.488.82



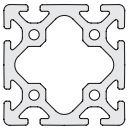
Profile 8 80x80 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
14.86	4.01	100.69	100.69	50.93	25.17	25.17	
natural, cut-off max. 6000 mm							7.0.000.29
natural, 1 pce., length 6000 mm							0.0.453.01



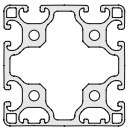
Profile 8 80x80 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
19.75	5.33	134.06	134.06	80.80	33.51	33.51	
natural, cut-off max. 6000 mm							0.0.265.80
natural, 1 pce., length 6000 mm							0.0.453.03
natural, 1 pce., length 3000 mm							0.0.453.02



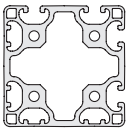
Profile 8 80x80

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
26.66	7.19	187.70	187.70	128.40	46.92	46.92	
natural, cut-off max. 6000 mm							0.0.026.27
natural, 1 pce., length 6000 mm							0.0.452.35



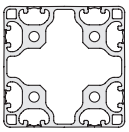
Profile 8 80x80 2N light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
20.08	5.42	139.00	135.00	94.12	34.25	33.68	
natural, cut-off max. 6000 mm							0.0.457.52
natural, 1 pce., length 6000 mm							0.0.452.45



Profile 8 80x80 4N90 light

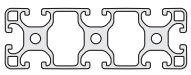
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
20.39	5.50	140.00	140.00	112.19	34.48	34.48	
natural, cut-off max. 6000 mm							0.0.457.59
natural, 1 pce., length 6000 mm							0.0.452.47



Profile 8 80x80 8N light

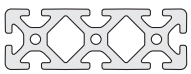
Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
19.43	5.25	134.24	134.24	101.09	33.56	33.56	
natural, cut-off max. 6000 mm							0.0.489.19
natural, 1 pce., length 6000 mm							0.0.488.84



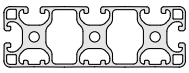
Profile 8 120x40 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
16.12	4.35	24.22	220.54	18.44	12.11	36.76	
natural, cut-off max. 6000 mm							0.0.416.66
natural, 1 pce., length 6000 mm							0.0.453.13



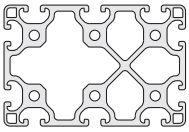
Profile 8 120x40

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
24.38	6.58	39.80	322.66	36.53	19.90	53.77	
natural, cut-off max. 6000 mm							0.0.416.29
natural, 1 pce., length 6000 mm							0.0.453.11



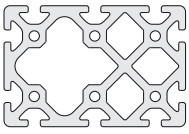
Profile 8 120x40 3N light 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
16.57	4.48	25.80	226.04	31.29	12.58	37.67	
natural, cut-off max. 6000 mm							0.0.675.52
natural, 1 pce., length 6000 mm							0.0.675.51



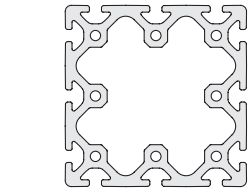
Profile 8 120x80 light 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
30.13	8.13	201.89	421.67	164.96	50.47	68.34	
natural, cut-off max. 6000 mm							0.0.416.65
natural, 1 pce., length 6000 mm							0.0.453.17



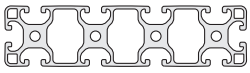
Profile 8 120x80 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
40.23	11.07	275.62	577.61	261.66	68.90	93.57	
natural, cut-off max. 6000 mm							0.0.416.30
natural, 1 pce., length 6000 mm							0.0.453.15



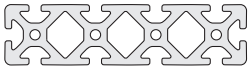
Profile 8 120x120 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
45.92	12.39	798.83	798.83	577.75	133.13	133.13	
natural, cut-off max. 6000 mm							0.0.609.79
natural, 1 pce., length 6000 mm							0.0.609.71



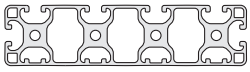
Profile 8 160x40 light 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
20.90	5.64	31.81	500.32	26.76	15.90	62.54	
natural, cut-off max. 6000 mm							0.0.418.35
natural, 1 pce., length 6000 mm							0.0.453.26



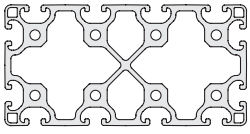
Profile 8 160x40 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
32.00	8.64	52.72	739.62	54.48	26.36	92.45	
natural, cut-off max. 6000 mm							0.0.265.23
natural, 1 pce., length 6000 mm							0.0.453.22



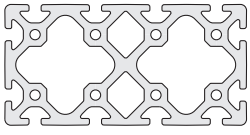
Profile 8 160x40 4N light 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
21.50	5.80	33.90	512.66	45.36	16.52	64.08	
natural, cut-off max. 6000 mm							0.0.429.04
natural, 1 pce., length 6000 mm							0.0.453.24



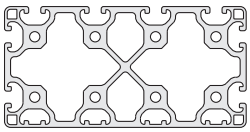
Profile 8 160x80 light 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
37.80	10.21	267.07	907.88	250.35	66.77	113.48	
natural, cut-off max. 6000 mm							0.0.411.18
natural, 1 pce., length 6000 mm							0.0.453.32



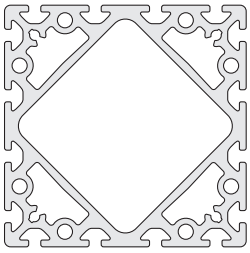
Profile 8 160x80 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
50.07	13.52	360.89	1,228.33	397.41	90.22	153.54	
natural, cut-off max. 6000 mm							0.0.265.26
natural, 1 pce., length 6000 mm							0.0.453.28



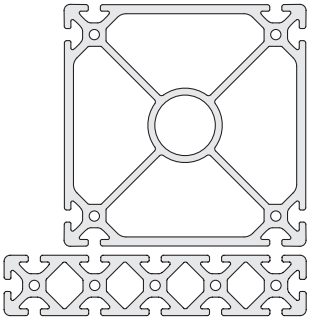
Profile 8 160x80 4N light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
38.34	10.35	275.91	919.80	310.07	68.97	114.97	
natural, cut-off max. 6000 mm							0.0.429.05
natural, 1 pce., length 6000 mm							0.0.453.30



Profile 8 160x160

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
74.20	20.04	2,355.00	2,355.00	1,876.66	294.40	294.40	
natural, cut-off max. 8000 mm							0.0.480.75
natural, 1 pce., length 8000 mm							0.0.480.76
natural, 1 pce., length 6000 mm							0.0.465.85

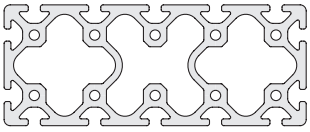


Profile 8 160x160 8EN

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
61.60	16.62	1,882.81	1,882.81	2,032.51	235.35	235.35	
natural, cut-off max. 6000 mm							0.0.474.58
natural, 1 pce., length 6000 mm							0.0.454.30

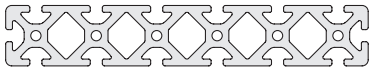
Profile 8 200x40

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
39.60	10.69	65.62	1,411.47	72.04	32.81	141.14	
natural, cut-off max. 6000 mm							0.0.473.82
natural, 1 pce., length 6000 mm							0.0.454.20



Profile 8 200x80

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
55.74	15.05	427.59	2,181.99	489.79	106.90	218.20	
natural, cut-off max. 6000 mm							0.0.483.35
natural, 1 pce., length 6000 mm							0.0.483.34

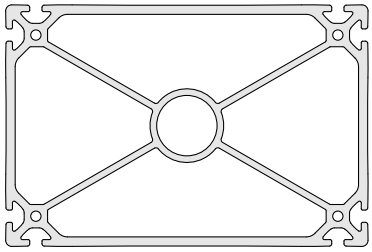


Profile 8 240x40

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
47.21	12.69	78.54	2,400.72	89.87	39.27	200.22	
natural, cut-off max. 6000 mm							0.0.473.84
natural, 1 pce., length 6000 mm							0.0.454.22

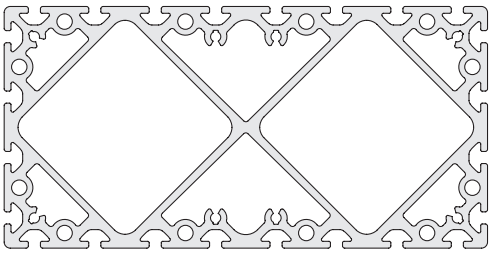
Profile 8 240x40 8N light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
15.52	4.19	42.18	1,098.70	99.97	20.28	91.56	
natural, cut-off max. 6000 mm							0.0.629.44
natural, 1 pce., length 6000 mm							0.0.629.41



Profile 8 240x160 8EN

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
76.77	20.73	2,525.49	5,229.22	3,888.75	312.50	435.77	
natural, cut-off max. 8000 mm							0.0.474.57
natural, 1 pce., length 8000 mm							0.0.615.30



Profile 8 320x160

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
125.55	33.90	4,398.20	14,194.10	5,293.30	549.80	887.30	
natural, cut-off max. 8000 mm							0.0.480.77
natural, 1 pce., length 8000 mm							0.0.465.86

Line 8

Profile X 8 40x40 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.61	1.78	9.47	9.47	1.37	4.73	4.73	
natural, cut-off max. 6000 mm							0.0.492.91
natural, 1 pce., length 6000 mm							0.0.492.90

Profile X 8 40x40 1N light

Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.68	1.80	9.74	9.47	2.71	4.82	4.73	
natural, cut-off max. 6000 mm							0.0.611.87
natural, 1 pce., length 6000 mm							0.0.611.86

Profile X 8 40x40 2N90 light

Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.75	1.82	9.74	9.74	4.56	4.82	4.82	
natural, cut-off max. 6000 mm							0.0.611.90
natural, 1 pce., length 6000 mm							0.0.611.89

Profile X 8 40x40 2N180 light

Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.75	1.82	10.03	9.47	4.08	5.01	4.73	
natural, cut-off max. 6000 mm							0.0.611.93
natural, 1 pce., length 6000 mm							0.0.611.92

Profile X 8 40x40 3N light

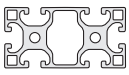
Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.82	1.84	9.75	10.03	6.14	4.82	5.01	
natural, cut-off max. 6000 mm							0.0.611.96
natural, 1 pce., length 6000 mm							0.0.611.95

Profile X 8 40x40 4N light

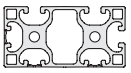
Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.90	1.86	10.03	10.03	8.37	5.01	5.01	
natural, cut-off max. 6000 mm							0.0.492.88
natural, 1 pce., length 6000 mm							0.0.492.87



Profile X 8 80x40 light

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
11.46	3.09	17.18	71.65	10.02	8.59	17.91	
natural, cut-off max. 6000 mm							0.0.492.94
natural, 1 pce., length 6000 mm							0.0.492.93

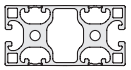


Profile X 8 80x40 3N90 light

Line 8

Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
11.68	3.15	17.72	73.38	16.90	8.78	18.25	
natural, cut-off max. 6000 mm							0.0.666.75
natural, 1 pce., length 6000 mm							0.0.666.74

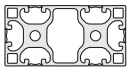


Profile X 8 80x40 4N180 light

Line 8

Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
11.75	3.17	18.29	72.82	20.86	9.15	18.21	
natural, cut-off max. 6000 mm							0.0.666.77
natural, 1 pce., length 6000 mm							0.0.666.76

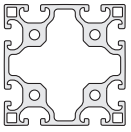


Profile X 8 80x40 6N light

Line 8

Profile features easy-to-open groove(s)

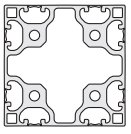
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
11.89	3.21	18.30	75.12	25.98	9.15	18.78	
natural, cut-off max. 6000 mm							0.0.493.01
natural, 1 pce., length 6000 mm							0.0.492.99



Profile X 8 80x80 light

Line 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
19.37	5.23	132.82	132.82	73.37	33.20	33.20	
natural, cut-off max. 6000 mm							0.0.492.97
natural, 1 pce., length 6000 mm							0.0.492.96

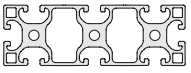


Profile X 8 80x80 8N light

Line 8

Profile features easy-to-open groove(s)

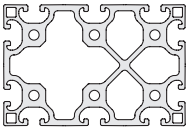
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
19.96	5.39	138.57	138.57	104.16	34.64	34.64	
natural, cut-off max. 6000 mm							0.0.493.04
natural, 1 pce., length 6000 mm							0.0.493.03



Profile X 8 120x40 light

Line 8

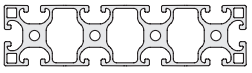
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	W_x [cm³]	W_y [cm³]	
16.31	4.40	24.88	225.53	12.44	37.59	
natural, cut-off max. 6000 mm						0.0.656.63
natural, 1 pce., length 6000 mm						0.0.656.62



Profile X 8 120x80 light

Line 8

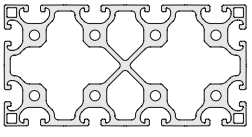
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	W_x [cm³]	W_y [cm³]	
30.36	8.20	204.88	427.82	51.22	69.34	
natural, cut-off max. 6000 mm						0.0.656.69
natural, 1 pce., length 6000 mm						0.0.656.68



Profile X 8 160x40 light

Line 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	W_x [cm³]	W_y [cm³]	
21.16	5.71	32.58	509.90	16.29	63.74	
natural, cut-off max. 6000 mm						0.0.656.65
natural, 1 pce., length 6000 mm						0.0.656.64



Profile X 8 160x80 light

Line 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	W_x [cm³]	W_y [cm³]	
37.99	10.26	270.35	919.31	67.59	114.91	
natural, cut-off max. 6000 mm						0.0.656.70
natural, 1 pce., length 6000 mm						0.0.656.67

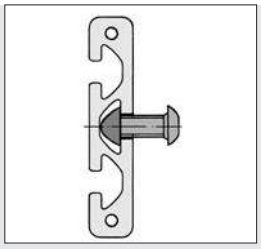
Profiles 8 – Flat Cross-Sections

- Full groove despite low construction height
- For attaching elements
- Suitable for use as a frame, support or strut
- Products from Line X also available

Line 8

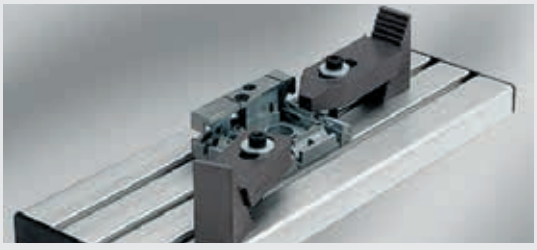
Profile 8 40x16 E can be used in conjunction with Hand Grip Element 8 to construct grip rails and handles.

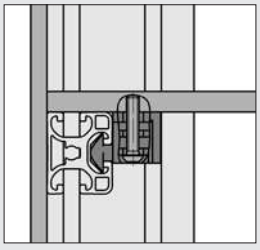
Profiles 8 80x16 and 160x28 are suitable for building the sliding carriages of roller guides 8 D6 and D14.



When using the centre groove of Profile 8 80x16, an access hole must be provided at the envisaged fastening position.

Profile 8 160x28 can also be used as a clamping and mounting surface or edgewise as a heavy-duty supporting profile.



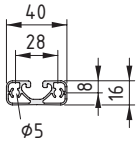


Profiles 8 40x32 and 80x32 light are particularly suitable for use as frames and struts in table, shelving and cabinet constructions. They are then used to connect profiles of modular dimension 40 mm.

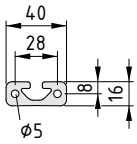
Perfect as a robust cover: Flat Profile 8 120x16 E features three grooves on one side and a smooth surface on the other. It is used as a foot-rail on platforms, for example.

Slim Profile X 8 40x16 light is used as a space-saving holder for Proximity Switches and other attachments on XMS machine frames and constructions built using Profiles X 8.

Materials used in all the following products:
Al, anodized

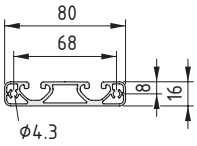


Profile 8 40x16 E							8
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
2.24	0.60	0.64	3.34	0.53	0.78	1.67	
natural, cut-off max. 3000 mm							7.0.000.01
natural, 1 pce., length 3000 mm							0.0.452.64



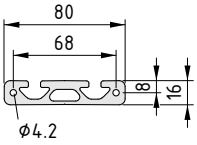
Profile 8 40x16

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
4.24	1.13	1.05	6.89	0.97	1.22	3.45	
natural, cut-off max. 6000 mm							0.0.026.84
natural, 1 pce., length 6000 mm							0.0.492.75
natural, 1 pce., length 3000 mm							0.0.452.62
black, cut-off max. 3000 mm							0.0.026.25
black, 1 pce., length 3000 mm							0.0.452.63



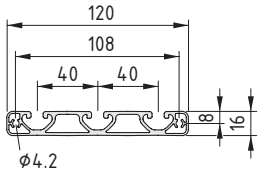
Profile 8 80x16 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
4.86	1.31	1.49	26.80	1.62	1.78	6.70	
natural, cut-off max. 3000 mm							7.0.000.15
natural, 1 pce., length 3000 mm							0.0.452.93



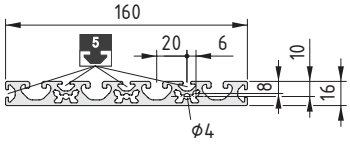
Profile 8 80x16

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
8.13	2.20	2.15	50.76	2.57	2.69	12.69	
natural, cut-off max. 3000 mm							0.0.364.72
natural, 1 pce., length 3000 mm							0.0.452.91



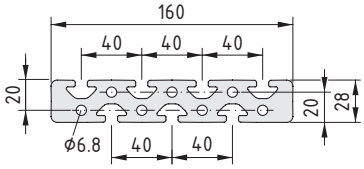
Profile 8 120x16 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.97	1.89	2.31	87.54	2.69	2.77	14.59	
natural, cut-off max. 6000 mm							0.0.650.86
natural, 1 pce., length 6000 mm							0.0.650.85



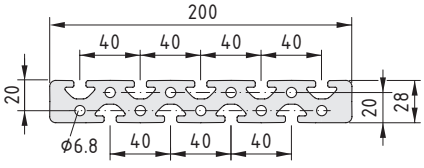
Profile 8 160x16

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
13.88	3.75	3.80	307.83	2.61	4.25	38.48	
natural, cut-off max. 3000 mm							0.0.265.90
natural, 1 pce., length 3000 mm							0.0.453.18



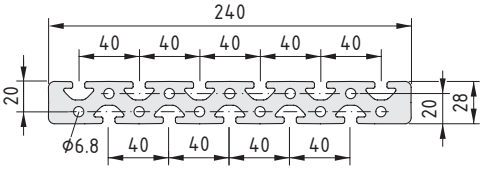
Profile 8 160x28

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
31.07	8.39	20.49	726.82	18.90	14.33	90.85	
natural, cut-off max. 6000 mm							0.0.026.85
natural, 1 pce., length 6000 mm							0.0.453.20



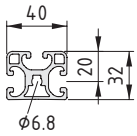
Profile 8 200x28

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
38.39	10.37	25.37	1,383.53	22.91	17.74	138.35	
natural, cut-off max. 6000 mm							0.0.473.86
natural, 1 pce., length 6000 mm							0.0.454.24

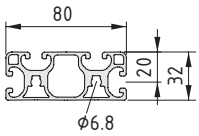


Profile 8 240x28

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
45.70	12.29	30.25	2,347.38	26.82	21.30	195.62	
natural, cut-off max. 6000 mm							0.0.473.88
natural, 1 pce., length 6000 mm							0.0.454.26

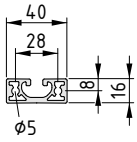


Profile 8 40x32 light							8
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
4.97	1.34	5.06	7.19	1.20	3.14	3.59	
natural, cut-off max. 6000 mm							0.0.494.97
natural, 1 pce., length 6000 mm							0.0.494.95

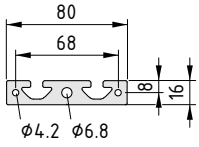


Profile 8 80x32 light							8
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
8.65	2.33	9.27	53.73	8.59	5.76	13.43	
natural, cut-off max. 6000 mm							0.0.494.98
natural, 1 pce., length 6000 mm							0.0.494.96

Line 8



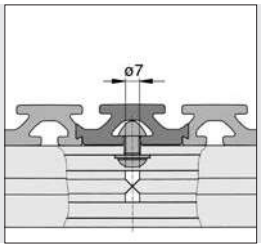
Profile X 8 40x16 light							Line 8
Al, anodized							
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	W_x [cm³]	W_y [cm³]		
3.05	0.82	0.87	5.18	1.03	2.59		
natural, cut-off max. 3000 mm							0.0.652.12
natural, 1 pce., length 3000 mm							0.0.651.97

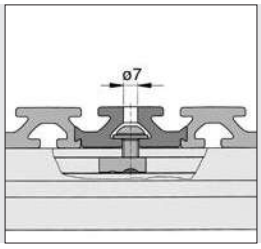


Profile X 8 80x16							Line 8
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
9.23	2.49	2.33	52.01	2.93	2.74	13.00	
natural, cut-off max. 3000 mm							0.0.609.34
natural, 1 pce., length 3000 mm							0.0.609.21

Bed Plate Profile 8

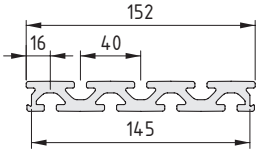
- For creating panels in any size
- Can be fastened to all types of substructures

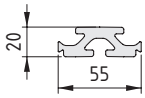




Options for connecting the plate to the frame structure (using Button-Head Screw M8x16, washer DIN 125-8.4 and T-Slot Nut 8 St M8).

Materials used in all the following products:
Al, anodized





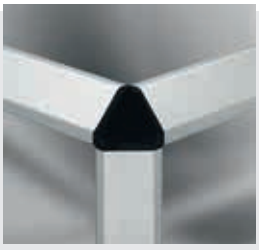
Bed Plate Profile 8 152x20							
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
18.39	4.97	7.39	350.50	2.69	7.20	46.12	
natural, cut-off max. 6000 mm							0.0.465.79
natural, 1 pce., length 6000 mm							0.0.454.09

Bed Plate Connection Profile 8 55x20							
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
5.71	1.54	2.12	11.30	0.77	1.98	4.10	
natural, cut-off max. 6000 mm							0.0.465.80
natural, 1 pce., length 6000 mm							0.0.454.11

Profiles 8 – 45° Angle

- Connect up to three profiles
- For sophisticated tables, display cases and systems

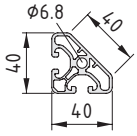
8



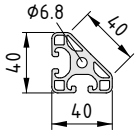
The 45° profiles bring a sophisticated aesthetic appeal to a whole range of constructions. Fastening Set 8 40x40-45° creates particularly elegant corner units.

Fastening Set 8 40x40-45° 107

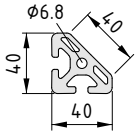
Materials used in all the following products:
Al, anodized



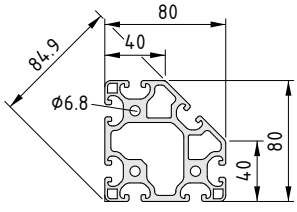
Profile 8 40x40-45° E							8
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
4.35	1.17	5.70	5.70	2.00	2.51	2.51	
natural, cut-off max. 6000 mm							7.0.000.12
natural, 1 pce., length 6000 mm							0.0.452.86



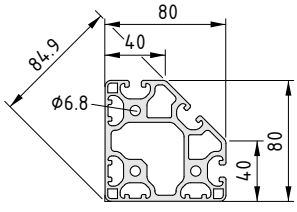
Profile 8 40x40-45° light							8
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
5.58	1.50	6.50	6.50	2.13	2.90	2.90	
natural, cut-off max. 6000 mm							0.0.404.52
natural, 1 pce., length 6000 mm							0.0.452.88
black, cut-off max. 6000 mm							0.0.406.45
black, 1 pce., length 6000 mm							0.0.452.90



Profile 8 40x40-45°							8
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
7.30	1.97	9.39	9.39	2.75	4.08	4.08	
natural, cut-off max. 6000 mm							0.0.373.45
natural, 1 pce., length 6000 mm							0.0.452.84



Profile 8 80x80-45° light							8
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
18.86	5.09	109.11	109.11	62.51	24.97	24.97	
natural, cut-off max. 6000 mm							0.0.416.89
natural, 1 pce., length 6000 mm							0.0.453.07

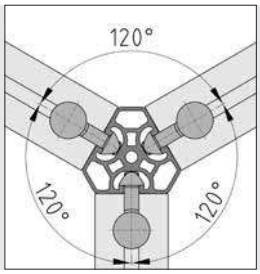


Profile 8 80x80-45° 4N90 light							8
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
19.48	5.25	106.20	106.20	91.44	24.69	24.69	
natural, cut-off max. 6000 mm							0.0.422.54
natural, 1 pce., length 6000 mm							0.0.453.05

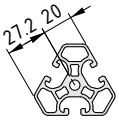
Profiles 8 – 120° Angle

- Three grooves in one profile
- Ideal as a stand profile when building partition systems

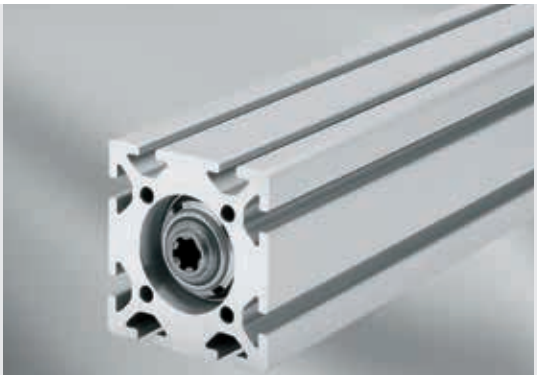
8



Grooves 8 are positioned at angles of 120° to each other. The relevant side faces have a width of modular dimension 40 mm for attaching Line 8 profiles and accessories.



Profile 8 3x40-120° light							8
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.59	1.73	10.65	10.71	3.42	3.98	5.33	
natural, cut-off max. 6000 mm							0.0.480.59
natural, 1 pce., length 6000 mm							0.0.480.58

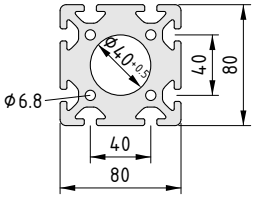


Profiles 8 D

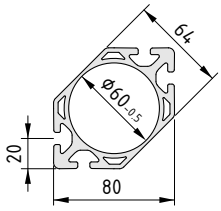
- With large central bore
- Ideal for the mounting of bearings
- Ideal for accommodating shafts, spindles and axles

Profile 8 80x80-45° D60 is the basis for Coupling Housings 8 D30 and 8 D55, Profile 8 120x120-45° D87 is used for Coupling Housing 8 D80. The profiles can be used to produce Coupling Housings of special lengths or housings for synchronising shafts between mechanical drive elements.

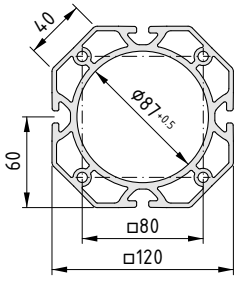
Materials used in all the following products:
Al, anodized



Profile 8 80x80 D40							
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
37.20	10.04	222.00	222.00	190.01	55.50	55.50	
natural, cut-off max. 3000 mm							0.0.408.28
natural, 1 pce., length 3000 mm							0.0.452.29



Profile 8 80x80-45° D60							
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
15.26	4.12	109.56	109.56	84.65	27.39	27.39	
natural, cut-off max. 6000 mm							0.0.463.24
natural, 1 pce., length 6000 mm							0.0.452.55



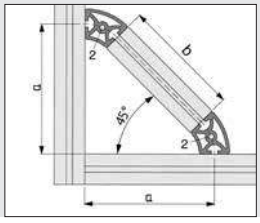
Profile 8 120x120-45° D87							
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
31.29	8.45	465.86	465.86	535.22	77.64	77.64	
natural, cut-off max. 6000 mm							0.0.463.25
natural, 1 pce., length 6000 mm							0.0.453.91

Profiles 8 R

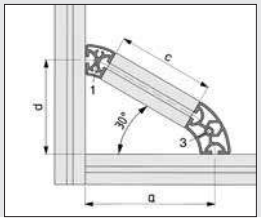
- Closed on two sides, rounded surface
- Various external angles available
- Ideal for building protective hoods, frames and tables

8

Profiles R can also be used to add bracing to profile constructions. Calculating the appropriate length for the struts is easy.



Connection at 45°	
Profile 2	Profile 8 R40/80-45°
b	$(a - 60)\cdot\sqrt{2}$

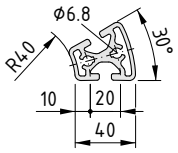


Connection at 30°	
Profile 1	Profile 8 R40/80-30°
Profile 3	Profile 8 R40/80-60°
c	$2(a - 60)/\sqrt{3}$
d	$(a - 60)/\sqrt{3} + 60$

Materials used in all the following products:
Al, anodized

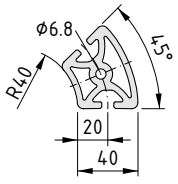
Profile 8 R40-90° light 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
5.72	1.54	6.65	6.65	2.69	3.04	3.04	
natural, cut-off max. 6000 mm							0.0.436.33
natural, 1 pce., length 6000 mm							0.0.453.39



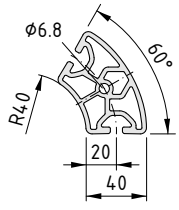
Profile 8 R40/80-30° 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.20	1.67	6.42	8.90	2.89	2.84	3.80	
natural, cut-off max. 6000 mm							0.0.427.66
natural, 1 pce., length 6000 mm							0.0.453.33



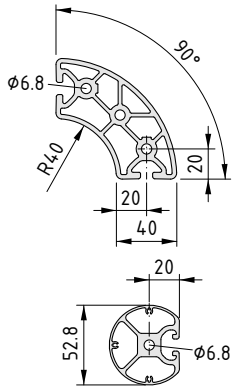
Profile 8 R40/80-45° 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
10.23	2.76	21.33	16.06	12.05	6.74	6.14	
natural, cut-off max. 6000 mm							0.0.409.14
natural, 1 pce., length 6000 mm							0.0.453.35



Profile 8 R40/80-60° 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
10.50	2.83	34.90	22.64	18.28	9.20	7.50	
natural, cut-off max. 6000 mm							0.0.427.67
natural, 1 pce., length 6000 mm							0.0.453.36

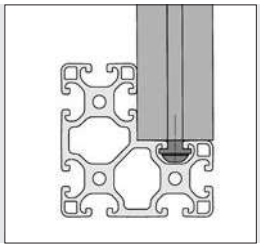


Profile 8 R40/80-90°							8
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
15.00	4.05	76.25	76.25	41.46	18.69	18.69	
natural, cut-off max. 6000 mm							0.0.427.68
natural, 1 pce., length 6000 mm							0.0.453.37

Profile 8 R26-270°							8
Al, anodized							
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.45	1.75	12.08	10.96	11.90	4.62	5.40	
natural, cut-off max. 6000 mm							0.0.474.48
natural, 1 pce., length 6000 mm							0.0.454.29

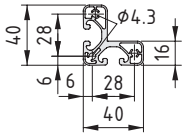
Profiles 8 W

- Angled profiles with grooves
- For use as panel fixing strips
- For supporting shelves



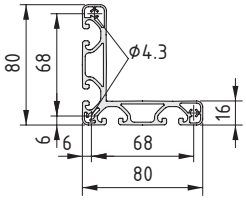
The inside corner of the angled profiles is provided with an undercut. Attachments with sharp edges can therefore be screwed flush with the surface on both sides.

