

item



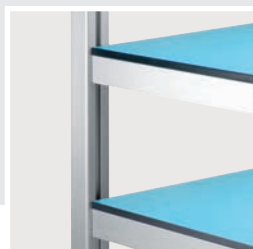
New Products 09/2007 MB Building Kit System

All the New Products 09/2007 at a glance.

Profile cross-sections and profile connections for special requirements, ESD profile connections, fastening elements for even greater design possibilities or innovative ideas for your transport tasks and goods flows - these are just some of the new additions to the item MB Building Kit System to expand its range of application.

Perfection in product and service quality – that is our promise. We would be pleased to advise you and work with you in finding the optimal solution for your needs.

The new products in the MB Building Kit System are well worth a closer look!



Profiles 6 and 8

- Profile 6 30x24 light
- Profile 6 60x24 light
- Profile 8 80x40 1N light

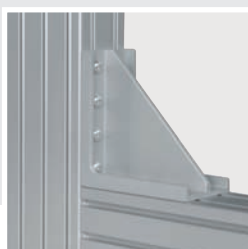
Pages 4 and 5



ESD fasteners

- Standard-Fastening Set 8 ESD
- Contact Pin 8 ESD

Pages 6 and 7



Angle Bracket 12 240x240 Al

- Angle Bracket 12 240x240 Al M12
- Fastening Set for Angle Bracket 12 240x240 Al M12

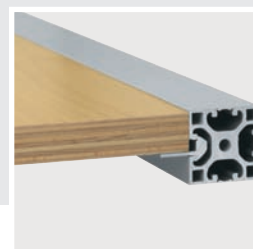
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Adjustable Foot 8 D40 PA

- Adjustable Foot 8 D40 PA

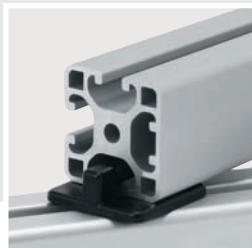
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Rebate Profiles 8 Al

- Rebate Profile 8 Al 16
- Rebate Profile 8 Al 16 M5

Page 10



T-Slot Slider 8

- T-Slot Slider 8

Page 11



Track 8 80x40

- Track Profile 8 80x40
- Cap Set Track Profile 8 80x40
- Roller D60 PU
- Roller Unit D60 PU

Pages 12 to 13

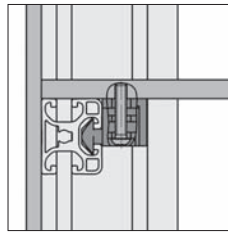


Telescope 8 80x40

- Telescope Profile 8 80x40
- Telescope Inside Profile 8 80x40
- Telescope Connection Set 8 80x40
- Telescope Securing Set 8 80x40
- Telescope Locking Plunger 8 80x40
- Telescope Connecting Plate 8 80x40

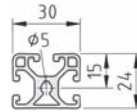
Pages 14 to 17

Profiles 6 light
Flat Cross-Sections



Profiles 6 30x24 and 60x24 light are particularly suitable for use as frames and struts in guards, enclosures and shelf constructions. They are used first and foremost to interconnect profiles in modular dimension 30 mm.

When used in conjunction with profiles with modular dimensions, this results in an offset of 6 mm. This enables e.g. a panel element (up to 6 mm thick) to be run alongside 24 mm wide profiles in one continuous length. Used inside a frame, the profile can serve as a high-strength rest (e.g. for a shelf) and reinforces the entire construction.



Profile 6 30x24 light

Al, anodized

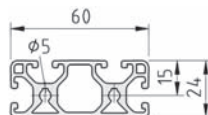
$A = 2.82 \text{ cm}^2$ $I_x = 1.69 \text{ cm}^4$ $I_y = 2.27 \text{ cm}^4$

$m = 0.76 \text{ kg/m}$ $I_t = 0.20 \text{ cm}^4$

$W_x = 1.36 \text{ cm}^3$ $W_y = 1.51 \text{ cm}^3$

natural, cut-off max. 6000 mm

0.0.608.88



Profile 6 60x24 light

Al, anodized

$A = 4.98 \text{ cm}^2$ $I_x = 3.14 \text{ cm}^4$ $I_y = 17.10 \text{ cm}^4$

$m = 1.34 \text{ kg/m}$ $I_t = 2.46 \text{ cm}^4$

$W_x = 2.53 \text{ cm}^3$ $W_y = 5.70 \text{ cm}^3$

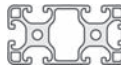
natural, cut-off max. 6000 mm

0.0.608.91

**Profile 8 80x40
1N light**



Lightweight profile with modular dimensions for constructing fixtures and equipment, particularly where the top and front of the frame are to have a closed groove.



