

item



Systematic innovation  
New Products 2018/ II



## Experience innovation – new item products for 2018/ II

### 4 MB Building Kit System

Hold fast! The new **Clamp Levers Pi** are perfect for rapidly fixing and releasing accessories. The ergonomically shaped grips make it easier to operate Slide Guides and Angle Locking Brackets. When space is tight, the insert and grip can be disconnected at the touch of a button.

Stop static! **Polycarbonate 5mm ESD** is impact-resistant, transparent and ESD-safe. The coated panels protect staff, plant and products. Ensuring seamless protection from static charging is the new **Panel-Clamping Strip 8 4-6mm ESD**.

Stay safe! The new **Adapter M45 for Control Circuit Device, 22mm** makes it easy to install Emergency Stop Buttons and Selector Switches in the item Installation Column, machines and work benches. This modular solution can be used to create customised, preassembled units.

### 19 Work Bench System

Stay informed! The new **Tablet Holder 8** and **Tablet Arm 8** with double pivot arm are mobile solutions for keeping important information close to hand. Thanks to a built-in spring mechanism, they can hold tablets in sizes from 7 to 13 inches. Tablet Holder 8 can also be rotated steplessly 360° to allow switching between landscape and portrait format.

See clearly! Distortion-free magnification up to 190 percent and bright illumination are key features of the new **LED Illuminated Magnifier D160**. The latest LED technology supports ergonomic, fatigue-free working practices.

Precisely positioned! The five item **Pivot Arms** are now available with a preassembled Height Adjuster. These carefully coordinated sets simplify assembly work. What's more, they offer an easy means of adjusting the working height of the Pivot Arm on a vertical Line 8 system groove.



### 39 Lean Production Building Kit System

Flag it up! The new **Warning and Protective Profile D30 R28-90°** combines Protective Profile D30 R28-90° with black/yellow hatched warning markings. The strikingly coloured impact cushioning is simply clipped into place to protect staff and material alike.

Prevent torsion! The new **Fastener D30 T1** features an integrated and exceptionally robust anti-torsion feature made of aluminium. A narrow gap along the side also allows users to see how far into the Fastener the (Profile) Tube is inserted and creates a slot that can accommodate the connecting web on Double Profile Tube D30-60.

Move smoothly! The new **Handle D30-300** comes with everything you need to get a hold on your transport trolley. It creates a DIN-standard-compliant handle that is automatically secured with a clearance that prevents hand injuries when moving the trolley from place to place.

### 52 Online tools

Build better! The item **Engineeringtool** now also incorporates the components in the Lean Production Building Kit System. As a result, you can now develop factory equipment based on Profile Tube System D30 on screen. What's more, the item Engineeringtool is now available in 41 countries and profiles can simply be dragged and dropped onto a design directly from the item Online Shop.

Better decisions! item **MotionDesigner®** now supports cantilever axes as an additional design option. Calculations for the optimum overall system factor in the additional load when the carriage is fixed in place and the entire linear axis moves instead. In the case of classic linear axes – when the axis is fixed and the carriage moves – the detailed documentation now states the support span needed, which makes it easier to design the machine frame.





## Factory equipment engineering – with the MB Building Kit System

Clamp Levers Pi

Hinge 5 20x20, heavy-duty T1 and T2

Bracket 8 120x40 flat, white aluminium

Panel-Clamping Strip 8 4-6mm ESD

Polycarbonate 5mm ESD, clear

Adapter M45 for Control Circuit Device, 22mm

Pushbutton, 22mm

Emergency Stop Button, Turn-Release, 22mm

Selector Switch 60°, 22mm

Mounting Clamp for Contact Blocks, 22mm

Contact Block, 1NO, 22mm

Contact Block, 1NC, 22mm

Warning and Protective Profile 8 40x16



Hold on!

Fast fix and release

Lever easily adjusted

Ergonomic grip

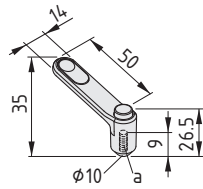
## Clamp Lever Pi

Fast fixing and rapid release! Clamp Lever Pi helps you fix accessories and machine parts firmly in place and then release them in next to no time. This makes Slide Guides and Angle Locking Brackets even more user-friendly – and, thanks to the simple release mechanism for separating grip and insert, that applies to tight spaces, too.

The slender lever with its ergonomic, easy-to-grip shape and contrasting coloured cap marks the Clamp Lever out as a member of the design award-winning operating elements Pi range from item.

Clamp Lever Pi comes in grip lengths of 50 and 60 mm. Depending on their design, the Clamp Levers have either a female thread (M4, M5, M6, M8, M10) or male thread (M4, M5, M6, M8) in various lengths. A pushbutton mechanism can be used to separate the grip and insert so that the grip can be adjusted to the desired point of rotation.