Materials used in all the following products:
Al, anodized



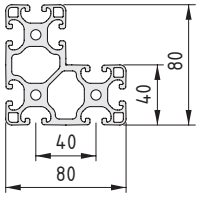
Profile 8 W40x40 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
4.09	1.10	4.82	4.82	0.70	1.95	1.95	
natural, cut-off max. 3000 mm							7.0.001.10
natural, 1 pce., length 3000 mm							0.0.453.40



Profile 8 W80x80 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
8.60	2.32	48.52	48.52	2.85	8.92	8.92	
natural, cut-off max. 3000 mm							7.0.001.12
natural, 1 pce., length 3000 mm							0.0.453.41



Profile 8 W80x80x40 light

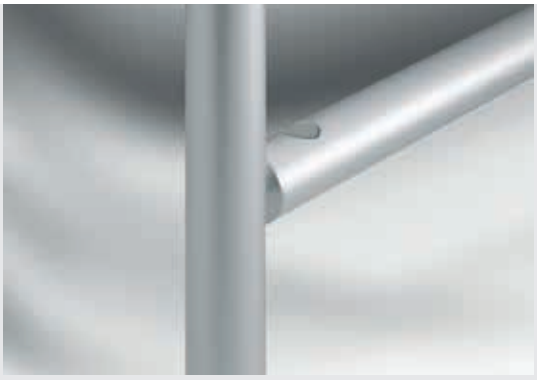
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
17.77	4.79	95.32	95.32	30.35	20.54	20.54	
natural, cut-off max. 6000 mm							0.0.458.92
natural, 1 pce., length 6000 mm							0.0.454.02

Profiles 8 D40

Edge-free elegance

- Profiles with a cylindrical cross-section
- Can be combined with square profiles
- Available with open or closed grooves
- Closed grooves can be subsequently opened up

8



The cylindrical cross-section, which is 40 mm in diameter, is the main feature of Profiles 8 D40. Their four Line 8 grooves are arranged at 90° angles to each other and can be either open or closed, as required. Cylindrical profiles are ideal for use in hand rails, tables, shelves and ancillary factory equipment such as signage.

Cylindrical and angular profiles from the MB Building Kit System can be combined to suit the task at hand. This compatibility is made possible by Adapter 8 D40. The connections meet the same standards in stability and reliability that design engineers have come to expect from all item products.

Materials used in all the following products:
Al, anodized

Profile 8 D40 8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
5.45	1.47	5.63	5.63	0.94	2.88	2.88	
natural, cut-off max. 6000 mm							0.0.493.36
natural, 1 pce., length 6000 mm							0.0.493.37

Profile 8 D40 1N 8

Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
5.51	1.48	5.87	5.63	2.02	3.00	2.80	
natural, cut-off max. 6000 mm							0.0.493.39
natural, 1 pce., length 6000 mm							0.0.493.40

Profile 8 D40 2N90 8

Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
5.58	1.50	5.88	5.88	3.39	2.90	2.90	
natural, cut-off max. 6000 mm							0.0.489.40
natural, 1 pce., length 6000 mm							0.0.489.39

Profile 8 D40 2N180

Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
5.58	1.50	6.13	5.63	3.16	3.07	2.92	
natural, cut-off max. 6000 mm							0.0.493.42
natural, 1 pce., length 6000 mm							0.0.493.43

Profile 8 D40 3N

Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
5.64	1.53	5.88	6.13	4.82	2.97	3.07	
natural, cut-off max. 6000 mm							0.0.493.45
natural, 1 pce., length 6000 mm							0.0.493.46

Profile 8 D40 4N

Profile features easy-to-open groove(s)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
5.71	1.54	6.13	6.13	6.64	3.07	3.07	
natural, cut-off max. 6000 mm							0.0.493.48
natural, 1 pce., length 6000 mm							0.0.493.49

Profiles 10 – modular dimension of 50 mm

The added-value profile with increased load-carrying capacity

- Increased load-carrying capacity for robust constructions
- Reliability against pre-tension losses
- Tensile loading up to 7,000 N per screw connection
- Also available in lightweight versions as Profiles 10 E

10

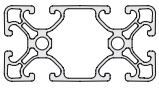
Materials used in all the following products:
Al, anodized

Profile 10 50x50 E 10

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
8.47	2.29	20.34	20.34	2.80	8.14	8.14	
natural, cut-off max. 6000 mm							0.0.624.93
natural, 1 pce., length 6000 mm							0.0.624.92

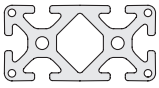
Profile 10 50x50 10

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
13.31	3.59	30.68	30.68	4.17	12.27	12.27	
natural, cut-off max. 6000 mm							0.0.624.52
natural, 1 pce., length 6000 mm							0.0.624.51



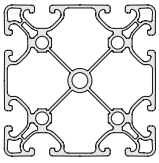
Profile 10 100x50 E 10

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
13.40	3.62	36.40	143.75	19.44	14.56	28.75	
natural, cut-off max. 6000 mm							0.0.625.14
natural, 1 pce., length 6000 mm							0.0.625.13



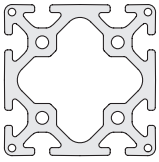
Profile 10 100x50 10

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
24.70	6.67	61.28	227.47	44.03	24.51	45.49	
natural, cut-off max. 6000 mm							0.0.624.60
natural, 1 pce., length 6000 mm							0.0.624.59



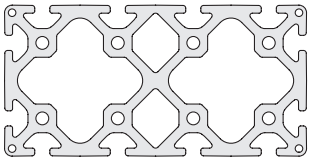
Profile 10 100x100 E 10

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
21.74	5.87	237.98	237.98	103.30	47.60	47.60	
natural, cut-off max. 6000 mm							0.0.625.18
natural, 1 pce., length 6000 mm							0.0.625.17



Profile 10 100x100 10

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
39.57	10.68	431.41	431.41	300.38	86.28	86.28	
natural, cut-off max. 6000 mm							0.0.624.56
natural, 1 pce., length 6000 mm							0.0.624.55



Profile 10 200x100 10

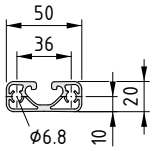
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
74.36	20.08	838.55	2,840.55	946.29	167.71	284.06	
natural, cut-off max. 6000 mm							0.0.624.68
natural, 1 pce., length 6000 mm							0.0.624.67

Profile 10 50x20 E

- Lightweight thanks to flat cross-section
- Full Profile 10 groove on one side, closed surface on the other
- Ideal for stable, space-saving struts and frames

10

Thanks to its flat cross-section, Profile 10 50x20 E takes up little space when integrated into constructions. The Line 10 groove leaves open all the fastening options associated with Profiles 10, providing a secure hold for all fastening elements. The closed surface on the rear of the profile is easy to clean. This profile makes it easy to add flat struts to a construction or build stable lightweight frames.



Profile 10 50x20 E							10
Al, anodized							
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
3.69	0.99	1.70	9.08	1.38	1.70	3.63	
natural, cut-off max. 6000 mm							0.0.632.54
natural, 1 pce., length 6000 mm							0.0.632.53

Profiles 12 – modular dimension of 60 mm

The robust option for load-carrying applications

- The strongest profile line in the MB system
- Exceptional reliability against pre-tension losses
- Tensile loading up to 10,000 N per screw connection
- For particularly stable, heavy-duty frame structures

12

Materials used in all the following products:
Al, anodized

Profile 12 60x60 light

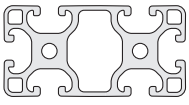
12

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
14.50	3.91	46.02	46.02	7.05	15.36	15.36	
natural, cut-off max. 6000 mm							0.0.001.16
natural, 1 pce., length 6000 mm							0.0.001.06

Profile 12 60x60

12

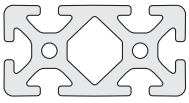
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
20.60	5.55	70.50	70.50	9.59	23.50	23.50	
natural, cut-off max. 6000 mm							0.0.001.11
natural, 1 pce., length 6000 mm							0.0.001.01



Profile 12 120x60 light

12

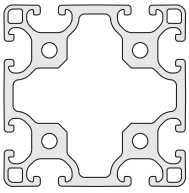
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
26.15	7.10	88.15	355.50	54.94	29.40	59.40	
natural, cut-off max. 6000 mm							0.0.001.17
natural, 1 pce., length 6000 mm							0.0.001.07



Profile 12 120x60

12

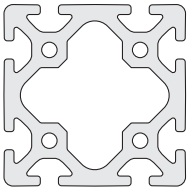
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
37.58	10.15	135.40	509.70	98.17	45.10	85.10	
natural, cut-off max. 6000 mm							0.0.001.12
natural, 1 pce., length 6000 mm							0.0.001.02



Profile 12 120x120 light

12

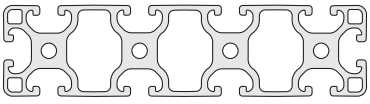
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
44.45	12.00	679.60	679.60	403.50	113.50	113.50	
natural, cut-off max. 6000 mm							0.0.001.18
natural, 1 pce., length 6000 mm							0.0.001.28



Profile 12 120x120

12

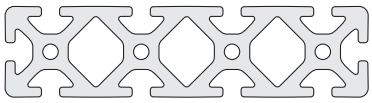
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
60.40	16.30	948.00	948.00	656.82	159.00	159.00	
natural, cut-off max. 6000 mm							0.0.001.13
natural, 1 pce., length 6000 mm							0.0.001.23



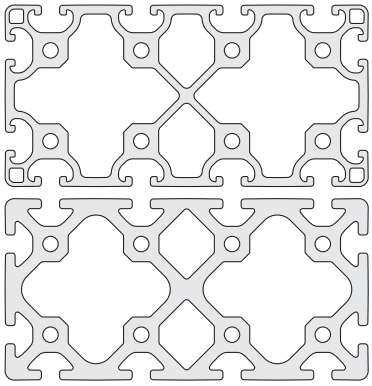
Profile 12 240x60 light

12

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
49.10	13.25	170.65	2,585.50	158.42	57.02	215.90	
natural, cut-off max. 6000 mm							0.0.001.20
natural, 1 pce., length 6000 mm							0.0.001.30

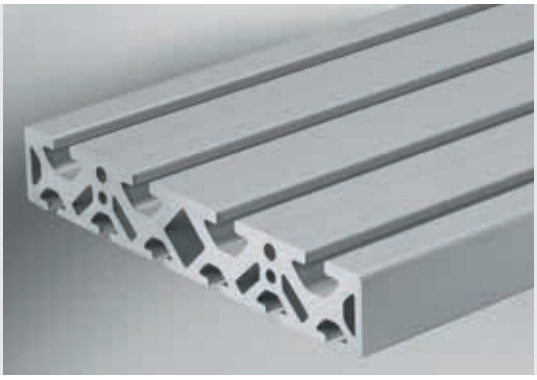


Profile 12 240x60							12
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
72.60	19.60	269.38	3,777.20	286.77	89.60	314.80	
natural, cut-off max. 6000 mm							0.0.001.15
natural, 1 pce., length 6000 mm							0.0.001.25



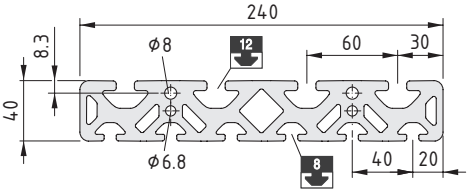
Profile 12 240x120 light							12
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
84.02	22.68	1,348.66	4,595.18	1,218.24	224.78	382.93	
natural, cut-off max. 6000 mm							0.0.001.19
natural, 1 pce., length 6000 mm							0.0.001.29

Profile 12 240x120							12
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
112.00	30.24	1,815.20	6,168.90	2,067.75	302.00	514.10	
natural, cut-off max. 6000 mm							0.0.001.14
natural, 1 pce., length 6000 mm							0.0.001.24



Profile 12/8 240x40

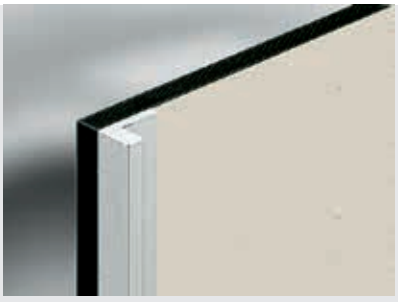
- Special profile with Line 8 and 12 grooves
- For building carriages for linear slides



Profile 12/8 240x40							8 12
Al, anodized							
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
57.94	15.70	83.90	2,904.15	81.39	41.60	242.15	
natural, cut-off max. 6000 mm							0.0.001.04
natural, 1 pce., length 6000 mm							0.0.001.03

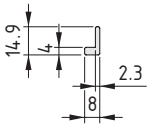
Solid profiles and profile edging

- Profiles without grooves
- Used as edging or grip rails
- For edging any panel elements
- For special constructions of all types



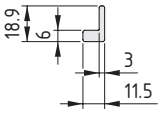
Can be used as a grip rail or edging and for stabilising panel elements.

Materials used in all the following products:
Al, anodized



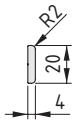
Profile Edging 15x8

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
0.56	0.15	0.10	0.03	0.02	0.10	0.05	
natural, cut-off max. 6000 mm							0.0.431.16
natural, 1 pce., length 6000 mm							0.0.453.43



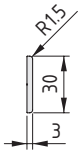
Profile Edging 19x11.5

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
1.14	0.30	0.28	0.12	0.07	0.22	0.17	
natural, cut-off max. 6000 mm							0.0.196.30
natural, 1 pce., length 6000 mm							0.0.453.45



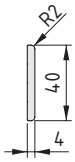
Profile M 20x4 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
0.78	0.21	0.24	0.01	0.04	0.24	0.05	
natural, cut-off max. 2000 mm							7.0.001.14
natural, 1 pce., length 2000 mm							7.0.002.62



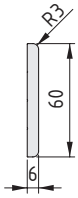
Profile M 30x3 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
0.89	0.24	0.65	0.01	0.02	0.44	0.04	
natural, cut-off max. 2000 mm							0.0.609.60
natural, 1 pce., length 2000 mm							0.0.609.59



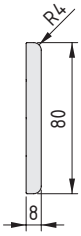
Profile M 40x4 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
1.57	0.42	2.06	0.02	0.08	1.03	0.10	
natural, cut-off max. 2000 mm							7.0.001.18
natural, 1 pce., length 2000 mm							7.0.002.66



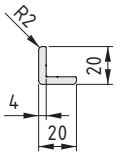
Profile M 60x6 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
3.56	0.96	10.46	0.11	0.40	3.49	0.35	
natural, cut-off max. 2000 mm							0.0.609.62
natural, 1 pce., length 2000 mm							0.0.609.61



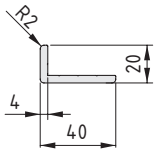
Profile M 80x8 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.32	1.70	33.05	0.33	1.26	8.26	0.81	
natural, cut-off max. 2000 mm							7.0.001.22
natural, 1 pce., length 2000 mm							7.0.002.67



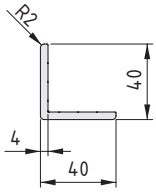
Profile M W20x20x4 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
1.41	0.38	0.48	0.48	0.07	0.35	0.35	
natural, cut-off max. 2000 mm							7.0.001.26
natural, 1 pce., length 2000 mm							7.0.002.68



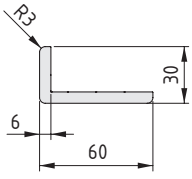
Profile M W40x20x4 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
2.21	0.59	0.59	3.52	0.11	0.38	1.40	
natural, cut-off max. 2000 mm							7.0.001.28
natural, 1 pce., length 2000 mm							7.0.002.69



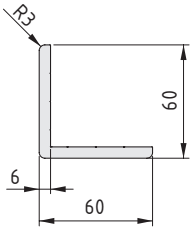
Profile M W40x40x4 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
3.01	0.81	4.51	4.51	0.16	1.58	1.58	
natural, cut-off max. 2000 mm							7.0.001.30
natural, 1 pce., length 2000 mm							7.0.002.70



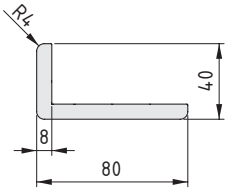
Profile M W60x30x6 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
4.98	1.34	3.00	17.88	0.58	1.32	4.74	
natural, cut-off max. 2000 mm							0.0.609.64
natural, 1 pce., length 2000 mm							0.0.609.63



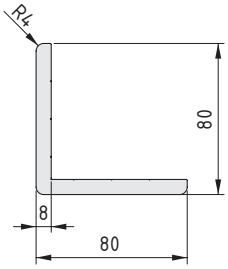
Profile M W60x60x6 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
6.78	1.83	22.86	22.86	0.80	5.34	5.34	
natural, cut-off max. 2000 mm							0.0.609.66
natural, 1 pce., length 2000 mm							0.0.609.65



Profile M W80x40x8 E

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
8.85	2.39	9.48	56.54	1.84	3.12	11.25	
natural, cut-off max. 2000 mm							7.0.001.32
natural, 1 pce., length 2000 mm							7.0.002.71



Profile M W80x80x8 E

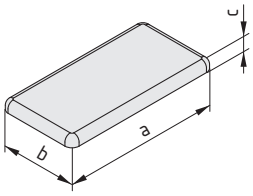
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
12.05	3.25	72.27	72.27	2.54	12.66	12.66	
natural, cut-off max. 2000 mm							7.0.001.34
natural, 1 pce., length 2000 mm							7.0.002.72

Caps for Profiles in modular dimensions

- Robust Caps made from glass-fibre-reinforced plastic
- Vibration-proof and temperature-resistant
- Protection against sharp cut edges
- Numerous designs also available in grey
- Products from Line X also available

if 86 Line X 5 6 8 10 12

Materials used in all the following products:
PA-GF



Cap 5 20x20				5
a = 20 mm	b = 20 mm	c = 2.5 mm	m = 1.2 g	
black, 1 pce.				0.0.370.09
Cap 5 40x20				5
a = 40 mm	b = 20 mm	c = 2.5 mm	m = 2.2 g	
black, 1 pce.				0.0.370.11
Cap 5 40x40				5
a = 40 mm	b = 40 mm	c = 2.5 mm	m = 5.0 g	
black, 1 pce.				0.0.370.13
Cap 5 60x20				5
a = 60 mm	b = 20 mm	c = 2.5 mm	m = 3.3 g	
black, 1 pce.				0.0.425.53
Cap 5 60x40				5
a = 60 mm	b = 40 mm	c = 2.5 mm	m = 7.0 g	
black, 1 pce.				0.0.425.56
Cap 5 80x20				5
a = 80 mm	b = 20 mm	c = 2.5 mm	m = 4.4 g	
black, 1 pce.				0.0.370.92
Cap 6 30x30				6
a = 30 mm	b = 30 mm	c = 3.0 mm	m = 2.6 g	
black, 1 pce.				0.0.419.22
Cap 6 60x30				6
a = 60 mm	b = 30 mm	c = 3.0 mm	m = 5.2 g	
black, 1 pce.				0.0.419.23
Cap 6 60x60				6
a = 60 mm	b = 60 mm	c = 3.0 mm	m = 9.4 g	
black, 1 pce.				0.0.419.24
Cap 6 120x30				6
a = 120 mm	b = 30 mm	c = 3.0 mm	m = 10.2 g	
black, 1 pce.				0.0.419.25
Cap 6 120x60				6
a = 120 mm	b = 60 mm	c = 3.0 mm	m = 20.8 g	
black, 1 pce.				0.0.419.26

Cap 8 40x40				8
a = 40 mm	b = 40 mm	c = 4.0 mm	m = 4.8 g	
black, 1 pce.				0.0.026.01
grey similar to RAL 7042, 1 pce.				0.0.627.16

Cap 8 80x40				8
a = 80 mm	b = 40 mm	c = 4.0 mm	m = 9.6 g	
black, 1 pce.				0.0.026.02
grey similar to RAL 7042, 1 pce.				0.0.627.18

Cap 8 80x80				8
a = 80 mm	b = 80 mm	c = 4.0 mm	m = 19.4 g	
black, 1 pce.				0.0.026.37
grey similar to RAL 7042, 1 pce.				0.0.627.20

Cap 8 120x40				8
a = 120 mm	b = 40 mm	c = 4.0 mm	m = 15.2 g	
black, 1 pce.				0.0.418.54
grey similar to RAL 7042, 1 pce.				0.0.627.27

Cap 8 120x80				8
a = 120 mm	b = 80 mm	c = 4.0 mm	m = 30.4 g	
black, 1 pce.				0.0.418.57
grey similar to RAL 7042, 1 pce.				0.0.627.28

Cap 8 120x120				8
a = 120 mm	b = 120 mm	c = 4.0 mm	m = 43.4 g	
black, 1 pce.				0.0.609.88

Cap 8 160x40				8
a = 160 mm	b = 40 mm	c = 4.0 mm	m = 21.4 g	
black, 1 pce.				0.0.265.39
grey similar to RAL 7042, 1 pce.				0.0.627.30

Cap 8 160x80				8
a = 160 mm	b = 80 mm	c = 4.0 mm	m = 37.0 g	
black, 1 pce.				0.0.265.40
grey similar to RAL 7042, 1 pce.				0.0.627.31

Cap 8 200x40				8
a = 200 mm	b = 40 mm	c = 4.0 mm	m = 29.0 g	
black, 1 pce.				0.0.474.01

Cap 8 200x80				8
a = 200 mm	b = 80 mm	c = 4.0 mm	m = 60.0 g	
black, 1 pce.				0.0.485.94

Cap 8 240x40				8
a = 240 mm	b = 40 mm	c = 4.0 mm	m = 36.0 g	
black, 1 pce.				0.0.474.04

Cap 10 50x50				10
a = 50 mm	b = 50 mm	c = 5.0 mm	m = 8.5 g	
black, 1 pce.				0.0.625.09
grey similar to RAL 7042, 1 pce.				0.0.632.25

Cap 10 100x50				10
a = 100 mm	b = 50 mm	c = 5.0 mm	m = 18.0 g	
black, 1 pce.				0.0.625.10
grey similar to RAL 7042, 1 pce.				0.0.632.26

Cap 10 100x100				10
a = 100 mm	b = 100 mm	c = 5.0 mm	m = 36.0 g	
black, 1 pce.				0.0.625.11
grey similar to RAL 7042, 1 pce.				0.0.632.27

Cap 10 200x100				10
a = 200 mm	b = 100 mm	c = 5.0 mm	m = 87.0 g	
black, 1 pce.				0.0.625.12
grey similar to RAL 7042, 1 pce.				0.0.632.28

Cap 12 60x60				12
a = 60 mm	b = 60 mm	c = 6.0 mm	m = 14.7 g	
black, 1 pce.				0.0.005.01

Cap 12 120x60				12
a = 120 mm	b = 60 mm	c = 6.0 mm	m = 28.0 g	
black, 1 pce.				0.0.005.02

Cap 12 120x120				12
a = 120 mm	b = 120 mm	c = 6.0 mm	m = 54.0 g	
black, 1 pce.				0.0.005.03

Cap 12 240x60				12
a = 240 mm	b = 60 mm	c = 6.0 mm	m = 54.0 g	
black, 1 pce.				0.0.005.05

Cap 12 240x120				12
a = 240 mm	b = 120 mm	c = 6.0 mm	m = 106.0 g	
black, 1 pce.				0.0.005.04

Line 8

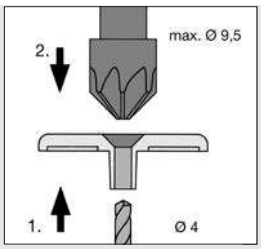
Cap X 8 40x16				Line 8
a = 40 mm	b = 16 mm	c = 4 mm	m = 3.0 g	
grey similar to RAL 7042, 1 pce.				0.0.652.13

Cap X 8 40x40				Line 8
a = 40 mm	b = 40 mm	c = 2.0 mm	m = 5.0 g	
grey similar to RAL 7042, 1 pce.				0.0.489.60

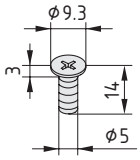
Cap X 8 80x40				Line 8
a = 80 mm	b = 40 mm	c = 2.0 mm	m = 8.0 g	
grey similar to RAL 7042, 1 pce.				0.0.489.61

Cap X 8 80x80				Line 8
a = 80 mm	b = 80 mm	c = 2.0 mm	m = 16.0 g	
grey similar to RAL 7042, 1 pce.				0.0.489.98

Screw for reinforcing the retention force of Caps 8 (PA-GF) in the core bores of Profiles 8.



The machining required is limited to counter boring and countersinking of the Caps.



Fastening Screw 8 5x14 8

St
m = 1.6 g

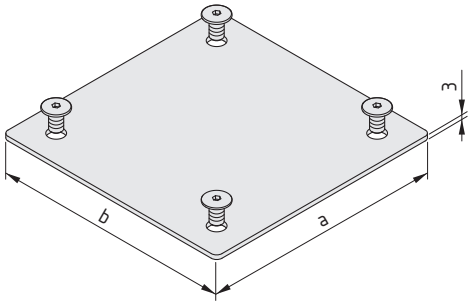
black, 1 pce. 0.0.427.08

Caps 8 St

- Robust steel plates
- Screws ensure a secure hold
- Closes large Profiles 8

8

Caps St must be screwed to the core bores of the profiles.



Cap 8 160x80 St 8

Cap 8 160x80, St, white aluminium similar to RAL 9006
4 dome-head screws M8x14, St, bright zinc-plated
a = 160 mm b = 80 mm m = 324.0 g

1 set 0.0.674.49

Cap 8 160x160 8

Cap 8 160x160, St, black
4 dome-head screws M8x14, St, black
a = 160 mm b = 160 mm m = 624.0 g

1 set 0.0.475.15

Cap 8 160x160 St 8

Cap 8 160x160, St, white aluminium similar to RAL 9006
4 dome-head screws M8x14, St, bright zinc-plated
a = 160 mm b = 160 mm m = 625.0 g

1 set 0.0.674.57

Cap 8 240x160 8

Cap 8 240x160, St, black
4 dome-head screws M8x14, St, black
a = 240 mm b = 160 mm m = 907.0 g

1 set 0.0.475.16

Cap 8 320x160 8

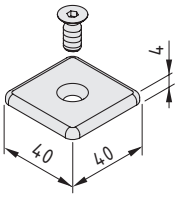
Cap 8 320x160, St, black
4 dome-head screws M8x14, St, black
a = 320 mm b = 160 mm m = 1.2 kg

1 set 0.0.476.64

Cap 8 40x40, rubber coated

- Steel cap with rubber coating
- Closes and cushions at the same time
- With self-tapping screw for rapid installation

8

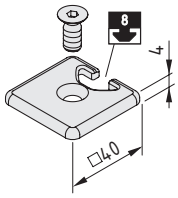


Cap 8 40x40, rubber coated	8
Steel plate, coated, NBR 80 Sh A, black Countersunk Screw 8 SF M7.1, St, black m = 24.0 g	
1 set	0.0.626.90

Cap 8 40x40 N

- Safely cover profile ends
- One groove stays open
- T-Slot Nut F can be used to secure the groove
- With self-tapping screw for rapid installation

8

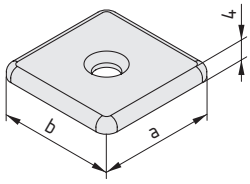


Cap 8 40x40 N	8
PA-GF, black Countersunk Screw 8 SF M7.1, St, black m = 9.0 g	
1 set	0.0.624.47

Caps 8 Zn

- Sturdy caps made from zinc
- Screws ensure a secure hold
- Closes Profiles 8 and protects against impacts

8



Cap 8 40x40 Zn 8

Die-cast zinc
a = 40 mm b = 40 mm m = 26.0 g

black, 1 pce.	0.0.427.09

Cap 8 80x40 Zn 8

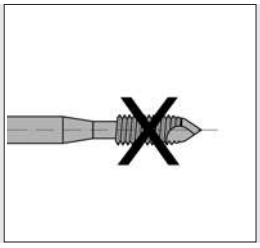
Die-cast zinc
a = 80 mm b = 40 mm m = 49.0 g

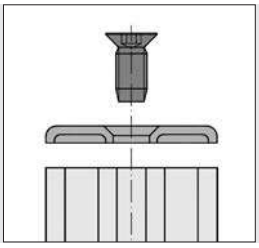
black, 1 pce.	0.0.427.11

Cap 8 80x80 Zn 8

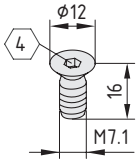
Die-cast zinc
a = 80 mm b = 80 mm m = 96.0 g

black, 1 pce.	0.0.427.13





Self-threading screw for securing Caps Zn in the core bore of Profiles 8.

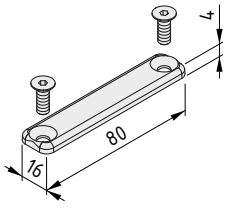


Countersunk Screw 8 SF M7.1 8

St
Slide coating
Head shape to DIN 7991 (M6)
m = 4.3 g

black, 1 pce.	0.0.428.05

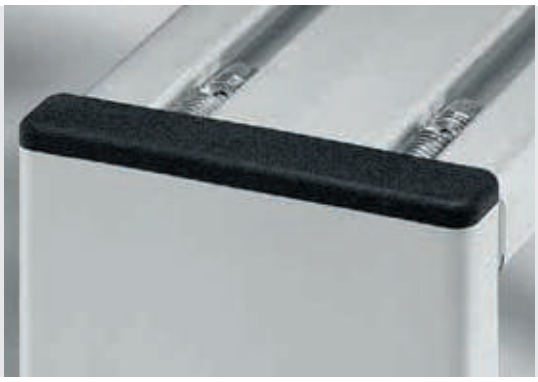
Cap 8 80x16 Zn is fixed to Profiles 8 80x16 using the enclosed screws to create a secure and friction-based connection, which ensures it can resist impacts and vibration over long-term use. A thread must be tapped into both screw channels of the flat profiles.