Profile 8 80x40 1N light

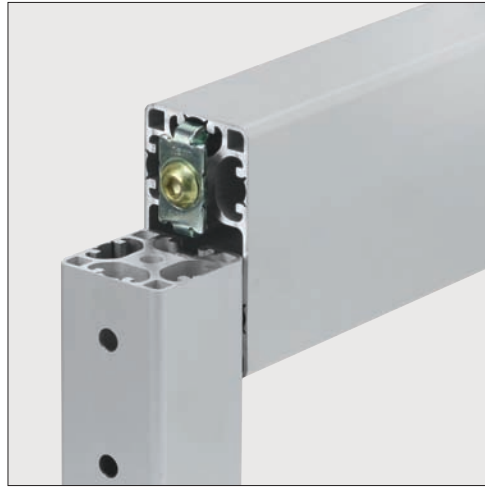
Al, anodized

$A = 11.53 \text{ cm}^2$ $I_x = 16.92 \text{ cm}^4$ $I_y = 72.13 \text{ cm}^4$
 $m = 3.11 \text{ kg/m}$ $I_t = 12.50 \text{ cm}^4$
 $W_x = 8.46 \text{ cm}^3$ $W_y = 17.81 \text{ cm}^3$

natural, cut-off max. 6000 mm

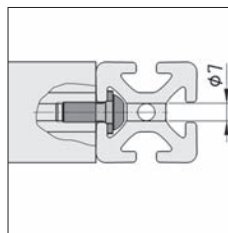
0.0.607.75

ESD Fasteners

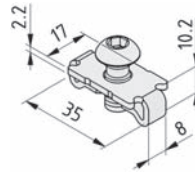


Standard-Fastening Set 8 ESD and Contact Pin 8 ESD are both components for ESD connection of Line 8 profiles.

For better identification, fastening elements 8 ESD are given a yellow passivation layer in compliance with Directive 2002/95/EC ("RoHS").



Standard-Fastening Set 8 ESD is used in the same way as a conventional Standard-Fastening Set (see Section 1.3 of the MB Building Kit System Comprehensive Catalogue - Fasteners). 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.



Standard-Fastening Set 8 ESD

Standard connecting plate 8, St
 Special Button-Head Screw similar to ISO 7380-M8x20, St
 $M_{0,2p} = 25 \text{ Nm}$
 $m = 21.0 \text{ g}$



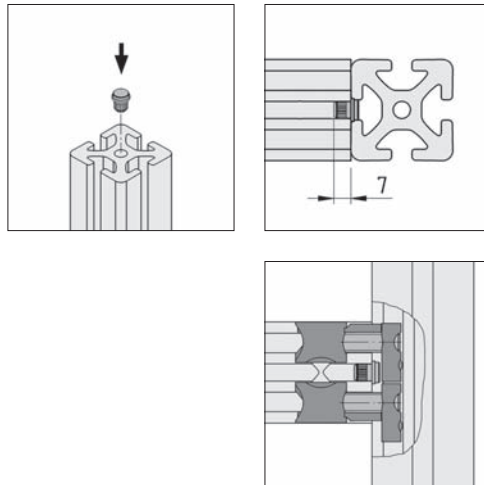
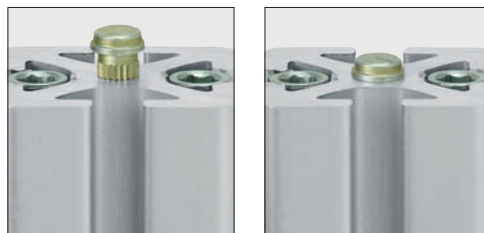
bright zinc-plated, 1 set

0.0.610.11



Contact Pin 8 ESD is an additional component used in conjunction with Universal-Fastening and Automatic-Fastening Sets 8. 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.

Note: Use of Contact Pin 8 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.



Contact Pin 8 ESD

St

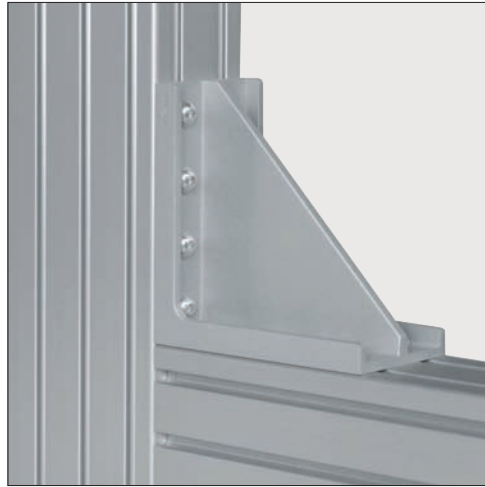
m = 3 g

bright zinc-plated, 1 pce.