The following applies to all the products below:

Clamp Lever, die-cast zinc, white aluminium with threaded insert, St, bright zinc-plated

Compression spring, St

Cap, PA-GF, red

#### Clamp Lever Pi 50 M4

a = M4 m = 40.0 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.684.59

#### Clamp Lever Pi 50 M5

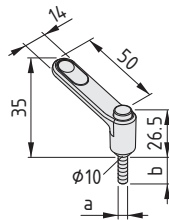
a = M5 m = 40.0 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.684.63

#### Clamp Lever Pi 50 M6

a = M6 m = 39.0 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.684.66



#### Clamp Lever Pi 50 M4x16

a = M4 b = 16 mm m = 42.5 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.684.57

#### Clamp Lever Pi 50 M4x20

a = M4 b = 20 mm m = 43.0 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.678.40

#### Clamp Lever Pi 50 M4x25

a = M4 b = 25 mm m = 43.5 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.684.58

#### Clamp Lever Pi 50 M5x16

a = M5 b = 16 mm m = 43.0 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.684.60

#### Clamp Lever Pi 50 M5x20

a = M5 b = 20 mm m = 44.0 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.678.50

#### Clamp Lever Pi 50 M5x25

a = M5 b = 25 mm m = 45.0 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.684.61

#### Clamp Lever Pi 50 M5x30

a = M5 b = 30 mm m = 46.0 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.678.51

#### Clamp Lever Pi 50 M5x40

a = M5 b = 40 mm m = 47.0 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.684.62

#### Clamp Lever Pi 50 M6x32

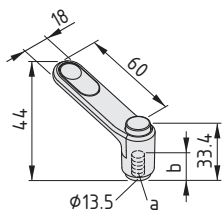
a = M6 b = 32 mm m = 48.0 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.684.64

#### Clamp Lever Pi 50 M6x40

a = M6 b = 40 mm m = 50.0 g

white aluminium, similar to RAL 9006, 1 pce. 0.0.684.65



#### Clamp Lever Pi 60 M6

a = M6      b = 11 mm      m = 80.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.684.69

#### Clamp Lever Pi 60 M8

a = M8      b = 11 mm      m = 79.0 g

white aluminium, similar to RAL 9006, 1 pce.

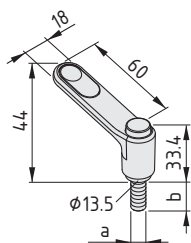
0.0.684.74

#### Clamp Lever Pi 60 M10

a = M10      b = 10 mm      m = 76.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.684.75



#### Clamp Lever Pi 60 M6x16

a = M6      b = 16 mm      m = 86.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.678.52

#### Clamp Lever Pi 60 M6x20

a = M6      b = 20 mm      m = 87.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.684.67

#### Clamp Lever Pi 60 M6x25

a = M6      b = 25 mm      m = 88.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.684.68

#### Clamp Lever Pi 60 M6x32

a = M6      b = 32 mm      m = 89.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.678.53

#### Clamp Lever Pi 60 M6x40

a = M6      b = 40 mm      m = 92.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.678.57

#### Clamp Lever Pi 60 M8x16

a = M8      b = 16 mm      m = 89.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.684.70

#### Clamp Lever Pi 60 M8x20

a = M8      b = 20 mm      m = 90.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.684.71

#### Clamp Lever Pi 60 M8x25

a = M8      b = 25 mm      m = 92.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.684.72

#### Clamp Lever Pi 60 M8x32

a = M8      b = 32 mm      m = 95.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.678.38

#### Clamp Lever Pi 60 M8x40

a = M8      b = 40 mm      m = 98.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.684.73



## A new angle

Compact Hinges

Can be fixed in position

Now also with preassembled screws



### Hinge 5 20x20, heavy-duty T1 and T2

Adjustable and ready for immediate use! Hinge 5 20x20, heavy-duty connects together profiles at any angle up to 180° and acts as a heavy-duty hinge (adjustment range:  $\pm 90^\circ$ ). The Hinge is available in two versions with preassembled screws for typical applications.

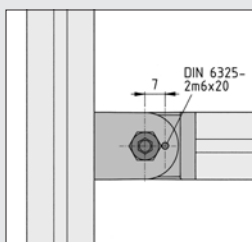
Variants T1 and T2 of Hinge 5, heavy-duty can be used to connect profiles from Line 6 or 8 and can be screwed to the end faces of two Profiles 5 20x20.

Hinge 5 20x20, heavy-duty T1 features a preassembled M5x12 captive screw.

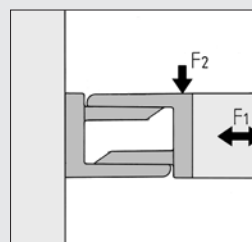
Hinge 5 20x20, heavy-duty T2 features two preassembled M5x12 captive screws.

Additional fastening materials must be selected as appropriate to the relevant groove size.

The spacer rings in the scope of supply ensure that Hinges 5 20x20, heavy-duty can move freely. If the spacer rings are removed, the Hinges can be used as rigid angle elements, e.g. as bracing. If required, the Hinges can also be pinned.