Cap 8 80x16 Zn 8

Cap, die-cast zinc, white aluminium
2 Countersunk Screws DIN 7991-M5x14, St, bright zinc-plated
m = 24.0 g

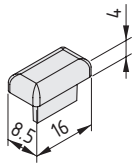
1 set	0.0.674.71



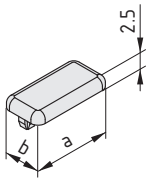
Caps for Flat Cross-Sections

- Simply push in to safely cover cut edges
- Neatly close side areas and end faces
- Suitable for profiles with flat cross-sections
- Products from Line X also available

Materials used in all the following products:
PA-GF



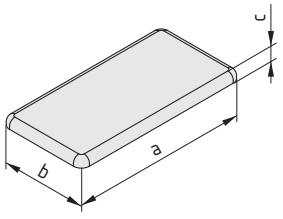
Cap 5 16x8.5				5
m = 0.7 g				
black, 1 pce.				0.0.364.60



Cap 5 20x10				5
a = 20 mm	b = 10 mm	m = 0.6 g		
black, 1 pce.				0.0.391.12

Cap 5 40x10				5
a = 40 mm	b = 10 mm	m = 1.0 g		
black, 1 pce.				0.0.391.14

Cap 5 80x14				5
a = 80 mm	b = 14 mm	m = 3.4 g		
black, 1 pce.				0.0.370.91



Cap 6 30x12				6
a = 30 mm	b = 12 mm	c = 3.0 mm	m = 1.0 g	
black, 1 pce.				0.0.478.09

Cap 6 30x24				6
a = 30 mm	b = 24 mm	c = 3.0 mm	m = 2.2 g	
black, 1 pce.				0.0.610.29

Cap 6 60x12				6
a = 60 mm	b = 12 mm	c = 3.0 mm	m = 2.0 g	
black, 1 pce.				0.0.478.11

Cap 6 60x24				6
a = 60 mm	b = 24 mm	c = 3.0 mm	m = 4.3 g	
black, 1 pce.				0.0.610.30

Cap 8 40x16				8
a = 40 mm	b = 16 mm	c = 4.0 mm	m = 2.5 g	
black, 1 pce.				0.0.026.79
grey similar to RAL 7042, 1 pce.				0.0.627.21

Cap 8 40x32				8
a = 40 mm	b = 32 mm	c = 4.0 mm	m = 4.1 g	
black, 1 pce.				0.0.610.23

Cap 8 80x16				8
a = 80 mm	b = 16 mm	c = 4.0 mm	m = 4.6 g	
black, 1 pce.				0.0.265.98
grey similar to RAL 7042, 1 pce.				0.0.627.25

Cap 8 80x32				8
a = 80 mm	b = 32 mm	c = 4.0 mm	m = 8.5 g	
black, 1 pce.				0.0.610.22

Cap 8 120x16				8
a = 120 mm	b = 16 mm	c = 4 mm	m = 6.0 g	
grey similar to RAL 7042, 1 pce.				0.0.650.87

Cap 8 160x16				8
a = 160 mm	b = 16 mm	c = 4.0 mm	m = 8.6 g	
black, 1 pce.				0.0.373.00

Cap 8 160x28				8
a = 160 mm	b = 28 mm	c = 4.0 mm	m = 16.1 g	
black, 1 pce.				0.0.026.80
grey similar to RAL 7042, 1 pce.				0.0.627.29

Cap 8 200x28				8
a = 200 mm	b = 28 mm	c = 4.0 mm	m = 22.0 g	
black, 1 pce.				0.0.474.07

Cap 8 240x28				8
a = 240 mm	b = 28 mm	c = 4.0 mm	m = 27.0 g	
black, 1 pce.				0.0.474.10

Cap 10 50x20				10
a = 50 mm	b = 20 mm	c = 5 mm	m = 4.0 g	
black, 1 pce.				0.0.632.55
grey similar to RAL 7042, 1 pce.				0.0.632.56

Line 6 8

Cap X 6 60x12				Line 6
a = 60 mm	b = 12 mm	c = 3.0 mm	m = 2.5 g	
grey similar to RAL 7042, 1 pce.				0.0.609.29

Cap X 8 80x16				Line 8
a = 80 mm	b = 16 mm	c = 4.0 mm	m = 6.0 g	
grey similar to RAL 7042, 1 pce.				0.0.609.28

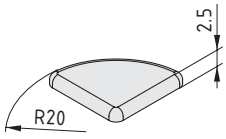
Caps with Radiused Outside Surface

- Aesthetically appealing
- No need to deburr cut edges
- Suitable for various angle measurements: 30°, 45°, 60°, 90° and 270°

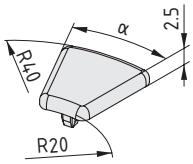
5 6 8

Rounded Cap for the profile end face, suitable for all Profile 8 D40 versions. No deburring of the cut edge is required.

Materials used in all the following products:
PA-GF



Cap 5 R20-90° 5
m = 0.9 g
black, 1 pce. 0.0.425.71

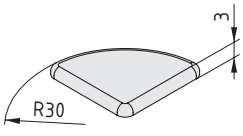


Cap 5 R20/40-30° 5
α = 30° m = 0.7 g
black, 1 pce. 0.0.425.59

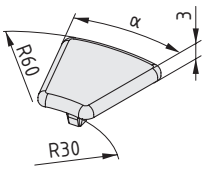
Cap 5 R20/40-45° 5
α = 45° m = 1.2 g
black, 1 pce. 0.0.425.62

Cap 5 R20/40-60° 5
α = 60° m = 1.5 g
black, 1 pce. 0.0.425.65

Cap 5 R20/40-90° 5
α = 90° m = 2.7 g
black, 1 pce. 0.0.425.68



Cap 6 R30-90° 6
m = 2.0 g
black, 1 pce. 0.0.434.75



Cap 6 R30/60-30° 6

α = 30° m = 2.0 g

black, 1 pce.	0.0.459.39

Cap 6 R30/60-45° 6

α = 45° m = 3.0 g

black, 1 pce.	0.0.459.40

Cap 6 R30/60-60° 6

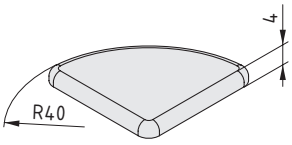
α = 60° m = 4.0 g

black, 1 pce.	0.0.459.41

Cap 6 R30/60-90° 6

α = 90° m = 6.0 g

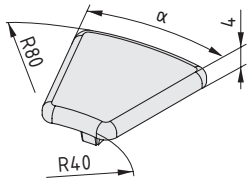
black, 1 pce.	0.0.459.42



Cap 8 R40-90° 8

m = 4.4 g

black, 1 pce.	0.0.436.34
grey similar to RAL 7042, 1 pce.	0.0.627.56



Cap 8 R40/80-30° 8

α = 30° m = 4.2 g

black, 1 pce.	0.0.427.69
grey similar to RAL 7042, 1 pce.	0.0.627.52

Cap 8 R40/80-45° 8

α = 45° m = 5.8 g

black, 1 pce.	0.0.409.15
grey similar to RAL 7042, 1 pce.	0.0.627.53

Cap 8 R40/80-60° 8

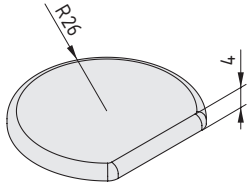
α = 60° m = 7.8 g

black, 1 pce.	0.0.427.70
grey similar to RAL 7042, 1 pce.	0.0.627.54

Cap 8 R40/80-90° 8

α = 90° m = 11.0 g

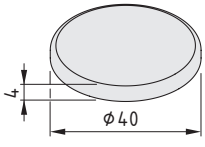
black, 1 pce.	0.0.427.71
grey similar to RAL 7042, 1 pce.	0.0.627.55



Cap 8 R26-270° 8

m = 5.6 g

black, 1 pce.	0.0.474.46

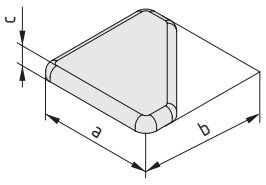


Cap 8 D40 8

PA-GF
m = 4.3 g

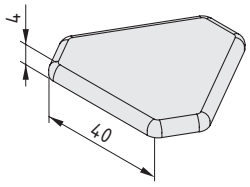
black, 1 pce.	0.0.489.53
grey similar to RAL 7042, 1 pce.	0.0.627.32

Caps with 45° and 120° angles



Materials used in all the following products:
PA-GF

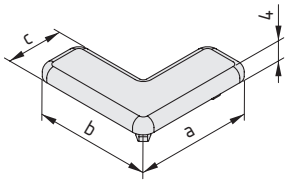
Cap 6 30x30-45°				
a = 30 mm	b = 30 mm	c = 3 mm	m = 1.9 g	
black, 1 pce.				0.0.434.74
Cap 8 40x40-45°				
a = 40 mm	b = 40 mm	c = 4 mm	m = 4.5 g	
black, 1 pce.				0.0.373.48
grey similar to RAL 7042, 1 pce.				0.0.627.24
Cap 8 80x80-45°				
a = 80 mm	b = 80 mm	c = 4 mm	m = 17.6 g	
black, 1 pce.				0.0.418.36



Cap 8 3x40-120°	
m = 5.0 g	
black, 1 pce.	0.0.482.39

Caps W Angle Geometry

Materials used in all the following products:
PA-GF



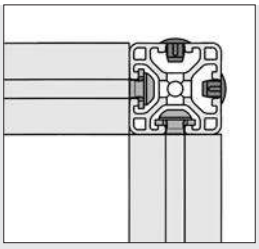
Cap 8 W40x40 E				
a = 40 mm	b = 40 mm	c = 16 mm	m = 4.2 g	
black, 1 pce.				0.0.429.51
Cap 8 W80x80 E				
a = 80 mm	b = 80 mm	c = 16 mm	m = 9.2 g	
black, 1 pce.				0.0.429.54
Cap 8 W80x80x40				
a = 80 mm	b = 80 mm	c = 40 mm	m = 14.0 g	
black, 1 pce.				0.0.465.50

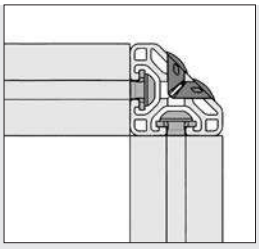
Caps for bores

Safe and clean

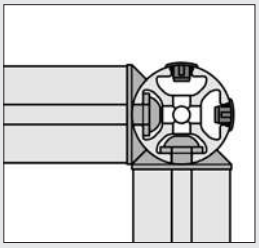
- Seal profile bores to stop dust getting inside
- Available in two colours

5 6 8

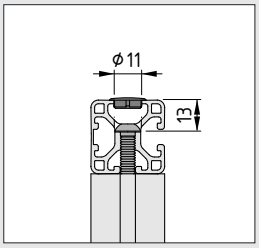


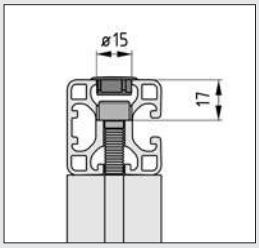


Grey Caps can be used to seal the holes in the sides of profiles with closed grooves. The grey blends in well with the aluminium.

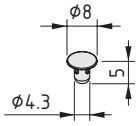


Cap 8 D7-D40 can be used to seal the 7 mm dia. through hole for the Standard Fastener 8 tool in Profiles 8 D40 with closed grooves. The grey colour is matched to the surface of the natural anodized profiles.

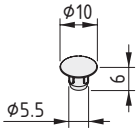




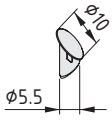
When screwing together profiles, users must drill through one profile to reach the core bore of the other profile. Cap 6 D11 and Cap 8 D15 seal this opening on profiles with closed grooves. This ensures that cut edges are safely covered over and keeps dust out of the grooves.



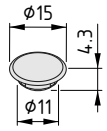
Cap 5 D4.3	5
PA m = 8 g/100	
black, 1 pce.	0.0.437.89
grey similar to RAL 7042, 1 pce.	0.0.484.34



Cap 6 D5.5	6
PA m = 14 g/100	
black, 1 pce.	0.0.439.86
grey similar to RAL 7042, 1 pce.	0.0.478.99



Cap 6 D5.5-45°	6
PA m = 18 g/100	
black, 1 pce.	0.0.439.87
grey similar to RAL 7042, 1 pce.	0.0.491.03

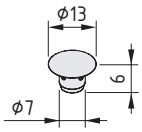


Cap 6 D11

6

PA
m = 30 g/100

grey similar to RAL 7042, 1 pce.	0.0.672.31

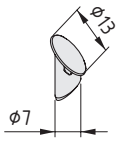


Cap 8 D7

8

PA
m = 27 g/100

black, 1 pce.	0.0.432.06
grey similar to RAL 7042, 1 pce.	0.0.489.47

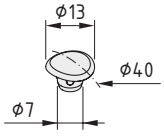


Cap 8 D7-45°

8

PA
m = 36 g/100

black, 1 pce.	0.0.432.96
grey similar to RAL 7042, 1 pce.	0.0.489.50

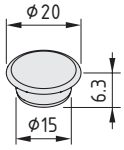


Cap 8 D7-D40

8

PA
m = 30 g/100

grey similar to RAL 7042, 1 pce.	0.0.493.88

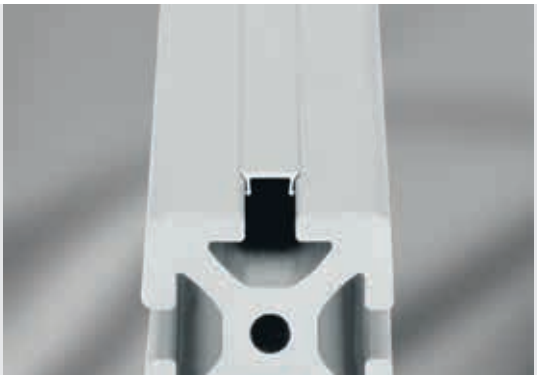


Cap 8 D15

8

PA
m = 83 g/100

grey similar to RAL 7042, 1 pce.	0.0.492.55



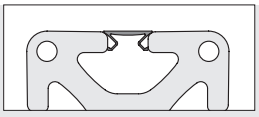
Cover Profiles Al

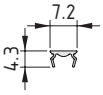
- Dust-tight and easy to clean
- For covering cables running through the groove

Line 6 8 10 12

Cover Profiles can also be printed or engraved for labelling modules.

Whenever it is especially important that constructions are kept clean and look good, Cover Profiles Al neatly close over the groove, either in sections or along the entire length of the profile.

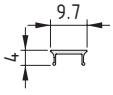




Cover Profile 6 Al 6

Al, anodized
m = 30 g/m

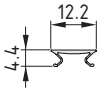
natural, 1 pce., length 2000 mm	0.0.439.70



Cover Profile 8 Al 8

Al, anodized
m = 32 g/m

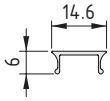
natural, 1 pce., length 2000 mm	0.0.452.03
black, 1 pce., length 2000 mm	0.0.452.04



Cover Profile 10 Al 10

Al, anodized
m = 40 g/m

natural, 1 pce., length 2000 mm	0.0.632.63



Cover Profile 12 Al 12

Al, anodized
m = 62 g/m

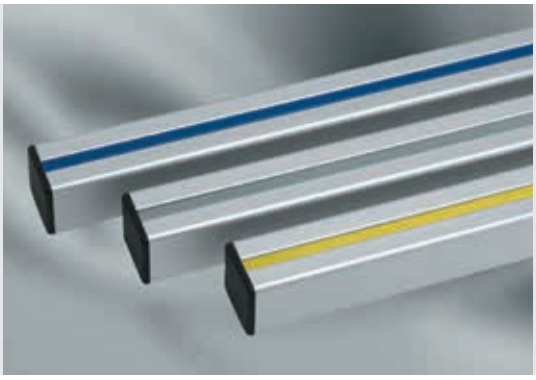
natural, 1 pce., length 2000 mm	0.0.003.25

Line

Cover Profile X 8 Al Line 8

Al, anodized
m = 31.5 g/m

natural, 1 pce., length 2000 mm	0.0.654.89



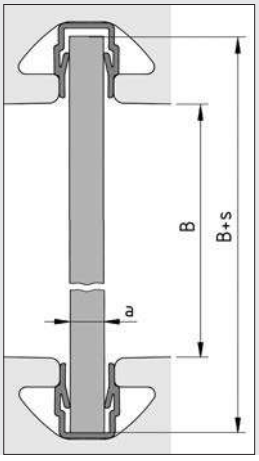
Cover Profiles PP

One profile, two applications

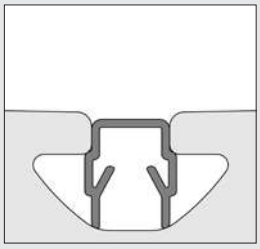
- Protection from dirt and dust when used as cover profiles
- Securing of panel elements in the groove when used as panel-fixing profiles
- Various colours for creating aesthetic effects
- ESD-safe versions also available

if 86 ESD 5 6 8 10 12

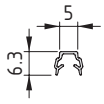
Cover Profile can be used as a cover for the profile groove or as a panel-fixing profile for panel elements.



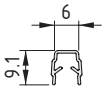
Cover Profile	a [mm]	s [mm]
5	1.5–2.0	10
6	2.0–3.5	16
8 (ESD)	4.0–5.5	21
10 (ESD)	4.0–8.0	27.5
12	6.0–9.5	33



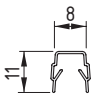
When inserted with its smooth side facing up, the Cover Profile keeps dirt and dust out of the groove.



Cover Profile 5	5
PP/TPE m = 8.9 g/m	
natural, 1 pce., length 2000 mm	0.0.391.73
black, 1 pce., length 2000 mm	0.0.391.74
grey similar to RAL 7042, 1 pce., length 2000 mm	0.0.639.02



Cover Profile 6	6
PP/TPE m = 15.4 g/m	
natural, 1 pce., length 2000 mm	0.0.419.48
black, 1 pce., length 2000 mm	0.0.431.01

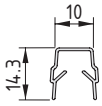


Cover Profile 8	8
PP/TPE m = 19 g/m	
natural, 1 pce., length 2000 mm	0.0.422.23
black, 1 pce., length 2000 mm	0.0.422.26
green, similar to RAL 6016, 1 pce., length 2000 mm	0.0.489.44
red, similar to RAL 3003, 1 pce., length 2000 mm	0.0.489.46
yellow, similar to RAL 1018, 1 pce., length 2000 mm	0.0.489.43
blue, similar to RAL 5010, 1 pce., length 2000 mm	0.0.481.01
grey similar to RAL 7042, 1 pce., length 2000 mm	0.0.489.45

Cover Profile 8 ESD ESD 8

PP/TPE
m = 19 g/m

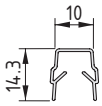
black, 1 pce., length 2000 mm	0.0.617.80



Cover Profile 10 10

PP/TPE
m = 26.9 g/m

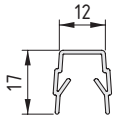
natural, 1 pce., length 2000 mm	0.0.632.10



Cover Profile 10 ESD ESD 10

PP/TPE
m = 26.9 g/m

black, 1 pce., length 2000 mm	0.0.632.04



Cover Profile 12 12

PP/TPE
m = 42.8 g/m

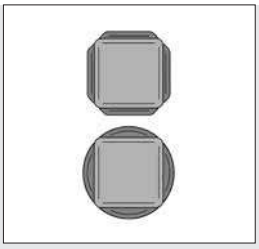
natural, 1 pce., length 2000 mm	0.0.005.08
black, 1 pce., length 2000 mm	0.0.005.28

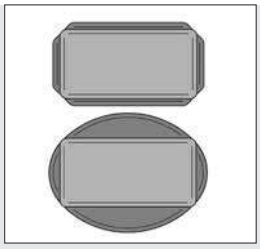
Cover Profiles R, WR and F

- Clads rectangular profiles with a rounded contour
- Ideal for table legs and other high-quality constructions
- Reduces risk of injury associated with protruding edges

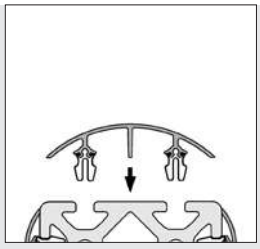
8

Cover Profile WR creates a uniformly wavy pattern around the main profile, neatly integrating the four corners.

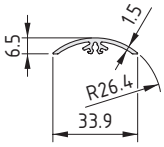




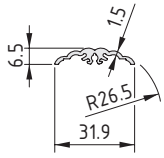
To achieve a completely smooth surface, both the Cap of the rectangular base profile and Caps R or F for the segments of the relevant Cover Profile must be used.



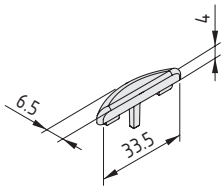
The round and flat Cover Profiles R, W and F are inserted into the grooves of Profiles 8 in conjunction with Clip 8 St.



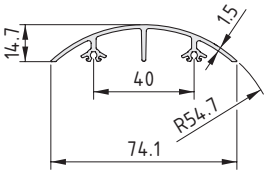
Cover Profile 8 R40 Al	8
Al, anodized m = 190 g/m	
natural, cut-off max. 3000 mm	0.0.422.76



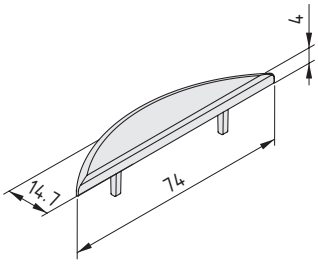
Cover Profile 8 WR40 Al	8
Al, anodized m = 200 g/m	
natural, cut-off max. 3000 mm	0.0.457.72



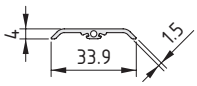
Cap 8 R40	8
PA-GF m = 0.6 g	
black, 1 pce.	0.0.429.60
grey similar to RAL 7042, 1 pce.	0.0.627.50



Cover Profile 8 R80 Al	8
Al, anodized m = 550 g/m	
natural, cut-off max. 3000 mm	0.0.422.77



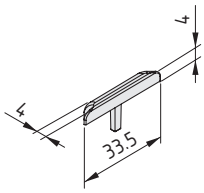
Cap 8 R80	8
PA-GF m = 2.3 g	
black, 1 pce.	0.0.429.61
grey similar to RAL 7042, 1 pce.	0.0.627.51



Cover Profile 8 F40 Al

Al, anodized
m = 170 g/m

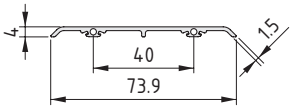
natural, cut-off max. 3000 mm	0.0.428.95



Cap 8 F40

PA-GF
m = 0.4 g

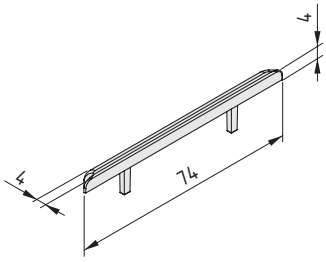
black, 1 pce.	0.0.429.62



Cover Profile 8 F80 Al

Al, anodized
m = 370 g/m

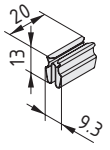
natural, cut-off max. 3000 mm	0.0.428.96



Cap 8 F80

PA-GF
m = 0.8 g

black, 1 pce.	0.0.429.63



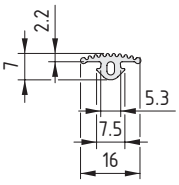
Clip 8 St

St
Recommended amount: 5 pce./m
m = 2.5 g

bright zinc-plated, 1 pce.	0.0.428.97

Cover Profiles NBR

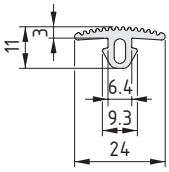
- Elastic covering for profile grooves
- Creates a non-slip surface
- Suitable as a buffer strip for sliding doors



Cover Profile 5 16x3

NBR
Hardness 80° Shore A, oil and water resistant
m = 57 g/m

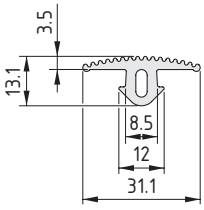
black, cut-off max. 20 m	0.0.425.23



Cover Profile 6 24x3

NBR
Hardness 80° Shore A, oil and water resistant
m = 119 g/m

black, cut-off max. 20 m	0.0.439.34



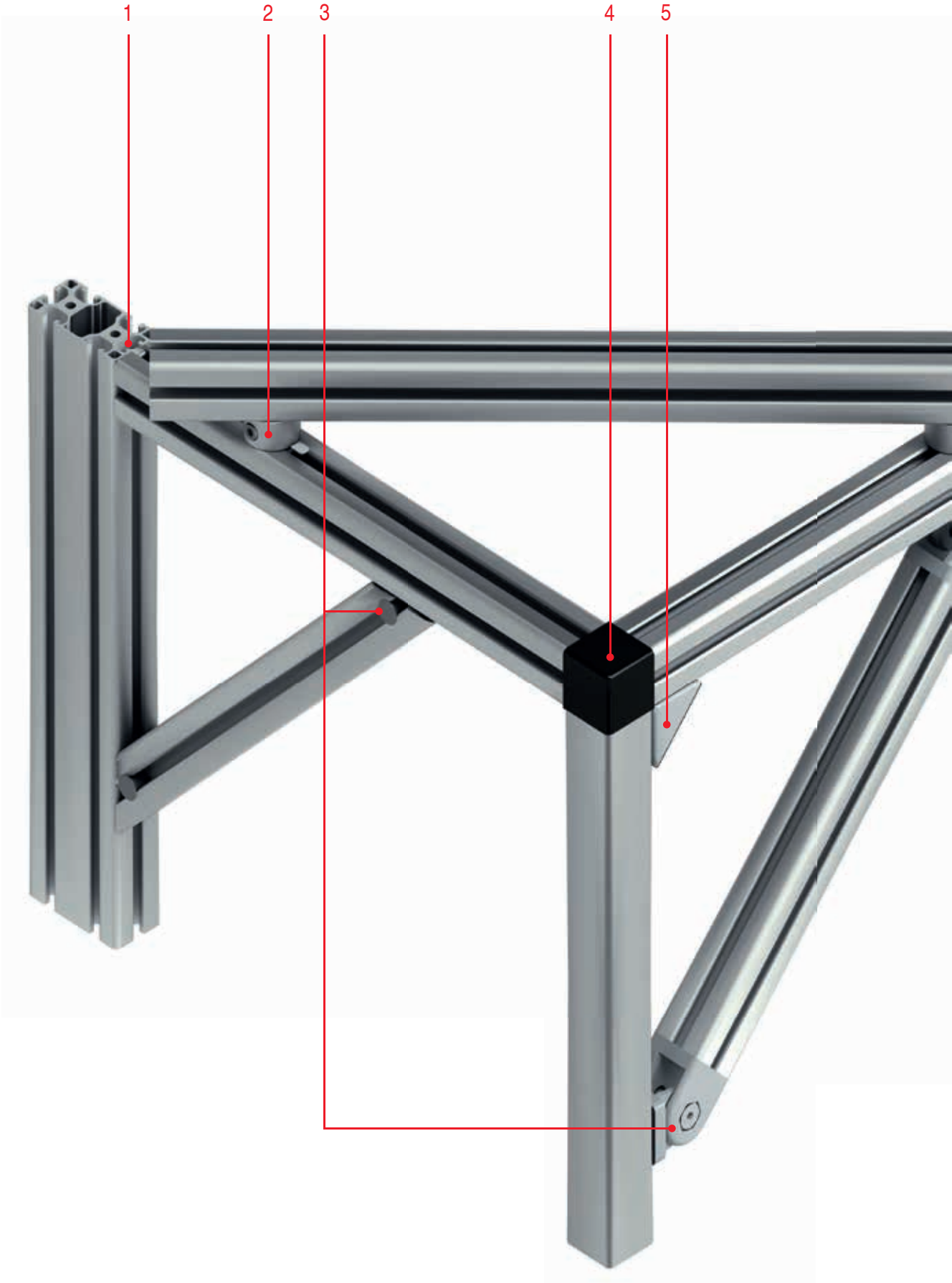
Cover Profile 8 32x4

NBR
Hardness 80° Shore A, oil and water resistant
m = 180 g/m

black, cut-off max. 20 m	0.0.429.02

2 FASTENING TECHNOLOGY

Application example – fastening technology
Connecting profiles



1 Right-angled connections

- Fastening sets for the rapid and stable assembly of profiles
- Numerous variants for each application
- Innovative fastening sets for power-locking connections without profile machining

79 Section 2

2 Cross-profile connections

- Power-lock connection between profiles that cross
- Adjustable to desired angle
- Solutions for rapid angle adjustment

119 Section 2

3 Angle Fasteners

- Hinges and fasteners for constructions with non-standard angle measurements
- Angle elements for stable and lightweight latticework
- Adjustable solutions for the rapid installation of supporting struts

112 Section 2

4 Corner fasteners

- Connect up to three profiles to form one corner unit
- For building tables, display cases and hoods
- Versatile design options thanks to various angles and caps

106 Section 2

5 Angle Bracket Sets

- Additional hold without profile machining for load-bearing supports
- Wide selection ranging from simple angle brackets to heavy-duty anchor points
- Models with caps for a closed look and easy cleaning

94 Section 2

6 T-Slot Nuts

- For fastening components
- Suitable for appropriate profile size
- Versions with different load-carrying capacities as required for specific applications

136 Section 3

7 Butt fasteners

- For extending profiles
- Simple end-face connections
- Also suitable for use with mitre cuts

125 Section 2

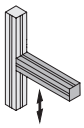
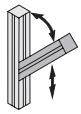
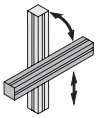
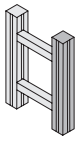
8 Parallel fasteners

- Connect parallel profiles to make an exceptionally stable unit
- Available in various sizes and strengths
- Connection Profiles for extremely strong struts

130 Section 2

Key: See page | 0 Products in this section | 0 Products in other sections

Overview – finding the right fastener fast

Configuration	Application	Product	
Right-angled profile connections			
	Extremely rapid and repositionable profile connections with no machining	Automatic-Fastening Sets	79
	High-strength and repositionable screw connections with minimal assembly requirements	Universal-Fastening Sets	82
	Cost-effective and fixed connection	Standard-Fastening Sets	85
	Flexible and rapid construction of frames for panel elements	Central-Fastening Sets	91
	Rapid profile connection with simple angle adjustment system	Click-Fastening Set 90°	92
	The fastest profile connection – put in place, tighten and it holds	Automatic Angle Bracket Sets	94
	Right-angled profile connections at any angle of rotation	Direct-Fastening Set 90°	93
	Extra hold for load-bearing support profiles without additional profile machining	Angle Bracket Zn	96
	Simple connection of three profiles to form one corner unit	Corner Fastening Sets	106
Connections at various angles			
	Construction of load-carrying latticework and supporting struts at a 45° angle	Angle Elements	112
	Construction of fixable tool rails or load-carrying hinges	Hinges, heavy-duty	114
	Permanent swivel capability and secure connection	Ball-Bearing Hinge	116
	Easily adjustable fastening for lightweight attachments	Ball joint	117
	Movable profile connections at any angle	Mitre-Fastening Sets	118
Cross-profile connections			
	Power-lock connection between profiles that cross	Direct-Fastening Sets	119
	Rapid fixing of struts at any (variable) position with minimal assembly requirements	Click-Fastening Sets	120
	Cost-effective angled fixing	Face Fastening Set	121
	Secure and fixed connection between profiles that cross	Angle Clamp Brackets	123
	Shelves with high load-carrying capacity and extremely easy-to-use angle adjustment system	Angle Locking Bracket	124
Butt fasteners for extending lengths			
	High load-carrying capacity with average machining requirements	Universal-Butt-Fastening Sets	127
	Medium load-carrying capacity with no profile machining	Automatic Butt-Fastening Sets	125
	Fastening mitre-cut profiles to frames	Mitre-Butt-Fastening Sets	129
Parallel fasteners for adjoining profiles			
	Gap-free assembly with moderate profile machining	Central-Fastening Sets	130
	Partition assembly with small gaps and no profile machining	Parallel-Fastening Sets	131
	Strong, continuous struts for profile constructions with exceptional load-carrying capacity	Connecting Profiles	132

Note:

Technical data on fastening technology can be found in Section 19.

