

## INSTALLATION ELEMENTS

14

Conduit Systems

Profiles with an Integrated Conduit

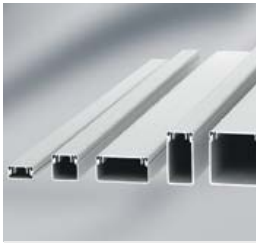
Fasteners for Cables, Hoses and Switches

Electronic Boxes

Electrical Discharge

14

Installation elements  
Products in this section



**Conduit Profiles E**

- U-shaped conduit for simple cable conduit installations
- Available in six heights and five widths

432



**Lid Profiles**

- Compatible with conduits E and the Modular Conduit System
- Flat lid for covering cable conduits

436



**Support Profiles**

- Lids and bases of the Modular Conduit System
- Available with or without Line 8 groove

437



**Wall Profiles**

- Side panels of the Modular Conduit System
- Available in four heights

439



**Conduit Inside Corners**

- Kink prevention for cables
- Covering for cut edges

441



**Cable Entry Protectors, Lid and Wall**

- Covering for cut edges in Lid and Wall Profiles
- For straightforward cable routing in and out of conduits

443



**Conduit Caps**

- Side covering for cable conduits and profiles
- Models to suit all sizes and variants
- Also available with through-hole for cables

444



**Flush-Mounted Sockets**

- For installation in the Wall and Support Profiles of cable conduits
- Also suitable for installation in any panel elements

447



**Stand Profiles**

- Wide profile with integrated cable conduit
- Easy-to-use system for building frames that incorporate cabling

448



**Column D110**

- Central table leg with cable routing
- Elegant support for all types of constructions

450



**Universal Holder 8**

- Simple cable fastening for constructions made with Line 8 profiles
- Anchor point for cable ties

451



**Limit-Switch Holders**

- For fastening limit switches to profiles
- Rigid anti-torsion feature

453



**Electronic-Box Profiles**

- For electronic boxes and other sealed containers
- With integrated cooling ribs

454



**Earthing Terminals**

- For connecting protective conductors to profile constructions
- Permanent screw attachment ensures sound contact

457



**Contact Pins ESD**

- For creating an electrostatically dissipative connection between profiles
- Integrated into the profile connection

459

## Overview – finding the right cable conduit fast

item offers two conduit systems for safely routing cables and supply lines.

### Conduit system E

Conduit system E comprises U-shaped profiles with solid side panels. The dimensions are based on the modular dimensions of Lines 6 and 8 profiles. The conduits are available in a range of sizes, including one that is particularly flat (30x15 mm). Conduit system E is a simple solution that can be quickly combined with Lid Profiles to form a conduit that can be screwed to profiles and panels. Caps can also be fitted as necessary.

### Modular Conduit System

The Modular Conduit System from item offers maximum flexibility. The conduit elements are interconnected simply by locking them together. As a result, conduit structures can be modified and reconfigured at any time. Even with

branched systems, cables and hoses can be installed or replaced at a later stage without the need for drilling, etc.



The modular conduit system is built on the modular dimensions of Line 8. Support Profiles with grooves make it easier to connect together profiles and conduits. The Modular Conduit System comprises profiles in a modular dimension of 40 mm that can be combined up to a size of 160x160.

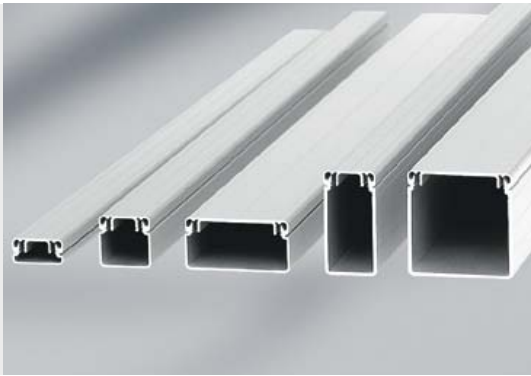


Conduits E comprise simple aluminium conduits used to route cables and hoses. Conduits SE are fitted with continuous screw channels for securing the Conduit Caps. These flat profiles do not incorporate profile grooves and are therefore screwed to existing constructions.

The universal Lid Profiles from item can be used as covers for Conduits E and the Modular Conduit System.

The Modular Conduit System comprises Wall, Support and Lid Profiles that can be used to build conduit structures with corners and branches without the need for complex machining work.

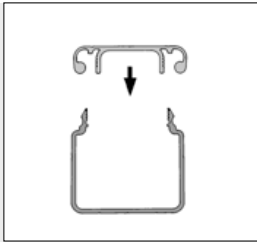
	Conduit system E  432	Modular Conduit System  437
Line 8 groove in Support Profile	-	+
Solid side panel	+	-
Width (mm)	30 - 160	40 - 160
Height (mm)	15 - 80	40 - 160
Easily segmentable	-	+
Cable through hole without drilling	-	+
Attachment of plug sockets, switches, etc.	-	+
Angled side panels possible	-	+
Incorporation of conduit inside corners	+ (lid only)	+



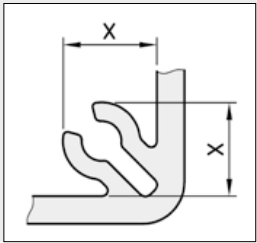
## Conduit Profiles E

The aluminium cable conduit that is simply great

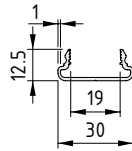
- Available in six heights and five widths
- For safely routing cables and hoses
- Matching Lid Profiles protect against dust and dirt



The SE versions of the installation conduits feature screw channels for fastening End Caps. This stops the lid being inadvertently opened. item offers matching Conduit Caps for the various profile variants and sizes.



Conduit Profile U	X
30x30 SE; 60x30 D30 SE; 60x30 D60 SE; 60x60 SE	6.8
40x40 SE; 80x40 D40 SE; 80x40 D80 SE; 80x80 SE	7.2



### Conduit Profile U 30x15 E

Al, anodized

A [cm<sup>2</sup>] m [kg/m]

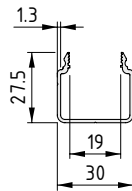
0.72 0.19

natural, cut-off max. 3000 mm

7.0.002.97

natural, 1 pce., length 3000 mm

0.0.451.21



### Conduit Profile U 30x30 E

Al, anodized

A [cm<sup>2</sup>] m [kg/m]

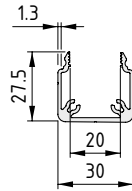
1.12 0.30

natural, cut-off max. 3000 mm

7.0.002.89

natural, 1 pce., length 3000 mm

0.0.451.44



### Conduit Profile U 30x30 SE

Al, anodized

A [cm<sup>2</sup>] m [kg/m]

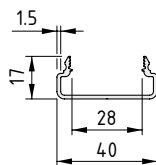
1.67 0.44

natural, cut-off max. 3000 mm

0.0.487.24

natural, 1 pce., length 3000 mm

0.0.487.25



### Conduit Profile U 40x20 E

Al, anodized

A [cm<sup>2</sup>] m [kg/m]

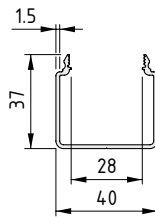
1.01 0.27

natural, cut-off max. 3000 mm

7.0.001.42

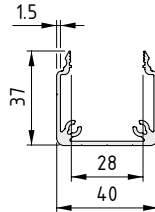
natural, 1 pce., length 3000 mm

0.0.452.19



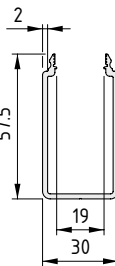
**Conduit Profile U 40x40 E**

Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
1.70	0.45
natural, cut-off max. 3000 mm	7.0.001.44
natural, 1 pce., length 3000 mm	0.0.452.20



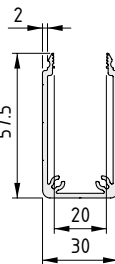
**Conduit Profile U 40x40 SE**

Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
2.23	0.61
natural, cut-off max. 3000 mm	0.0.487.27
natural, 1 pce., length 3000 mm	0.0.487.28



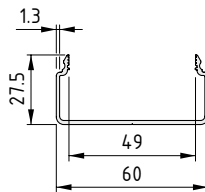
**Conduit Profile U 60x30 D30 E**

Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
2.78	0.75
natural, cut-off max. 3000 mm	7.0.002.93
natural, 1 pce., length 3000 mm	0.0.451.46



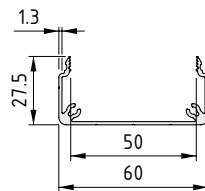
**Conduit Profile U 60x30 D30 SE**

Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
3.22	0.86
natural, cut-off max. 3000 mm	0.0.487.30
natural, 1 pce., length 3000 mm	0.0.487.31



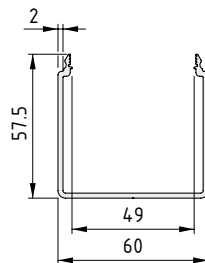
**Conduit Profile U 60x30 D60 E**

Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
1.51	0.41
natural, cut-off max. 3000 mm	7.0.002.95
natural, 1 pce., length 3000 mm	0.0.451.47



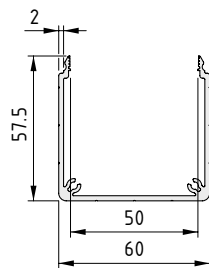
**Conduit Profile U 60x30 D60 SE**

Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
2.09	0.55
natural, cut-off max. 3000 mm	0.0.487.33
natural, 1 pce., length 3000 mm	0.0.487.34