0.0.604.15

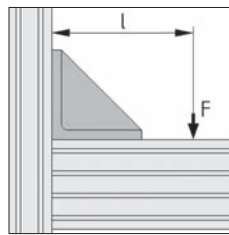
**Angle Bracket
12 240x240 AI**



Angle Bracket 12 240x240 AI M12 is a heavy-duty fastening element for power-lock, non-machined interconnection of large Profiles 12.

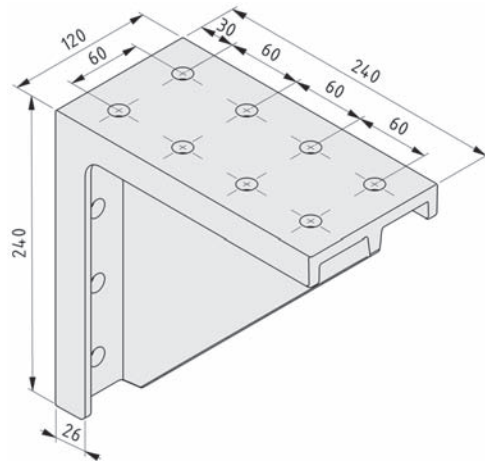
It can also be used for screwing profiles to floors and walls and for fastening heavy parts that are not part of the MB Building Kit System.

Angle Bracket 12 240x240 AI M12 is secured to the profile with Fastening Sets. Up to 4 Fastening Sets per Angle Bracket are required depending on the combination of profiles used.



$$F < 16,000 \text{ N} \wedge F \cdot l < 4,200 \text{ Nm}$$

The load-carrying capacity is to be checked based on both conditions.

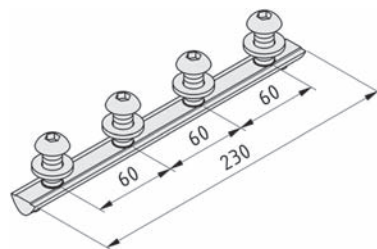


Angle Bracket 12 240x240 AI M12

Die-cast aluminium
m = 2.78 kg

white aluminium similar to RAL 9006, 1 pce.

0.0.007.79



Fastening Set for Angle Bracket 12 240x240 AI M12

- 1 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
- M = 80 Nm
- m = 400 g

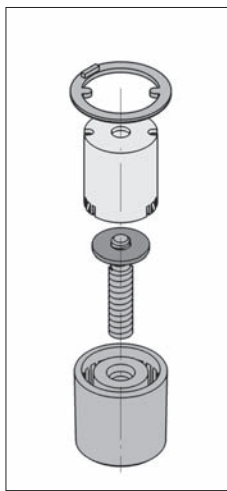
1 set

0.0.609.16

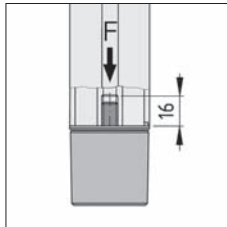
Adjustable Foot 8 D40 PA



Adjustable Foot 8 D40 PA is height-adjustable and is used for tables and light pieces of equipment constructed using round Profiles 8 D40.

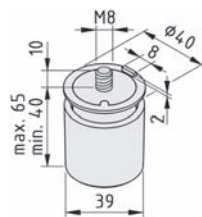


The spindle is screwed into an M8 thread in the core bore of Profile 8 D40. The height is adjusted without the use of tools simply by turning the lower part of the foot manually.



Can be secured to Profiles 8 D40

$F_{perm.} = 1,500 \text{ N}$



Adjustable Foot 8 D40 PA

Housing, inner part and end plate, PA-GF, black

Spindle and washer, St, bright zinc-plated

$m = 69 \text{ g}$

1 set

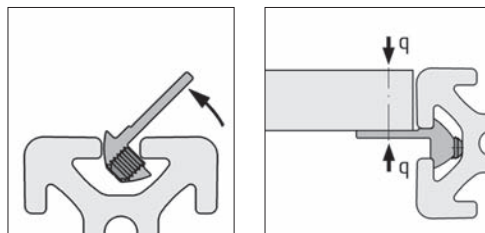
0.0.603.33

**Rebate Profiles
8 Al**



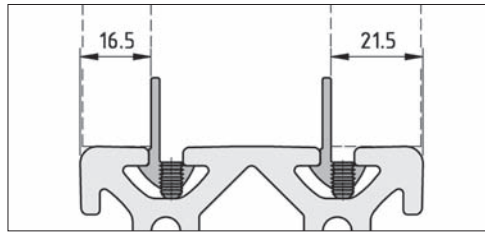
Rebate Profiles 8 Al 16 for universal fastening of various elements to Profiles 8.