In addition to fasteners for profiles, the catalogue also contains additional fastening elements:

T-Slot Nuts – for universal fastening to the profile groove	Section 3
Panel Fasteners – for installing panels in profile constructions	Section 5
Floor elements – for fastening profiles to a floor or wall.	Section 11

Fastening technology
Products in this section

Automatic-Fastening Sets

- No profile machining required
- For stable, repositionable connections

79

Universal-Fastening Sets

- For stable, repositionable connections
- Minimal assembly requirements

82

Standard-Fastening Sets

- For a fixed profile connection
- Outstanding resistance to displacement and torsion

85

Automatic-Fastening Sets 8 N

- For profiles with closed grooves
- Surfaces stay easy to clean

89

Central-Fastening Sets

- For building frames for panel elements
- Repositionable connection with a stand profile

91

Click-Fastening Set 8 90°

- Connect profiles at any angle of rotation
- Ideal for prototypes and temporary structures

92

Direct-Fastening Set 8 90°

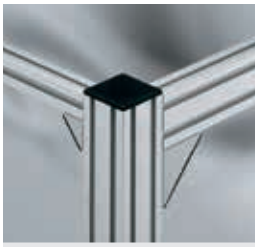
- Right-angled connection at any angle of rotation
- Power-locking profile connection

93

Automatic flat and angle bracket sets

- Preassembled and ready for immediate use
- Holds straight away with no profile machining

94



Angle Brackets

- Reinforcement for profile connections
- Power-lock connection with no profile machining

96

Diagonal Strut Set 8

- Complete package for supporting profiles
- Smooth surface

105

Corner Fastening Sets

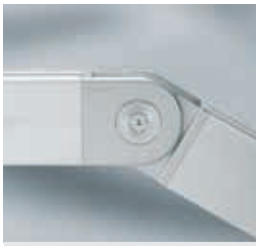
- Connect three profiles to form one corner unit
- Stylish covers in various shapes

106

Angle Elements

- Latticework reinforcement for profile constructions
- Profile connection at a 45° angle

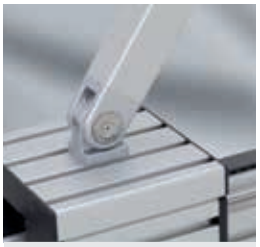
112



Hinges, heavy-duty

- Stable connection at any angle of adjustment from 0° to 180°
- Clamp lever enables rapid adjustment

114



Ball-Bearing Hinge 8 40x40

- Enables movement through up to 180°
- Wear-resistant and robust

116

Ball Joint 8

- Two-dimensional pivoting
- Available with optional clamp lever for rapid adjustment

117

Mitre-Fastening Sets

- At any angle from 30° to 90°
- The profile groove stays free to accommodate panel elements

118

Click-Fastening Set 8

- For fitting profiles that cross at any position
- For assembling struts quickly, no machining required

120

Face Fastening Set 8

- Toothed fastener for inclined working and storage surfaces
- Angle adjustment in 5° increments

121

Angle Hinge Brackets, Angle Clamp Brackets

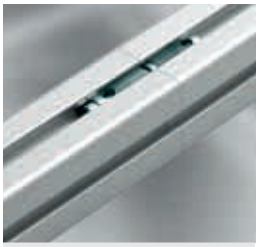
- Simple fixing for profiles that cross
- Angle adjustment via Angle Clamp Bracket

122

Angle Locking Bracket 8 80x40

- Angular adjustment without tools
- Secure, rigid connection

124



Butt-Fastening Sets

- Connect identical profiles via their end faces
- No profile machining necessary

125

Mitre-Butt-Fastening Sets

- Connect two profiles with the same mitre angle
- Overall angle of 60° to 180° possible

129

Central-Fastening Set P 8

- Connect two parallel Profiles 8
- Flush connection for partitioning and room dividers

130

Parallel Fastener

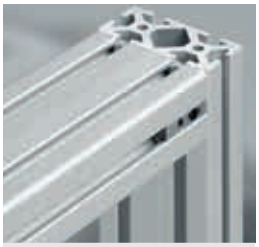
- Connect two parallel Profiles 8
- No machining required
- Easy to use thanks to snap-in function

131

Connecting Profiles

- Simple engineering for stable composite profiles
- For open and closed supports
- No machining required

132



Pin Elements

- Additional rigidity from dowel pin
- Excellent resistance against impact and overload

134

Note:

Technical data on fastening technology can be found in Section 19.

Automatic-Fastening Sets

The fastest and most flexible profile connection

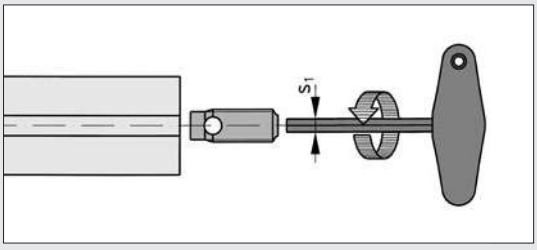
- No additional profile machining required
- For a profile connection that is stable and can also be repositioned
- Outstanding resistance to displacement, torsion and deflection

5 6 8 10 12 www.item24.com item Innovation

The Automatic-Fastening Set is an innovative solution for power-lock connections between profiles. Because no profile machining is required, it can be fitted quickly and easily. Due to the special design of the fasteners in the set, screw connections are all that is needed to fix them in place. They can be retrofitted to structures and repositioned in a matter of moments.

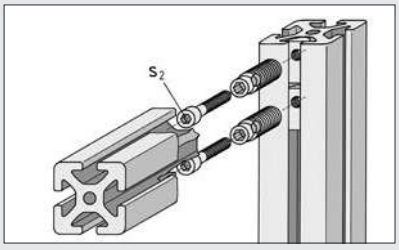
Automatic Fasteners can withstand the heaviest loads. A stainless steel version is also available for special requirements.

The Automatic-Fastening Set ensures that design engineers benefit from maximum design flexibility without having to compromise on stability.

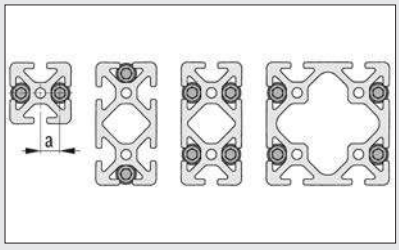


The Fastener is screwed into a profile groove in the end face, the thread being cut automatically. Use of a lubricant is recommended.

Note: All Fasteners with a through bore for the fastening screw have a counter-clockwise thread on the outside in order to prevent the Fastener twisting when the screw is tightened.

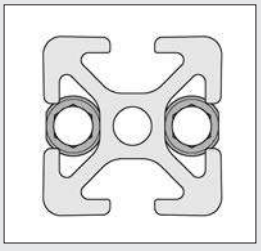


L-Keys from item are the ideal tool for tightening the screws of the Automatic-Fastening Set (tightening torque M).

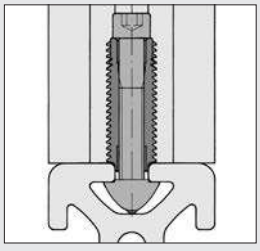


Automatic-Fastening Sets should always be used in pairs.
Automatic Fasteners with a double T-Slot Nut are available as complete sets to enable rapid installation in pairs. They make it easier to position the T-Slot Nuts and speed up the installation process.

Automatic-Fastening Set					
	5	6	8	10	12
a [mm]	6.8	9.5	13.2	16.2	19.5
s_1	4 A/F	5 A/F	6 A/F	8 A/F	8 A/F
s_2	3 A/F	4 A/F	5 A/F	5 A/F	6 A/F



Automatic-Fastening Set 5 should be inserted so that the flattening on the thread is flush with the outer edge of the profile.

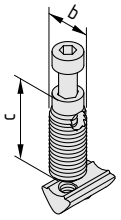


Automatic-Fastening Sets 6, 8, 10 and 12 also have an anti-torsion feature. Once the profile has been preassembled, this feature can be deployed by unscrewing the fastener sufficiently so that the end of it projects into the profile groove.

A special version of the Automatic-Fastening Set is available for Profile 8 with closed grooves (which can be opened up).

Automatic-Fastening Set 8 N 89

The following applies to all the sets below:
Automatic Fastener, St
Hexagon Socket Head Cap Screw, St
T-Slot Nut St

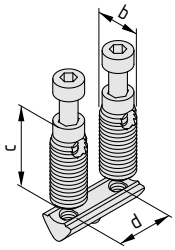


Automatic-Fastening Set 5				5
b = 7 mm	c = 24 mm	$M_{bz\text{-}p}$ = 2.5 Nm	m = 8.0 g	
bright zinc-plated, 1 set				0.0.391.60
Automatic-Fastening Set 5				5
b = 7 mm	c = 24 mm	$M_{stainl.}$ = 2.5 Nm	m = 8.0 g	
stainless, 1 set				0.0.437.46
Automatic-Fastening Set 6				6
b = 10 mm	c = 27 mm	$M_{bz\text{-}p}$ = 8.0 Nm	m = 18.0 g	
bright zinc-plated, 1 set				0.0.419.71
Automatic-Fastening Set 6				6
b = 10 mm	c = 27 mm	$M_{stainl.}$ = 6.5 Nm	m = 18.0 g	
stainless, 1 set				0.0.441.67
Automatic-Fastening Set 8				8
b = 12 mm	c = 31 mm	$M_{bz\text{-}p}$ = 14 Nm	m = 35.0 g	
bright zinc-plated, 1 set				0.0.388.08
Automatic-Fastening Set 8				8
b = 12 mm	c = 31 mm	$M_{stainl.}$ = 11 Nm	m = 35.0 g	
stainless, 1 set				0.0.440.58
Automatic-Fastening Set 10				10
b = 15 mm	c = 39 mm	$M_{bz\text{-}p}$ = 25 Nm	m = 69.5 g	
bright zinc-plated, 1 set				0.0.624.74
Automatic-Fastening Set 12				12
b = 18 mm	c = 47 mm	$M_{bz\text{-}p}$ = 34 Nm	m = 125.0 g	
bright zinc-plated, 1 set				0.0.003.50

The Automatic Fasteners with double T-Slot Nut come in complete sets for the Line 8 groove (suitable for profile widths of 40 and 80 mm), Line 6 groove (profile widths of 30 and 60 mm) and Line 5 groove (profile width of 20 mm).

The following applies to all the sets below:

2 Automatic Fasteners, St, bright zinc-plated
2 Hexagon Socket Head Cap Screws, St, bright zinc-plated
T-Slot Nut, St, bright zinc-plated



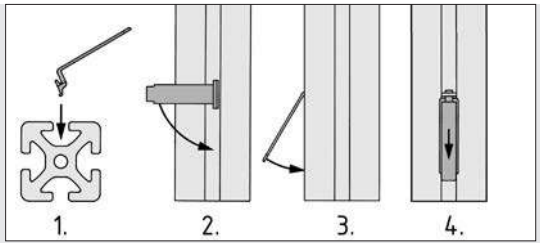
Automatic-Fastening Set 5 20					
b = 7 mm	c = 24 mm	d = 13.6 mm	M = 2.5 Nm	m = 18.0 g	
1 set					0.0.672.88

Automatic-Fastening Set 6 30					
b = 10 mm	c = 27 mm	d = 19 mm	M = 8 Nm	m = 39.0 g	
1 set					0.0.672.86

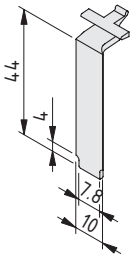
Automatic-Fastening Set 6 60					
b = 10 mm	c = 27 mm	d = 49 mm	M = 8 Nm	m = 49.0 g	
1 set					0.0.672.87

Automatic-Fastening Set 8 40					
b = 12 mm	c = 31 mm	d = 26.4 mm	M = 14 Nm	m = 60.4 g	
1 set					0.0.672.84

Automatic-Fastening Set 8 80					
b = 12 mm	c = 31 mm	d = 66.4 mm	M = 14 Nm	m = 81.5 g	
1 set					0.0.672.85



A cover is available for Automatic-Fastening Set 8. It is fitted after the fastening has been installed.



Automatic-Fastening Set 8 Cap	8
PA-GF m = 0.7 g	
black similar to RAL 9005, 1 pce.	0.0.388.66
grey similar to RAL 7042, 1 pce.	0.0.616.31

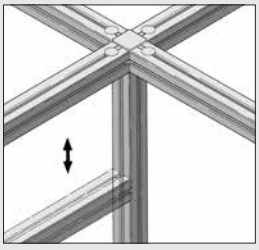
Universal-Fastening Sets

The high-strength and flexible profile connection

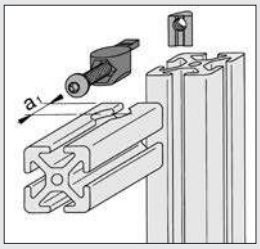
- For a profile connection that is stable and can also be repositioned
- Outstanding resistance to displacement, torsion and deflection
- Minimal assembly requirements – just one hole to cut

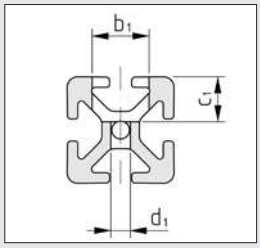
When it comes to creating flexible and strong profile connections, the Universal-Fastening Sets from item are an excellent choice. They are anchored via a single hole cut into one profile, while the fastening in the second profile can be repositioned at any time. As a result, they can also be installed in existing constructions.

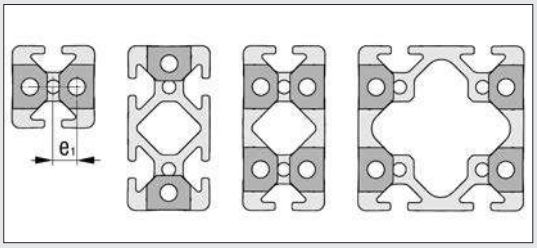
Universal Fasteners made from cast stainless steel are exceptionally resistant to strong forces, changes in temperature and vibrations. They are also ideal for use in outdoor areas and cleanrooms.



Where required, the anti-torsion pin of the Universal Fastener can be broken off at a specified breakpoint. This Universal-Fastening Set can thus also be used to secure profiles to e.g. panels.



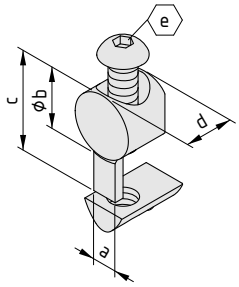




Universal-Fastening Sets should always be used in pairs.

Universal-Fastening Set	5	6	8	10	12
a_1	10.0 mm	15.0 mm	20.0 mm	25.0 mm	30.0 mm
b_1	∅ 12.0 mm	∅ 16.0 mm	∅ 20.0 mm	∅ 25.0 mm	∅ 30.0 mm
c_1	8.5 mm	12.7 mm	16.0 mm	20.0 mm	24.0 mm
d_1	∅ 4.3 mm	∅ 5.5 mm	∅ 7.0 mm	∅ 9.0 mm	∅ 12.0 mm
e_1	5.8 mm	8.7 mm	12.0 mm	15.1 mm	17.8 mm

The following applies to all the sets below:
Universal Fastener, die-cast zinc
Screw, St
T-Slot Nut, St



Universal-Fastening Set 5						5
a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	$M_{bz\text{-}p}$ [Nm]	m [g]
5	12	17.2	8.5	3	3	7.0
bright zinc-plated, 1 set						0.0.370.27

Universal-Fastening Set 5						5
a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	$M_{stainl.}$ [Nm]	m [g]
5	12	17.2	8.5	3	2.4	7.0
stainless, 1 set						0.0.437.52

Universal-Fastening Set 6							6
a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	M_{bz-p} [Nm]	m [g]	
6.2	16	25.2	12.6	4	8	18.0	
bright zinc-plated, 1 set							0.0.419.52

Universal-Fastening Set 6							6
a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	$M_{stainl.}$ [Nm]	m [g]	
6.2	16	25.2	12.6	4	6.5	18.0	
stainless, 1 set							0.0.441.74

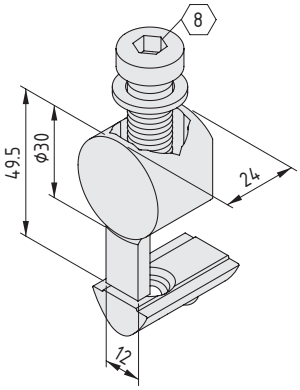
Universal-Fastening Set 8							8
a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	M_{bz-p} [Nm]	m [g]	
8	20	33.5	16	5	25	41.0	
bright zinc-plated, 1 set							0.0.026.92

Universal-Fastening Set 8							8
a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	$M_{stainl.}$ [Nm]	m [g]	
8	20	33.5	16	5	20	41.0	
stainless, 1 set							0.0.444.18

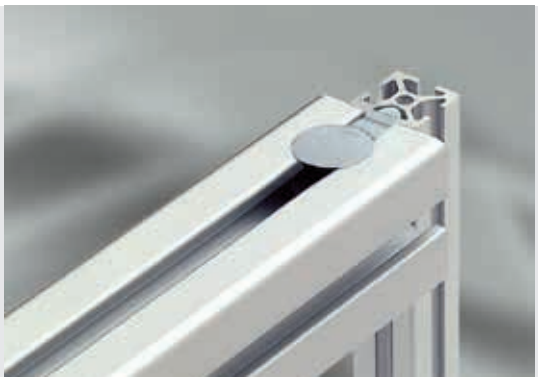
Universal-Fastening Set 8 St							8
Universal Fastener St, stainless							
a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	M_{bz-p} [Nm]	m [g]	
8	20	32.5	16	5	25	45.0	
bright zinc-plated, 1 set							0.0.488.60

Universal-Fastening Set 8 St							8
Universal Fastener St, stainless							
a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	$M_{stainl.}$ [Nm]	m [g]	
8	20	32.5	16	5	20	45.0	
stainless, 1 set							0.0.488.51

Universal-Fastening Set 10							10
a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	M_{bz-p} [Nm]	m [g]	
10	25	41	20	6	46	97.4	
bright zinc-plated, 1 set							0.0.632.07



Universal-Fastening Set 12	12
Universal Fastener 12, die-cast zinc Hexagon Socket Head Cap Screw DIN 7984-M12x45, St Washer DIN 433-13, St T-Slot Nut 12 St M12 M_{bz-p} = 60 Nm m = 155.0 g	
bright zinc-plated, 1 set	0.0.003.57



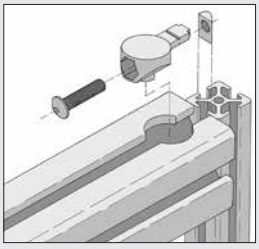
Universal-Fastening Sets 5/8 and 8/5

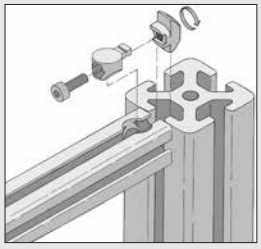
- For connecting together profiles from Lines 5 and 8
- Suitable for retrofitting and repositionable

5 8

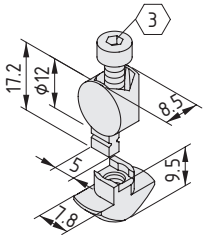
For universal power-lock interconnection of Profiles 5 and Profiles 8. Suitable for profiles which need to be moved subsequently, since only one profile is processed. These Fastening Sets can be installed easily into existing constructions.

Connection processing of the profiles is the same as for the Universal-Fastening Sets.





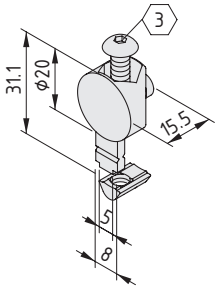
Universal-Fastening Sets should always be used in pairs. Where required, the anti-torsion pin of the Universal Fastener can be broken off at a specified breakpoint.



Universal-Fastening Set 5/8 5 8

Universal Fastener 5, die-cast zinc
Hexagon Socket Head Cap Screw DIN 912-M4x18, St
Special T-Slot Nut 8 Zn M4
$M_{bz\text{-}p}$ = 3 Nm m = 9.0 g

bright zinc-plated, 1 set	0.0.370.34



Universal-Fastening Set 8/5 5 8

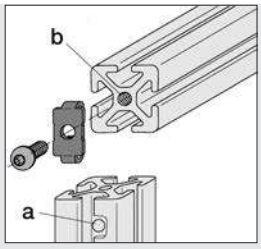
Universal Fastener 8/5, die-cast zinc
Button-Head Screw ISO 7380-M5x25, St
T-Slot Nut 5 St M5
$M_{bz\text{-}p}$ = 3 Nm m = 18.0 g

bright zinc-plated, 1 set	0.0.370.25

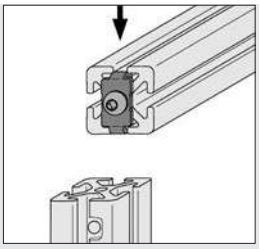
Standard-Fastening Sets

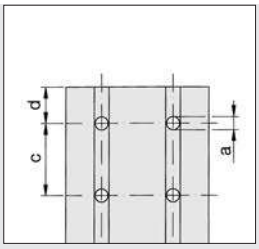
Stable, fixed screw connection for profiles

- For a fixed profile connection
- Outstanding resistance to displacement and torsion



The necessary thread is tapped directly into the core bore of the profiles.



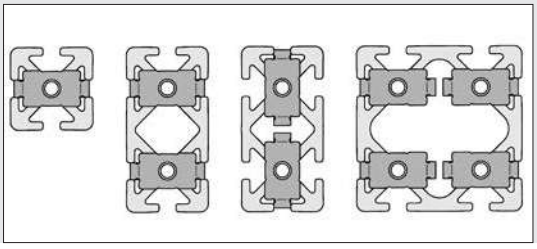


Position of the through holes for the key.

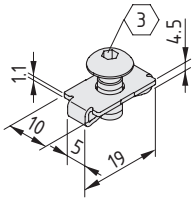
Standard-Fastening Set ESD is used in the same way as a conventional Standard-Fastening Set. The special design of the fastening screw partially destroys the insulating anodized layer on the profile groove and creates an electrical contact between the connected profiles.

For better identification, fastening elements ESD are given a yellow passivation layer in compliance with Directive 2002/95/EC ("RoHS").

Standard-Fastening Set						
	5	6	8	8 E	10	12
a	∅ 4.3 mm	∅ 5.5 mm	∅ 7 mm	∅ 7 mm	∅ 9 mm	∅ 11.5 mm
b	M5 12 mm deep	M6 15 mm deep	M8 18 mm deep	-	M10 22 mm deep	M12 30 mm deep
c	20 mm	30 mm	40 mm	40 mm	50 mm	60 mm
d	10 mm	15 mm	20 mm	20 mm	25 mm	30 mm



The standard connecting plates can be arranged to match the way in which the profiles are fitted.
Large profiles with high load-bearing capabilities can be connected using a larger number of Standard Fasteners.



Standard-Fastening Set 5 5

Standard connecting plate 5, St
Special Button-Head Screw similar to ISO 7380-M5x12, St
M_{bz-p} = 4.5 Nm m = 4.0 g

bright zinc-plated, 1 set 0.0.370.08

Standard-Fastening Set 5 5

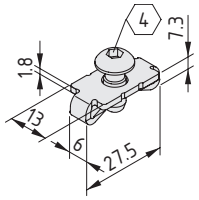
$M_{stainl.}$ = 3.6 Nm m = 4.0 g

stainless, 1 set 0.0.437.49

Standard-Fastening Set 5 ESD ESD 5

M_{bz-p} = 4.5 Nm m = 4.0 g

bright zinc-plated, 1 set 0.0.612.14



Standard-Fastening Set 6 6

Standard connecting plate 6, St
Special Button-Head Screw similar to ISO 7380-M6x14, St
M_{bz-p} = 10 Nm m = 9.0 g

bright zinc-plated, 1 set 0.0.419.14

Standard-Fastening Set 6 6

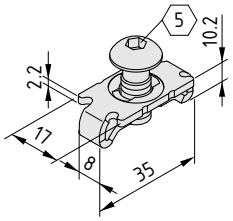
$M_{stainl.}$ = 8 Nm m = 9.0 g

stainless, 1 set 0.0.439.10

Standard-Fastening Set 6 ESD ESD 6

M_{bz-p} = 10 Nm m = 9.0 g

bright zinc-plated, 1 set 0.0.612.04



Standard-Fastening Set 8 8

Standard connecting plate 8, St
Special Button-Head Screw similar to ISO 7380-M8x20, St
M_{bz-p} = 25 Nm m = 21.0 g

bright zinc-plated, 1 set 0.0.026.07

Standard-Fastening Set 8 8

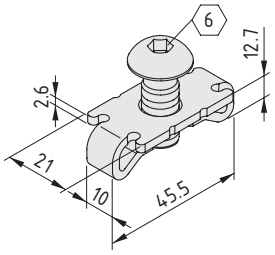
$M_{stainl.}$ = 20 Nm m = 21.0 g

stainless, 1 set 0.0.388.79

Standard-Fastening Set 8 ESD ESD 8

M_{bz-p} = 25 Nm m = 21.0 g

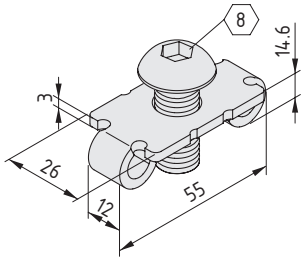
bright zinc-plated, 1 set 0.0.610.11



Standard-Fastening Set 10 10

Standard connecting plate 10, St
Special Button-Head Screw similar to ISO 7380-M10x25, St
M_{bz-p} = 46 Nm m = 43.2 g

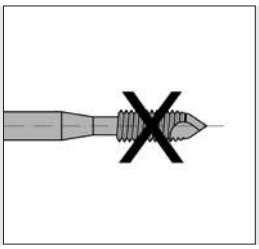
bright zinc-plated, 1 set 0.0.625.08



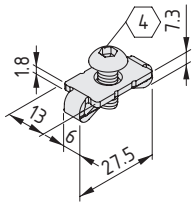
Standard-Fastening Set 12 12

Standard connecting plate 12, St
Special Button-Head Screw similar to ISO 7380-M12x30, St
M_{bz-p} = 80 Nm m = 70.0 g

bright zinc-plated, 1 set 0.0.003.35



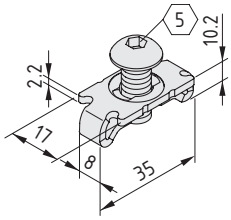
For connections with slightly reduced loading, Standard-Fastening Set E with a self-threading special screw which further reduces the machining requirement.



Standard-Fastening Set 6 E 6

Standard connecting plate 6, St
Self-tapping Button-Head Screw, head similar to ISO 7380-M5.4x14, St, bright zinc-plated
M_{bz-p} = 10 Nm m = 9.0 g

bright zinc-plated, 1 set	0.0.648.65

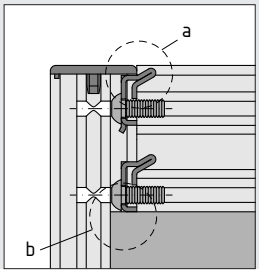


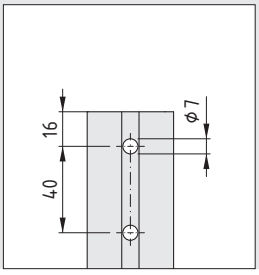
Standard-Fastening Set 8 E 8

Standard connecting plate 8, St
Self-threading, Button-Head Screw, head shape similar to ISO 7380-M7.3x20, St
M_{bz-p} = 20 Nm m = 20.0 g

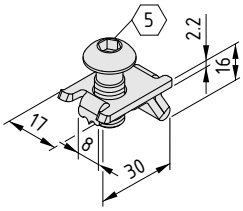
bright zinc-plated, 1 set	0.0.421.75

Standard-Fastening Set 8, one-sided has a modified centring feature that allows users to offset profiles. This means that right-angled profile connections can be achieved with a flush fit that factors in Caps (a). Furthermore, because the anti-torsion feature is located on just one side, the internal grooves are left clear. This means that panel elements can be inserted into the grooves without having to trim the corners first (b).





Position of the through holes for the key.



Standard-Fastening Set 8, one-sided 8

Standard connecting plate 8, one-sided, St, bright zinc-plated
Special Button-Head Screw similar to ISO 7380 M8x20, St, bright zinc-plated
M = 25 Nm m = 19.0 g

1 set	0.0.672.99

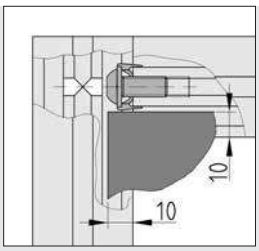
Standard-Fastening Set 8 ESD, one-sided ESD 8

Standard connecting plate 8, one-sided, St, bright zinc-plated
Special Button-Head Screw similar to ISO 7380 M8x20, St, bright zinc-plated
M = 25 Nm m = 19.0 g

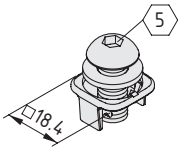
1 set	0.0.673.00

Standard-Fastening Set 8 K is a special version of the proven Standard-Fastening Set. It is employed for right-angled connection of Line 8 Profiles in which the profile grooves are used for holding panel elements.

Panel elements can be slid into the profile groove without needing cutouts in the corners.



We recommend that panel elements be inserted to a depth of 10 mm into a Profile 8 groove.