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



Connection rigid:

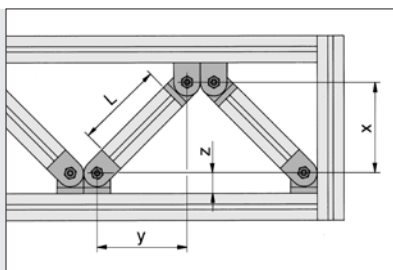
$F_1 = 500 \text{ N}$

$F_2 = 200 \text{ N}$

Connection movable:

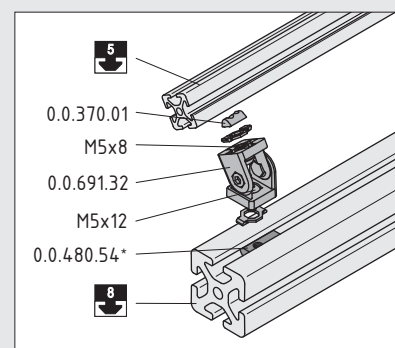
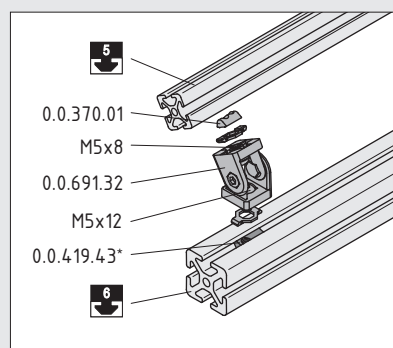
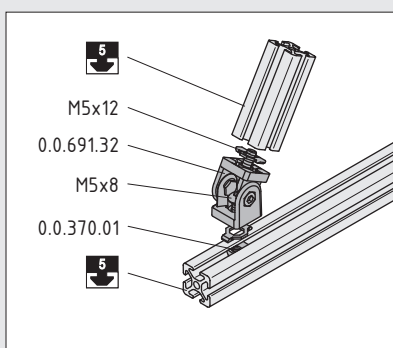
$F_1 = 200 \text{ N}$

$F_2 = 100 \text{ N}$

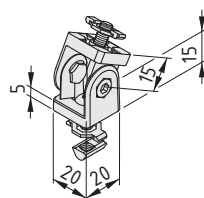


Calculation of the strut length L:

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



\* Not included in the scope of supply

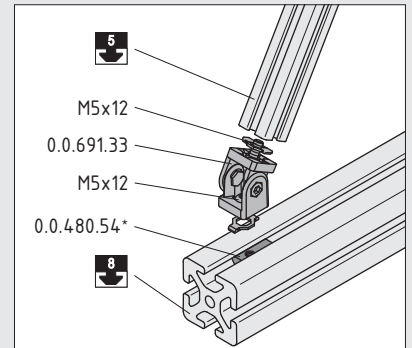
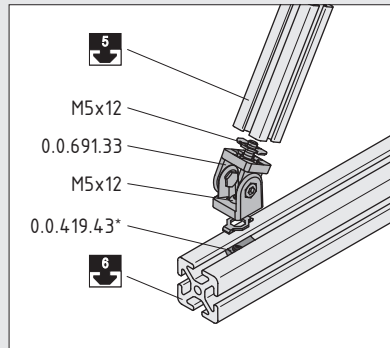
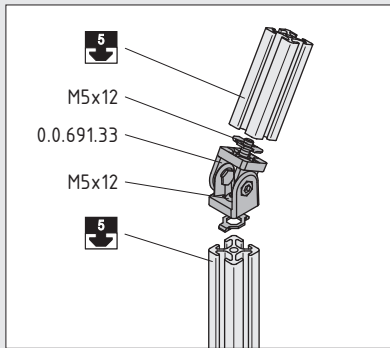


#### Hinge 5 20x20, heavy-duty T1

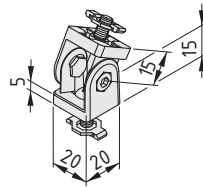
- 2 hinge halves, die-cast zinc, RAL 9006 white aluminium
- 2 fixings, PA-GF, black
- 2 thread bushes M4, St, bright zinc-plated
- 2 spacer rings, St, stainless
- 2 hexagon screws, St
- 1 Button-Head Screw ISO 7380-M5x12, St, bright zinc-plated (preassembled)
- 1 Button-Head Screw ISO 7380-M5x8, St, bright zinc-plated
- 1 T-Slot Nut 5 St M5, bright zinc-plated
- m = 45.0 g

1 set

0.0.691.32



\* Not included in the scope of supply



#### Hinge 5 20x20, heavy-duty T2



2 hinge halves, die-cast zinc, RAL 9006 white aluminium  
 2 fixings, PA-GF, black  
 2 thread bushes M4, St, bright zinc-plated  
 2 spacer rings, St, stainless  
 2 hexagon screws, St  
 2 Button-Head Screws ISO 7380-M5x12, St, bright zinc-plated (preassembled)  
 m = 44.0 g

1 set

0.0.691.33



## Reinforcement

Makes structures more rigid

Suitable for retrofitting

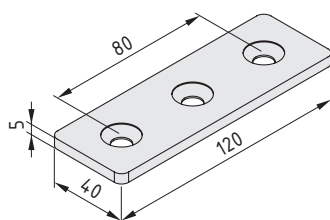
In white aluminium

### Bracket 8 120x40 flat, white aluminium

Additional hold made easy! Bracket 8 120x40 flat connects together profiles and attachments.