Rebate Profiles 8 Al 16 are also suitable either as a continuous screw strip for practically dust and dirt-tight constructions, possibly in combination with panel elements and Sealing Strips, or as a rebate strip for doors.



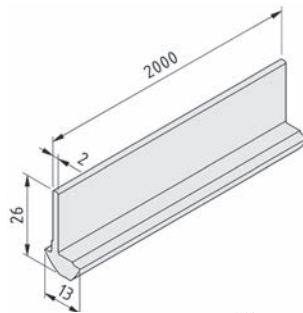
The Rebate Profile is inserted into the groove and fixed in position with M5 grub screws. Rebate Profile 8 Al 16 M5 is supplied with the required threaded holes and grub screws already in place.

Permissible linear load for Rebate Profiles 8 Al:
 $q_{max} = 1,000 \text{ N/m}$.



Connection dimensions for the Rebate Profile 8 Al 16 to Profiles 8.

The distances between the Rebate Profiles and the edge of the profile make them ideal for installing 16 and 21 mm thick panel elements in profile constructions.

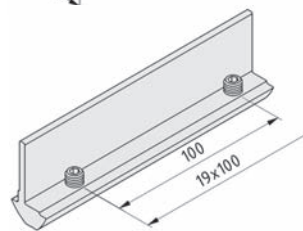


Rebate Profile 8 Al 16

Al, anodized
 $m = 268 \text{ g/m}$

natural, 1 pce., length 2000 mm

0.0.607.10



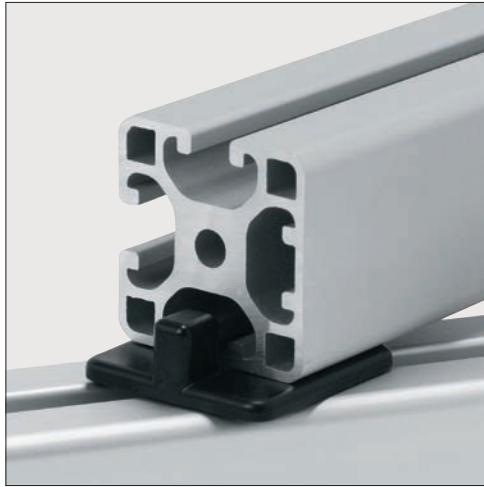
Rebate Profile 8 Al 16 M5

Al, anodized natural
Fully machined with 20 M5 threads
incl. grub screws DIN 913-M5x6
 $m = 554 \text{ g}$

1 pce., length 2000 mm

0.0.605.21

T-Slot Slider 8

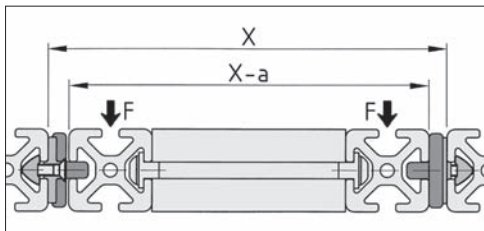


The T-Slot Slider enables elements to slide in the profile grooves while simultaneously rotating around the fastening point.

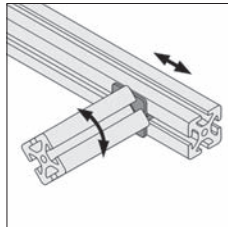
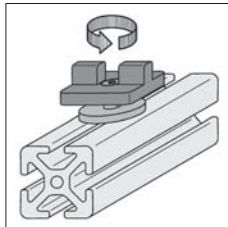
It can be used to construct simple guides for various components, e.g. keyboard pull-outs, panels for operating instructions, or simple lifting, folding and sliding doors in Line 8 profile grooves.



Construction of a folding door with T-Slot Sliders

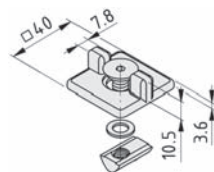


$a = 10 \text{ mm}$
 $F = 60 \text{ N}$



Unrestricted rotation of the T-Slot Slider around the hub also compensates for possible alignment errors.

T-Slot Slider 8 can also be fitted to the end faces of Profiles 8 40x40.



T-Slot Slider 8

T-Slot Slider, POM, black

Adapter washer DIN 988-8x14x1, St, stainless

T-Slot Nut V 8 St M8, bright zinc-plated

Countersunk Screw DIN 7991-M8x13, St, bright zinc-plated
 $m = 24 \text{ g}$

1 set

0.0.601.23

**Track Profile
8 80x40 and
Rollers D60 PU**



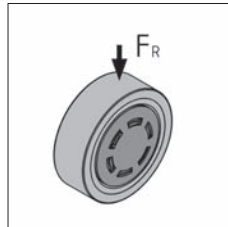
The system solution for constructing heavy-duty transport equipment consists of a special Track Profile and guided Rollers. Track Profile 8 80x40 is used as a guide rail for customised carriages equipped with Roller Units. Rollers D60 PU are ball-bearing mounted and are fitted with wear-resistant polyurethane tyres to ensure smooth and quiet running.