Standard-Fastening Set 8 K	
Spacer, POM, black Washer ISO 7089-8, St, bright zinc-plated Button-Head Screw ISO 7380-M8x20, St, bright zinc-plated M = 25 Nm m = 11.0 g	
1 set	0.0.488.07

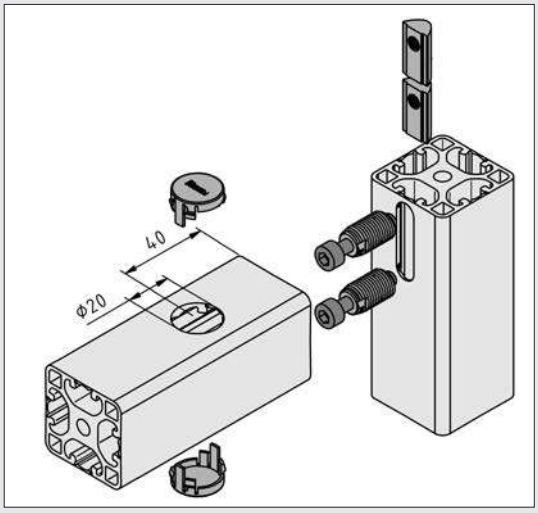
Standard-Fastening Set 8 K ESD	
Spacer, POM, black Washer D9/D16-1.6, St, bright zinc-plated Button-Head Screw M8x20 ESD, St, bright zinc-plated M = 25 Nm m = 11.0 g	
1 set	0.0.625.33

Automatic-Fastening Set 8 N

- For rectangular profiles with closed grooves
- Surfaces stay easy to clean

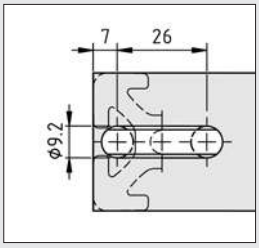
8 www.item24.com item Innovation

Special form of the Automatic-Fastening Set for installation in profiles with closed grooves. The groove is opened as shown below.

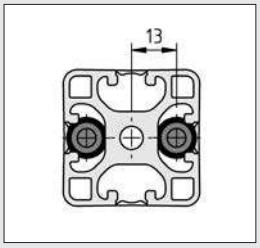


The fastener is located inside the profile cavity. To access the fastening screw just drill a hole into the profile. The grey Cap is used to close the hole.

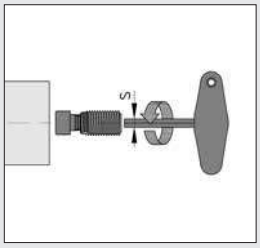
A T-Slot Nut is inserted into the groove in the second profile and forms the counterpart for the Automatic Fastener screw. If this groove in the second profile is also closed, the T-Slot Nut must be inserted from either the profile's end face or through a larger opening in the groove cover created beforehand.



Opening the closed groove of a Line 8 Profile in order to insert the T-Slot Nuts of two Automatic-Fastening Sets 8 N.



Automatic-Fastening Sets should always be used in pairs.

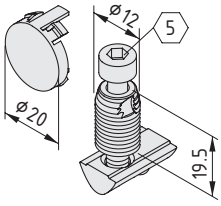


s = 6 A/F

Note:

A special 5 A/F N L-Key is available for tightening the screw connection of Automatic-Fastening Sets 8 N.

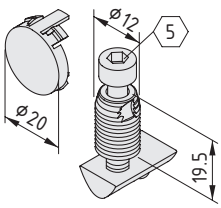
673



Automatic-Fastening Set 8 N 8

Automatic Fastener 8 N, St, black
Cap, PA grey
Hexagon Socket Head Cap Screw M6x30, St, bright zinc-plated
T-Slot Nut V 8 St M6, bright zinc-plated
M = 14 Nm m = 27.0 g

bright zinc-plated, 1 set	0.0.489.96



Automatic-Fastening Set 8 N 8

Automatic Fastener 8 N, St, stainless
Cap, PA grey
Hexagon Socket Head Cap Screw M6x30, St, stainless
T-Slot Nut 8 St M6, stainless
M = 11 Nm m = 29.0 g

stainless, 1 set	0.0.669.05

Automatic-Fastening Set 8 N D40

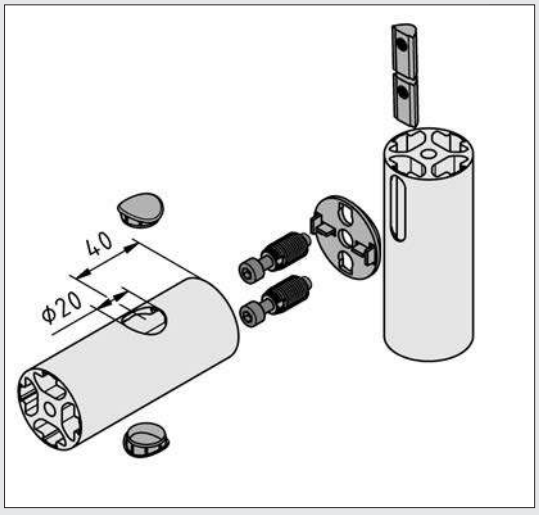
- Connect cylindrical Profiles 8 D40
- Suitable for open and closed grooves

8 www.item24.com item Innovation

Automatic-Fastening Set 8 N D40 can be used for connecting Profiles 8 D40 to other Profiles 8 D40 or – if an Adapter 8 D40 is used – to Profiles 8 with rectangular cross-sections.

When used with Profiles 8 that have closed grooves, a hole with a diameter of 20 mm must be cut into the profile, 40 mm from the profile end face, for the fastening screw.

However, when used with profiles that have open grooves, there is no need to machine the profiles. The self-tapping Automatic Fastener is simply driven into the profile groove from the end face.



Automatic-Fastening Set 8 N D40 can be used to connect Profiles 8 with both open and closed grooves (where designed for opening). To cover the mounting bore in the side face of profiles with closed grooves, Automatic-Fastening Set 8 N D40 contains Caps for Profiles 8 with rectangular and round cross-sections. Depending on the profile attached, the Cap with a rounded or flat outer contour will be used. In the case of Profiles 8 with open grooves, no bore is needed. Consequently, the Caps are not required in this instance.

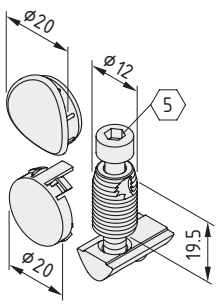
The length of the screw in Automatic-Fastening Set 8 N D40 is matched to the thickness of Adapter 8 D40. The full length of the thread is therefore available in order to ensure that the maximum fastening force is applied.

Adapter 8 D40 111

Note:

A special 5 A/F N L-Key is available for tightening the screw connection of Automatic-Fastening Sets 8 N.

673



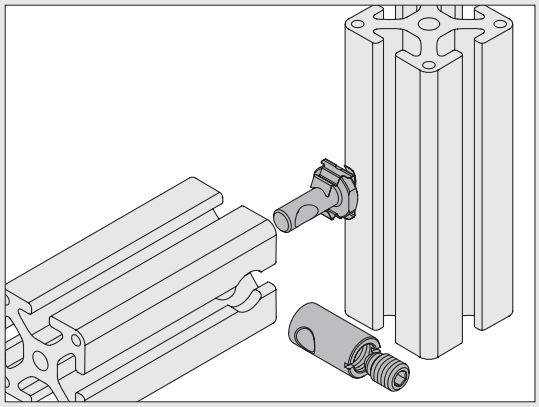
Automatic-Fastening Set 8 N D40	8
Automatic Fastener 8 N, St, black 2 caps, PA grey Hexagon Socket Head Cap Screw M6x32, St, bright zinc-plated T-Slot Nut V 8 St M6, bright zinc-plated M = 14 Nm m = 28.5 g	
1 set	0.0.493.91

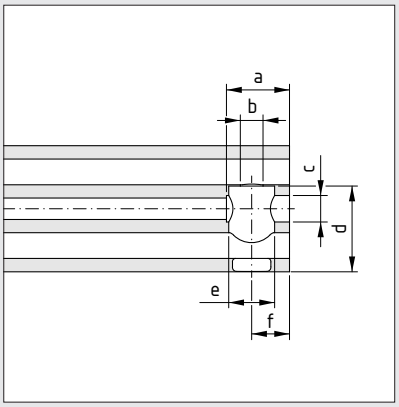
Central-Fastening Sets

- For building frames for panel elements
- Flexible connection with a stand profile
- Medium resistance to displacement

8 10

The Central-Fastening Set connects profiles at right angles to each other and leaves the grooves that are facing each other completely free. This is useful when the profile grooves are to accommodate a panel element. It eliminates the need to specially machine the corner areas of the panel element, which instead can be inserted directly into the grooves.





The profile to be connected via its end face needs to be machined before the Central-Fastening Set can be used.

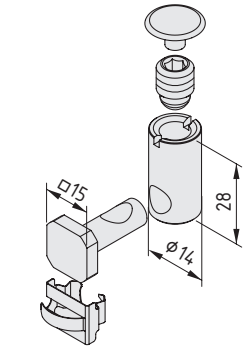
The hole to accommodate Central-Fastening Set 8 should be produced with Step Drill D14.2 (0.0.492.60).

The hole to accommodate Central-Fastening Set 10 should be produced with Step Drill D18.2 (0.0.632.75).

Due to the reduced clamping force and the lack of any anti-torsion feature between the profiles, this fastening set should only be used in combination with panel elements in the profile groove and only for profile connections subject to low loads. Where more stringent requirements need to be satisfied and parts are important for safety considerations, it is advisable to use the proven fastening techniques for basic constructions (Standard-Fastening, Universal-Fastening or Automatic-Fastening Sets).

Central-Fastening Set						
	a	b	c	d	e	f
8	20 mm	∅ 7 mm	∅ 8.2 mm	26.7 mm	∅ 14.2 mm	12/11 mm*
10	25 mm	∅ 9 mm	∅ 10.5 mm	34 mm	∅ 18.2 mm	15 mm

* When using Radius Seals in combination with Central-Fastening Set 8, the distance between the hole and the end face of the profile should be reduced from 12 mm to 11 mm.

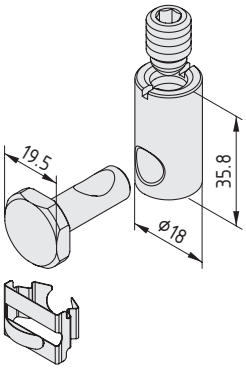


Central-Fastening Set 8

8

Clamping pin, St, bright zinc-plated
Clamping spring, St, stainless
Sleeve with bore, St, bright zinc-plated
Grub screw M10, St, bright zinc-plated
Cap, PA grey
M = 15 Nm m = 42.0 g

1 set	0.0.494.15



Central-Fastening Set 10

10

Clamping pin, St, bright zinc-plated
Spring element, St, stainless
Sleeve with bore, St, bright zinc-plated
Grub screw M12, St, bright zinc-plated
M = 22 Nm m = 87.0 g

bright zinc-plated, 1 set	0.0.632.74

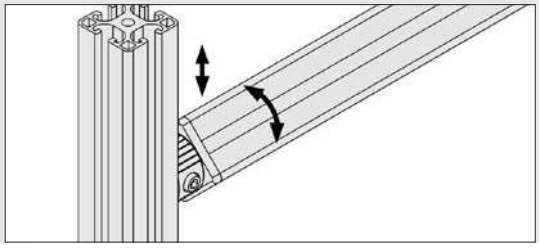
Click-Fastening Set 8 90°

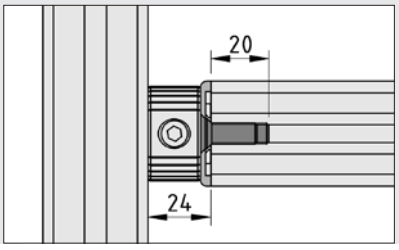
- For simple and flexible constructions
- Connect profiles at any angle of rotation
- Repositionable
- Ideal for prototypes and temporary structures

reddot design award honourable mention 2009

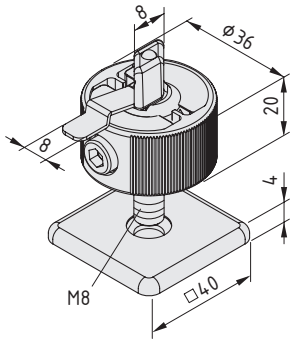
8 item Innovation

One click and it's ready – it really can be that easy to fit a strut. The practical Click Fastening Set connects together profiles at any point and at virtually any angle of rotation. Profile sections can be easily added to existing constructions and used as reusable, variable struts. That makes the Click-Fastening Set particularly useful when building temporary structures. Modifications can also be made quickly and easily.

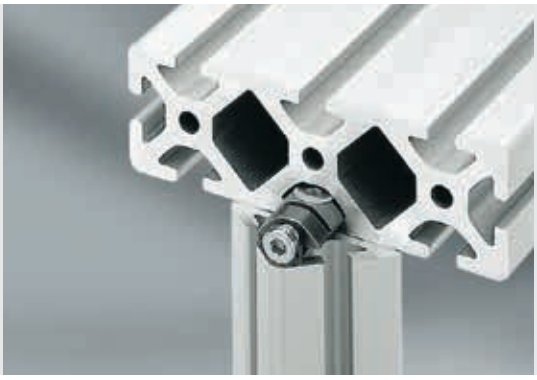




To use Click-Fastening Set 8 90°, the core bore of the Profile 8 connected via the end face must have an M8x20 tapped hole. In this case, the distance between the end face of the profile and the side of the second profile is 24 mm.



Click-Fastening Set 8 90°	8
Clamping profile Al, natural Clamping elements, St, stainless Locking strip, St, stainless Hex. Socket Head Cap Screw M6x25, St, bright zinc-plated Tensioning screw M8, St, bright zinc-plated Cap 8 40x40, die-cast zinc, white aluminium m = 125.0 g	
1 set	0.0.606.94

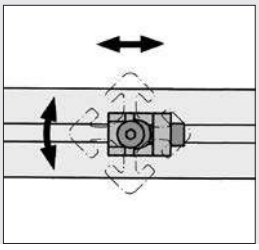


Direct-Fastening Set 8 90°

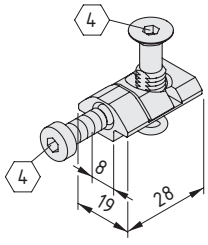
- Right-angled profile connections
- Connections possible at any angle of rotation

8 item Innovation

Direct-Fastening Set 8 90° is used for right-angled connection of Profiles 8. The profile can be secured at the end face and at any angle. The core bore must have an M8x18 thread.



Direct-Fastening Set 8 90° is particularly suitable when a repositionable connection is required with a profile that has one or more closed grooves and Universal or Automatic Fasteners cannot be used.



Direct-Fastening Set 8 90°	8
Fastener, die-cast steel Countersunk Screw M8x27, St O-ring, NBR, black Hexagon Socket Head Cap Screw DIN 7984-M6x14, St $M_{stainl.}$ = 5.5 Nm m = 30.0 g	
stainless, 1 set	0.0.388.67

Automatic flat and angle bracket sets

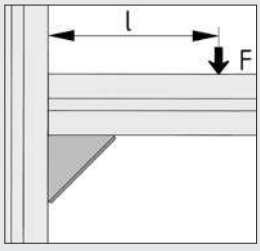
- Ready for use thanks to preassembled components
- Automatically fits into the profile groove
- Installed in seconds
- Holds straight away with no profile machining

8 item Innovation

Automatic Angle Bracket Cap 8 is just as easy to fit – and to remove again, if required.

This ingenious accessory for keeping out dust and dirt can be pushed into place by hand and removed with ease using a screwdriver.

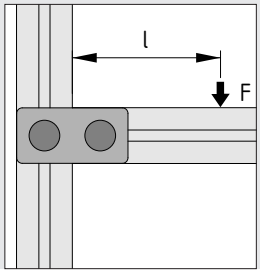
When using Automatic Flat Bracket Sets, caps cover the nuts, which are located on the outside of the construction.



Automatic Angle Bracket Set 8 40x40 Al	F < 1,000 N ∧ F x l < 50 Nm
Automatic Angle Bracket Set 8 80x80 Al	F < 2,000 N ∧ F x l < 150 Nm

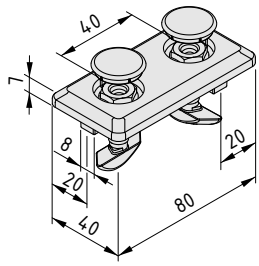
When used to reinforce the joints of large profiles or conduits, several Angle Brackets can be used in parallel.

Note: Ensure the maximum permissible tensile load on the Profile Groove is not exceeded!



Automatic Flat Bracket Set 8 40x40 Al	F < 1,000 N ∧ F x l < 50 Nm
Automatic Flat Bracket Set 8 80x80 Al	F < 2,000 N ∧ F x l < 150 Nm

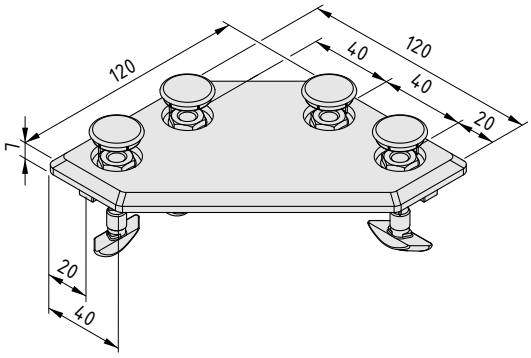
The load-carrying capacity is to be checked to ensure both conditions are met.



Automatic Flat Bracket Set 8 80x40 Al

Automatic flat bracket 8 80x40, die-cast Al, white aluminium similar to RAL 9006
2 automatic T-slot screws M8x11, St, bright zinc-plated
2 countersunk nuts M8x6, St, bright zinc-plated
2 Caps 8 D20, PA-GF, grey similar to RAL 7042
m = 88.0 g

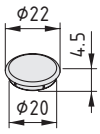
1 set	0.0.642.53



Automatic Flat Bracket Set 8 120x120 Al

Automatic flat bracket 8 120x120, die-cast Al, white aluminium similar to RAL 9006
4 automatic T-slot screws M8x11, St, bright zinc-plated
4 countersunk nuts M8x6, St, bright zinc-plated
4 Caps 8 D20, PA-GF, grey similar to RAL 7042
m = 257.0 g

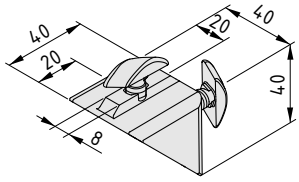
1 set	0.0.642.55



Cap 8 D20

PA-GF
m = 1.0 g

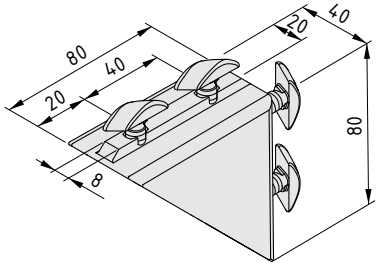
grey similar to RAL 7042, 1 pce.	0.0.651.65



Automatic Angle Bracket Set 8 40x40 Al

Automatic angle bracket 8 40x40, die-cast Al, white aluminium similar to RAL 9006
2 automatic T-slot screws M8x11, St, bright zinc-plated
2 countersunk nuts M8x6, St, bright zinc-plated
m = 87.0 g

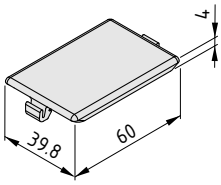
1 set	0.0.642.54



Automatic Angle Bracket Set 8 80x80 Al

Automatic angle bracket 8 80x80, die-cast Al, white aluminium similar to RAL 9006
4 automatic T-slot screws M8x11, St, bright zinc-plated
4 countersunk nuts M8x6, St, bright zinc-plated
m = 208.0 g

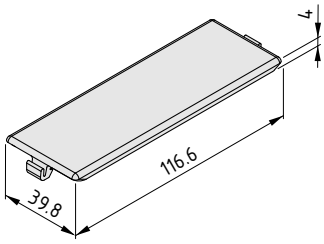
1 set	0.0.642.56



Automatic Angle Bracket Cap 8 40x40

PA-GF
m = 7.0 g

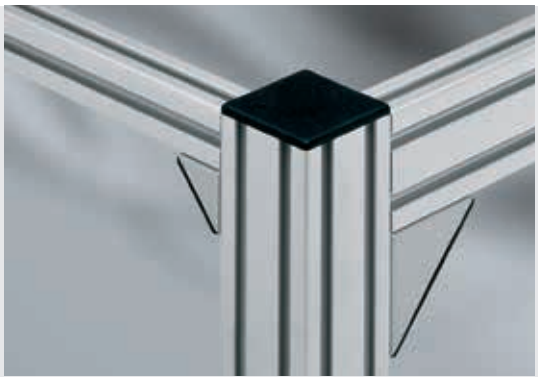
black similar to RAL 9005, 1 pce.	0.0.669.89
grey similar to RAL 7042, 1 pce.	0.0.669.28



Automatic Angle Bracket Cap 8 80x80

PA-GF
m = 15.0 g

black similar to RAL 9005, 1 pce.	0.0.669.90
grey similar to RAL 7042, 1 pce.	0.0.669.88



Angle Bracket Zn

Simple, stable connection

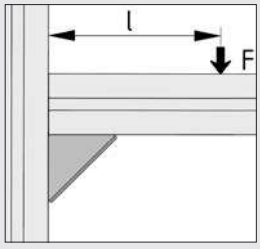
- Reinforcement for profile connections
- Power-lock connection with no profile machining
- Can be retrofitted rapidly
- Products from Line X also available

Line X | 5 | 6 | 8 | 12 | 10

To ensure Angle Bracket installation is particularly straightforward, it is advisable to use the Angle Bracket Sets containing the corresponding screws and special washers.

Angle Brackets are ideal for connecting cable conduits. The rounded internal edge prevents damage to the cables.

Specially designed Angle Brackets X 8 are available for profile constructions built with Line X.



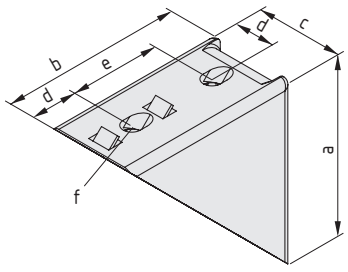
When used to reinforce the joints of large profiles or conduits, several Angle Brackets can be used in parallel.

Note: Ensure the maximum permissible tensile load on the Profile Groove is not exceeded!

For Angle Brackets of Lines 6, 8 and 12, special square washers are used to improve the application of the clamping force.

Angle Bracket 5	20x20 Zn	$F < 250$ N ∧ $F_x l < 5$ Nm
Angle Bracket 5	40x40 Zn	$F < 500$ N ∧ $F_x l < 25$ Nm
Angle Bracket 6	30x30 Zn	$F < 500$ N ∧ $F_x l < 12$ Nm
Angle Bracket 6	60x60 Zn	$F < 1{,}000$ N ∧ $F_x l < 36$ Nm
Angle Bracket (X) 8	40x40 Zn	$F < 1{,}000$ N ∧ $F_x l < 50$ Nm
Angle Bracket (X) 8	80x80 Zn	$F < 2{,}000$ N ∧ $F_x l < 150$ Nm
Angle Bracket 8	160x80 Zn	$F < 2{,}000$ N ∧ $F_x l < 150$ Nm
Angle Bracket 10	50x50 Zn	$F < 1{,}500$ N ∧ $F_x l < 75$ Nm
Angle Bracket 10	100x100 Zn	$F < 3{,}000$ N ∧ $F_x l < 200$ Nm
Angle Bracket 12	60x60 Zn	$F < 2{,}000$ N ∧ $F_x l < 100$ Nm
Angle Bracket 12	120x120 Zn	$F < 4{,}000$ N ∧ $F_x l < 250$ Nm

The load-carrying capacity is to be checked to ensure both conditions are met.



Materials used in all the following products:
Die-cast zinc

Angle Bracket 5 20x20 Zn 5

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
20	20	20	10	-	∅5.3	14.0	
white aluminium, similar to RAL 9006, 1 pce.							0.0.425.03

Angle Bracket 5 40x40 Zn 5

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
40	40	20	10	20	∅5.3	39.0	
white aluminium, similar to RAL 9006, 1 pce.							0.0.425.06

Angle Bracket 6 30x30 Zn 6

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
30	30	30	15	-	∅6.6	47.0	
white aluminium, similar to RAL 9006, 1 pce.							0.0.419.63

Angle Bracket 6 60x60 Zn 6

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
60	60	30	15	30	∅6.6	130.0	
white aluminium, similar to RAL 9006, 1 pce.							0.0.419.65

Angle Bracket 8 40x40 Zn 8

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
40	40	40	20	-	∅8.2	119.0	
white aluminium, similar to RAL 9006, 1 pce.							0.0.411.24

Angle Bracket 8 80x80 Zn 8

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
80	80	40	20	40	∅8.2	270.0	
white aluminium, similar to RAL 9006, 1 pce.							0.0.411.23

Angle Bracket 8 160x80 Zn 8

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
80	160	40	20	40	∅8.2	530.0	
white aluminium, similar to RAL 9006, 1 pce.							0.0.436.23

Angle Bracket 12 60x60 Zn 12

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
60	60	60	30	-	∅12.5	350.0	
white aluminium, similar to RAL 9006, 1 pce.							0.0.003.20

Angle Bracket 12 120x120 Zn 12

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
120	120	60	30	60	∅12.5	900.0	
white aluminium, similar to RAL 9006, 1 pce.							0.0.003.21

Angle Bracket	Art. No.
6 30x30	0.0.491.43
6 60x60	0.0.491.43
8 40x40	0.0.494.45
8 80x80	0.0.494.45
8 160x80	0.0.416.11

Angle Brackets should always be used with the appropriate washers.

Washer 10.5x10.5x1.3

St
m = 0.6 g

bright zinc-plated, 1 pce.	0.0.491.43

Washer 13.5x9x1

St
m = 0.6 g

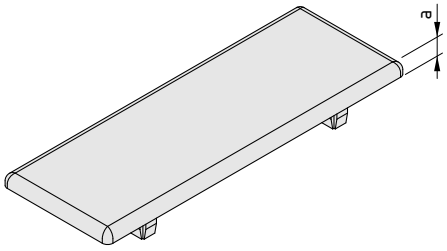
bright zinc-plated, 1 pce.	0.0.416.11

Washer 13.9x13.9x2

St
m = 1.7 g

bright zinc-plated, 1 pce.	0.0.494.45

Materials used in all the following products:
PA-GF



Angle Bracket Cap 5 20x20 5

a = 2.5 mm m = 1.0 g

black, 1 pce.	0.0.425.04

Angle Bracket Cap 5 40x40 5

a = 2.5 mm m = 3.0 g

black, 1 pce.	0.0.425.07

Angle Bracket Cap 6 30x30 6

a = 3.0 mm m = 4.0 g

black, 1 pce.	0.0.419.64

Angle Bracket Cap 6 60x60 6

a = 3.0 mm m = 7.0 g

black, 1 pce.	0.0.419.66

Angle Bracket Cap 8 40x40 8

a = 4.0 mm m = 6.0 g

black, 1 pce.	0.0.411.26
grey similar to RAL 7042, 1 pce.	0.0.627.57

Angle Bracket Cap 8 80x80 8

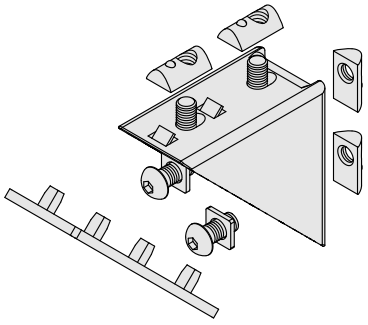
a = 4.0 mm m = 13.0 g

black, 1 pce.	0.0.411.25
grey similar to RAL 7042, 1 pce.	0.0.627.58

Angle Bracket Cap 8 160x80	8
a = 4.0 mm m = 23.0 g	
black, 1 pce.	0.0.436.25
grey similar to RAL 7042, 1 pce.	0.0.627.59

Angle Bracket Cap 12 60x60	12
a = 5.4 mm m = 20.0 g	
black, 1 pce.	0.0.005.06

Angle Bracket Cap 12 120x120	12
a = 5.4 mm m = 40.0 g	
black, 1 pce.	0.0.005.07



The following applies to all the sets below:
Angle Bracket Zn, die-cast zinc, RAL9006
Angle Bracket Cap, PA, black
Fastening elements and washers, St, bright zinc-plated

Angle Bracket Set 5 20x20	5
m = 23.0 g	
1 set	0.0.425.02

Angle Bracket Set 5 40x40	5
m = 58.0 g	
1 set	0.0.425.05

Angle Bracket Set 6 30x30	6
m = 66.0 g	
1 set	0.0.419.67

Angle Bracket Set 6 60x60	6
m = 166.0 g	
1 set	0.0.419.68

Angle Bracket Set 8 40x40	8
m = 163.0 g	
1 set	0.0.411.15

Angle Bracket Set 8 80x80	8
m = 360.0 g	
1 set	0.0.411.32

Angle Bracket Set 8 160x80	8
m = 662.0 g	
1 set	0.0.436.24

Angle Bracket Set 12 60x60	12
m = 520.0 g	
1 set	0.0.003.53

Angle Bracket Set 12 120x120	12
m = 1.2 kg	
1 set	0.0.003.54

The following applies to all the sets below:
Angle Bracket Zn, die-cast zinc, RAL9006
Angle Bracket Cap, PA, grey
Fastening elements and washers, St, bright zinc-plated

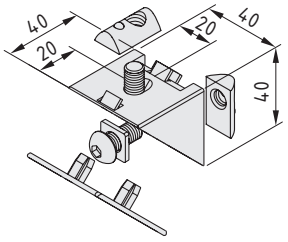
Angle Bracket Set 8 40x40	8
m = 176.0 g	
1 set	0.0.670.11

Angle Bracket Set 8 80x80	8
m = 414.0 g	
1 set	0.0.670.12

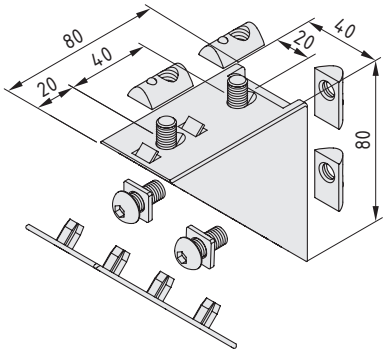
Angle Bracket Set 10 50x50	10
m = 335.0 g	
1 set	0.0.625.23

Angle Bracket Set 10 100x100	10
m = 826.0 g	
1 set	0.0.625.26

Line 8



Angle Bracket Set X 8 40x40	Line 8
m = 150.0 g	
1 set	0.0.601.62



Angle Bracket Set X 8 80x80	Line 8
m = 360.0 g	
1 set	0.0.601.61

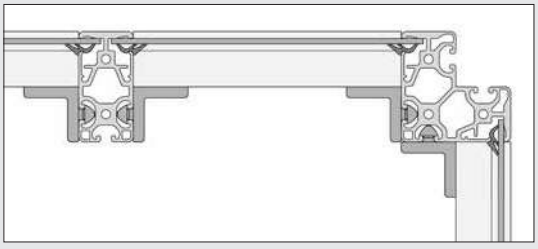
Angle Bracket V Zn

- Simple, torsion-resistant profile connections
- For medium loads
- No machining required

5 6 8

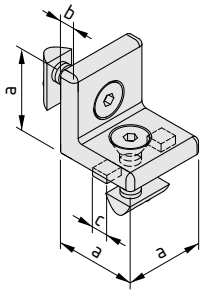
Angle Brackets V Zn are very easy-to-use fastening elements for right-angled profile connections. The profiles do not need to be processed. Angle Brackets V Zn have an anti-torsion feature which locates them in the correct position in the profile groove.