This sturdy steel bracket with three countersinks in the modular dimension of 40 mm can be screwed to a groove and cable conduits. As a result, it can be used to join together up to three profiles to reinforce a frame.

**Note:** item supplies Fastening Set 8 2-5mm with Countersunk Screw M8 (0.0.680.96) as a simple means of fixing the Bracket to a Line 8 groove.



#### Bracket 8 120x40 flat

St

m = 163.0 g

white aluminium, similar to RAL 9006, 1 pce.

0.0.687.82



#### Fastening Set 8 2-5mm with Countersunk Screw M8

1 Countersunk Screw DIN 7991-M8x14, St, bright zinc-plated

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

m = 17.0 g

1 set

0.0.680.96

## A guiding role

Secure hold for panels

Electrostatically dissipative

Visually striking edging

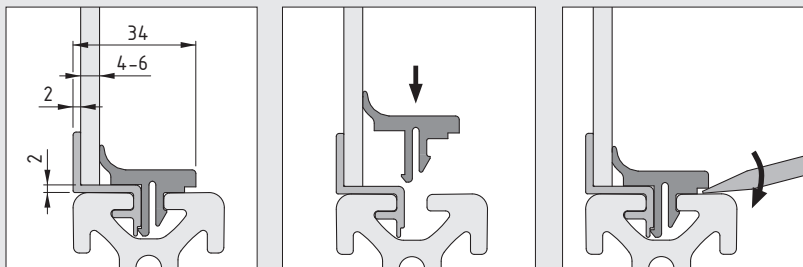


### Panel-Clamping Strip 8 4-6mm ESD

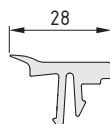
Comprehensive ESD safety for panels! Panel-Clamping Strip 8 4-6mm ESD is electrostatically dissipative and is best used to secure ESD-safe panel elements such as Polycarbonate 5mm ESD (0.0.689.81) in a closed profile frame.

The panel fixing comes in two parts. First, the aluminium Panel-Clamping Strip 8 Al (0.0.495.05) is inserted into the profile groove to locate the panel at the edge of the profile with a slight offset. Second, the elastic Panel-Clamping Strip 8 4-6mm ESD is pressed into place at the rear to hold the panel element and fix the aluminium strip in the groove. This creates a mechanically locked, smooth-surfaced outer wall for protective enclosures.

**Note:** It is advisable to use Standard-Fastening Set 8 ESD, one-sided (0.0.673.00) or Standard-Fastening Set 8 K ESD (0.0.625.33) in the profile frame so that the panel element and Panel-Clamping Strips don't need to be machined at the corners.



A screwdriver is used to lever out the Panel-Clamping Strip so as to enable removal of the panel element from the frame.



#### Panel-Clamping Strip 8 4-6mm ESD



PP/TPE

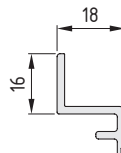
m = 140 g/m

black, 1 pce., length 2000 mm

0.0.685.09

black, cut-off max. 2000 mm

0.0.685.10



#### Panel-Clamping Strip 8 Al



Al, anodized

m = 238 g/m

natural, cut-off max. 3000 mm

0.0.495.05

natural, 1 pce., length 3000 mm

0.0.493.53

## Double protection

Extremely impact-resistant plastic

Electrostatically dissipative coating



### Polycarbonate 5mm ESD, clear

The best choice for all-round safety! Polycarbonate 5mm ESD is extremely robust, transparent and electrostatically dissipative. The coated panels are perfect for protecting personnel, plant and products.

Because this transparent plastic is very light and virtually indestructible, polycarbonate is often the first choice for use in machines and partition walls. A thin, conductive layer also makes these polycarbonate panels electrostatically dissipative. Ensuring seamless protection from static charging requires a dissipative panel fixing such as Panel-Clamping Strip 8 4-6mm ESD (0.0.685.09) and earthing connections for aluminium profiles.

The conductive coating is applied to both sides using evaporation deposition and has a minimal impact on the polycarbonate's excellent optical qualities.



Property	Value	Test Standard
Density	1.2 g/cm <sup>3</sup>	ISO 1183
Tensile strength	60 N/mm <sup>2</sup>	ISO 527
Elongation at tear	80 %	ISO 527
Modulus of elasticity in tension	2200 N/mm <sup>2</sup>	ISO 527
Impact resistance (without notch)	doesn't break	ISO 179
Vicat softening temperature	145 °C	ISO 306
Coefficient of thermal expansion	65 x 10 <sup>-6</sup> K <sup>-1</sup>	DIN 52612
Construction material class	B 2	DIN 4102
Refractive index	1,486 n <sub>D</sub> 20	ISO 489
Luminous transmission index clear	> 70 %	DIN 5036-T3
Surface resistance	≥10 <sup>4</sup> – ≤10 <sup>8</sup> Ohm	DIN 53482

#### Polycarbonate 5mm ESD



PC

Thickness tolerance ± 5 %

m = 5.90 kg/m<sup>2</sup>

clear, cut-off max. 2970x1970 mm	0.0.689.81
clear, 1 pce. panel dimensions. approx. 3000x2000 mm	0.0.689.80





A real turning point

For control circuit devices

Tool-free installation

Compatible with the Mounting Box K76-M45 range

## Accessories for installation profiles

Results at the touch of a button! Adapter M45 for Control Circuit Device, 22mm makes it easy to install Emergency Stop Buttons and Selector Switches in the item Installation Column, machines and work benches.