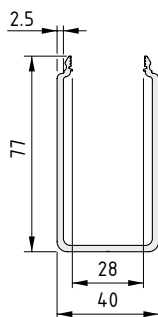


**Conduit Profile U 60x60 E**

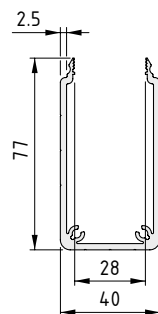
Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
3.38	0.91
natural, cut-off max. 3000 mm	7.0.002.91
natural, 1 pce., length 3000 mm	0.0.451.45



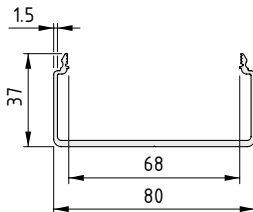
Conduit Profile U 60x60 SE	
Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
3.82	1.02
natural, cut-off max. 3000 mm	0.0.487.36
natural, 1 pce., length 3000 mm	0.0.487.37



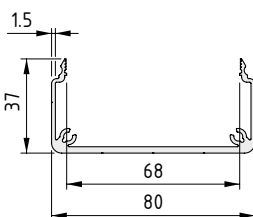
Conduit Profile U 80x40 D40 E	
Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
4.62	1.25
natural, cut-off max. 3000 mm	7.0.002.75
natural, 1 pce., length 3000 mm	7.0.002.79



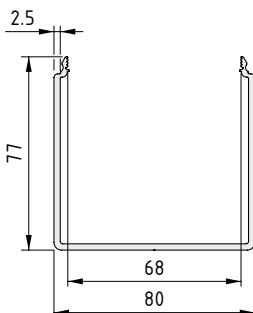
Conduit Profile U 80x40 D40 SE	
Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
5.11	1.37
natural, cut-off max. 3000 mm	0.0.487.39
natural, 1 pce., length 3000 mm	0.0.487.40



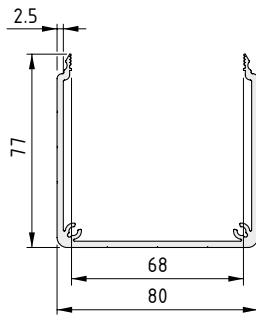
Conduit Profile U 80x40 D80 E	
Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
3.06	0.82
natural, cut-off max. 3000 mm	7.0.002.76
natural, 1 pce., length 3000 mm	7.0.002.80



Conduit Profile U 80x40 D80 SE	
Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
3.60	0.96
natural, cut-off max. 3000 mm	0.0.487.42
natural, 1 pce., length 3000 mm	0.0.487.43

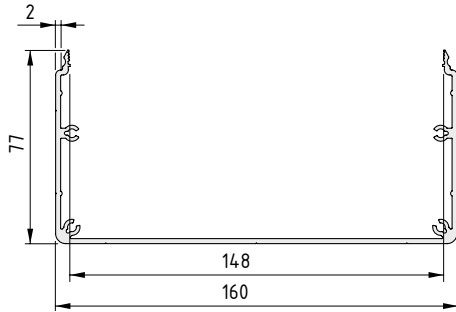


Conduit Profile U 80x80 E	
Al, anodized	
A [cm <sup>2</sup> ]	m [kg/m]
5.61	1.52
natural, cut-off max. 3000 mm	7.0.002.74
natural, 1 pce., length 3000 mm	7.0.002.78



**Conduit Profile U 80x80 SE**

Al, anodized		
A [cm <sup>2</sup> ]	m [kg/m]	
6.10	1.64	
natural, cut-off max. 3000 mm		0.0.487.45
natural, 1 pce., length 3000 mm		0.0.487.46



**Conduit Profile U 160x80 SE**

Al, anodized		
A [cm <sup>2</sup> ]	m [kg/m]	
5.98	1.95	
natural, 1 pce., length 3000 mm		0.0.630.72
natural, cut-off max. 3000 mm		0.0.630.71



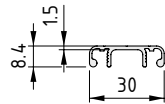
## Lid Profiles

- Flat lid for covering cable conduits
- Compatible with conduits E and the Modular Conduit System

Lid Profile	Self-Tapping Screw DIN 7981	Bore
D30 and D60	3.5x6.5	∅ 3.0 mm
D40 and D80	4.2x9.5	∅ 3.5 mm

Self-Tapping Screws can also be used in the marking guideline to secure the Lid Profile. An electrically conductive connection is established at the same time.

Self-Tapping Screws 445



### Lid Profile D30 E

Al, anodized

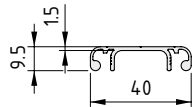
A [cm <sup>2</sup> ]	m [kg/m]
0.85	0.23

natural, cut-off max. 3000 mm

7.0.002.85

natural, 1 pce., length 3000 mm

0.0.451.42



### Lid Profile D40 E

Al, anodized

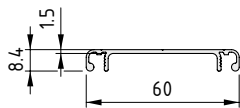
A [cm <sup>2</sup> ]	m [kg/m]
1.13	0.30

natural, cut-off max. 3000 mm

7.0.001.46

natural, 1 pce., length 3000 mm

0.0.452.09



### Lid Profile D60 E

Al, anodized

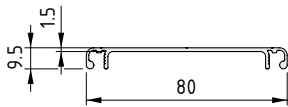
A [cm <sup>2</sup> ]	m [kg/m]
1.50	0.41

natural, cut-off max. 3000 mm

7.0.002.87

natural, 1 pce., length 3000 mm

0.0.451.43



### Lid Profile D80 E

Al, anodized

A [cm <sup>2</sup> ]	m [kg/m]
2.12	0.57

natural, cut-off max. 3000 mm

7.0.002.73

natural, 1 pce., length 3000 mm

7.0.002.77

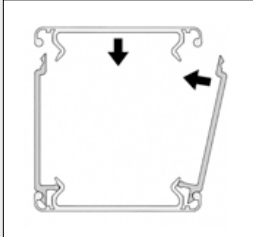




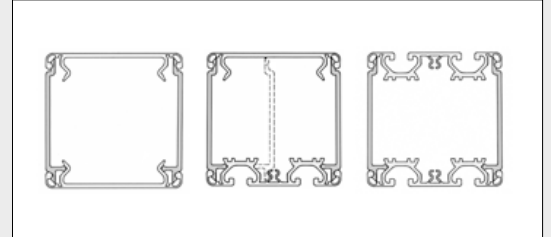
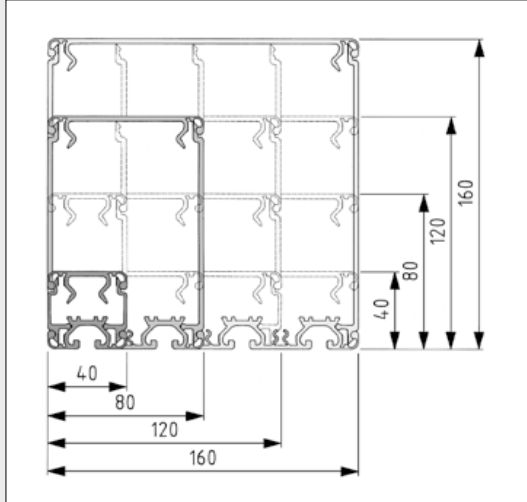
## Support Profiles

### The versatile conduit

- Suitable as lids and bases in the Modular Conduit System
- Available with or without Line 8 groove
- For versatile conduits that route cables and hoses
- For conduit sizes from 40x40 mm to 160x160 mm



Straightforward construction of the modular conduits by moving the Wall Profiles into the Support Profiles. The Support Profiles can also be used as a lid. Before installation, it is advisable to wipe the locking areas of the conduit elements with a cloth soaked in oil.



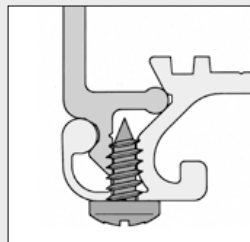
The fact that the Support Profiles and Wall Profiles have identical external dimensions means that different conduits can be constructed by choosing the position of the profiles accordingly. The conduit can be opened and closed from different sides.



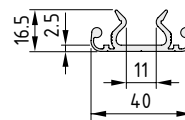
The cable conduit can be opened with a screwdriver.



Wall Profiles and Lid Profiles can be secured in position by means of Self-Tapping Screw St 4.2x9.5. The Support Profiles must be provided with a bore  $\varnothing$  3.5 mm in the marking groove for this purpose. The screw connection creates a conductive bond between the conduit elements.



By subdividing Wall Profiles and Support Profiles into segments and machining accordingly (for e.g. cable glands, plug sockets, pushbuttons etc.) it is possible to reduce the work involved in assembling, dismantling and repairing installations.