The integral anti-torsion lugs are present on one face only, so that the Brackets can also be used for fastening any other parts to profiles.



The Clamp Profiles light are connected using Angle Bracket V 8 40 Zn.

The following applies to all the sets below:
Angle Bracket, die-cast zinc, RAL 9006 white aluminium
2 T-Slot Nuts, St, bright zinc-plated
2 Countersunk Screws DIN 7991, St, bright zinc-plated



Angle Bracket V 5 20 Zn 5

a [mm]	b [mm]	c [mm]	m [g]	
20	3	5	18.0	
1 set				0.0.612.79

Angle Bracket V 6 30 Zn 6

a [mm]	b [mm]	c [mm]	m [g]	
30	6	6	68.5	
1 set				0.0.612.78

Angle Bracket V 8 40 Zn 8

a [mm]	b [mm]	c [mm]	m [g]	
40	8	8	167.0	
1 set				0.0.486.28

Angle Bracket Al and St

Maximum load-carrying capacity for large profile cross-sections

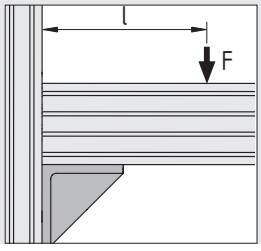
- Heavy-duty fastening elements for profiles
- For fastening heavy-duty components
- Power-lock connection with no profile machining

8 10 12

These Angle Brackets are heavy-duty fastening elements that produce power-lock, non-machined connections between large profiles. They can also be used as screw connections between profiles and floors or walls and for fastening heavy parts that are not part of the MB Building Kit System.

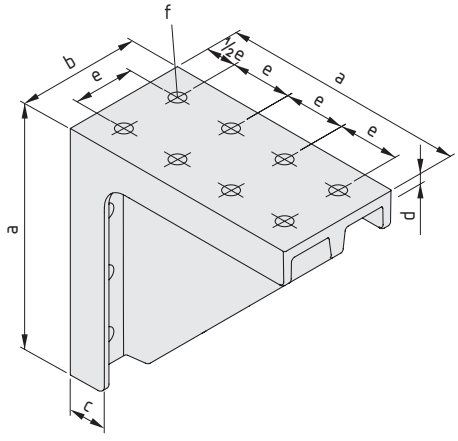
The Angle Brackets can be screwed to the profile with up to four Fastening Sets, according to requirements. They support the load-bearing component above them without the need for further machining.

The substantial web gives the Angle Bracket its high load-carrying capacity but the screws are still readily accessible, thereby ensuring easy installation.



Angle Bracket 8 160x160-40 Al	F < 4,000 N ∧ F x l < 400 Nm
Angle Bracket 8 160x160 Al	F < 8,000 N ∧ F x l < 800 Nm
Angle Bracket 8 160x160 St	F < 8,000 N ∧ F x l < 1,200 Nm
Angle Bracket 10 200x200-50 Al	F < 5,000 N ∧ F x l < 500 Nm
Angle Bracket 12 240x240 Al	F < 16,000 N ∧ F x l < 4,200 Nm

The load-carrying capacity is to be checked to ensure both conditions are met.



Angle Bracket 8 160x160 Al M8 8

Die-cast Al

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [kg]	
160	80	24	7.5	40	∅9	1.1	
white aluminium, similar to RAL 9006, 1 pce.							0.0.602.36

Angle Bracket 8 160x160 St M8 8

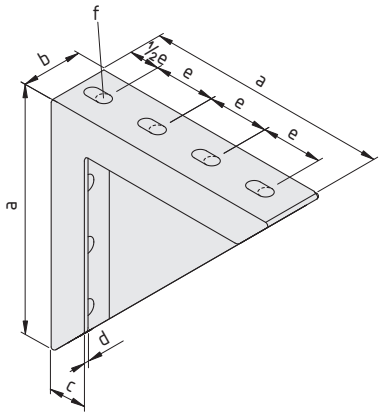
High-strength cast iron

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [kg]	
160	80	24	7	40	∅9	2.4	
white aluminium, similar to RAL 9006, 1 pce.							0.0.475.21

Angle Bracket 12 240x240 Al M12 12

Die-cast Al

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [kg]	
240	120	26	9.5	60	∅13.5	2.7	
white aluminium, similar to RAL 9006, 1 pce.							0.0.007.79



Angle Bracket 8 160x160-40 Al M8 8

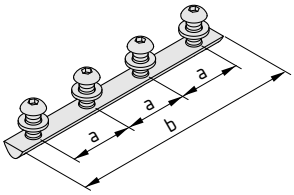
Die-cast Al

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
160	40	24	7.5	40	∅9	480.0	
white aluminium, similar to RAL 9006, 1 pce.							0.0.619.56

Angle Bracket 10 200x200-50 Al M10 10

Die-cast Al

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
200	50	30	10	50	∅11	899.0	
white aluminium, similar to RAL 9006, 1 pce.							0.0.624.78



Fastening Set for Angle Bracket 8 160x160 M8 8

Profile Bar 8 St M8, bright zinc-plated
4 Button-Head Screws ISO 7380-M8x20, St, bright zinc-plated
4 washers DIN 1441-9.0, St, bright zinc-plated

a [mm]	b [mm]	M [Nm]	m [g]	
40	150	25	132.0	
1 set				0.0.479.96

Fastening Set for Angle Bracket 10 200x200 M10 10

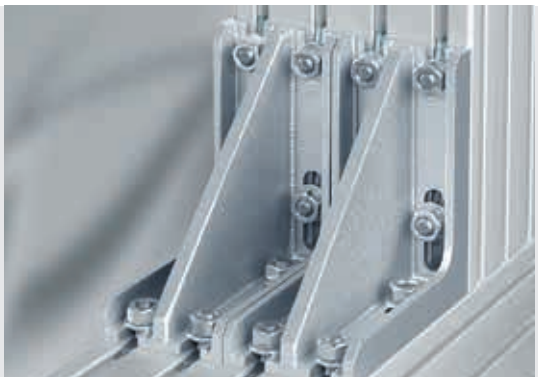
Profile Bar 10 St M10, bright zinc-plated
4 Button-Head Screws ISO 7380-M10x25, St, bright zinc-plated
4 washers DIN 125-10.5, St, bright zinc-plated

a [mm]	b [mm]	M [Nm]	m [g]	
50	190	46	231.8	
1 set				0.0.632.41

Fastening Set for Angle Bracket 12 240x240 M12 12

Profile Bar 12 St M12-60, bright zinc-plated
4 Button-Head Screws ISO 7380-M12x30, St, bright zinc-plated
4 washers DIN 1441-13.0, St, bright zinc-plated

a [mm]	b [mm]	M [Nm]	m [g]	
60	230	80	400.0	
1 set				0.0.609.16

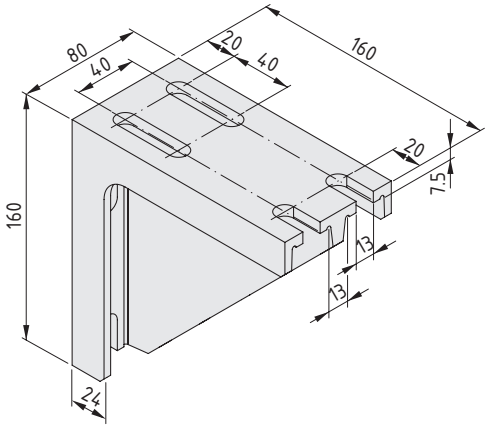


Angle Bracket 8 160x160 St M12 is used for screw attachment with Fasteners 8 M12. A particularly heavy-duty connection is possible for the profiles by using an M12 bolt with Profile 8 grooves. Alternatively, Angle Bracket 8 St M12 can also be screw attached using bolts and T-Slot Nuts 8 St M8.

item
Innovation

Two-part Fastener for heavy-duty securing of parts to the Profile 8 groove.
The two halves of the Fastener are fitted into the groove at any point where they are then slid together. The integrated spring ball holds the Fastener in place and facilitates screw attachment.

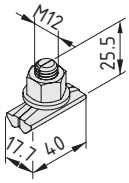
The tightening torque for the nut of Fastener 8 M12 is M = 80 Nm.



Angle Bracket 8 160x160 St M12

High-strength cast iron
m = 2.2 kg

white aluminium, similar to RAL 9006, 1 pce.	0.0.475.20



Fastener 8 M12

Fastener half, cast steel, stainless
Fastener half with spring ball, cast steel, stainless
Nut DIN 934-M12, St, bright zinc-plated
Washer DIN 125-12, St, bright zinc-plated
M = 80 Nm m = 70.0 g

1 set	0.0.473.02

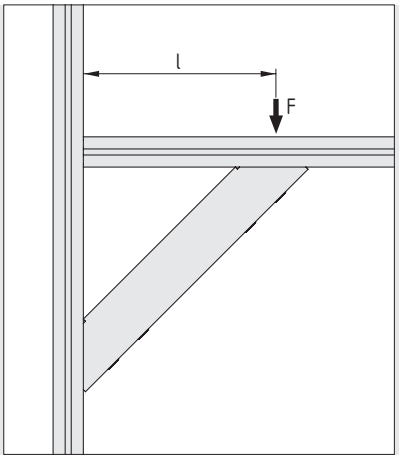
Diagonal Strut Set 8

- Complete package for supporting profiles
- Increases load-carrying capacity
- Reduces profile deflection
- Smooth surface

8

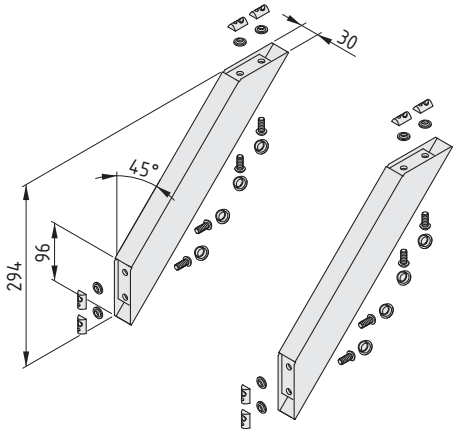
Improved load-carrying capacity for individual supporting struts and cantilever arms! Diagonal Strut Set 8 300x300 is a strong solution that increases the load-carrying capacity of horizontal profiles. This means users can build more elegant constructions without having to compromise their suitability for day-to-day use.

The 45° diagonal struts have a closed, easy-clean outer surface.



$F < 1000\ N \wedge F \times l < 300\ Nm$

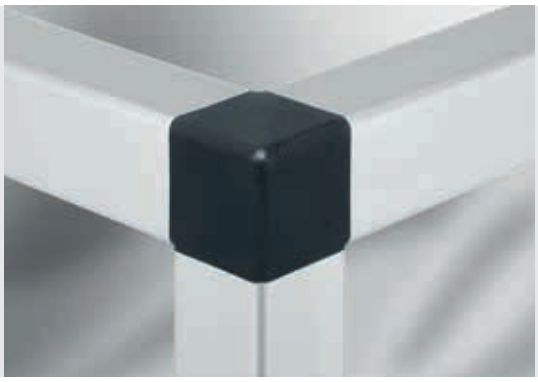
Load-carrying capacity is to be checked to ensure both conditions are met.



Diagonal Strut Set 8 300x30 8

2 Diagonal Struts 8 300x30, St, white aluminium similar to RAL 9006
8 T-Slot Nuts 8 St M8, bright zinc-plated
8 Anti-Loss Washers M8, St, bright zinc-plated
8 Button-Head Screws ISO 7380-M8x20, St, bright zinc-plated
8 Caps 8 D15, PA, grey similar to RAL 7042
m = 2.3 kg

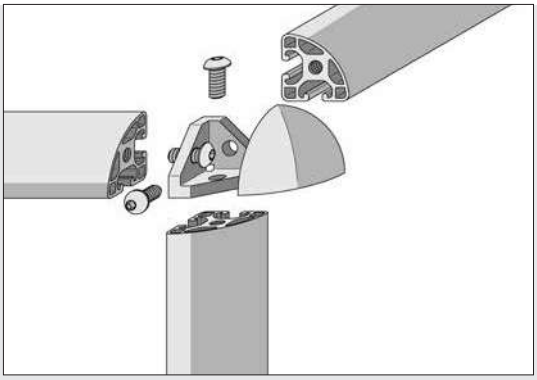
1 set	0.0.659.03



Corner Fastening Sets

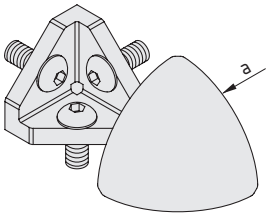
- Connect three profiles to form one corner unit
- Stylish covers in two colours

5 6 8



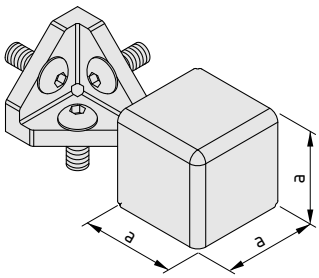
Fastening Sets can be used to construct a corner unit with three profiles or one corner angle with two profiles, ensuring a continuous profile geometry.

Fastening Sets are ideal for constructing attractive display cases, tables, cover hoods etc.
The profiles must be provided with threads in the core bores.



The following applies to all the sets below:
Fastener, die-cast zinc, black
Fastener Cap
3 Button-Head Screws ISO 7380

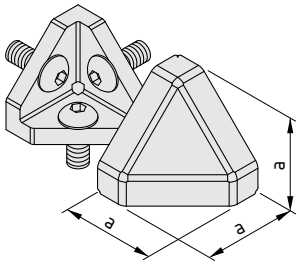
Fastening Set 5 R20-90°	5
a = R20 m = 21.0 g	
black, 1 set	0.0.425.97
grey similar to RAL 7042, 1 set	0.0.642.11
Fastening Set 6 R30-90°	**6**
a = R30 m = 54.0 g	
black, 1 set	0.0.434.87
grey similar to RAL 7042, 1 set	0.0.642.13
Fastening Set 8 R40-90°	**8**
a = R40 m = 120.0 g	
black, 1 set	0.0.436.35
grey similar to RAL 7042, 1 set	0.0.640.33



Fastening Set 5 20x20x20	5
a = 20 mm m = 22.0 g	
black, 1 set	0.0.437.96
grey similar to RAL 7042, 1 set	0.0.642.12

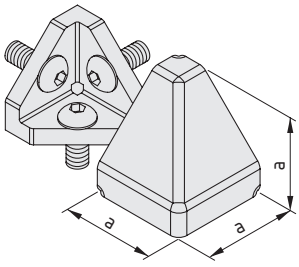
Fastening Set 6 30x30x30	6
a = 30 mm m = 59.0 g	
black, 1 set	0.0.434.88
grey similar to RAL 7042, 1 set	0.0.642.15

Fastening Set 8 40x40x40	8
a = 40 mm m = 133.0 g	
black, 1 set	0.0.416.08
grey similar to RAL 7042, 1 set	0.0.640.32



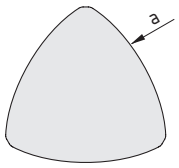
Fastening Set 6 30x30-45°	6
a = 30 mm m = 54.0 g	
black, 1 set	0.0.434.86
grey similar to RAL 7042, 1 set	0.0.642.14

Fastening Set 8 40x40-45°	8
a = 40 mm m = 127.0 g	
black, 1 set	0.0.388.68
grey similar to RAL 7042, 1 set	0.0.640.34



Fastening Set 8 40x40-2x45°	8
a = 40 mm m = 128.0 g	
black, 1 set	0.0.436.63

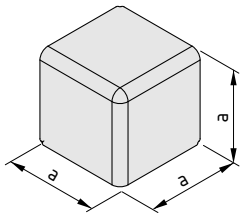
Materials used in all the following products:
PA-GF



Fastener Cap 5 R20-90°	5
a = R20 m = 0.7 g	
black, 1 pce.	0.0.425.94
grey similar to RAL 7042, 1 pce.	0.0.641.48

Fastener Cap 6 R30-90°	6
a = R30 m = 3.0 g	
black, 1 pce.	0.0.434.83
grey similar to RAL 7042, 1 pce.	0.0.636.17

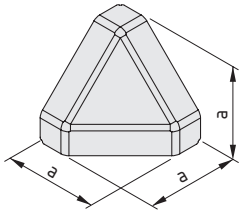
Fastener Cap 8 R40-90°	8
a = R40 m = 8.0 g	
black, 1 pce.	0.0.436.32
grey similar to RAL 7042, 1 pce.	0.0.627.60



Fastener Cap 5 20x20x20	5
a = 20 mm m = 1.0 g	
black, 1 pce.	0.0.437.73
grey similar to RAL 7042, 1 pce.	0.0.641.46

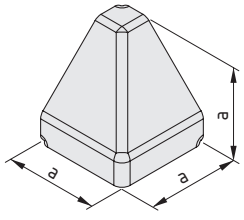
Fastener Cap 6 30x30x30	6
a = 30 mm m = 8.0 g	
black, 1 pce.	0.0.434.84
grey similar to RAL 7042, 1 pce.	0.0.636.18

Fastener Cap 8 40x40x40	8
a = 40 mm m = 16.0 g	
black, 1 pce.	0.0.415.97
grey similar to RAL 7042, 1 pce.	0.0.628.69



Fastener Cap 6 30x30-45°	6
a = 30 mm m = 3.0 g	
black, 1 pce.	0.0.434.85
grey similar to RAL 7042, 1 pce.	0.0.636.19

Fastener Cap 8 40x40-45°	8
a = 40 mm m = 9.0 g	
black, 1 pce.	0.0.373.52
grey similar to RAL 7042, 1 pce.	0.0.628.68



Fastener Cap 8 40x40-2x45°	8
a = 40 mm m = 10.0 g	
black, 1 pce.	0.0.436.62

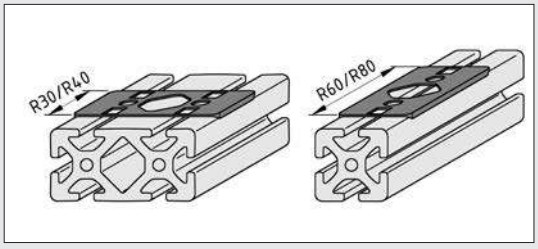
Radius Seals

- Sealing for the end face of a profile
- Protection against dirt and dust
- Ideal for cleanroom applications

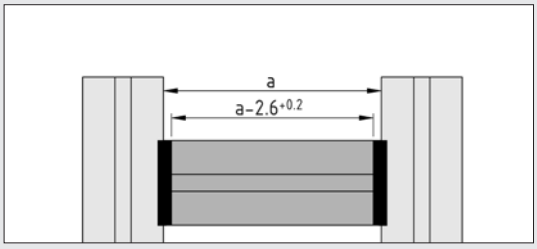
6 8

The plastic Radius Seals ensure a continuous transition for the external contour of 90° profile connections. The gap between the straight end-face saw cut of the profile and the profile edge radius is filled by the seal. The Radius Seals can be used in combination with all fastening elements in the MB Building Kit System.

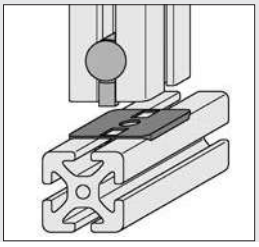
Note:
When using the Radius Seal with Standard, Universal and Automatic Fasteners the power-lock connection is achieved by an intermediate plastic element. It is advisable to double the safety factor at the design stage.

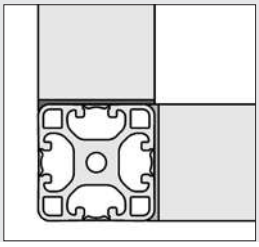


The designations R30, R40, R60 and R80 refer to the length of the side of the seal facing the profile radius.



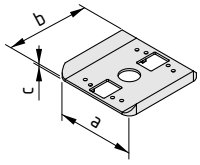
In calculating the length of the cross profiles between two profiles, the thickness of the Radius Seals on each side must be taken into account.





Where a radius seal is already fitted to a perpendicular connection, a Radius Seal 1R should be used.

Materials used in all the following products:
PA

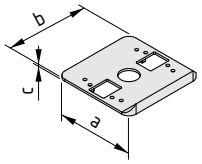


Radius Seal 6 30x30 6

a [mm]	b [mm]	c [mm]	m [g]	
30	30	1.3	1.1	
grey similar to RAL 7042, 1 pce.				0.0.478.73

Radius Seal 8 40x40 8

a [mm]	b [mm]	c [mm]	m [g]	
40	40	1.3	2.0	
grey similar to RAL 7042, 1 pce.				0.0.480.01

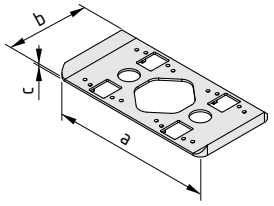


Radius Seal 6 30x30 1R 6

a [mm]	b [mm]	c [mm]	m [g]	
30	30	1.3	1.0	
grey similar to RAL 7042, 1 pce.				0.0.491.37

Radius Seal 8 40x40 1R 8

a [mm]	b [mm]	c [mm]	m [g]	
40	40	1.3	2.0	
grey similar to RAL 7042, 1 pce.				0.0.494.46

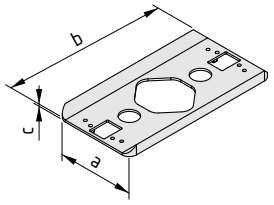


Radius Seal 6 60x30 R30 6

a [mm]	b [mm]	c [mm]	m [g]	
60	30	1.3	1.7	
grey similar to RAL 7042, 1 pce.				0.0.478.75

Radius Seal 8 80x40 R40 8

a [mm]	b [mm]	c [mm]	m [g]	
80	40	1.3	4.0	
grey similar to RAL 7042, 1 pce.				0.0.480.03

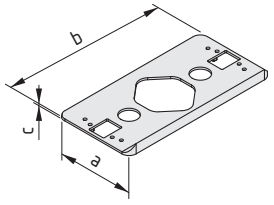


Radius Seal 6 60x30 R60 6

a [mm]	b [mm]	c [mm]	m [g]	
30	60	1.3	2.1	
grey similar to RAL 7042, 1 pce.				0.0.478.74

Radius Seal 8 80x40 R80 8

a [mm]	b [mm]	c [mm]	m [g]	
40	80	1.3	4.0	
grey similar to RAL 7042, 1 pce.				0.0.480.02



Radius Seal 6 60x30 1R60 6

a [mm]	b [mm]	c [mm]	m [g]	
30	60	1.3	2.0	
grey similar to RAL 7042, 1 pce.				0.0.491.40

Radius Seal 8 80x40 1R80 8

a [mm]	b [mm]	c [mm]	m [g]	
40	80	1.3	4.0	
grey similar to RAL 7042, 1 pce.				0.0.494.49

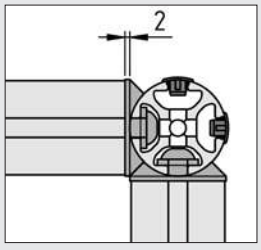
Adapter 8 D40

- Connect together cylindrical Profiles 8 D40
- Combine rectangular Profiles 8 with Profiles 8 D40

Profiles 8 D40 can be connected with other Profiles 8 D40 or with Profiles 8 40x40 or 80x40 using Line 8 fastening elements. In contrast to connecting two profiles with rectangular cross-sections, suitable adapters must be used for Profiles 8 D40.

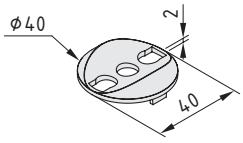
Standard-Fastening Set 8 and the Automatic-Fastening Set 8 N D40 are well suited for right-angled profile connections. When calculating the cut-off length of the profiles, the 2 mm wall thickness of Adapters 8 D40 must be taken into account.

Universal-Fastening Set 8 can also be used when connecting the rectangular end face of a Profile 8 to a Profile 8 D40. It is important to ensure that, due to the wall thickness of the adapter, the distance from the centre of the 20 mm dia. mounting bores of the Universal Fastener to the end of the profile must not exceed 18 mm. In addition, the anti-torsion feature of Universal Fastener 8 must be removed.

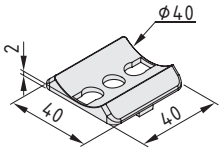


The gap that would result when connecting the rounded outer surface of Profiles 8 D40 and the straight profile end faces (or any other flat components) is closed off completely by Adapter 8 D40. A smooth transition is made from the outer contour of the profile to the connecting face of the second profile.

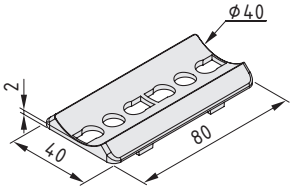
Adapters 8 D40 also serve as radial seals. In completely covering the end face of the profile, they seal the openings of the profile cross-section.



Adapter 8 D40/D40	
Die-cast zinc m = 28.0 g	
white aluminium, similar to RAL 9006, 1 pce.	0.0.489.88



Adapter 8 40x40/D40	
Die-cast zinc m = 42.0 g	
white aluminium, similar to RAL 9006, 1 pce.	0.0.489.86



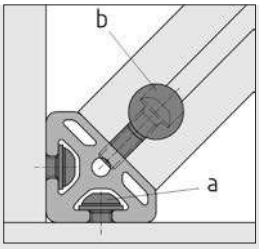
Adapter 8 80x40/D40	
Die-cast zinc m = 84.0 g	
white aluminium, similar to RAL 9006, 1 pce.	0.0.489.87

Angle Elements T1

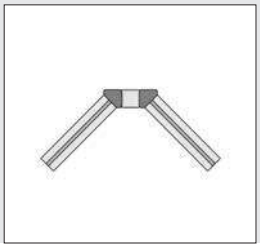
- Latticework reinforcement for profile constructions
- Profile connection at a 45° angle

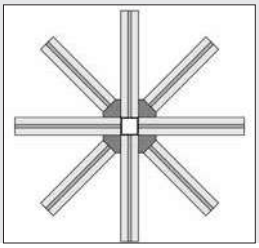
6 8

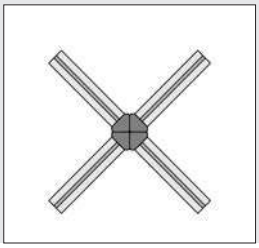
Angle Elements T1 create 45° angle connections either between two profiles or between themselves. They are fastened using Button-Head Screws ISO 7380 and DIN 125 washers. The profile to be connected via its end face can be screwed into place using two Universal Fasteners (anti-torsion feature removed) and Button-Head Screws ISO 7380.



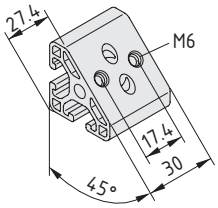
6	a	Button Head Screws ISO 7380-M6x12 Washers DIN 125-6.4
	b	Universal Fasteners 6 Button Head Screws ISO 7380-M6x20
8	a	Button Head Screws ISO 7380-M8x16 Washers DIN 125-8.4
	b	Universal Fasteners 8 Button Head Screws ISO 7380-M8x25







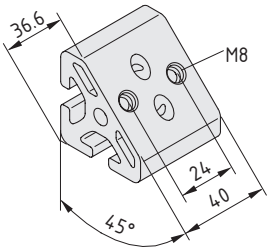
The ends of the Angle Elements can be covered with Caps 6 30x30-45° or 8 40x40-45°.



Angle Element 6 T1-30 6

Al, anodized
m = 23.0 g

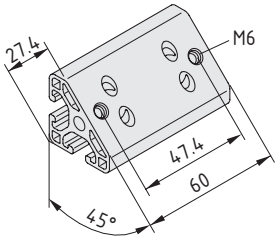
natural, 1 pce.	0.0.459.70



Angle Element 8 T1-40 8

Al, anodized
m = 73.0 g

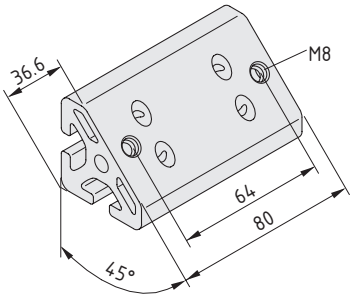
natural, 1 pce.	0.0.388.00



Angle Element 6 T1-60 6

Al, anodized
m = 40.0 g

natural, 1 pce.	0.0.459.74



Angle Element 8 T1-80 8

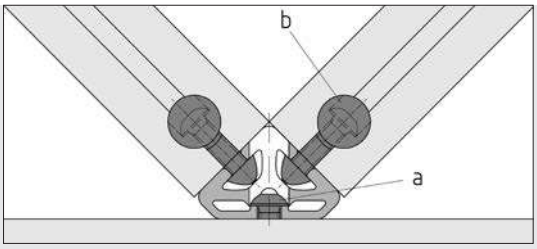
Al, anodized
m = 148.0 g

natural, 1 pce.	0.0.388.01

Angle Elements T2

- Connect two profiles at a 45° angle
- Latticework design produces greater stability

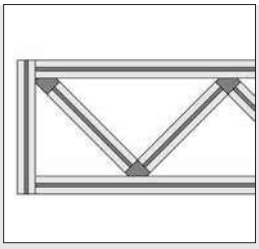
6 8

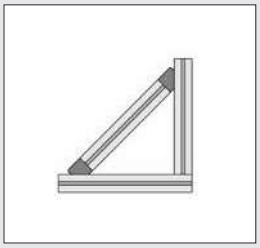


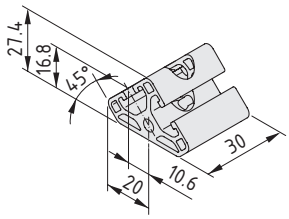
Angle Elements T2 are fastened with Button-Head Screws, Universal Fasteners or Automatic Fasteners and a special T-Slot Nut (see table).

The ends of the Angle Elements can be covered with Caps 6 30x30-45° or 8 40x40-45°.