This modular solution can be used to create custom, preassembled units that clip into the integrated cable conduit of Installation Column Profile 8 160x160 K76 (0.0.663.39) and Installation Profile 8 160x80 K76 (0.0.672.90) – no tools required.

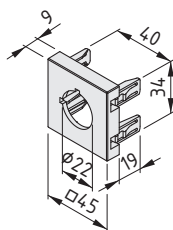
The required 22mm-diameter control circuit device is inserted into the Mounting Clamp for Contact Blocks, 22mm. The wired Contact Blocks can be inserted from the rear, with the cables and wires running safely through the aluminium cable conduit.

Adapter M45 for Control Circuit Device, 22mm is available in white, black grey and yellow.

item offers Pushbuttons in green, red and white, a Selector Switch that can be turned through 60° and a turn-to-release Emergency Stop Button as operating elements. These are held in place at the rear by a threaded ring that is included in the scope of supply. The fixings are suitable for a wall thickness of 1 to 6 mm.

Thanks to the variable system comprising Adapter M45 and the Mounting Clamp, other control circuit devices with a diameter of 22 mm can also be used. Power and network connections are implemented using the Mounting Box K76 M45 range from item.





#### Adapter M45 for Control Circuit Device, 22mm

PA-GF

m = 10.2 g

black grey, similar to RAL 7021, 1 pce.

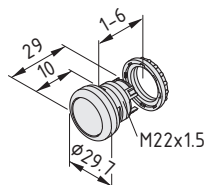
0.0.687.74

white, similar to RAL 9010, 1 pce.

0.0.688.72

yellow similar to RAL 1021, 1 pce.

0.0.691.58



#### Pushbutton, 22mm

PA-GF

m = 9.9 g

red, 1 pce.

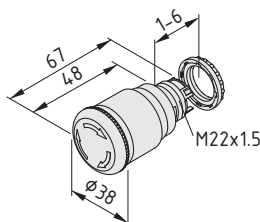
0.0.691.48

green, 1 pce.

0.0.691.49

white, 1 pce.

0.0.691.50



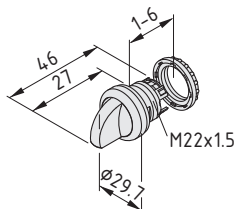
#### Emergency Stop Button, Turn-Release, 22mm

PA-GF

m = 40.9 g

1 pce.

0.0.691.53



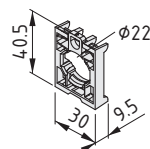
#### Selector Switch 60°, 22mm

PA-GF

m = 12.4 g

1 pce.

0.0.691.54



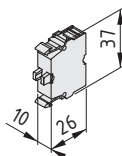
#### Mounting Clamp for Contact Blocks, 22mm

PA-GF

m = 3.5 g

1 pce.

0.0.691.55



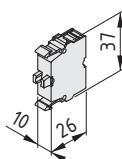
#### Contact Block, 1NO, 22mm

PA-GF

m = 10.0 g

1 pce.

0.0.691.57



#### Contact Block, 1NC, 22mm

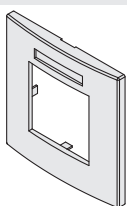
PA-GF

m = 10.0 g

1 pce.

0.0.691.56

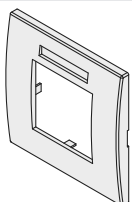
## Possible Combinations



### Face Plate M45 1 Gang with Labelling Panel

white, similar to RAL 9010, 1 pce.  
0.0.663.68

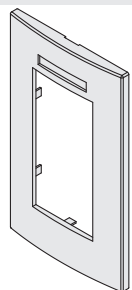
black grey, similar to RAL 7021, 1 pce.  
0.0.663.69



### Face Plate M45 1 Gang with Labelling Panel, Horizontal

white, similar to RAL 9010, 1 pce.  
0.0.675.75

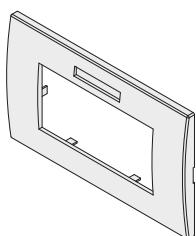
black grey, similar to RAL 7021, 1 pce.  
0.0.675.76



### Face Plate M45 2 Gang with Labelling Panel

white, similar to RAL 9010, 1 pce.  
0.0.663.71

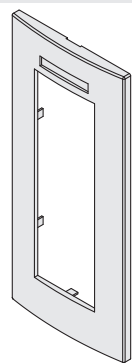
black grey, similar to RAL 7021, 1 pce.  
0.0.663.72