#### Support Profile 40

Al, anodized

A [cm<sup>2</sup>] m [kg/m]

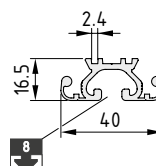
1.74 0.47

natural, cut-off max. 3000 mm

0.0.196.38

natural, 1 pce., length 3000 mm

0.0.453.50



#### Support Profile 40 with groove 8

Al, anodized

A [cm<sup>2</sup>] m [kg/m]

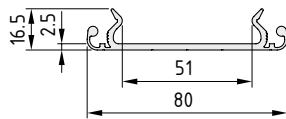
2.06 0.55

natural, cut-off max. 3000 mm

0.0.196.37

natural, 1 pce., length 3000 mm

0.0.453.51



**Support Profile 80**

Al, anodized

A [cm<sup>2</sup>]    m [kg/m]

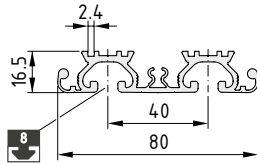
2.73    0.74

natural, cut-off max. 3000 mm

0.0.196.41

natural, 1 pce., length 3000 mm

0.0.453.52



**Support Profile 80 with grooves 8**



Al, anodized

A [cm<sup>2</sup>]    m [kg/m]

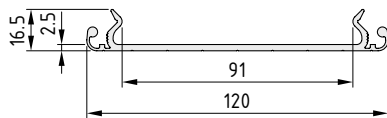
4.17    1.13

natural, cut-off max. 3000 mm

0.0.196.40

natural, 1 pce., length 3000 mm

0.0.453.53



**Support Profile 120**



Al, anodized

A [cm<sup>2</sup>]    m [kg/m]

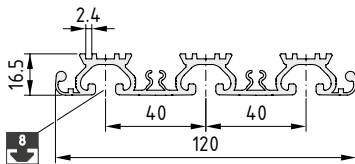
3.73    1.01

natural, cut-off max. 3000 mm

0.0.418.47

natural, 1 pce., length 3000 mm

0.0.453.55



**Support Profile 120 with grooves 8**



Al, anodized

A [cm<sup>2</sup>]    m [kg/m]

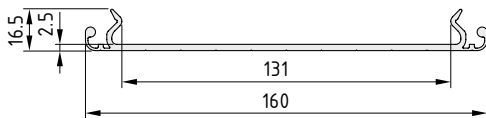
6.21    1.68

natural, cut-off max. 3000 mm

0.0.418.48

natural, 1 pce., length 3000 mm

0.0.453.56



**Support Profile 160**



Al, anodized

A [cm<sup>2</sup>]    m [kg/m]

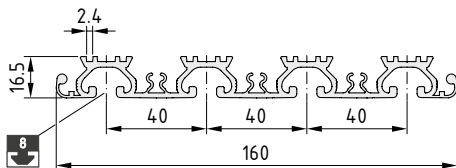
4.73    1.27

natural, cut-off max. 3000 mm

0.0.265.84

natural, 1 pce., length 3000 mm

0.0.453.57



**Support Profile 160 with grooves 8**



Al, anodized

A [cm<sup>2</sup>]    m [kg/m]

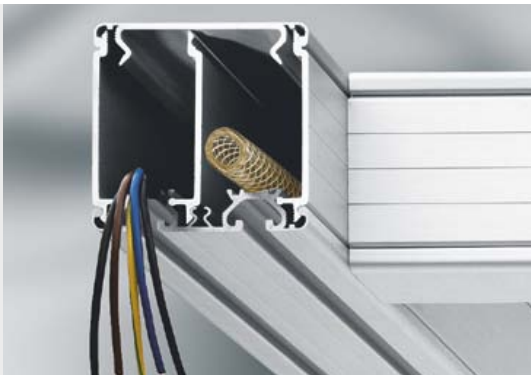
8.27    2.23

natural, cut-off max. 3000 mm

0.0.265.85

natural, 1 pce., length 3000 mm

0.0.453.59

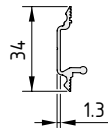


## Wall Profiles

- Suitable as side panels in the Modular Conduit System
- Available in four heights
- Also suitable as partitions in Support Profiles with grooves



160x160 mm conduit using Support Profile 160 with grooves as a base.

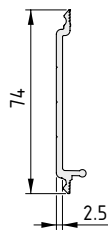


### Wall Profile 40



Al, anodized

A [cm <sup>2</sup> ]	m [kg/m]
0.76	0.20
natural, cut-off max. 3000 mm	
natural, 1 pce., length 3000 mm	

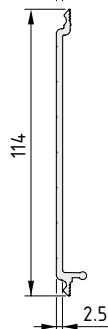


### Wall Profile 80



Al, anodized

A [cm <sup>2</sup> ]	m [kg/m]
2.03	0.55
natural, cut-off max. 3000 mm	
natural, 1 pce., length 3000 mm	

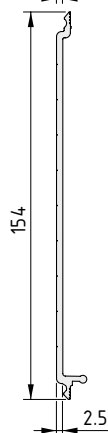


### Wall Profile 120



Al, anodized

A [cm <sup>2</sup> ]	m [kg/m]
3.04	0.82
natural, cut-off max. 3000 mm	
natural, 1 pce., length 3000 mm	

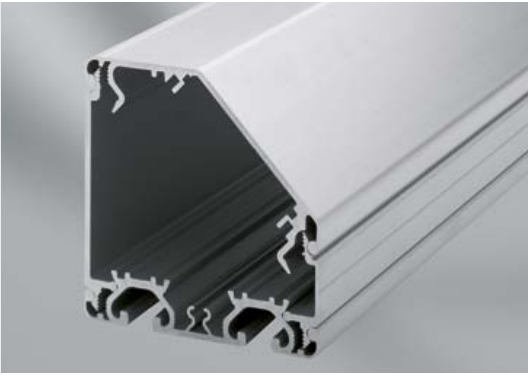


### Wall Profile 160



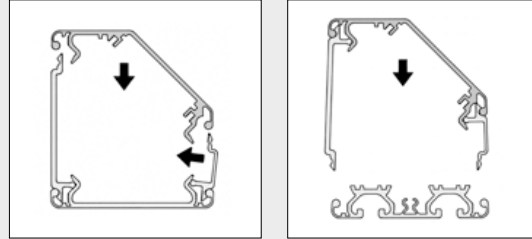
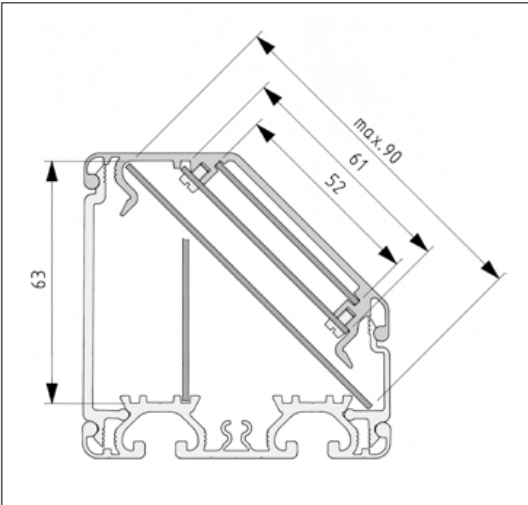
Al, anodized

A [cm <sup>2</sup> ]	m [kg/m]
4.04	1.09
natural, cut-off max. 3000 mm	
natural, 1 pce., length 3000 mm	

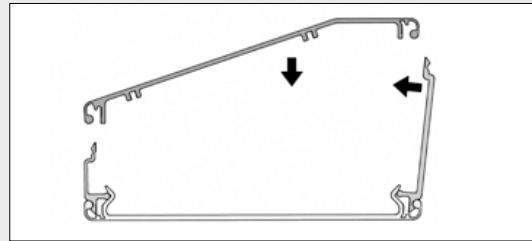
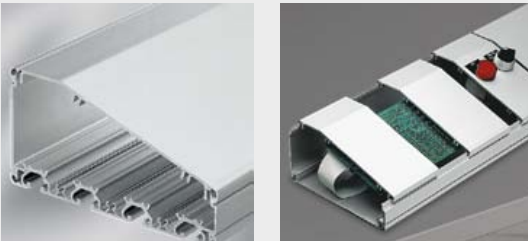


## Support Profiles with Angled Geometry

- Attractive cover
- Suitable for incorporating operating elements
- Conduit can be used as a mounting for printed circuit boards
- Two different angles available



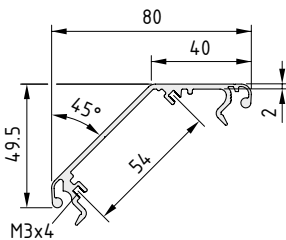
Support Profile 80-45° can be used as floor or lid element, while Support Profile 160-20° can only be used as a lid profile. The Wall Profiles must exhibit a height difference of 40 mm.



Support Profiles 80-45° and 160-20° are particularly suitable, as the lids of a modular conduit, for constructing operating consoles of any length, manual control boxes or similar applications.

The housings can be used to hold and secure printed circuit boards of various sizes up to width 100 mm.

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### Support Profile 80-45°

Al, anodized

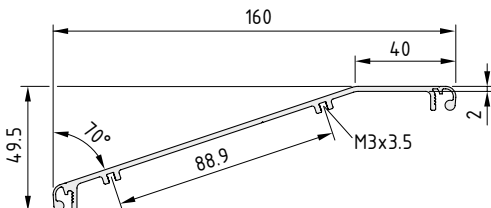
A [cm <sup>2</sup> ]	m [kg/m]
3.53	0.90

natural, cut-off max. 3000 mm

0.0.411.54

natural, 1 pce., length 3000 mm

0.0.453.54



### Support Profile 160-20°

Al, anodized

A [cm <sup>2</sup> ]	m [kg/m]
4.29	1.16

natural, cut-off max. 3000 mm

0.0.404.81

natural, 1 pce., length 3000 mm

0.0.453.60



## Conduit Inside Corners

- Kink prevention for corners in cable conduits
- Covering for sharp cut edges

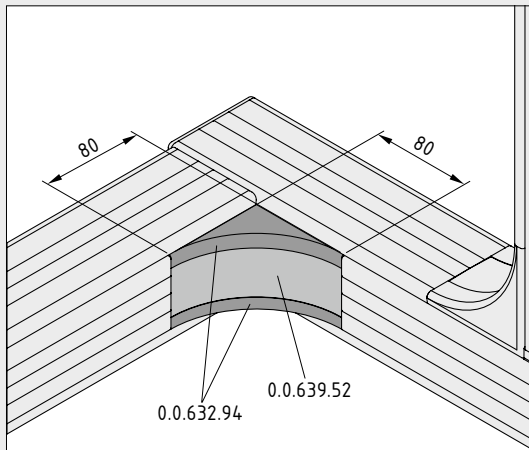
Safe cornering! It's just as important to cable conduits as it is on the roads.