6	a	Button-Head Screws ISO 7380-M6x16
	b	Universal Fastener 6 Button-Head Screws ISO 7380-M6x22 T-Slot Nut 6 St 2xM6-28 or 6 St 2x M6-58
		Automatic Fastener 6; Hexagon Socket Head Cap Screws DIN 912-M5x35 T-Slot Nut 6 St 2xM5-28 or 6 St 2x M5-58
8	a	Button-Head Screws ISO 7380-M8x16
	b	Universal Fastener 8 Button-Head Screws ISO 7380-M8x30 T-Slot Nut 8 St 2xM8-36 or 8 St 2x M8-76
		Automatic Fastener 8; Hexagon Socket Head Cap Screws DIN 912-M6x40 T-Slot Nut 8 St 2xM6-36 or 8 St 2x M6-76



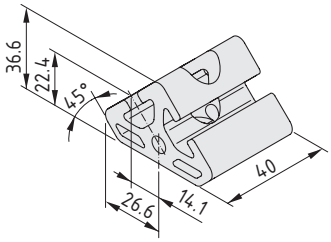




Angle Element 6 T2-30 6

Al, anodized
m = 23.0 g

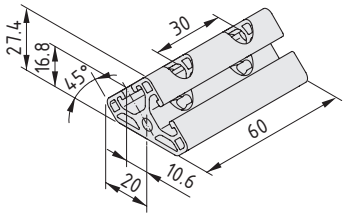
natural, 1 pce.	0.0.459.72



Angle Element 8 T2-40 8

Al, anodized
m = 67.0 g

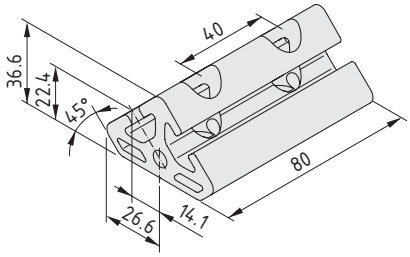
natural, 1 pce.	0.0.388.02



Angle Element 6 T2-60 6

Al, anodized
m = 44.0 g

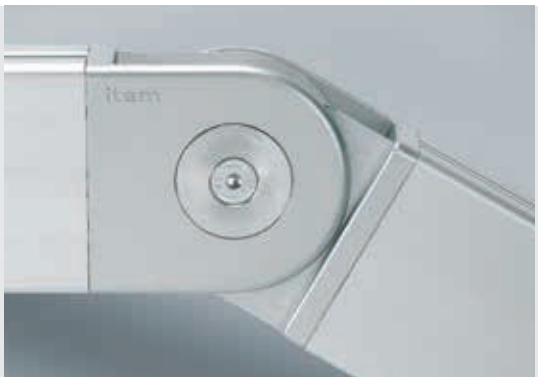
natural, 1 pce.	0.0.459.76



Angle Element 8 T2-80 8

Al, anodized
m = 135.0 g

natural, 1 pce.	0.0.388.03



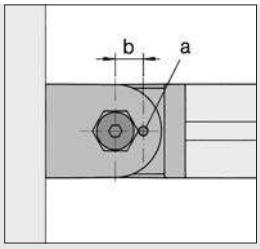
Hinges, heavy-duty

- Stable connection at any angle of adjustment from 0° to 180°
- Clamp lever enables rapid adjustment
- Fixing also possible using a dowel pin
- Products from Line X also available

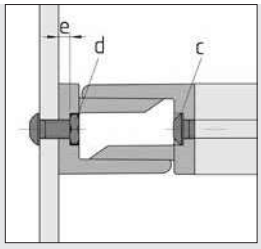
Line X | 5 | 6 | 8

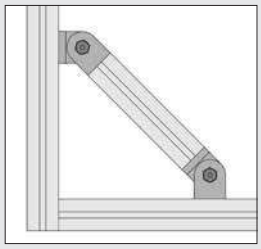
The Hinges with Clamp Lever can be locked in position or released. Particularly suitable for adjustable holders, swivel-type arms for Parts Containers and other similar equipment.

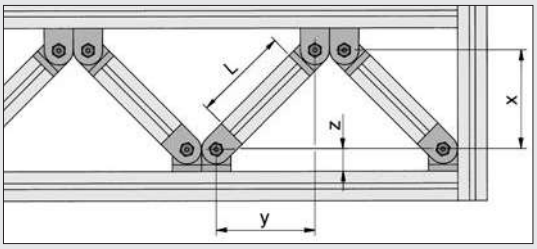
Specially designed Hinges X 8 with or without a clamp lever are available for profile constructions built with Line X.



A Hinge heavy-duty can be fixed at any angle by pinning (a).

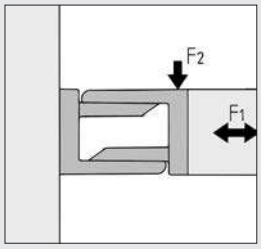






Calculation of the strut length L:

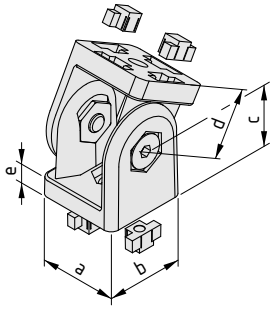
$$L = \sqrt{x^2 + y^2} - 2z$$



Hinge, heavy-duty	Dowel DIN 6325		Screw	Nut		Connection rigid		Connection movable	
	a	b	c	d	e	F1	F2	F1	F2
5 20x20	2m6x20	7 mm	Button-Head Screw ISO 7380-M5x8	DIN 557 M5	3.3 mm	500 N	200 N	200 N	100 N
6 30x30	4m6x30	10 mm	Button-Head Screw ISO 7380-M6x14	DIN 439 M6	3.5 mm	1,750 N	500 N	500 N	500 N
8 40x40	4m6x40	12 mm	Button-Head Screw ISO 7380-M8x16	DIN 439 M8	5.0 mm	5,000 N	1,000 N	750 N	750 N
8 80x40	6m6x40	24 mm	Button-Head Screw ISO 7380-M8x16	DIN 439 M8	5.0 mm	10,000 N	2,000 N	1,500 N	1,500 N

The following applies to all the sets below:

2 hinge halves, die-cast zinc, white aluminium
4 anti-torsion lugs
2 thread bushes
2 spacer rings
2 Countersunk Screws DIN 7991



Hinge 5 20x20, heavy-duty — 5

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	m [g]	
20	20	15	15	5	39.0	
1 pce.						0.0.464.39

Hinge 6 30x30, heavy-duty 6

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	m [g]	
30	30	22.5	22.5	7	125.0	
1 pce.						0.0.419.80

Hinge 8 40x40, heavy-duty 8

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	m [g]	
40	40	30	30	9	320.0	
1 pce.						0.0.265.31

Hinge 8 80x40, heavy-duty 8

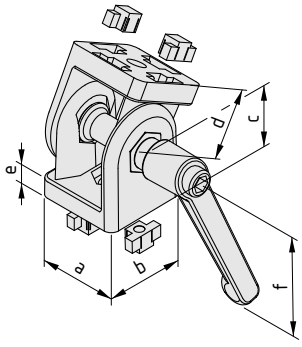
a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	m [kg]	
40	80	50	50	9	1.0	
1 pce.						0.0.373.91

Line 8

Hinge X 8 40x40, heavy-duty Line 8

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	m [g]	
40	40	30	30	9	310.0	
1 pce.						0.0.601.12

The following applies to all the sets below:
2 hinge halves, die-cast zinc, white aluminium
4 anti-torsion lugs
1 thread bush
1 bush liner
1 spacer collar
1 clamp lever



Hinge 5 20x20, heavy-duty with Clamp Lever 5

Max. holding torque = 5 Nm

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
20	20	15	15	5	45	81.0	
1 pce.							0.0.464.43

Hinge 6 30x30, heavy-duty with Clamp Lever 6

Max. holding torque = 10 Nm

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
30	30	22.5	22.5	7	45	163.0	
1 pce.							0.0.419.85

Hinge 8 40x40, heavy-duty with Clamp Lever 8

Max. holding torque = 20 Nm

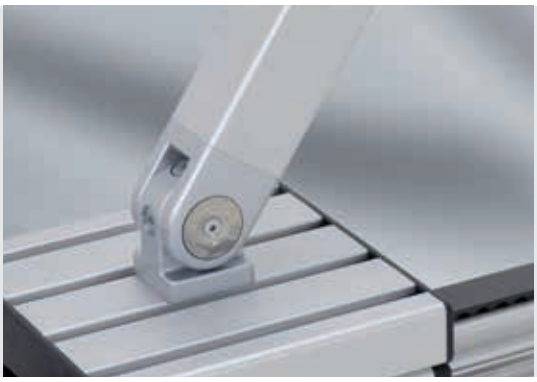
a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
40	40	30	30	9	63	410.0	
1 pce.							0.0.373.93

Line 8

Hinge X 8 40x40, heavy-duty with Clamp Lever Line 8

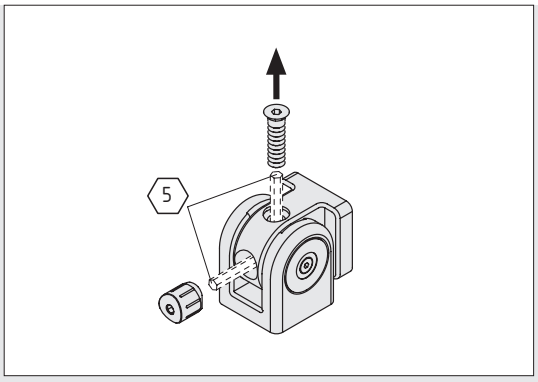
Max. holding torque = 20 Nm

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	f [mm]	m [g]	
40	40	30	30	9	63	390.0	
1 pce.							0.0.601.13

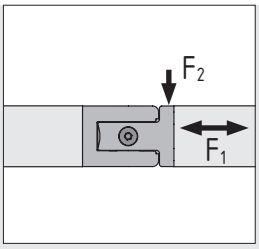


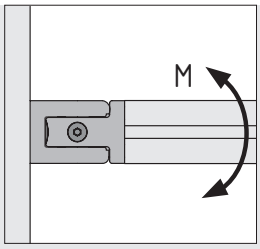
Ball-Bearing Hinge 8 40x40

- Enables movement through up to 180°
- Two ball bearings provide excellent load-carrying capacity
- Wear-resistant and robust



The Ball-Bearing Hinge can be screwed to any components using the integrated M8x16 fastening screws. These screws are driven through the holes in the bearing block using a 5 A/F hexagon key. To access the screws, simply remove the retaining screw from the bearing block. The Ball-Bearing Hinge does not need to be disassembled.



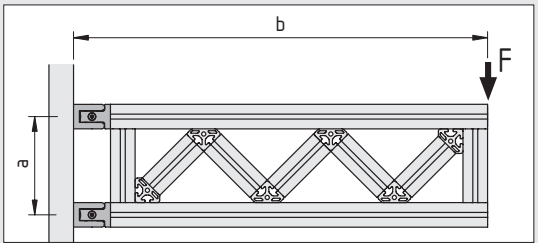


Permissible load:

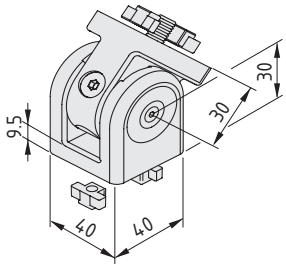
F_{1max} = 2500 N
F_{2max} = 750 N
M_{max} = 45 Nm

Where there is a combination of radial (F_1) and axial (F_2) load, the total load must satisfy the following equation:

$$\frac{F_1}{F_{1max}} + \frac{F_2}{F_{2max}} \leq 1$$



$$F_{max} \leq F_{1max} \frac{a}{b}$$
$$F_{max} \leq F_{2max} / 2$$



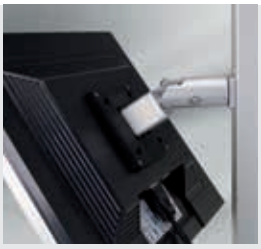
Ball-Bearing Hinge 8 40x40

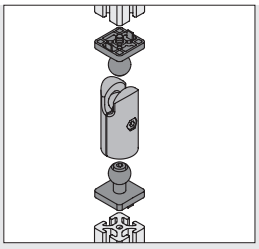
Ball-Bearing Hinge fork, die-cast zinc, RAL 9006 white aluminium
Ball-Bearing Hinge bearing block, die-cast zinc, RAL 9006 white aluminium
4 anti-torsion lugs, die-cast zinc
2 fastening screws M8x16, St, bright zinc-plated
Cap, PA-GF, grey
Retaining screw M8, St, bright zinc-plated
m = 510.0 g

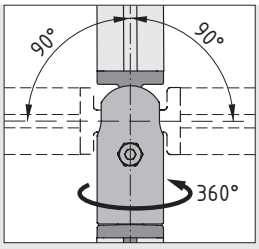
1 pce.	0.0.494.11

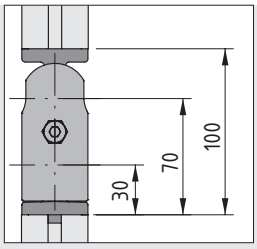
Ball Joints 8

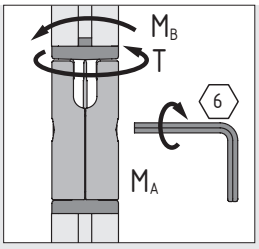
- Two-dimensional pivoting
- Available with clamp lever for rapid adjustment









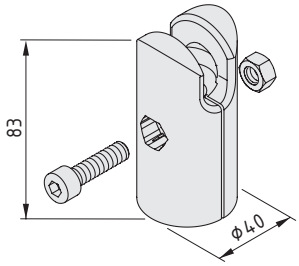


Each Ball Joint 8 requires two balls that are suitable for the profiles being connected:

- Ball 40x40 for connection to Profiles 8 with right-angled cross-sections
- Ball D40 for connection to Profiles 8 D40 (with cylindrical cross-section)

Max. tightening torque of central securing screw M8:
M_A = 25 Nm

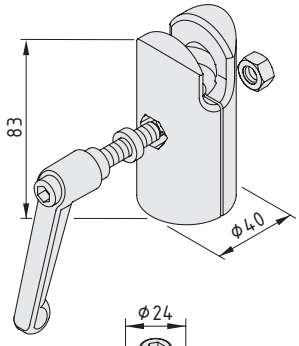
Permissible loading moments for Ball Joint 8:
Deflection M_B = 2 Nm
Torsion T = 3 Nm



Ball Joint 8, Socket

2 hinge halves, die-cast aluminium, RAL 9006 white aluminium
Hexagon Socket Head Cap Screw M8x30, St, bright zinc-plated
Hexagon Nut M8, St, bright zinc-plated
m = 200.0 g

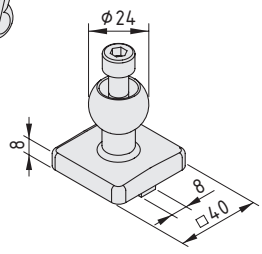
1 set	0.0.608.69



Ball Joint 8, Socket with Clamp Lever

2 hinge halves, die-cast aluminium, RAL 9006 white aluminium
Clamp Lever M8x32
Spacer sleeve, St, bright zinc-plated
Hexagon Nut M8, St, bright zinc-plated
m = 272.0 g

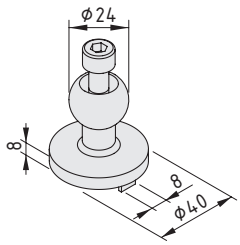
1 set	0.0.611.00



Ball Joint 8, Ball End 40x40

Ball, die-cast aluminium, RAL 9006 white aluminium
Hexagon Socket Head Cap Screw M8x40, St, bright zinc-plated
m = 55.0 g

1 set	0.0.610.95



Ball Joint 8, Ball End D40

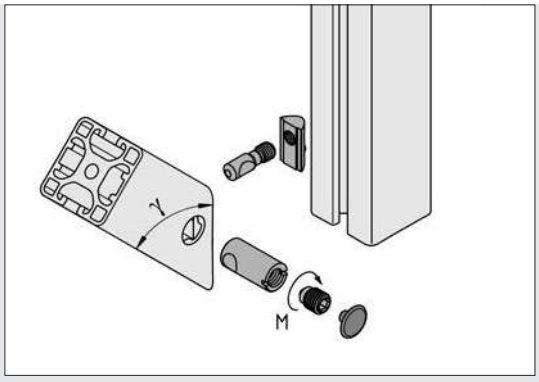
Ball, die-cast aluminium, RAL 9006 white aluminium
Hexagon Socket Head Cap Screw M8x40, St, bright zinc-plated
m = 51.0 g

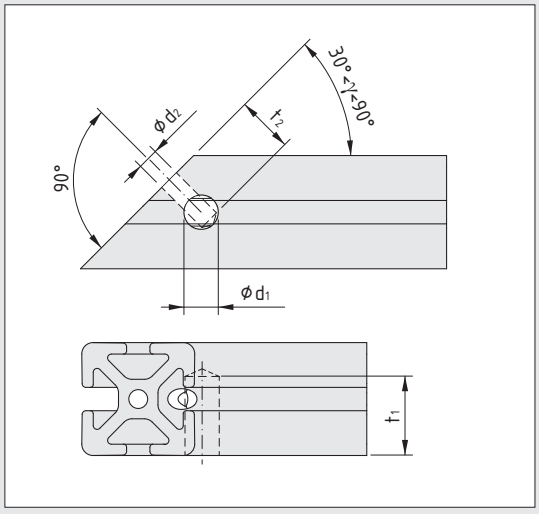
1 set	0.0.610.98

Mitre-Fastening Sets

- Profile connection at any angle from 30° to 90°
- The profile groove stays free to accommodate panel elements

6 8 Service www.item24.com





Drilling Jig and Step Drill, Mitre Connection 657

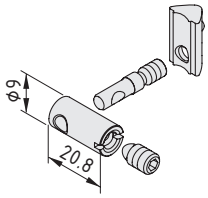
Using the Mitre-Fastening Set:

1. Mitre-cut profile at angle γ.
2. Drill a counterbore (∅ d_1) for the fastener sleeve into the side of the mitre-cut profile.
3. Drill a hole (∅ d_2) into the mitred face of the profile
4. Insert the T-Slot Nut into the profile groove of the continuous profile and screw in the clamping pin until the mark around the perimeter is level with the profile surface.
5. Insert the fastener sleeve into the counterbore of the mitred profile and fit the assembly over the clamping pin.
6. Drive the grub screw into the fastener sleeve and clamp the profile connection.
7. Fit the cap onto the fastener sleeve (Line 8).

Note: Despite the optimised design, the flow of forces across the inclined contact faces of the profiles is such that only part of the pretension of the screw connection is utilized. Mitre connections therefore have a lower load bearing capacity than other, right-angled profile connections (Standard-Fastening, Universal-Fastening or Automatic-Fastening Set). Mitre-Fastening Sets should therefore not be used for constructing basic frames and safety-related parts that are subject to high loads.

	d_1	t_1	d_2	t_2	M [Nm]
6	∅9.1	21	∅5.5	15	3.5
Drill	0.0.628.25		0.0.628.55		
Drilling Jig	0.0.616.77		0.0.616.89		
8	∅14.2	26.7	∅9	12	15
Drill	0.0.492.60		-		
Drilling Jig	0.0.493.72		0.0.493.71		

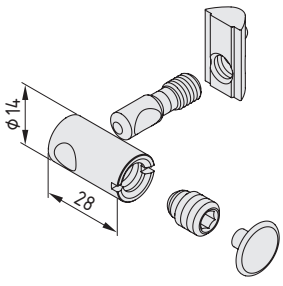
Your item dealer can provide the required mitre cuts and profile processing as a service.



Mitre-Fastening Set 6 6

Clamping pin M5x23, St, bright zinc-plated
Sleeve with bore, St, bright zinc-plated
Grub screw M6, St, bright zinc-plated
T-Slot Nut 6 St M5, bright zinc-plated
m = 17.0 g

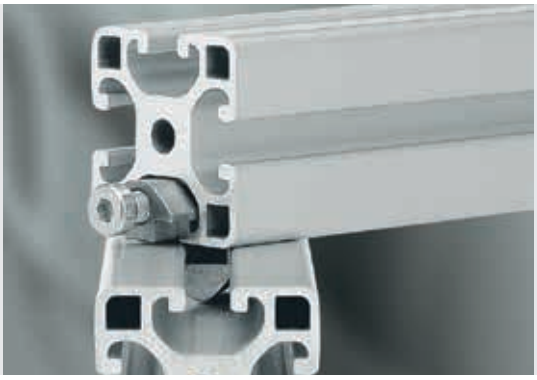
1 set 0.0.627.12



Mitre-Fastening Set 8 8

Clamping pin M8x28.5, St, bright zinc-plated
Sleeve with bore, St, bright zinc-plated
Grub screw M10, St, bright zinc-plated
T-Slot Nut V 8 St M8, bright zinc-plated
Cap, PA grey
m = 40.0 g

1 set 0.0.492.30



Direct-Fastening Set 8

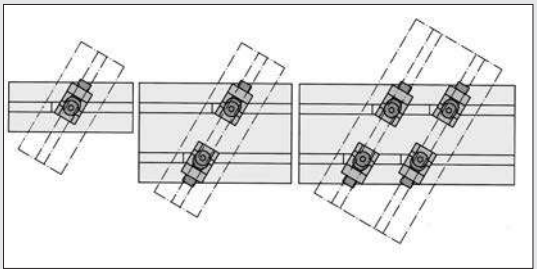
- Power-lock connection for profiles that cross
- Profile sides abut against each other

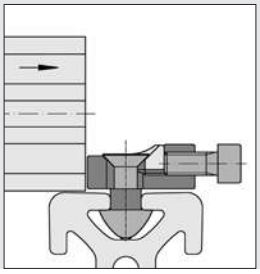
8 item Innovation

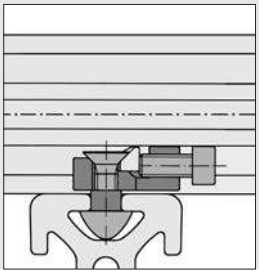
Power-lock connection (without machining) of two Profiles 8 that touch along their outer faces. The profiles can also run in parallel over a certain distance.
Both profiles can be moved in the direction of the groove.

The Direct-Fastening Set is particularly suitable for connecting the profiles of ball-bush block guides with other profiles, so that the profiles can be moved and no machining is required.

Note: Where anodized surfaces are to be fitted together, we recommend greasing the contact points. This minimises the level of noise generated.

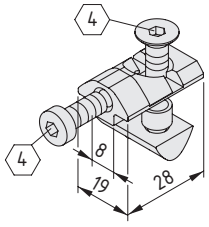






Installation note:
Loosen the Cap Screw to maximise the adjustment range of the wedge and gently tighten the Countersunk Screw.

Push the profiles together and tension the Direct-Fastening Set by tightening the Cap Screw.



Direct-Fastening Set 8	8
Fastener, cast steel Countersunk Screw DIN 7991-M6x20, St Hexagon Socket Head Cap Screw DIN 7984-M6x14, St Spacer sleeve, POM, black T-Slot Nut 8 St M6 M_{bz-p} = 5.5 Nm m = 37.0 g	
bright zinc-plated, 1 set	0.0.388.63

Direct-Fastening Set 8	8
$M_{stainl.}$ = 4.5 Nm m = 37.0 g	
stainless, 1 set	0.0.440.65

Click-Fastening Set 8

Adjustable and fast

- For profiles that cross, can be fitted at any position
- For assembling struts without the need for machining
- Particularly quick to fit
- Ideal for temporary structures

reddot design award honourable mention 2009

8 item Innovation

The item MB Building Kit System opens up a whole new dimension in flexibility. Profiles can be connected to other profiles at any position and at virtually any angle without machining.

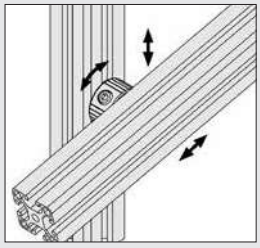
Profile sections are attached to existing constructions and are employed as re-usable, variable struts. Thanks to the Click-Fastening Set, profiles no longer need to be cut off with absolute accuracy!

The Click-Fastening Set is particularly attractive for temporary structures - modifications can be made quickly and easily!

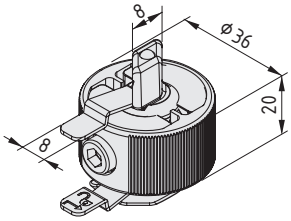
Mount the CLICK-Fastening Set onto the profile groove and **lock** in position (CLICK!).

Connect the CLICK-Fastening Set with the second profile.

Align the CLICK-Fastening Set and **tighten** the tensioning screw.



Dismantling: Loosen the tensioning screw, lift the locking strip out of the profile groove and swivel it back.
The CLICK-Fastening Set does not need to be taken apart and is immediately ready for use again.



Click-Fastening Set 8	8
Clamping profile Al, natural Clamping elements, St, stainless Locking strips, St, stainless Hex. Socket Head Cap Screw M6x25, St, bright zinc-plated m = 105.0 g	
1 set	0.0.489.79

Face Fastening Set 8

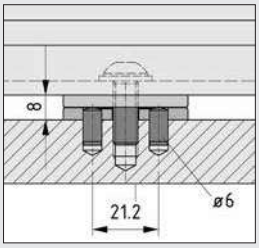
- Toothed fastener reinforces the rigid angled connection
- For inclined working surfaces
- Adjustment in 5° increments with anti-torsion feature

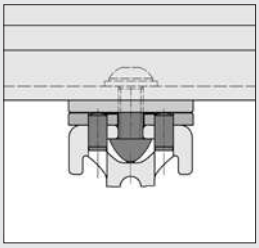
8

Face Fastening Set 8 is used to create a rigid angled connection between two profiles whose grooved sides face each other.
It can also be used to connect the end face of one profile to the grooved side of another profile.

The two halves of the Face Fastening Set are located between the profiles being connected.

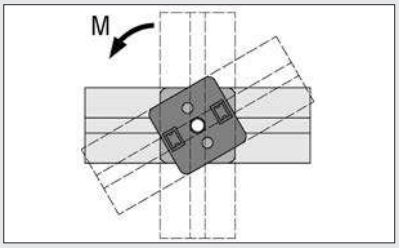
A clamp lever extending all the way through may be used with Face Fastening Set 8 to facilitate adjustment.





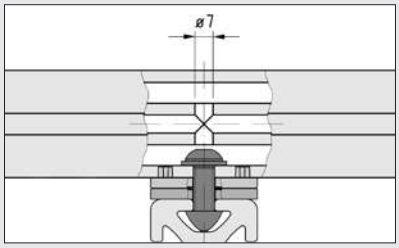
The anti-torsion blocks must be removed when attaching to panel elements.

Position of the fixing bores in the panel elements and profiles. These fixing bores are predrilled in the fastener (∅ 5.8 mm).

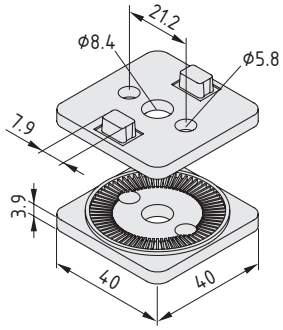


The angle between the profiles can be selected in 5° increments. The toothing ensures that the two halves fit together securely at the correct angle.

The two halves must be pinned together if a moment of M > 10 Nm is applied to the Face Fastening Set.
The permissible load is $M_{max.}$ = 20 Nm.



Two Line 8 Profiles are screw-connected using screw ISO 7380-M8x25, Washer DIN 125-8,4 and T-Slot Nut 8 St M8.
An access hole must be made in one of the profiles to accommodate the Allen key.



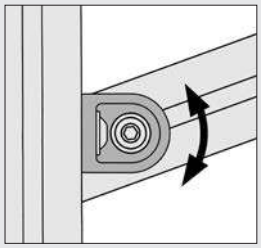
Face Fastening Set 8	8
Die-cast zinc m = 71.0 g	
black, 1 set	0.0.474.44

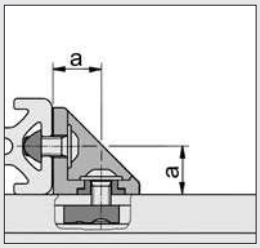
Angle Hinge Brackets, Angle Clamp Brackets

- Simple, secure fixing for profiles that cross
- Adjustable via angle bracket with clamp lever
- For creating any angle

5 6 8

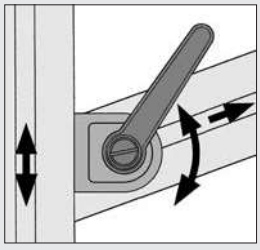
The Angle Hinge Brackets and Angle Clamp Brackets are used for connecting two profiles of the same Line whose side faces are in contact and which cross at an angle.

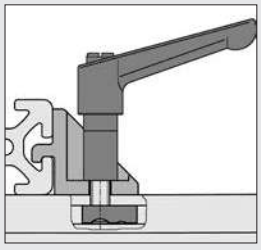




Angle Hinge Bracket	5	6	8
a	10 mm	15 mm	20 mm

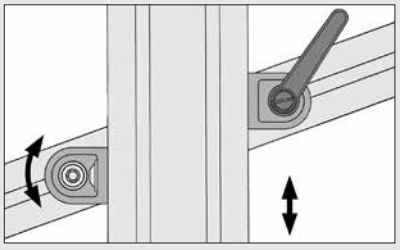
The Angle Hinge Bracket serves as a fixed point of rotation for profiles crossing each other. When the screws are tight, the rotational position around the bearing bush can still be selected at will.



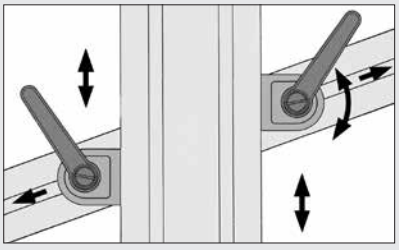


The Angle Clamp Bracket can be used in combination with an Angle Hinge Bracket or a second Angle Clamp Bracket to provide a simple connection between two crossing profiles.

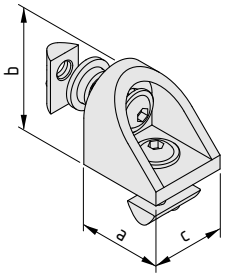
Loosening the screw or clamp lever releases the tension in the two profile grooves and allows rotation at any angle and movement along the grooves.



Combination of Angle Hinge Bracket and Angle Clamp Bracket, e.g. for adjusting the angle of a shelf around a fixed point of rotation.



Combination of two Angle Clamp Brackets, e.g. for adjusting a rest (in terms of height, lateral location and angle).