### Face Plate M45 2 Gang with Labelling Panel, Horizontal

white, similar to RAL 9010, 1 pce.  
0.0.675.77

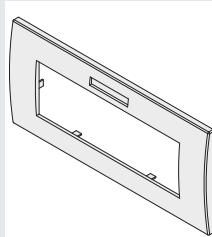
black grey, similar to RAL 7021, 1 pce.  
0.0.675.78



### Face Plate M45 3 Gang with Labelling Panel

white, similar to RAL 9010, 1 pce.  
0.0.663.74

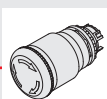
black grey, similar to RAL 7021, 1 pce.  
0.0.663.75



### Face Plate M45 3 Gang with Labelling Panel, Horizontal

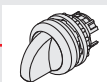
white, similar to RAL 9010, 1 pce.  
0.0.675.79

black grey, similar to RAL 7021, 1 pce.  
0.0.675.80



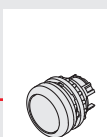
### Emergency Stop Button, Turn-Release, 22mm

1 pce.  
0.0.691.53



### Selector Switch 60°, 22mm

1 pce.  
0.0.691.54

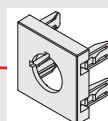


### Pushbutton, 22mm

red, 1 pce.  
0.0.691.48

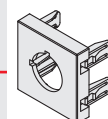
green, 1 pce.  
0.0.691.49

white, 1 pce.  
0.0.691.50



### Adapter M45 for Control Circuit Device, 22mm

yellow similar to RAL 1021, 1 pce.  
0.0.691.58



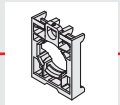
### Adapter M45 for Control Circuit Device, 22mm

white, similar to RAL 9010, 1 pce.  
0.0.688.72

black grey, similar to RAL 7021, 1 pce.  
0.0.687.74

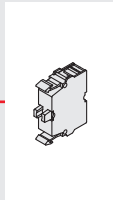
yellow similar to RAL 1021, 1 pce.  
0.0.691.58





Mounting Clamp for Contact Blocks, 22mm

1 pce.  
0.0.691.55

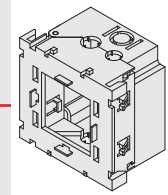


Contact Block, 1NC, 22mm

1 pce.  
0.0.691.56

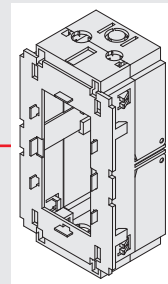
Contact Block, 1NO, 22mm

1 pce.  
0.0.691.57



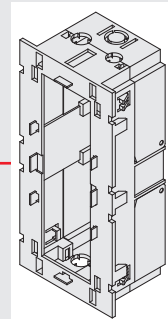
Mounting Box K76 M45 1 Gang

grey, 1 pce.  
0.0.663.52



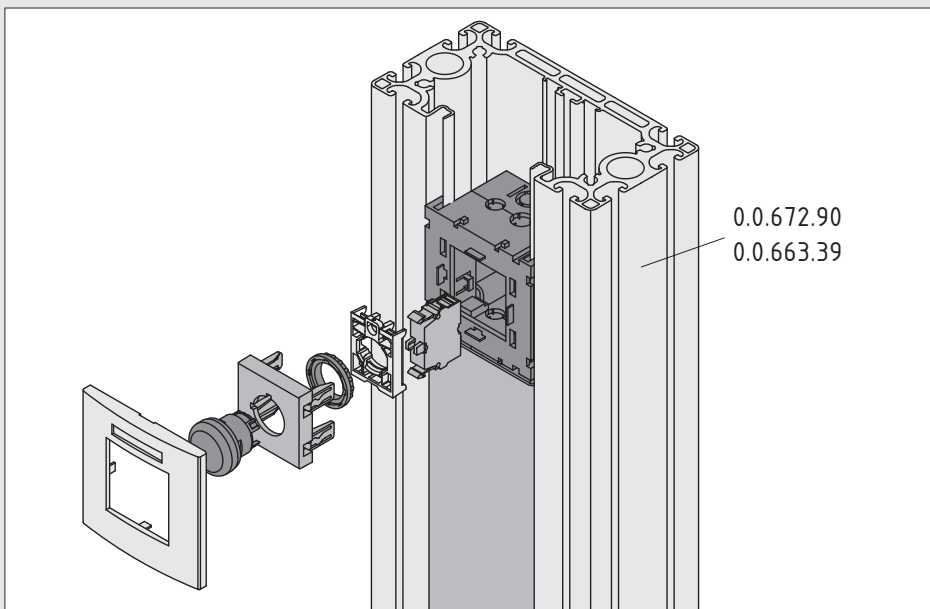
Mounting Box K76 M45 2 Gang

grey, 1 pce.  
0.0.663.53



Mounting Box K76 M45 3 Gang

grey, 1 pce.  
0.0.663.54



## Warning rectangle

Hatched warning markings

Elastic chambers absorb impacts

Simply press into the groove



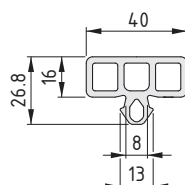
### Warning and Protective Profile 8 40x16

Impact protection and signal marking in one! The elastic Warning and Protective Profile 8 40x16 comprises three hollow chambers and effectively absorbs mechanical loads. The highly visible black and yellow hatched markings draw attention to exposed profiles and hazardous areas. As a result, it delivers comprehensive protection.