The Conduit Inside Corners for modular cable conduits improve the reliability of cable laying in three ways:

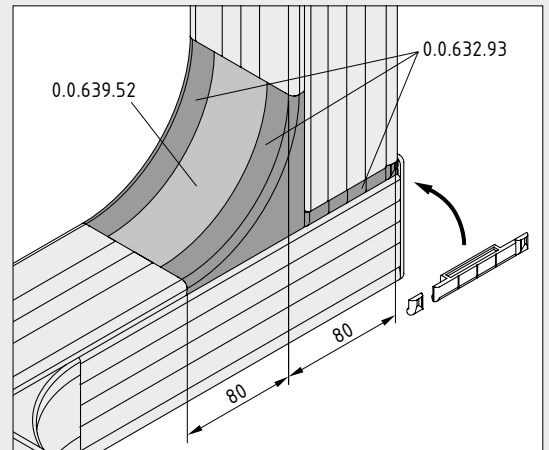
- By preventing kinks in cables and hoses
- By covering cut edges inside the conduit to protect cables
- By creating a smooth transition between Wall Profiles and Support Profiles to protect hands

The Conduit Inside Corner sets for lids and walls include all the components needed to create a corner in a conduit with a wall or lid measuring 40 mm.

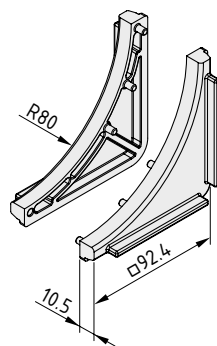
Filler Pieces measuring 40 mm wide are used to extend the height or width of inside corners. As a result, modular conduits up to 160 mm can be fitted with Conduit Inside Corners.



Conduit Inside Corner, Wall on modular conduits, wall height 80 mm:  
The wall profiles are each shortened by 80 mm.



Using the Conduit Inside Corner, Lid:  
The width of 80 mm is achieved using a Filler Piece.  
The cut edge coverings need to be shortened accordingly at one end.

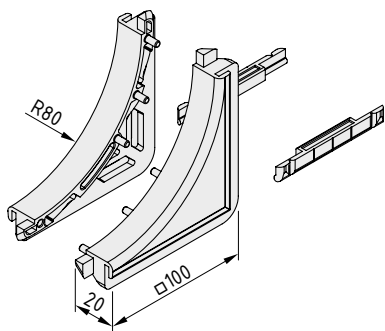


### Conduit Inside Corner, Wall

2 inside corners, wall, PA-GF  
m = 66.0 g

black, 1 set

0.0.632.94

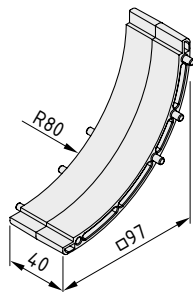


**Conduit Inside Corner, Lid**

2 inside corners, lid, PA-GF  
 2 cut edge coverings, PA-GF  
 m = 105.0 g

black, 1 set

0.0.632.93



**Conduit Inside Corner Filler Piece**

PA-GF  
 m = 50.0 g

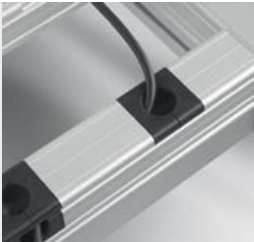
black, 1 pce.

0.0.639.52

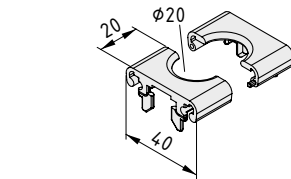


## Cable Entry Protectors, Lid and Wall

- Safe covering for cut edges
- For straightforward cable routing in and out of conduits
- Suitable as an opening in Lid Profiles and Wall Profiles



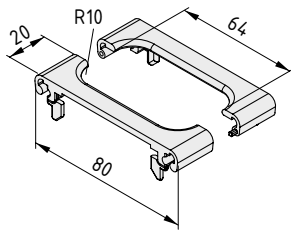
Cable Entry Protectors, Lid and Cable Entry Protectors Wall 120-80 and 160-80 are divided into two parts, which greatly facilitates installation for cables, without having to remove plugs or terminals.



### Cable Entry Protector Lid 40

PA-GF  
2 halves  
m = 7.0 g

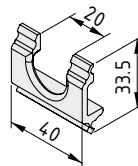
black, 1 set 0.0.479.76



### Cable Entry Protector Lid 80

PA-GF  
2 halves  
m = 9.0 g

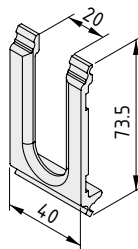
black, 1 set 0.0.479.77



### Cable Entry Protector Wall 40

PA-GF  
m = 5.0 g

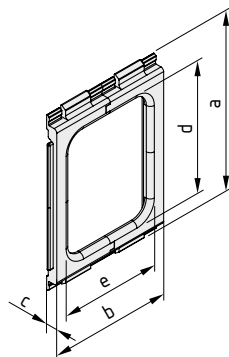
black, 1 pce. 0.0.479.74



### Cable Entry Protector Wall 80

PA-GF  
m = 9.0 g

black, 1 pce. 0.0.479.75



### Cable Entry Protector Wall 120-80

PA-GF

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	m [g]
116	80	7.6	80	60	32.0

black, 1 set 0.0.642.93

### Cable Entry Protector Wall 160-80

PA-GF

a [mm]	b [mm]	c [mm]	d [mm]	e [mm]	m [g]
156	80	7.6	120	60	38.0

black, 1 set 0.0.642.94



## Conduit Caps

- Side covering for cable conduits
- Models to suit all sizes and variants



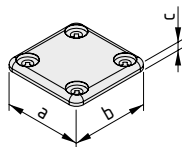
Recommended screws for fastening the Conduit Caps:

Modular 30 mm dimension: Self-Tapping Screw DIN 7981 3.5x6.5 (Order No. 8.0.000.54)

Modular 40 mm dimension: Self-Tapping Screw DIN 7981 4.2x9.5 (Order No. 8.0.000.13)

Materials used in all the following products:

PA-GF



### Conduit Cap 30x15

a = 30 mm    b = 15 mm    c = 3 mm    m = 1.0 g

black, 1 pce. 0.0.486.81

### Conduit Cap 30x30

a = 30 mm    b = 30 mm    c = 3 mm    m = 2.0 g

black, 1 pce. 0.0.486.82

### Conduit Cap 40x20

a = 40 mm    b = 20 mm    c = 4 mm    m = 3.0 g

black, 1 pce. 0.0.486.85

### Conduit Cap 40x40

a = 40 mm    b = 40 mm    c = 4 mm    m = 8.0 g

black, 1 pce. 0.0.196.88

### Conduit Cap 60x30

a = 60 mm    b = 30 mm    c = 3 mm    m = 4.0 g

black, 1 pce. 0.0.486.83

### Conduit Cap 60x60

a = 60 mm    b = 60 mm    c = 3 mm    m = 8.0 g

black, 1 pce. 0.0.486.84

### Conduit Cap 80x40

a = 80 mm    b = 40 mm    c = 4 mm    m = 14.0 g

black, 1 pce. 0.0.196.89

### Conduit Cap 80x80

a = 80 mm    b = 80 mm    c = 4 mm    m = 30.0 g

black, 1 pce. 0.0.196.90



**Conduit Cap 120x40**

a = 120 mm    b = 40 mm    c = 4 mm    m = 24.0 g

black, 1 pce. 0.0.411.33

**Conduit Cap 120x80**

a = 120 mm    b = 80 mm    c = 4 mm    m = 45.0 g

black, 1 pce. 0.0.411.34

**Conduit Cap 120x120**

a = 120 mm    b = 120 mm    c = 4 mm    m = 68.0 g

black, 1 pce. 0.0.418.33

**Conduit Cap 160x40**

a = 160 mm    b = 40 mm    c = 4 mm    m = 30.0 g

black, 1 pce. 0.0.364.81

**Conduit Cap 160x80**

a = 160 mm    b = 80 mm    c = 4 mm    m = 58.0 g

black, 1 pce. 0.0.265.97

**Conduit Cap 160x120**

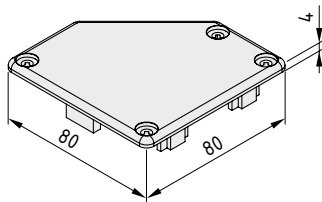
a = 160 mm    b = 120 mm    c = 4 mm    m = 89.0 g

black, 1 pce. 0.0.411.35

**Conduit Cap 160x160**

a = 160 mm    b = 160 mm    c = 4 mm    m = 115.0 g

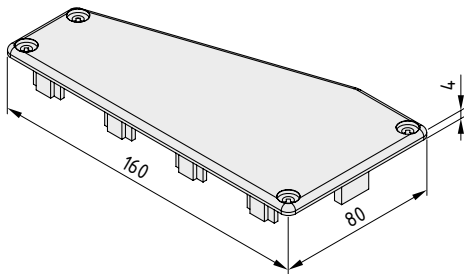
black, 1 pce. 0.0.411.36



**Conduit Cap Set 80x80-45°**

PA-GF  
Conduit Cap 80x80-45° left  
Conduit Cap 80x80-45° right  
m = 50.0 g

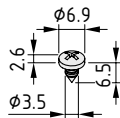
black, 1 set 0.0.406.68



**Conduit Cap Set 160x80-20°**

PA-GF  
Conduit Cap 160x80-20° left  
Conduit Cap 160x80-20° right  
m = 96.0 g

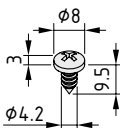
black, 1 set 0.0.406.67



**Self-Tapping Screw DIN 7981 St 3.5x6.5**

St  
m = 0.7 g  
bright zinc-plated, 1 pce.