The pre-assembled Roller Units D60 PU can be fitted to workpiece carriers or frames constructed from profiles (preferably Line 8). The freely selectable support widths and axle distances of the carriage construction enable the guide to be constructed for the given application. The result is a system for manual or automatic transportation of even heavy products that is particularly robust and insensitive to ambient factors (dust and knocks).

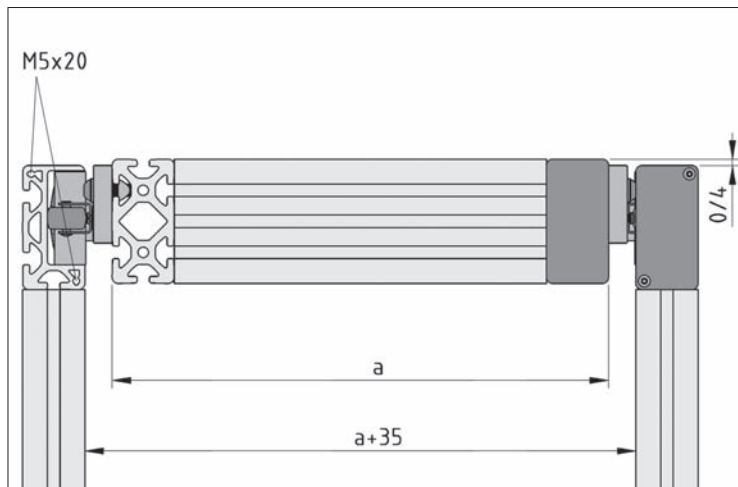


Track Profiles and Roller Units are also ideal for constructing trolleys for suspension devices.

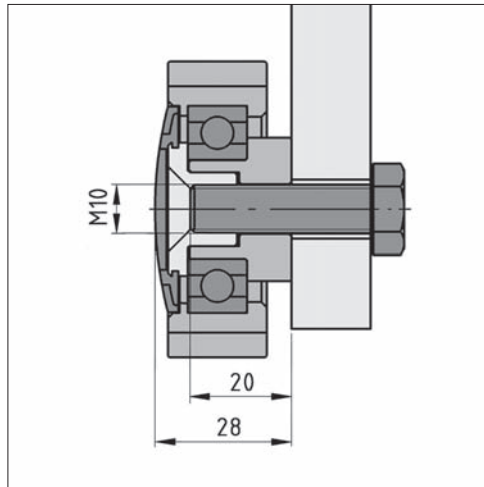
An additional guide roller on the base plate guides Roller Unit D60 PU laterally in the Track Profile.



$F_R = 800 \text{ N}$

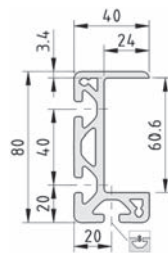


Connection dimensions and structure of a slide construction with Roller Unit D60 PU and Track Profile 8 80x40.



Rollers D60 PU can also be used as universal guide and support elements for pull-outs, as guide elements for sliding doors, and for all linear movements where flexibility and high load-bearing capacity are particularly important. They can be screwed from the outside (Countersunk Screw DIN 7981-M8) or inside (via the M10 internal thread) as required.

Roller D60 must always be fitted with the circlip facing outwards.

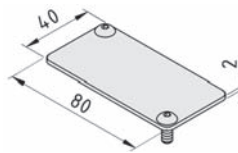


Track Profile 8 80x40

Al, anodized

$A = 10.92 \text{ cm}^2$ $I_x = 76.68 \text{ cm}^4$ $I_y = 12.79 \text{ cm}^4$
 $m = 2.84 \text{ kg/m}$ $W_x = 17.76 \text{ cm}^3$ $W_y = 7.94 \text{ cm}^3$

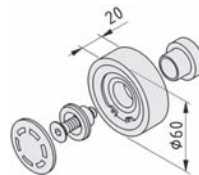
natural, cut-off max. 6000 mm 0.0.606.69



Cap Set, Track Profile 8 80x40

4 caps, St, black
 8 Button-Head Screws M5x16, St, bright zinc-plated
 m = 49.3 g

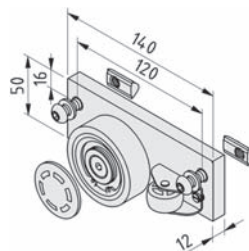
1 set 0.0.608.95



Roller D60 PU

Roller D60, St
 Tyre PU, 92 Sh A, yellow
 Bearing sleeve, St, bright zinc-plated
 Axial securing device, St, bright zinc-plated
 Cap, POM, black
 Countersunk Screw DIN 7981 M8x35
 $C = 9,360 \text{ N}$
 $C_0 = 5,000 \text{ N}$
 m = 270 g