Warning and Protective Profile is simply pressed into a Line 8 groove and leaves no trace behind when removed. This makes it ideal as a temporary warning element. Made of TPE, the profile can be cut to size using item Multi-Purpose Pliers with 90° Stop (0.0.662.33).

Warning and Protective Profile 8 40x16 covers over one side of a profile. The end faces of all the variants of Protective Profile can be sealed using the elastic Cap for Protective Profile 8 40x16 (0.0.474.74).

Several profiles can be arranged side by side to protect larger areas or create all-round impact protection for profiles.



#### Warning and Protective Profile 8 40x16

PP/TPE  
Black and yellow stripes  
m = 380 g/m

yellow, similar to RAL 1023, 1 pce., length 2000 mm

0.0.689.23





## Ergonomic production – with the item Work Bench System

Tablet Holder 8

LED Illuminated Magnifier D160

Pivot Arms 8 with Height Adjuster

Toolpanel Pivot Arm

Cordless Driver Holder 8

Tool Holder 8

Hook and Holder Assortment

Connecting Element, Groove Plate Profile 8

Shelf St ESD

Plug-in Adapter with Kink Prevention ND 7.2





A matter of viewpoint

360° rotating holder for tablet computers

Mobile or temporary information provision

Also with integrated pivot arm



## Tablet Arm 8, 5 Joints and Tablet Holder 8, 3 Joints

Mobile and stationary information provision made easy! Tablet Holder 8 and Tablet Arm 8 feature a rubber-coated clamp that holds a mobile device on two sides. The stepless spring mechanism holds the tablet securely in place and is compatible with devices from 7 to 13 inches. Both sides of the clamp open in sync, making it easier to fit and remove the device. As a result, tablets can be secured to any Line 8 groove – even on mobile transport trolleys and SystemMobiles.

The three joints on Tablet Holder 8 allow users to pivot and tilt their device to get the viewing angle just right. The tablet can also be rotated 360° to change between portrait and landscape orientation. An optional fixing can be used to prevent unauthorised removal and devices can also be charged whilst secured in the Holder.

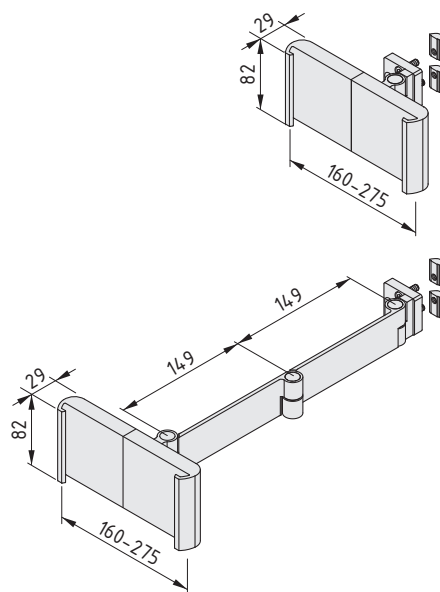
Tablet Arm 8, 5 Joints, which incorporates a double pivot arm with friction joints, offers additional flexibility. The Holder stays in the desired position and, thanks to its five joints, can be manoeuvred into the perfect orientation at the work bench and then simply folded away when not needed.

The Tablet Arm and Tablet Holder are ideal accessories in helping you integrate Industry 4.0 applications efficiently and ergonomically.





Thanks to a cut-out in the holding clamp, devices can be charged while held securely in the Tablet Arm or Tablet Holder.



#### Tablet Holder 8, 3 Joints



Tablet Holder 7-13 inch, ABS, rubber coated  
Joint, Al  
Fastening materials  
m = 490.0 g

1 set

0.0.689.82

#### Tablet Arm 8, 5 Joints



Tablet Holder 7-13 inch, ABS, rubber coated  
Pivot Arm, Al  
Fastening materials  
m = 780.0 g

1 set

0.0.689.72





Eagle eye

High-quality, low-distortion image quality

LED lighting ring eliminates shadows

Continuously dimmable

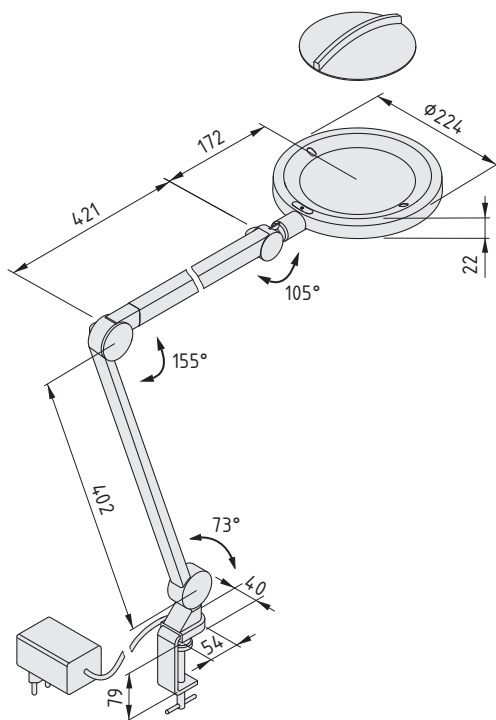
## LED Illuminated Magnifier D160

Perfect for precision work! LED Illuminated Magnifier D160 LED combines bright lighting with the latest LED technology and distortion-free magnification in one high-quality housing.