8.0.000.54



**Self-Tapping Screw DIN 7981 St 4.2x9.5**

St  
m = 1.3 g  
bright zinc-plated, 1 pce.

8.0.000.13



## Conduit Caps with Cable Entry Protector

- Edge protection that is screwed into place
- Caps stay in place even when cables are being pulled through

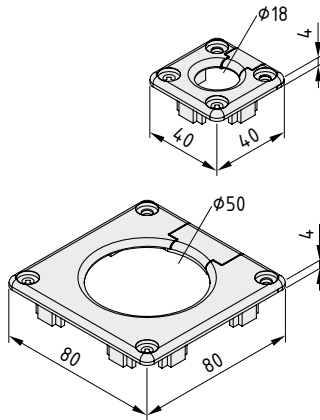
No more fiddly edge protection that flies off every time cabling is changed.

The systematic closure for all cable conduits with a screw channel for fastening Caps (Conduits SE 40x40 and SE 80x80 and the Modular Conduit System).

Two-part Conduit Caps with Cable Entry Protector remain attached to the conduit, but still allow additional cables or

hoses to be added or removed. Once the Lid Profile has been replaced, the removable part of the cap safely covers the edge of the lid and protects the cables within the conduit.

Recommended screws: Self-Tapping Screw DIN 7981 St 4.2x9.5 (8.0.000.13).



### Conduit Cap 40x40 with Cable Entry Protector

PA-GF  
m = 8.0 g

black, 1 set

0.0.638.31

### Conduit Cap 80x80 with Cable Entry Protector

PA-GF  
m = 23.0 g

black, 1 set

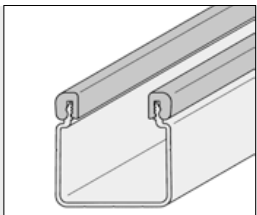
0.0.638.39



## Conduit Edge Profile

- Flexible protective strips for cable conduits
- Prevent damage to cables caused by the conduit wall
- Suitable for use on Wall Profiles and Edge Profiles E

14



### Conduit Edge Profile

TPE  
m = 60 g/m

black, 1 roll length 20 m

0.0.411.58

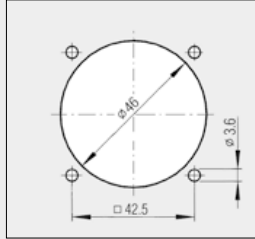


## Flush-Mounted Sockets

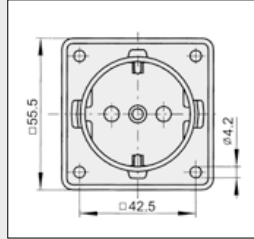
- For installation in the Wall and Support Profiles of cable conduits
- Suitable for use in any panel elements
- Available with or without swing lid



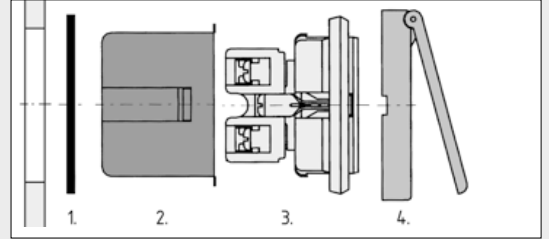
The Flush-Mounted Socket with Lid is dust-tight and protected against splashes (IP44)



Mounting operations

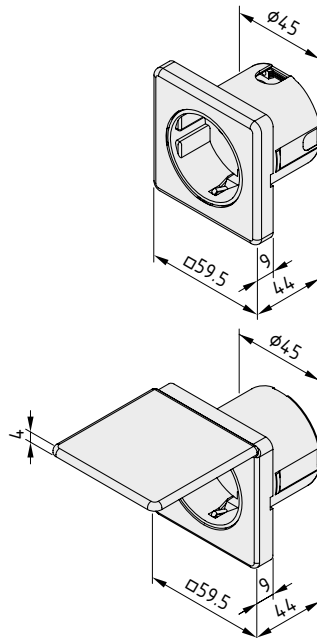


The housing of the Flush-Mounted Socket is secured in place using four Self-Tapping Screws DIN 7981 St-4.2x9.5 (0.0.196.13).



Sequence for installing Flush-Mounted Socket with lid:

1. Seal
2. Insulation box
3. Socket
4. Cover frame with swing lid



### Flush-Mounted Socket

Socket, PA, black  
Cover frame, PA, black  
Insulation box, PA, grey  
2-pin + earth, 16 A, 250 V  
m = 50.0 g

1 pce.

0.0.465.82

### Flush-Mounted Socket with Lid

Socket, PA, black  
Cover frame with swing lid and seal, PA, black  
Protection: IP 44  
Insulation box, PA, grey  
m = 57.0 g

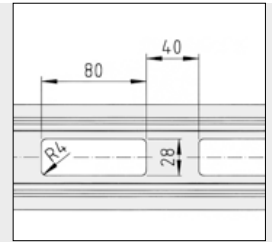
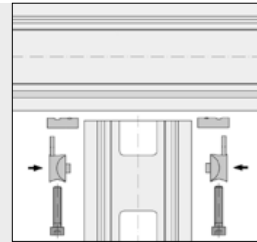
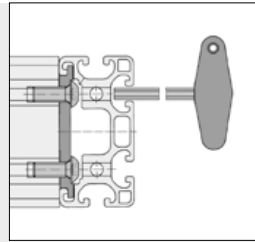
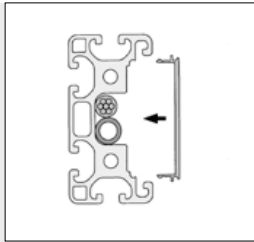
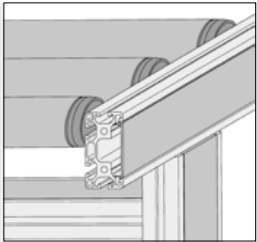
1 pce.

0.0.465.84



## Stand Profiles

- Wide profiles with integrated cable conduit
- Easy-to-use system for building frames that incorporate cabling
- Cabling is securely housed within the profile

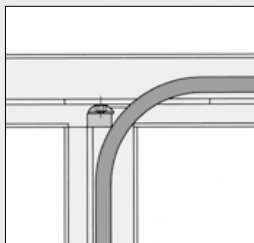
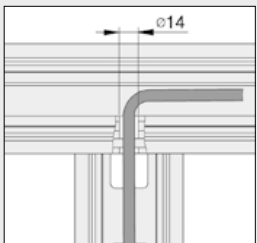


Standard fastening is effected on the end face in conjunction with Stand Profile Connection Element 8 and Button-Head Screws ISO 7380-M8x20 (M = 25 Nm).

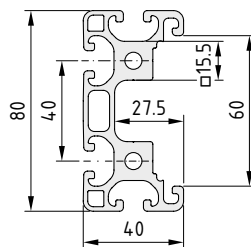
Fastening on the groove side is by means of a Pneumatic Universal-Fastening Set 8 or Automatic-Fastening Set 8.

The openings are located at modular intervals and are used for running through cables and hoses. The Profiles are cut regardless of the positioning of the openings, therefore the minimum profile length is 160 mm.

Pneumatic Universal-Fastening Set 8 420  
Automatic-Fastening Set 8 77



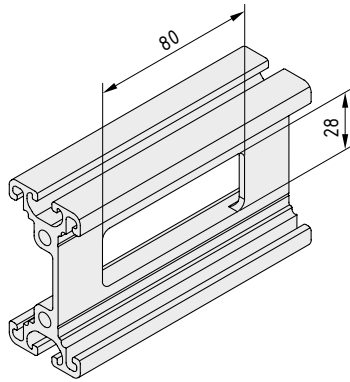
By providing Stand Profile 8 80x40 with a  $\varnothing$  14 mm bore, the profile can be used for routing cables and hoses.



### Stand Profile 8 80x40 K60

Al, anodized

A [cm <sup>2</sup> ]	m [kg/m]	I <sub>x</sub> [cm <sup>4</sup> ]	I <sub>y</sub> [cm <sup>4</sup> ]	I <sub>z</sub> [cm <sup>4</sup> ]	W <sub>x</sub> [cm <sup>3</sup> ]	W <sub>y</sub> [cm <sup>3</sup> ]
10.20	2.75	69.02	11.74	2.72	17.26	5.13
natural, cut-off max. 6000 mm						0.0.427.79
natural, 1 pce., length 6000 mm						0.0.453.49

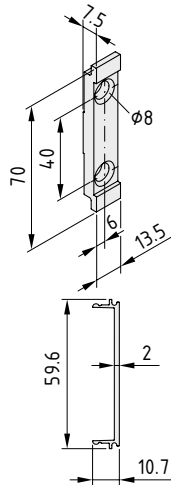


**Stand Profile 8 80x40 2xK60**



Al, anodized

A [cm <sup>2</sup> ]	m [kg/m]	I <sub>x</sub> [cm <sup>4</sup> ]	I <sub>y</sub> [cm <sup>4</sup> ]	I <sub>t</sub> [cm <sup>4</sup> ]	W <sub>x</sub> [cm <sup>3</sup> ]	W <sub>y</sub> [cm <sup>3</sup> ]
7.84	2.05	64.19	7.75	0.84	16.05	3.67
natural, cut-off max. 6000 mm						3.0.005.00
natural, 1 pce., length 6000 mm						0.0.453.48