1 set 0.0.608.94



Roller Unit D60 PU

Connecting Plate, Al, anodized
 Roller D60 PU
 Guide roller with compression spring and fastening material
 2 Button-Head Screws ISO 7380-M8x25, St, bright zinc-pl.
 2 washers DIN 433-8,4, St, bright zinc-plated
 2 T-Slot Nuts V 8 St M8, bright zinc-plated
 m = 430 g

1 set 0.0.606.90

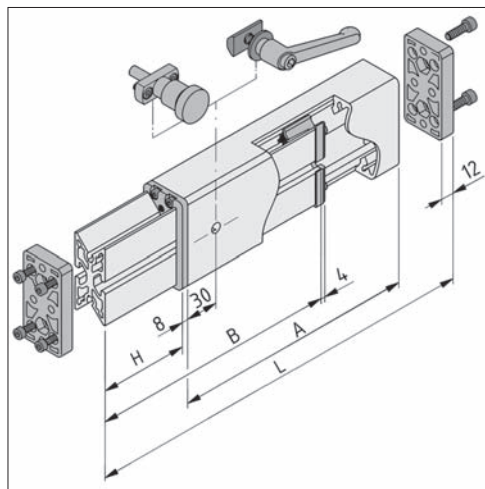
**Telescope 8
80x40**



Telescope 8 80x40 is a heavy-duty strut of adjustable length. It is particularly suitable for adjusting the height or inclination of equipment. The adjustable plain bearings and extended support width also enable this telescope to be used for constructing length-adjustable table legs.

Telescope Profile 8 80x40 supports and guides the inside profile. The outside profile can be connected directly to a profile groove on the end face or using fastening elements (e.g. Hinge 8 80x40, heavy duty).

Telescope Inside Profile 8 80x40 mounted in a sliding bearing is either secured with Telescope Securing Set 8 80x40 at the required height or is secured in predrilled holes using Telescope Locking Plunger 8 80x40.



Telescope Inside Profile 8 80x40 (length B) should be 20 mm shorter than Telescope Profile 8 80x40 (length A) so that it can be slipped fully into the assembled telescope and to make full use of the stroke H.

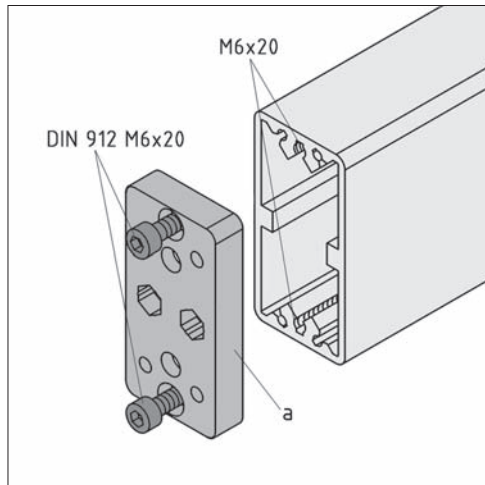
$$L_{min.} = A + 20 \text{ mm}$$

$$L_{max.} = L_{min.} + H$$

$$B \geq H \times 1.2 \wedge B \geq H + 60 \text{ mm}$$

$$B \leq A - 20 \text{ mm}$$

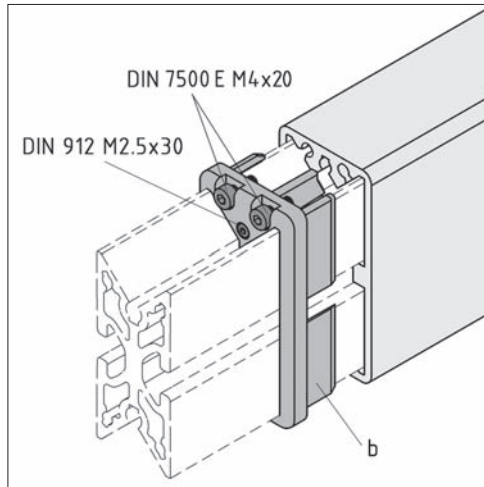
Max. load in telescope direction: 750 N



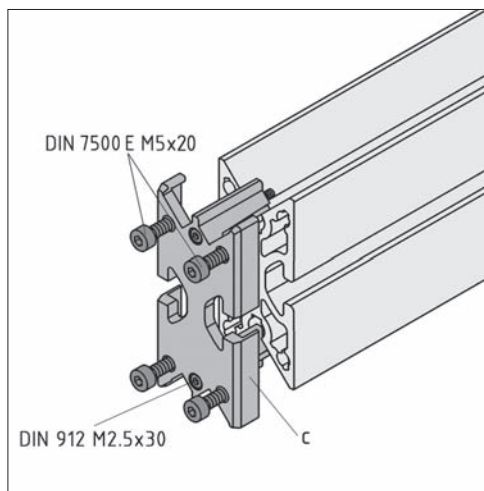
Telescope Connection Set 8 80x40 contains all components required for connecting Telescope Profile 8 80x40 and for constructing a telescope:

- a = Telescope Connecting Plate 8 80x40
- b = Telescope Cap 8 80x40
- c = Telescope Sliding Cap 8 80x40

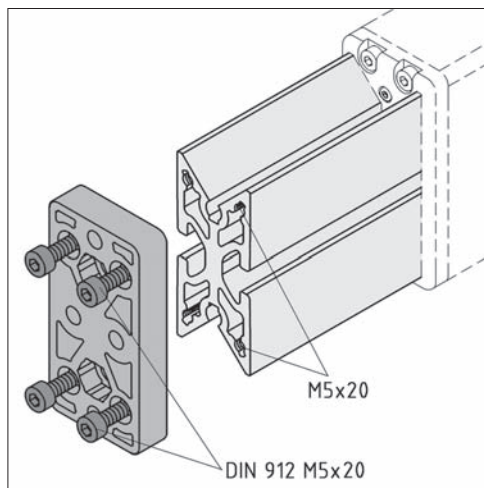
Telescope Connecting Plate 8 80x40 is screwed to the Telescope Profile and offers various possibilities for fastening to a connecting structure.



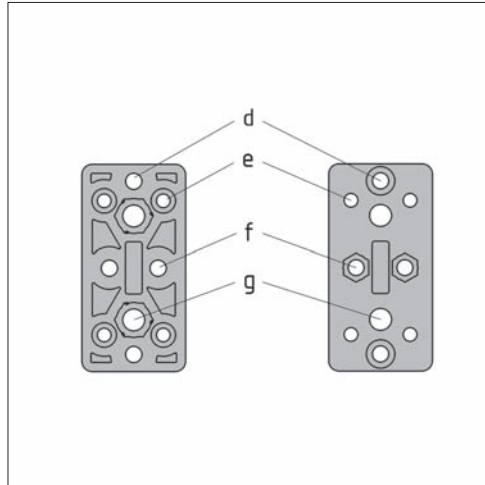
To secure the telescope cap (with Telescope Profile 8 80x40) and telescope sliding cap (with Telescope Inside Profile 8 80x40), the Telescope Connection Set is provided with self-tapping screws DIN 7500.



After trial assembly of the two telescope profiles, the plain bearings of the Telescope Sliding Cap and Telescope Cap are adjusted free of play using screws M2.5x30 (1.5 A/F).

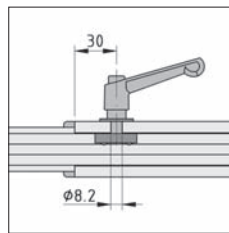


Telescope Connecting Plate 8 80x40 offers various possibilities for attaching the inside profile to a connecting structure. It is used for screw connection with Line 8 components or other parts. Suitable through holes and countersinks are provided in the Connecting Plate for this purpose.

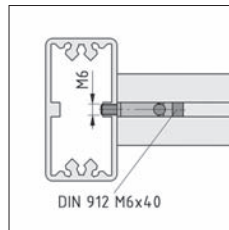
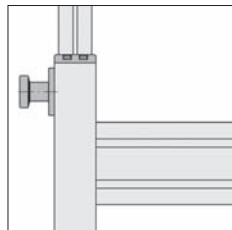
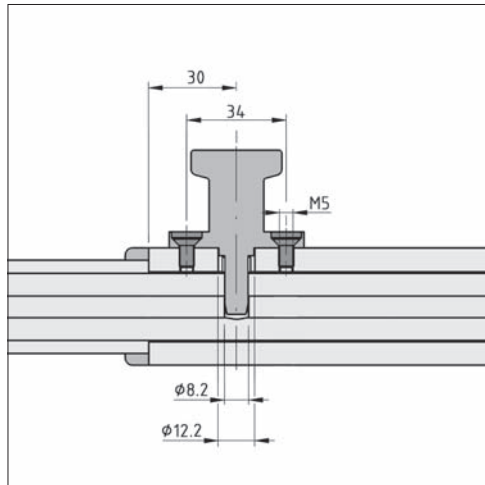


Function of the holes in the Telescope Connecting Plate:

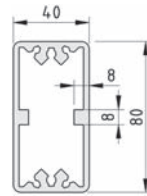
- > Securing to Telescope Profile 8 80x40 using screws M6x22 (d)
- > Securing to Telescope Inside Profile 8 80x40 using screws M5x12 (e)
- > Through hole \varnothing 6.4 (f) for adapting other products to the Telescope Inside Profile 8 80x40
- > Through hole \varnothing 9 (g) for adapting other products to the Telescope Profile 8 80x40 by press-fitting an M8 nut



On request, your local item partner will be pleased to process the Telescope Profiles to enable use of the Telescope Securing Set or Telescope Locking Plunger.