Angle Hinge Bracket 5

5

Angle bracket, die-cast zinc, RAL 9006 white aluminium
Fastening materials

a [mm]	b [mm]	c [mm]	m [g]	
18	18	16	20.0	
1 set				0.0.437.83

Angle Hinge Bracket 6

6

Angle bracket, die-cast zinc, RAL 9006 white aluminium
Fastening materials

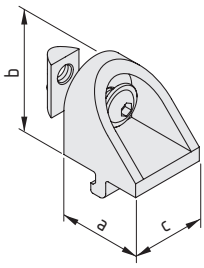
a [mm]	b [mm]	c [mm]	m [g]	
27	27	24	65.0	
1 set				0.0.441.97

Angle Hinge Bracket 8

8

Angle bracket, die-cast Al, RAL 9006 white aluminium
Fastening materials

a [mm]	b [mm]	c [mm]	m [g]	
36	36	32	85.0	
1 set				0.0.457.76



Angle Clamp Bracket 5

5

Angle bracket, die-cast zinc, RAL 9006 white aluminium
Fastening materials

a [mm]	b [mm]	c [mm]	m [g]	
18	18	16	19.0	
1 set				0.0.437.84

Angle Clamp Bracket 6

6

Angle bracket, die-cast zinc, RAL 9006 white aluminium
Fastening materials

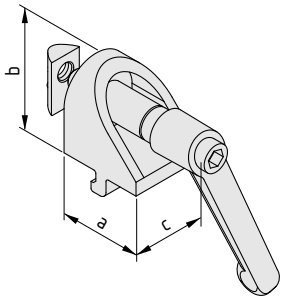
a [mm]	b [mm]	c [mm]	m [g]	
27	27	24	66.0	
1 set				0.0.441.98

Angle Clamp Bracket 8

8

Angle bracket, die-cast Al, RAL 9006 white aluminium
Fastening materials

a [mm]	b [mm]	c [mm]	m [g]	
36	36	32	64.0	
1 set				0.0.457.77



Angle Clamp Bracket 5 with Clamp Lever

5

Angle bracket, die-cast zinc, RAL 9006 white aluminium
Fastening materials

a [mm]	b [mm]	c [mm]	m [g]	
18	18	16	51.0	
1 set				0.0.437.85

Angle Clamp Bracket 6 with Clamp Lever

6

Angle bracket, die-cast zinc, RAL 9006 white aluminium
Fastening materials

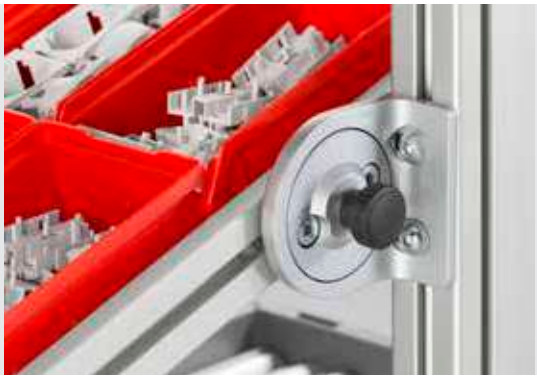
a [mm]	b [mm]	c [mm]	m [g]	
27	27	24	103.0	
1 set				0.0.441.99

Angle Clamp Bracket 8 with Clamp Lever

8

Angle bracket, die-cast Al, RAL 9006 white aluminium
Fastening materials

a [mm]	b [mm]	c [mm]	m [g]	
36	36	32	161.0	
1 set				0.0.457.78



Angle Locking Bracket 8 80x40

Secure fixing and rapid adjustment

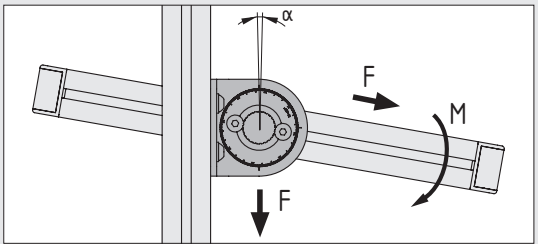
- Toothed fastener reinforces rigid angled connection
- For inclined ledges and shelves
- Adjustment in 2.5° increments
- Easy to adjust without the need for tools

8

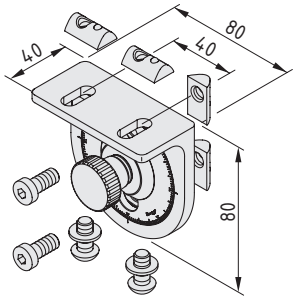
Angle Locking Bracket 8 80x40 is an ideal fastening element for adjustable fixtures. It enables the set-up and easy adjustment of ergonomic work benches. Typical areas of application include stand-alone shelves, shelving units, material trolleys, etc.

The Angle Locking Bracket is incredibly easy to adjust: When the knurled screw is loosened, spring pressure lifts the disc out of the toothing and enables adjustments to be carried out easily without the need for tools. The toothing creates an extremely strong rigid angled fixing. The angle of incline can be adjusted in 2.5° increments.

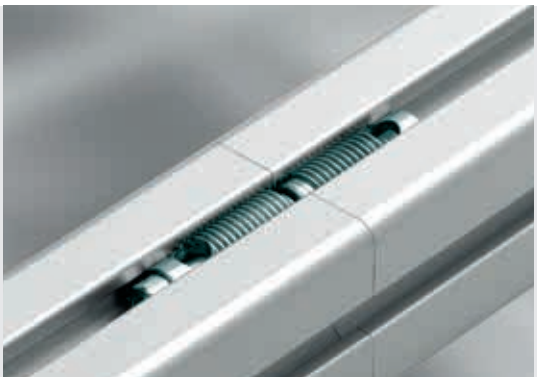
The Angle Locking Bracket is supplied preassembled and is screwed easily to Profiles 8 using the enclosed fastening elements without processing.



An adjustable profile frame with 2 Angle Locking Brackets 8 80x40 can withstand a force $F_{max.}$ = 2000 N.
This profile frame has a permissible loading moment of:
M = 100 Nm



Angle Locking Bracket 8 80x40	8
Bracket and locking discs, die-cast aluminium, RAL 9006 white aluminium Knurled screw M8x18, St, bright zinc-plated 2 compression springs, St 2 Button-Head Screws M8x18, St, bright zinc-plated 2 Hexagon Socket Head Cap Screws M8x18, St, bright zinc-plated 3 washers, St, bright zinc-plated 4 T-Slot Nuts 8 St M8, bright zinc-plated m = 290.0 g	
1 set	0.0.615.59

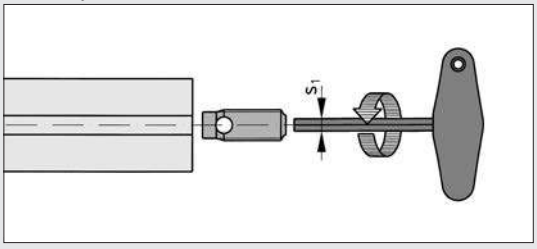


Automatic Butt-Fastening Sets

- Connect identical profiles via their end faces
- No profile machining required

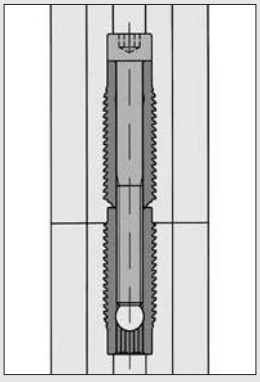
5 6 8 12

The Automatic Butt-Fastening Sets can be used to connect the end faces of two profiles from the same Line without mechanical processing.
Automatic Butt-Fastening Sets should always be used in pairs. Depending on the profile size and load, several pairs may be necessary.

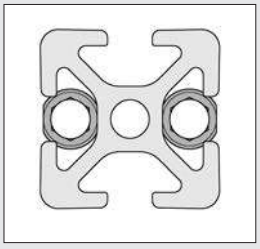


Automatic Butt-Fastening Set				
	5	6	8	12
s_1	4 A/F	5 A/F	6 A/F	8 A/F

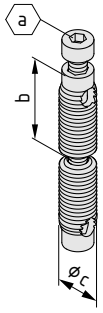
The Fastener is screwed into a profile groove in the end face, the thread being cut automatically. Use of a lubricant is recommended.
Note: All Fasteners with a through bore for the fastening screw have a counter-clockwise thread on the outside in order to prevent the Fastener twisting when the screw is tightened. The Fasteners with internal threads have a clockwise thread on the outside.



When driving the Fastener with internal thread into a profile, additional anti-torsion protection can be provided by leaving the end protruding out so that it projects into the groove opposite. The Fastener with through bore will then need to be driven far enough into the adjoining profile to accommodate it.



Automatic-Fastening Set 5 should be inserted so that the flattening on the thread is flush with the outer edge of the profile.



The following applies to all the sets below:
Automatic Fastener with through bore, St
Automatic Fastener with threaded bore, St
Hex. Socket Head Cap Screw, St

Automatic Butt-Fastening Set 5					5
a [mm]	b [mm]	c [mm]	M_{bz-p} [Nm]	m [g]	
3	24	7	2.5	11.0	
bright zinc-plated, 1 set					0.0.464.19

Automatic Butt-Fastening Set 5					5
a [mm]	b [mm]	c [mm]	$M_{stainl.}$ [Nm]	m [g]	
3	24	7	2.5	11.0	
stainless, 1 set					0.0.464.18

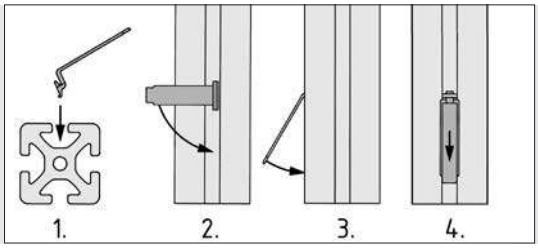
Automatic Butt-Fastening Set 6				6
a [mm]	b [mm]	c [mm]	M_{bz-p} [Nm]	m [g]
4	27	10	8.0	23.0
bright zinc-plated, 1 set				0.0.419.74

Automatic Butt-Fastening Set 6				6
a [mm]	b [mm]	c [mm]	$M_{stainl.}$ [Nm]	m [g]
4	27	10	6.5	23.0
stainless, 1 set				0.0.441.71

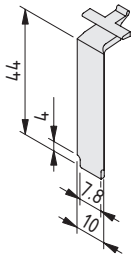
Automatic Butt-Fastening Set 8				8
a [mm]	b [mm]	c [mm]	M_{bz-p} [Nm]	m [g]
5	31	12	14	43.0
bright zinc-plated, 1 set				0.0.406.80

Automatic Butt-Fastening Set 8				8
a [mm]	b [mm]	c [mm]	$M_{stainl.}$ [Nm]	m [g]
5	31	12	11	43.0
stainless, 1 set				0.0.444.15

Automatic Butt-Fastening Set 12				12
a [mm]	b [mm]	c [mm]	M_{bz-p} [Nm]	m [g]
6	47	18	34	140.0
bright zinc-plated, 1 set				0.0.003.51



A cover is available for Automatic-Fastening Set 8. It is fitted after the fastening has been installed.



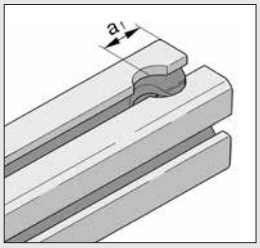
Automatic-Fastening Set 8 Cap	8
PA-GF m = 0.7 g	
black similar to RAL 9005, 1 pce.	0.0.388.66
grey similar to RAL 7042, 1 pce.	0.0.616.31

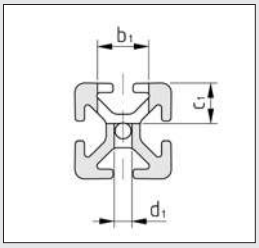
Universal-Butt-Fastening Sets

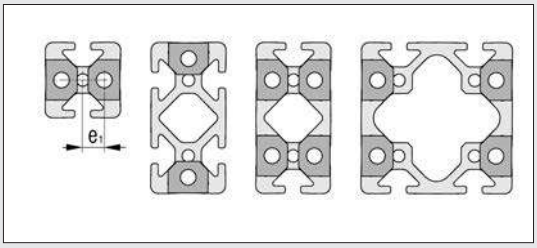
■ Connect identical profiles via their end faces

5 6 8 10 12

Extend the profiles only with the aid of the corresponding fastening elements and, where possible, support them at the joints.



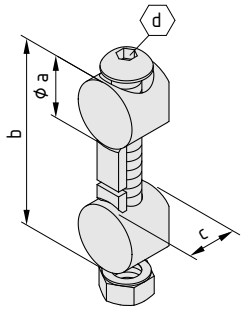




Universal-Fastening Sets should always be used in pairs.

Universal-Fastening Set					
	5	6	8	10	12
a_1	10.0 mm	15.0 mm	20.0 mm	25.0 mm	30.0 mm
b_1	∅ 12.0 mm	∅ 16.0 mm	∅ 20.0 mm	∅ 25.0 mm	∅ 30.0 mm
c_1	8.5 mm	12.7 mm	16.0 mm	20.0 mm	24.0 mm
d_1	∅ 4.3 mm	∅ 5.5 mm	∅ 7.0 mm	∅ 9.0 mm	∅ 12.0 mm
e_1	5.8 mm	8.7 mm	12.0 mm	15.1 mm	17.8 mm

The following applies to all the sets below:
2 Universal Fasteners, die-cast zinc
Screw, St
Hexagon nut, St



Universal-Butt-Fastening Set 5						5
a [mm]	b [mm]	c [mm]	d [mm]	M_{bz-p} [Nm]	m [g]	
12	32	8.5	3	3.0	10.0	
bright zinc-plated, 1 set						0.0.370.32

Universal-Butt-Fastening Set 5						5
a [mm]	b [mm]	c [mm]	d [mm]	$M_{stainl.}$ [Nm]	m [g]	
12	32	8.5	3	2.5	10.0	
stainless, 1 set						0.0.437.55

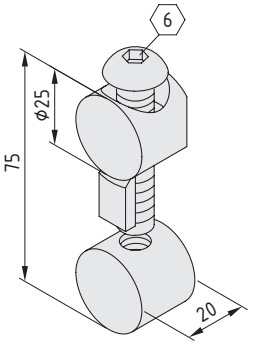
Universal-Butt-Fastening Set 6						6
a [mm]	b [mm]	c [mm]	d [mm]	M_{bz-p} [Nm]	m [g]	
16	46	12.6	4	8.0	27.0	
bright zinc-plated, 1 set						0.0.419.53

Universal-Butt-Fastening Set 6						6
a [mm]	b [mm]	c [mm]	d [mm]	$M_{stainl.}$ [Nm]	m [g]	
16	46	12.6	4	6.5	27.0	
stainless, 1 set						0.0.441.77

Universal-Butt-Fastening Set 8						8
a [mm]	b [mm]	c [mm]	d [mm]	M_{bz-p} [Nm]	m [g]	
20	60	16	5	25	60.0	
bright zinc-plated, 1 set						0.0.265.46

Universal-Butt-Fastening Set 8						8
a [mm]	b [mm]	c [mm]	d [mm]	$M_{stainl.}$ [Nm]	m [g]	
20	60	16	5	20	60.0	
stainless, 1 set						0.0.440.94

Universal-Butt-Fastening Set 12						12
a [mm]	b [mm]	c [mm]	d [mm]	M_{bz-p} [Nm]	m [g]	
30	90	24	6	60	200.0	
bright zinc-plated, 1 set						0.0.003.61



Universal-Butt-Fastening Set 10	10
Universal Fastener 10, St Button-Head Screw ISO 7380-M10x50, St Universal Butt-Fastener 10, St M_{bz-p} = 46 Nm m = 148.5 g	
bright zinc-plated, 1 set	0.0.632.08

Mitre-Butt-Fastening Sets

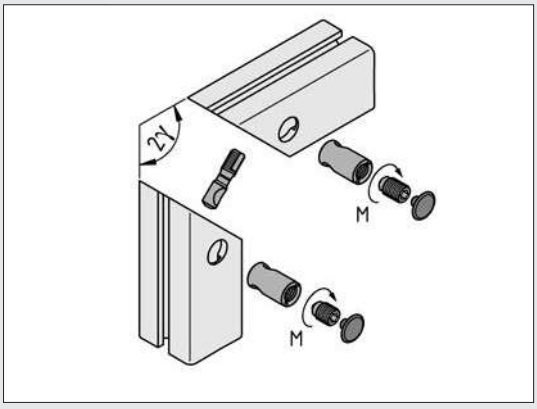
- Connect two profiles with the same mitre angle
- Overall angle of 60° to 180° possible

6 8 Service

Mitre-Butt-Fastening Sets are suitable for connecting two profiles at an angle. They are used primarily when constructing frame elements and panel edging. The profile grooves facing each other inside the frame remain unobstructed so they can be used for holding panel elements.
Two mitred profiles (each with an identical angle γ between 30° and 90°) are connected together. This gives a possible angle between the profiles of (2γ) between 60° and 180°.

The position of the clamping pins at right angles to the cut profile edge generates particularly high clamping forces on the fastening elements. The clamping screws are accessed from the side of the profile frame.

Note:
Despite the optimized design, the flow of forces across the inclined contact faces of the profiles is such that only part of the pretension of the screw connection is utilized. Mitre connections therefore have a lower load bearing capacity than other, right-angled profile connections (Standard-Fastening, Universal-Fastening or Automatic-Fastening Set). Mitre-Fastening Sets should therefore not be used for constructing basic frames and safety-related parts that are subject to high loads.

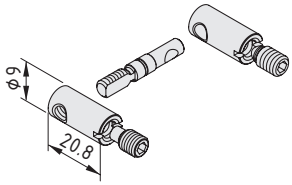


Using the Mitre-Butt-Fastening Set:

1. Mitre-cut profile at angle γ.
2. Drill counterbores for the fastener sleeves into the side of each profile (use of drilling jig recommended).
3. Drill a hole into the mitred face of both profiles (use of drilling jig recommended).
4. Insert the fastener sleeve with lateral thread into the counterbore of one of the profiles and screw in the clamping pin until the perimeter mark is level with the cut profile edge.
5. Use grub screw DIN 915 to tighten the clamping pin in the fastener sleeve with thread.
6. Insert the fastener sleeve with bore into the second profile, and fit the assembly over the clamping pin.
7. Drive the special grub screw into the fastener sleeve and clamp the profile connection.
8. Fit the caps onto the fastener sleeves (Line 8).

Connection processing of the profiles is the same as for the Mitre-Fastening Set.
Your item dealer can provide the required mitre cuts and profile processing as a service.

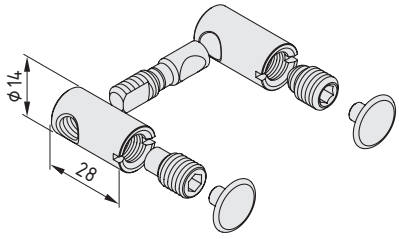
Drilling Jig and Step Drill, Mitre Connection 657



Mitre-Butt-Fastening Set 6 6

Clamping pin M5x29, St, bright zinc-plated
Sleeve with bore, St, bright zinc-plated
Threaded sleeve, St, bright zinc-plated
Grub screw M6, St, bright zinc-plated
Grub screw DIN 915-M6x10, St, bright zinc-plated
m = 20.0 g

1 set	0.0.606.47



Mitre-Butt-Fastening Set 8 8

Clamping pin M8x33, St, bright zinc-plated
Sleeve with bore, St, bright zinc-plated
Threaded sleeve, St, bright zinc-plated
Grub screw M10, St, bright zinc-plated
Grub screw DIN 915-M10x16, St, bright zinc-plated
2 Caps, PA grey
m = 58.0 g

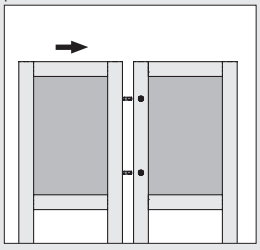
1 set	0.0.492.25

Central-Fastening Set P 8

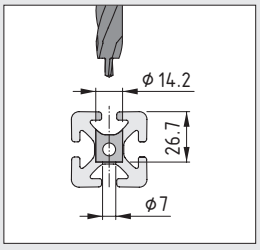
- Connect two parallel Profiles 8
- Flush connection for partitioning and room dividers

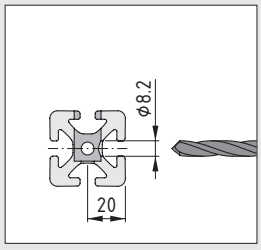
8

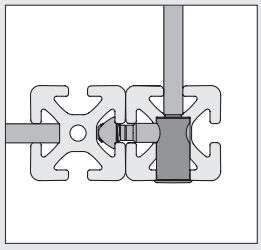
Central-Fastening Set P 8 can be used to quickly connect together individual, inherently stable partitions or partition elements side by side without time-consuming alignment procedures.

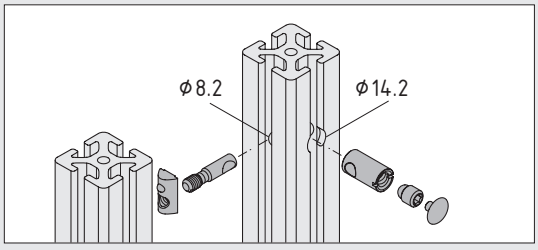


Unevenness in the ground can be compensated for by adjusting the position of the T-Slot Nut in the profile groove.









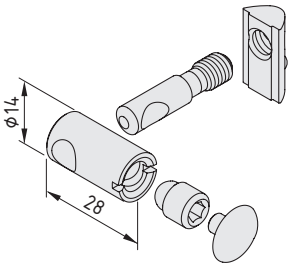
Profile processing: To accommodate the fastener sleeve, a ∅14.2 mm counterbore is drilled into the side of one of the profiles being connected (using Step Drill 0.0.492.60) along with a ∅8.2 mm fastening hole located perpendicular to this.

T-Slot Nut V 8 St M8 is fitted into the facing groove of the second profile and the clamping pin is screwed into this T-Slot Nut as far as the marking.

After the clamping pin has been inserted into the fastener sleeve, the profile connection is tightened with an M10 grub screw (tightening torque M = 15 Nm).

N.B.: At least 2 grooves always remain free for fitting panel elements into the profile grooves. Frame elements can also be connected to each other at an angle of 90° by positioning Central-Fastening Set P 8 appropriately.

Drilling Jig and Step Drill, Mitre Connection 657



Central-Fastening Set P 8	8
Clamping pin, St, bright zinc-plated T-Slot Nut V 8 St M8, bright zinc-plated Threaded sleeve with bore, St, bright zinc-plated Grub screw M10, St, bright zinc-plated Cap, PA, grey m = 44.0 g	
1 set	0.0.619.69

Parallel Fastener 8

Holds by itself

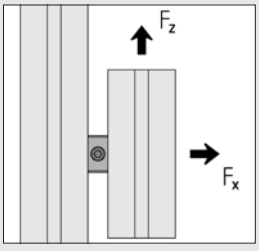
- Connect two parallel Profiles 8
- No machining required
- Easy to use thanks to snap-in function

8 item Innovation

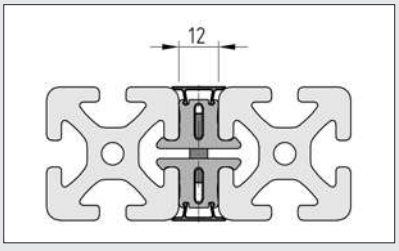
Element for fastening two parallel Line 8 Profiles at a distance of 12 mm.

Parallel Fastener 8 is very easy to use: Both halves of the spring loaded fastener engage in the profile grooves facing each other. This fixes the profiles in position. The fastener is then clamped by tightening an internal screw.

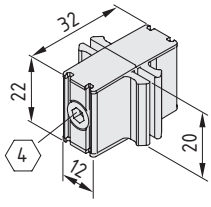
Max. torque for the tensioning screw:
M = 2.5 Nm



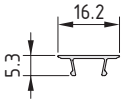
Permissible loading force per Fastener:
F_x = 1,000 N
F_z = 100 N



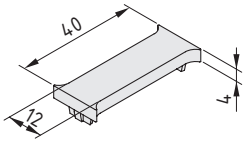
Using the Parallel Fastener 8 Cover Profile: The gap (12 mm wide) between the profiles which is generated when Parallel Fastener 8 is used can be covered in full using this profile. The Cover Profile must be fitted over at least 2 Parallel Fasteners 8.
Parallel Fastener 8 Cover Profile Cap covers the end-face gap between the profiles when using Parallel Fastener 8 Cover Profiles.



Parallel Fastener 8	8
2 clamping elements, Al, anodized natural Housing, PA-GF, black Compression spring Tensioning screw, St, bright zinc-plated m = 21.0 g	
1 set	0.0.476.58



Parallel Fastener 8 Cover Profile	8
Al, anodized m = 50 g/m	
natural, 1 pce., length 2000 mm	0.0.476.59



Parallel Fastener 8 Cover Profile End Cap	8
PA-GF m = 2.5 g	
black, 1 pce.	0.0.476.60

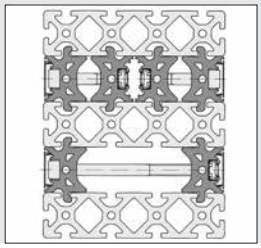
Connection Profiles

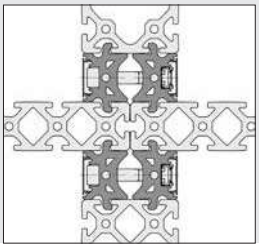
Connect Profiles 8 to make extra strong supports

- Simple engineering for stable composite profiles
- For open and closed supports
- Suitable Cover Profile for easy-to-clean surfaces

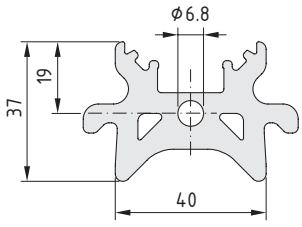
8 www.item24.com item Innovation

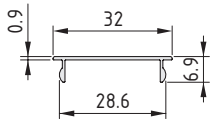
Connection Profile 8 40 is supplied in pairs and machined with 11 mm ∅ bores (bore spacing 200 mm) for the fastening screws.
The use of Captive Nuts (designed to fix positions and prevent torsion) allows the Connection Profile to be fitted from one side. DIN 912-M10x60, M10x100 or M10x140 Hexagon Socket Head Cap Screws (tightening torque M = 34 Nm) are inserted at the relevant predetermined positions to join Connection Profiles.
The joint and/or screw heads and Captive Nuts can be covered over with a dust-tight Cover Profile 32.

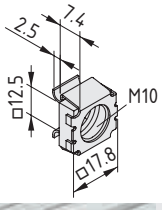




Hexagon Socket Head Cap Screw DIN 912 M10x60 159







Connection Profile 8 40 8

Al, anodized
(The values apply for an individual profile section and not for a pair)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
8.97	2.42	5.73	19.85	4.59	2.90	6.96	
natural, cut-off max. 6000 mm, 1 pair							0.0.422.35
natural, 1 pair, length 6000 mm							0.0.453.90

Cover Profile 32 8

Al, anodized

A [cm²]	m [kg/m]	
0.41	0.11	
natural, cut-off max. 3000 mm		0.0.420.43
natural, 1 pce., length 3000 mm		0.0.452.01

Captive Nut M10

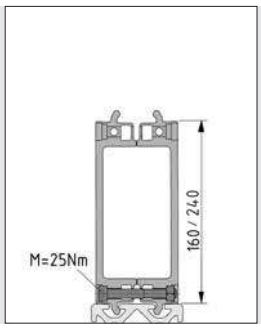
Cage and square nut, St
m = 8.0 g

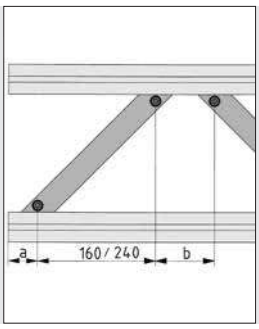
bright zinc-plated, 1 pce.	8.0.004.02

Connection Profiles 8 160 and 8 240 are supplied in pairs and machined with bores for the DIN 912-M8x60 fastening screws and DIN 934-M8 Hexagon Nuts.

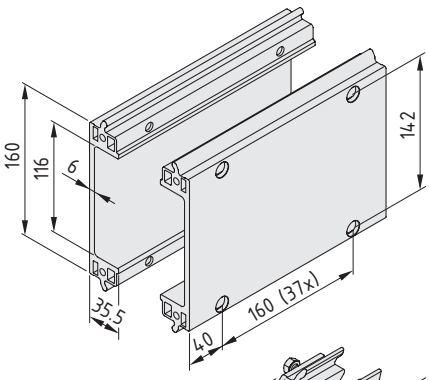
The Connection Profile Braces 8 are ready-to-install kits complete with screws and nuts.

Hexagon Socket Head Cap Screw DIN 912 M8x60 159





The Connection Profile Braces (45° sections of the Connection Profiles) are suitable for constructing lightweight, open "composite profiles". These Connection Profile Braces consist of left and right diagonal sections together with the corresponding nuts and bolts. They can be retrofitted at any point and any distance (dimension a / b) along the profiles which are being joined. With a fixed spacing of 160 or 240 mm, the Connection Profiles Braces represent an inexpensive alternative to the latticework construction.

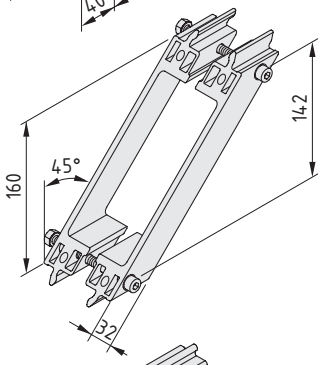


Connection Profile 8 160

Al, anodized

(The values apply for an individual profile section and not for a pair)

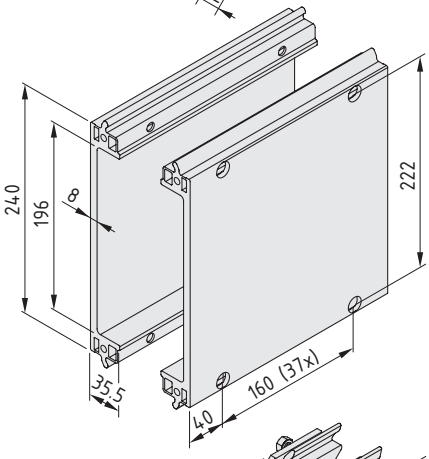
A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
17.80	4.76	618.43	17.51	10.34	69.10	7.14	
natural, cut-off max. 6000 mm, 1 pair							0.0.458.03
natural, 1 pair, length 6000 mm							0.0.458.08



Connection Profile Brace 8 160-45°

Al, anodized, natural
Brace right
Brace left
2 Hexagon Socket Head Cap Screws DIN 912-M8x60, St, bright zinc-plated
2 Hexagon Nuts DIN 934-M8, St, bright zinc-plated
$a_{min.}$ = 33 mm (recommended 40 mm)
$b_{min.}$ = 65 mm (recommended 80 mm)
m = 488.0 g

1 set	0.0.458.18

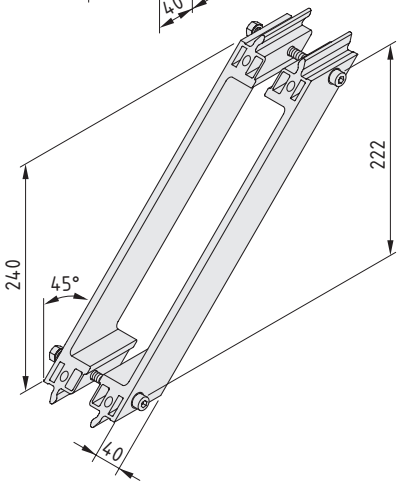


Connection Profile 8 240

Al, anodized

(The values apply for an individual profile section and not for a pair)

A [cm²]	m [kg/m]	I_x [cm⁴]	I_y [cm⁴]	I_t [cm⁴]	W_x [cm³]	W_y [cm³]	
26.00	6.97	1,808.44	19.33	12.54	139.65	7.24	
natural, cut-off max. 6000 mm, 1 pair							0.0.458.17
natural, 1 pair, length 6000 mm							0.0.458.14



Connection Profile Brace 8 240-45°

Al, anodized, natural
Brace right
Brace left
2 Hexagon Socket Head Cap Screws DIN 912-M8x60, St, bright zinc-plated
2 Hexagon Nuts DIN 934-M8, St, bright zinc-plated
$a_{min.}$ = 38 mm (recommended 40 mm)
$b_{min.}$ = 76 mm (recommended 80 mm)
m = 846.0 g

1 set	0.0.458.21