**Stand Profile Connection Element 8**



Al, anodized

m = 11.0 g

natural, 1 pce.	3.0.005.03
-----------------	------------

**Cover Profile 60**



Al, anodized

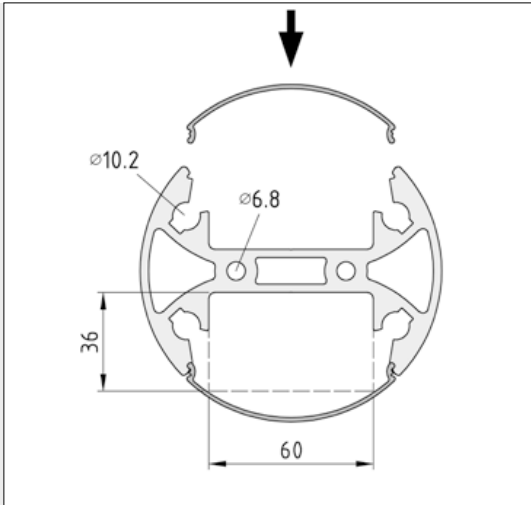
m = 0.36 kg/m

natural, cut-off max. 3000 mm	3.0.005.01
natural, 1 pce., length 3000 mm	0.0.452.02



## Column D110

- Central table leg with integrated cable routing
- Elegant support for all types of constructions

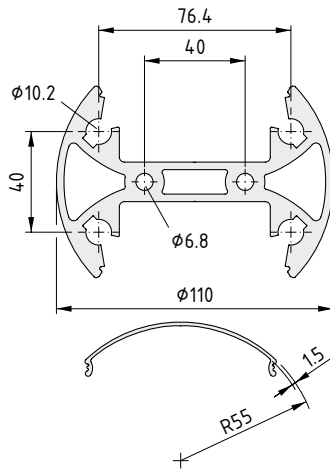


The end face of Column Profile D110 can be screwed to any panel using Flange 8 D130.

Flange 8 D130  192

Located below the Lid Profiles are integrated conduits for equipment cables. Cables can be run in and out of the column at any point through an opening in the Lid Profiles.

Thread M8 can be tapped in core bores  $\varnothing 6.8$  mm. Screw channels  $\varnothing 10.2$  mm are suitable for thread M12 or for use of Automatic Fasteners 8.



### Column Profile D110

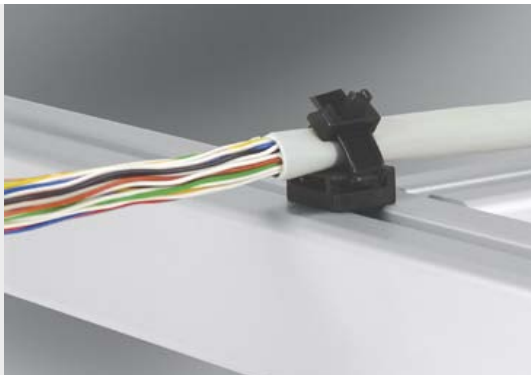
Al, anodized

A [cm <sup>2</sup> ]	m [kg/m]	I <sub>x</sub> [cm <sup>4</sup> ]	I <sub>y</sub> [cm <sup>4</sup> ]	W <sub>x</sub> [cm <sup>3</sup> ]	W <sub>y</sub> [cm <sup>3</sup> ]	
20.64	5.57	63.06	283.93	16.55	51.16	
natural, cut-off max. 6000 mm						0.0.475.11
natural, 1 pce., length 6000 mm						0.0.475.10

### Column Lid Profile D110

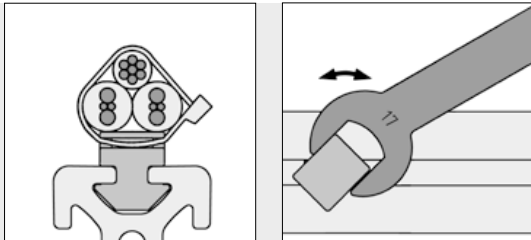
Al, anodized

A [cm <sup>2</sup> ]	m [kg/m]	
1.39	0.37	
natural, cut-off max. 3000 mm		0.0.475.09
natural, 1 pce., length 3000 mm		0.0.475.07

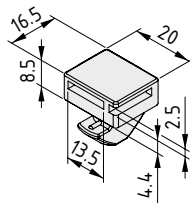


## Universal Holder 8

- Simple cable fastener for constructions with Line 8 grooves
- No additional screws required
- Anchor point for cable ties



Universal Holder 8 is inserted directly into the profile groove without additional fastening elements and is locked in place by means of a 90° turn. A wrench A/F 17 is recommended for this operation.



### Universal Holder 8



PA-GF  
m = 4.0 g  
black, 1 pce.

0.0.494.52

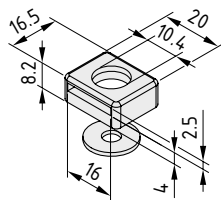


## Universal Holder

- Anchor point for cable ties
- Mounting with Countersunk Screw
- Suitable for all profile lines and panel elements



The Universal Holder can be assembled at any angle. Fastening is performed in the profile groove of the panel element using a Countersunk Screw DIN 7991-M5 and corresponding T-Slot Nut or in conjunction with a hexagon nut DIN 936-M5.



### Universal Holder

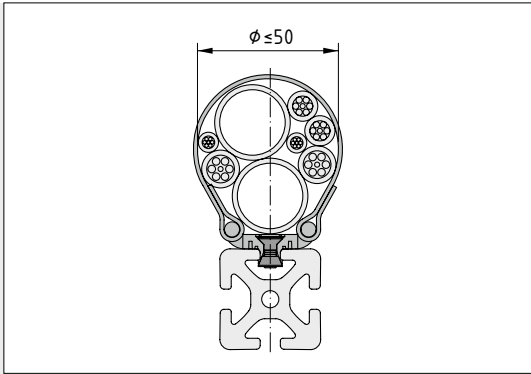
PA-GF, black  
1 washer DIN 9021-5.3, St, bright zinc-plated  
m = 3.0 g  
1 set

0.0.418.24

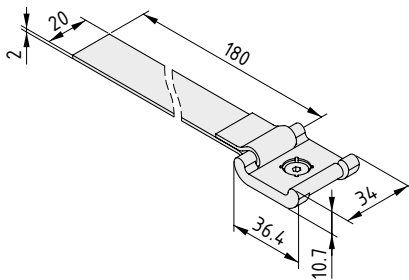


## Universal Holder with Securing Strap 8 180

- Secure cables and hoses with a 180 mm-long hook-and-loop strap
- Safe for use with cables and easily released
- Fastened directly to a Line 8 groove via a central screw



Because the opened hook-and-loop strap can be slipped out of the Universal Holder at one side, cables do not need to be fed through a closed loop.



### Universal Holder with Securing Strap 8 180



Housing, PA  
Hook-and-loop strap  
Countersunk Screw DIN 7991-M5x12, St  
m = 12.5 g

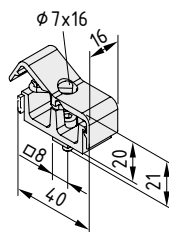
black, 1 set

0.0.627.90



## Holder for Cables and Hoses

- Two fittings for fixing in place cables and hoses up to a diameter of 12 mm
- O-rings ensure a secure and gentle hold



### Holder for Cables and Hoses 8



PA, black  
O-ring  
1 Hexagon Socket Head Cap Screw DIN 912-M4x10, St, bright zinc-plated  
m = 10.0 g

1 set

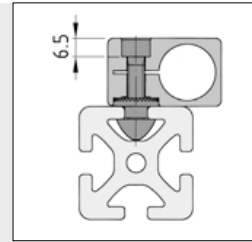
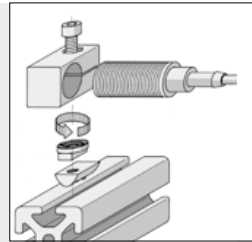
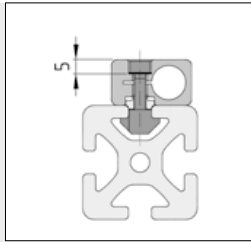
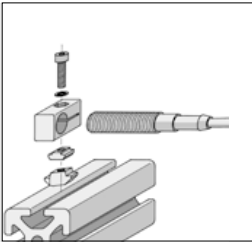
0.0.196.65





## Limit-Switch Holders

- For fastening limit switches to profiles
- Optimum adjustment options for position and angle
- Rigid anti-torsion feature

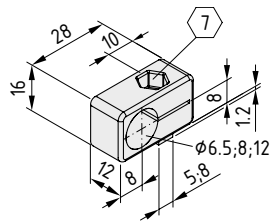


Limit-Switch Holders D6.5, D8 and D12 can be attached with anti-torsion blocks either parallel or at right-angles to the Profile 5 or Profile 8 groove.

Fastening Limit-Switch Holders D6.5, D8 and D12 with Hexagon Socket Head Cap Screw DIN 912-M4, spring washer and T-Slot Nut of the corresponding Line.

When the anti-torsion block is used, Limit-Switch Holders D18 and D20 can be attached in 10° increments relative to the Profile 8 groove. Without anti-torsion blocks, attachment is possible at any angle.

For fastening Limit-Switch Holders D18 and D20 with Hexagon Socket Head Cap Screw DIN 912-M6 and T-Slot Nut of the corresponding Line. Screw M6x28 comes in a special length for fastening to Line 8 profiles.