For lateral connection of Telescope Profiles 8 80x40, it is advisable to tap M6 threads in the area of the central rib and to use Automatic-Fastening Sets 8.



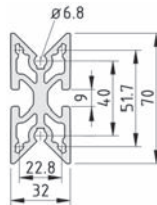
Telescope Profile 8 80x40

Al, anodized

$A = 9.61 \text{ cm}^2$ $I_x = 20.57 \text{ cm}^4$ $I_y = 77.12 \text{ cm}^4$
 $m = 2.59 \text{ kg/m}$ $W_x = 10.28 \text{ cm}^3$ $W_y = 19.28 \text{ cm}^3$

natural, cut-off max. 6000 mm

0.0.608.49



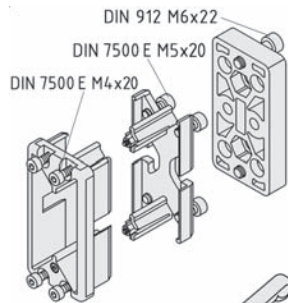
Telescope Inside Profile 8 80x40

Al, anodized

$A = 9.78 \text{ cm}^2$ $I_x = 10.50 \text{ cm}^4$ $I_y = 34.88 \text{ cm}^4$
 $m = 2.64 \text{ kg/m}$ $W_x = 2.99 \text{ cm}^3$ $W_y = 21.80 \text{ cm}^3$

natural, cut-off max. 6000 mm

0.0.608.50



Telescope Connection Set 8 80x40

Telescope Conn. Plate 8 80x40, die-cast zinc, white alum.

Telescope Sliding Cap 8 80x40, POM, black

Telescope Cap 8 80x40, POM, black

2 Cap Screws DIN 912-M6x22, St, bright zinc-plated

4 Cap Screws DIN 7500 E-M5x20, St, bright zinc-plated

4 Cap Screws DIN 7500 E-M4x20, St, bright zinc-plated

$m = 250 \text{ g}$

1 set

0.0.608.57



Telescope Securing Set 8 80x40

Special T-Slot Nut 8 St M6, bright zinc-plated

Stepped threaded bolt M8/M6

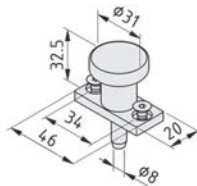
Washer DIN 9021-8,4, St, bright zinc-plated

Clamp lever M8, black

$m = 110 \text{ g}$

1 set

0.0.608.48



Telescope Locking Plunger 8 80x40

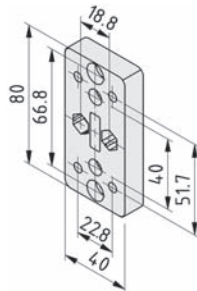
Locking plunger with base plate, black

2 Countersunk Screws DIN 7991-M5x12

$m = 68 \text{ g}$

1 set

0.0.609.73



Telescope Connecting Plate 8 80x40

Die-cast zinc

$m = 190 \text{ g}$

white aluminium similar to RAL 9006, 1 pce.

0.0.604.60

Alphabetical Register

A	
Adjustable Foot 8 D40 PA	9
Angle Bracket 12 240x240 AI M12	8
C	
Cap Set, Track Profile 8 80x40	13
Contact Pin 8 ESD	7
F	
Fastening Set for Angle Bracket 12 240x240 AI M12	8
P	
Profile 6 30x24 light	4
Profile 6 60x24 light	4
Profile 8 80x40 1N light	5
R	
Rebate Profile 8 AI 16 M5	10
Rebate Profile 8 AI 16	10
Roller D60 PU	13
Roller Unit D60 PU	13
S	
Standard-Fastening Set 8 ESD	6
T	
Telescope Connecting Plate 8 80x40	17
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Telescope Profile 8 80x40	17
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Track Profile 8 80x40	13
T-Slot Slider 8	11

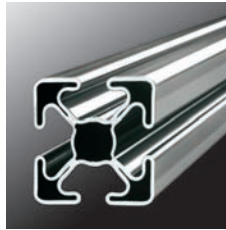
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MB Building Kit System



Profiles St 8



RS Building Kit System

Concept, design and realization
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Technical Documentation Department

Photographs
item Industrietechnik GmbH

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