### Limit-Switch Holder D6.5

Housing and anti-torsion block, PA-GF, black  
Spring washer, St, black  
m = 8.0 g

1 set 0.0.406.40

### Limit-Switch Holder D8

Housing and anti-torsion block, PA-GF, black  
Spring washer, St, black  
m = 7.0 g

1 set 0.0.406.41

### Limit-Switch Holder D12

Housing and anti-torsion block, PA-GF, black  
Spring washer, St, black  
m = 6.0 g

1 set 0.0.406.42

### Limit-Switch Holder D18

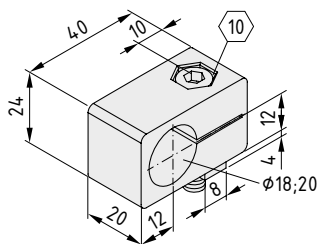
Housing and anti-torsion block, PA-GF, black  
Cap Screw DIN 912-M6x28, St, bright zinc-plated  
m = 23.0 g

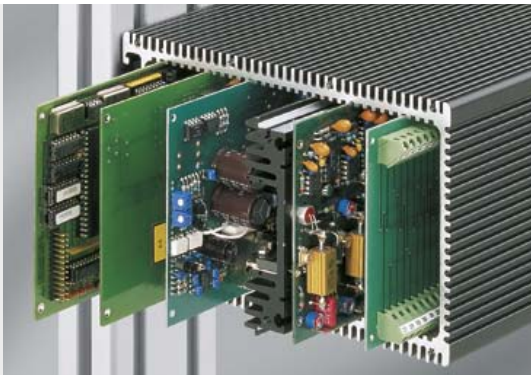
1 set 0.0.411.30

### Limit-Switch Holder D20

Housing and anti-torsion block, PA-GF, black  
Cap Screw DIN 912-M6x28, St, bright zinc-plated  
m = 22.0 g

1 set 0.0.411.31





## Electronic-Box Profiles

- For electronic boxes and other sealed containers
- With integrated cooling ribs
- Profile grooves for easy fastening

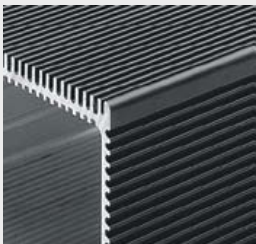


Sealed Electronic Boxes (IP 65, EN 60529) can be constructed, in any length, using Electronic-Box Profiles and the corresponding lids:

- Stable, anodized aluminium profiles with cooling ribs for heat dissipation, special grooves (in 5.08 mm grid) to accommodate printed circuit boards in European Standard format (100x160

mm) and Profile 5 and 8 grooves for integration into the MB Building Kit System

- Electronic-Box Lid, plain finish or with knockouts for cable glands, together with bore grid for installing a backplane; sealing provided by matching, peripheral seals



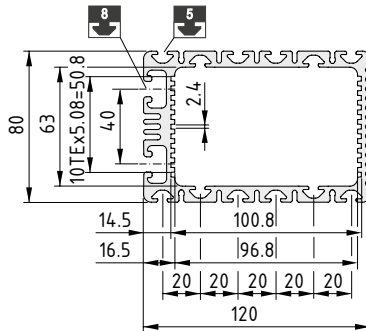
Cooling ribs



Grooves for securing boxes



Seal in box lid

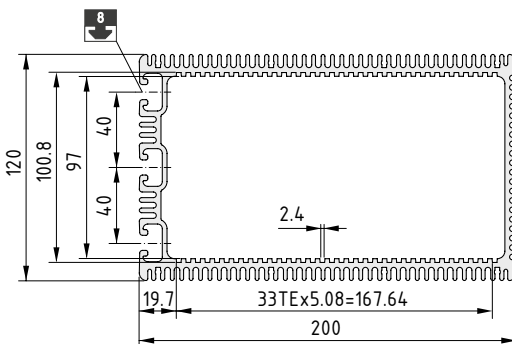


### Electronic-Box Profile 8 120x80

Al, anodized

Protection: IP 65, EN 60529 in connection with Electronic-Box Lid 8 120x80

A [cm <sup>2</sup> ]	m [kg/m]
20.50	5.55
black, cut-off max. 3000 mm	0.0.259.58
black, 1 pce., length 3000 mm	0.0.452.11



### Electronic-Box Profile 8 200x120

Al, anodized

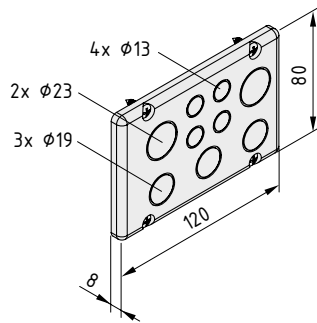
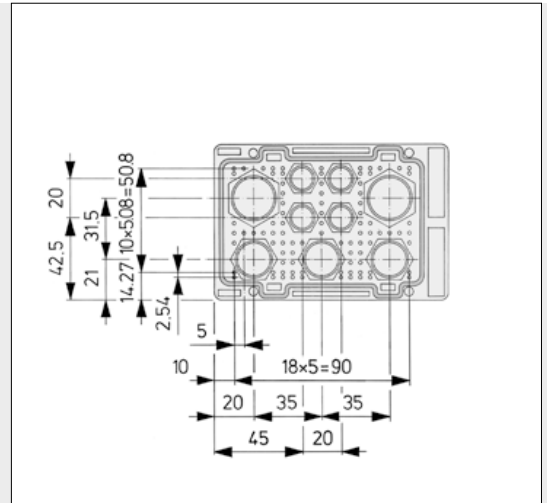
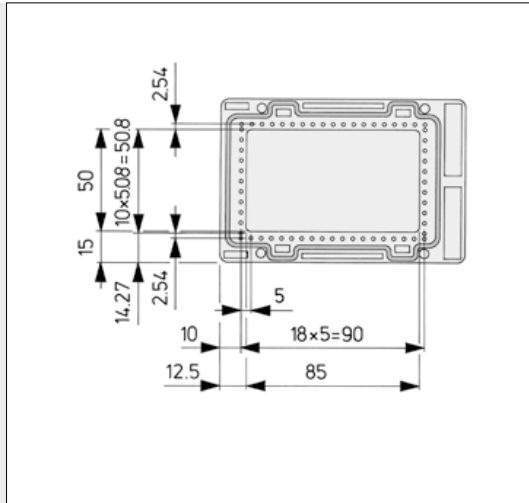
Protection: IP 65, EN 60529 in connection with Electronic-Box Lid 8 200x120

A [cm <sup>2</sup> ]	m [kg/m]
36.51	9.85
black, cut-off max. 3000 mm	0.0.259.36
black, 1 pce., length 3000 mm	0.0.452.12



## Electronic-Box Lids

- The lid for Electronic-Box Profiles
- All-round seal
- Bore grid on inside for creating cable through holes

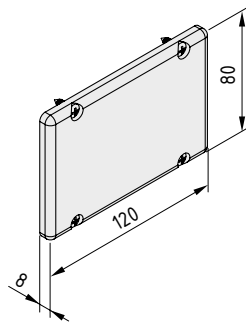


### Electronic-Box Lid 8 120x80

PA-GF, black  
 Seal  
 Protection: IP 65, EN 60529 in connection with Electronic-Box Profile 8 120x80  
 4 Self-Tapping Screws DIN 7981-4.2x13, St, bright zinc-plated  
 m = 64.0 g

1 pce.

0.0.259.60

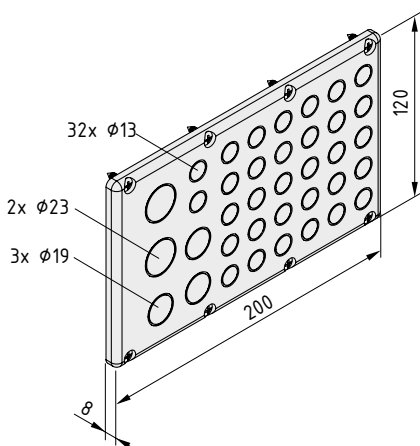
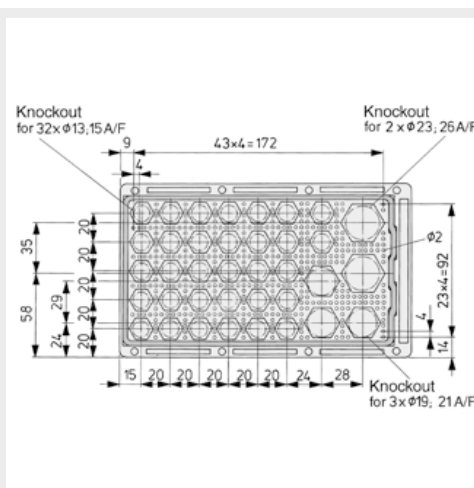
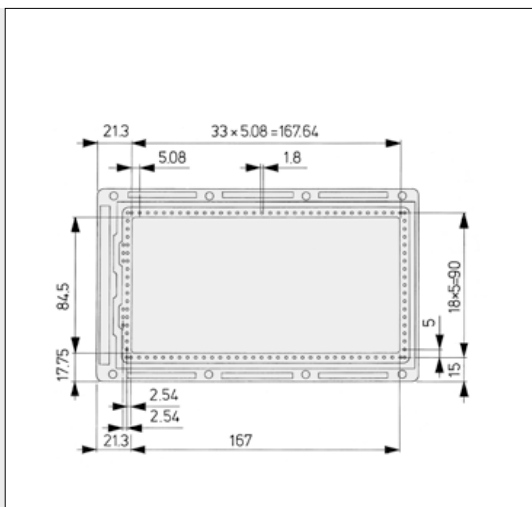


### Electronic-Box Lid 8 120x80, plain

PA-GF, black  
 Seal  
 Protection: IP 65, EN 60529 in connection with Electronic-Box Profile 8 120x80  
 4 Self-Tapping Screws DIN 7981-4.2x13, St, bright zinc-plated  
 m = 59.0 g

1 pce.

0.0.259.61

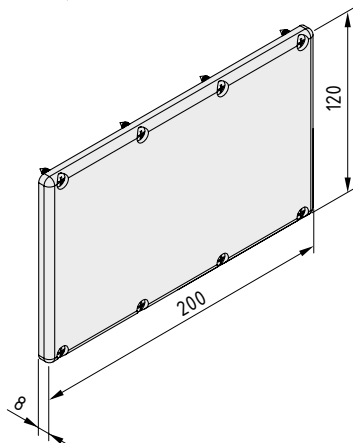


### Electronic-Box Lid 8 200x120

PA-GF, black  
Seal  
Protection: IP 65, EN 60529 in connection with Electronic-Box Profile 8 200x120  
8 Self-Tapping Screws DIN 7981-4.2x13, St, bright zinc-plated  
m = 170.0 g

1 pce.

0.0.259.37



### Electronic-Box Lid 8 200x120, plain

PA-GF, black  
Seal  
Protection: IP 65, EN 60529 in connection with Electronic-Box Profile 8 200x120  
8 Self-Tapping Screws DIN 7981-4.2x13, St, bright zinc-plated  
m = 140.0 g

1 pce.

0.0.259.44



## Earthing Terminals

- For connecting protective conductors to profile constructions
- For protecting systems and personnel
- Permanent screw attachment ensures sound contact



Terminals for earthing profile constructions and for interconnecting the profiles when the latter are incorporated into a protective circuit. Contact is made by partially destroying the anodized layer in the T-slot and on the groove flanks. The Earthing Terminal is installed by twisting the grub screw into the T-slot ( $M_1 = 4 \text{ Nm}$ ) and screwing in the hexagon nut ( $M_2 = 4 \text{ Nm}$ ) with the earthing line in place. The cable lug must lie between the washer and the special washer.

M5x16



### Earthing Terminal 5

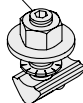


T-Slot Nut 5 St M5, bright zinc-plated  
 Grub screw DIN 916-M5x16, St, bright zinc-pl.  
 Hexagon Nut DIN 934-M5, brass  
 Washer DIN 9021-5.3, brass  
 Washer DIN 6798-A 5.3, St, bright zinc-plated  
 $M = 4 \text{ Nm}$        $m = 6.0 \text{ g}$

1 set

0.3.001.80

M6x25



### Earthing Terminal 6

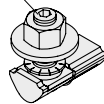


T-Slot Nut 6 St M6, bright zinc-plated  
 Grub screw DIN 916-M6x25, St, bright zinc-pl.  
 Hexagon Nut DIN 934-M6, brass  
 Washer DIN 9021-6.4, brass  
 Washer DIN 6798-A 6.4, St, bright zinc-plated  
 $M = 4 \text{ Nm}$        $m = 13.0 \text{ g}$

1 set

0.3.004.62

M6x25



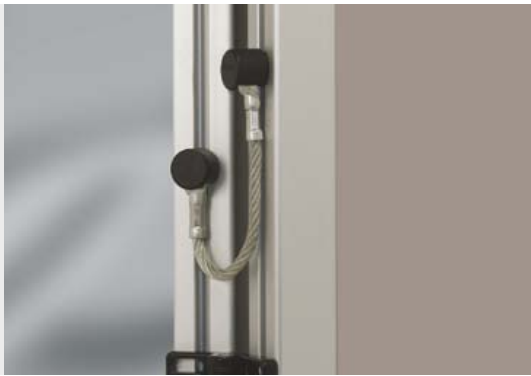
### Earthing Terminal 8



T-Slot Nut 8 St/PA M6  
 Grub screw DIN 916-M6x25, St, bright zinc-pl.  
 Hexagon Nut DIN 934-M6, brass  
 Washer DIN 9021-6.4, brass  
 Washer DIN 6798-A 6.4, St, bright zinc-plated  
 $M = 4 \text{ Nm}$        $m = 12.0 \text{ g}$

1 set

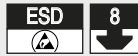
0.3.001.81



## Earthing Connection

The movable connector for protective conductors

- Highly flexible wire for doors and lids

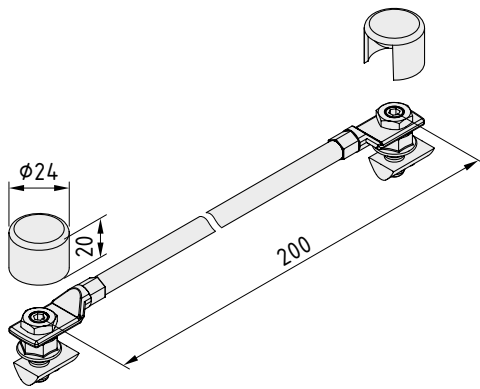


Ready-made electrical connection for system elements that need to be grounded to a construction frame.

All elements of a machine have to be connected to the protective conductor if there is a danger that they will become electrically live in the event of a fault. Detachable or movable components must not be connected via their fastening elements (fastening screws, hinges). A flexible conductor with a large conductive cross-sectional area (16 mm<sup>2</sup>) ensures that the electrical connection remains intact irrespective of the mechanical fastening or possible movement.

Earthing Connection 8 can also be used to interconnect neighbouring shelves or table constructions in order to equalise potential. Earthing Connection 8 can also be used to connect work benches to the grounding earth equipment.

The set includes selected fastening elements which provide a secure contact with the groove of Profile 8, highly flexible stranded wires and protective caps.



### Earthing Connection 8



- 2 T-Slot Nuts 8 St M8, bright zinc-plated
  - 2 caps for Earthing Connection 8, PA-GF, black
  - Earthing wire, Cu, tin-plated
  - 2 hexagon nuts DIN936-M8, St, black
  - 2 grub screws DIN 916-M8x30, St, bright zinc-plated
  - 2 special washers DIN 6798-8.4, St, bright zinc-plated
  - 2 lock nuts M8, St, black
- M = 25 Nm      m = 125.0 g

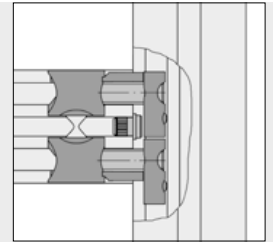
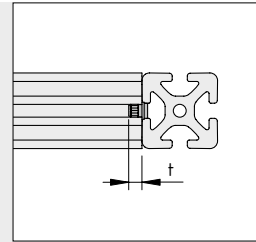
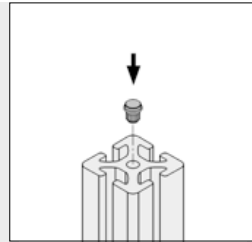
1 set

0.0.486.95



## Contact Pins ESD

- For creating an electrostatically dissipative connection between profiles
- Integrated into the profile connection



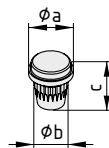
Contact Pins ESD are designed for ESD profile connections. For better identification, fastening elements ESD are given a yellow passivation layer in compliance with Directive 2002/95/EC ("RoHS").

Contact Pin ESD is an additional component used in conjunction with Universal-Fastening and Automatic-Fastening Sets. Pressed into the core bore of the Profile Bar, the Contact Pin makes the electrical connection between the profiles when the fastening screws are tightened.

N.B.: Use of Contact Pin ESD can lead to restrictions when retrofitting profiles into closed structures.

Contact Pin 8 ESD destroys the insulating anodized layer in the core bore and profile groove of the connected profiles.

	t
	3.5 mm
	6 mm
	7 mm



### Contact Pin 5 ESD



St  
a = 6 mm      b = 4.5 mm      c = 6 mm      m = 0.6 g

bright zinc-plated, 1 pce.

0.0.612.15

### Contact Pin 6 ESD



St  
a = 7 mm      b = 5.4 mm      c = 8 mm      m = 1.4 g

bright zinc-plated, 1 pce.

0.0.612.11

### Contact Pin 8 ESD



St  
a = 9 mm      b = 6.9 mm      c = 10 mm      m = 3.0 g

bright zinc-plated, 1 pce.

0.0.604.15



## Potential Equaliser

- For safely equalising electrostatic charges in profiles
- Additional ESD-safety – can be retrofitted to constructions

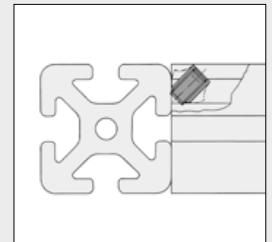


The Potential Equaliser ensures that possible charge buildups are balanced out between the individual profiles of a construction. It can be retrofitted to the profile groove. Fitted at joints, it destroys the insulating anodized layer and creates an electrically conductive connection.

The Potential Equaliser cannot be considered an electrical connection suitable for forming part of a safety circuit.

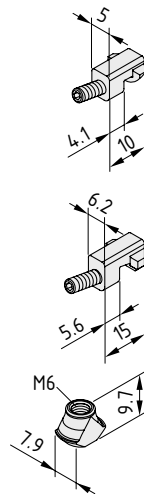








Potential Equalisers 5 and 6 are swivelled into the Profile Groove and then pushed against the joint.



The grub screw must be screwed in with light pressure on the key, until it rests against both profiles and nudges the Potential Equaliser out of its original position.

Potential Equaliser 8 is twisted into the profile groove, tilted to an angle of 45°, and the grub screw driven in so as to bite jointly where the two profiles meet, thus making contact between them.



<b>Potential Equaliser 5</b> Die-cast zinc Grub screw DIN 916-M3x12, St, bright zinc-pl. m = 1.0 g bright zinc-plated, 1 pce.	 	0.0.464.45
<b>Potential Equaliser 6</b> Die-cast zinc Grub screw DIN 916-M4x16, St, bright zinc-pl. m = 4.0 g bright zinc-plated, 1 pce.	 	0.0.459.65
<b>Potential Equaliser 8</b> St Grub screw DIN 915-M6x12, St, bright zinc-pl. m = 4.7 g bright zinc-plated, 1 pce.	 	0.0.265.77