Measuring 160 mm in diameter and with 190-percent magnification power, the lens supports sustained, fatigue-free ergonomic working practices. The continuously dimmable LED lighting ring (energy efficiency rating A++) produces a maximum lighting level of 7000 Lux in the centre with no distracting shadows. The colour temperature of the light is 5000 K (neutral white).

Thanks to the integrated table clamp, Illuminated Magnifier D160 LED can be fixed to profiles, table tops and panel elements up to 70 mm thick. The perfectly balanced Illuminated Magnifier also has a large range of movement.

A protective cover stops the lens getting scratched and prevents damage that could otherwise be caused by light refracting through the focal point of the Magnifier. Illuminated Magnifier D160 LED provides ergonomic and efficient conditions for tasks that require a great deal of visual focus.



#### LED Illuminated Magnifier D160

Lens, PMMA, Ø160 mm, 3.5 dioptré  
 Protective cover  
 0-70 mm table clamp  
 Aluminium rods  
 Button with dimming function  
 Protection class: III  
 Protection: IP 20  
 Power: 15 W  
 Connecting cable, black, L = 3 m  
 With plug transformer, EU/US interchangeable adapter  
 Rated voltage: 100-240 V AC, 50/60 Hz  
 m = 2.0 kg

1 pce.

0.0.687.56

## New dimensions

Preassembled Height Adjuster

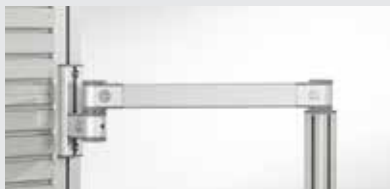
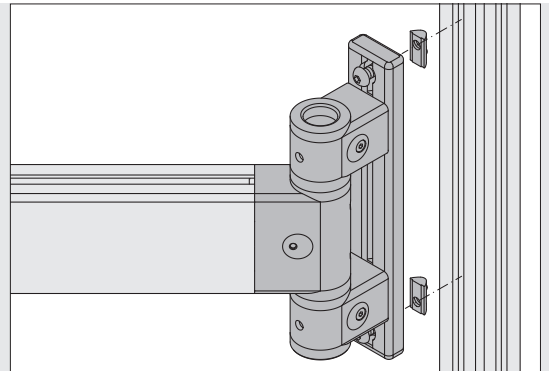
Five variants to choose from



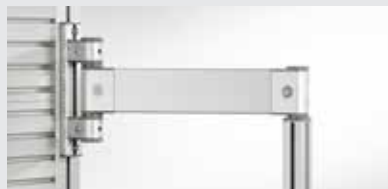
### Pivot Arm 8 and Double Pivot Arm 8 with Height Adjuster

Accurate positioning in all directions! These preassembled sets combine the item Pivot Arms with an appropriate Height Adjuster. This means working height can be adjusted with ease up or down a vertical Line 8 system groove.

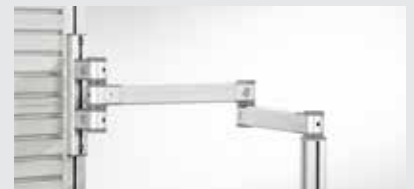
The five preassembled sets make it even easier to mount the device on a profile.



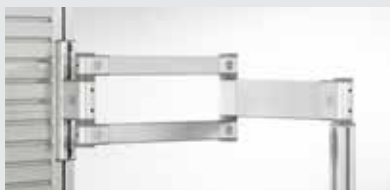
Pivot Arm 8 370 with Height Adjuster 8 150



Pivot Arm 8 80-370 heavy-duty with Height Adjuster 8 240



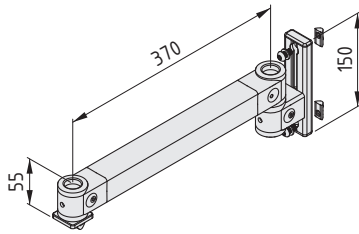
Double Pivot Arm 8 695 with Height Adjuster 8 240



Double Pivot Arm 8 80 695 heavy-duty with Height Adjuster 8 240



Double Pivot Arm 8 695, heavy-duty with Height Adjuster 8 290



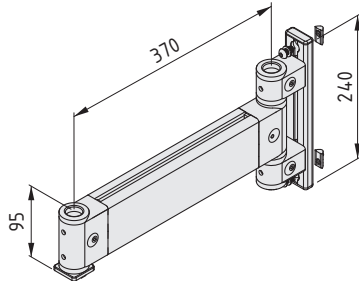
#### Pivot Arm 8 370 with Height Adjuster 8 150



Pivot Arm 8 370 light  
Height Adjuster 8 150  
Preassembled  
m = 1.6 kg

1 set

0.0.690.19



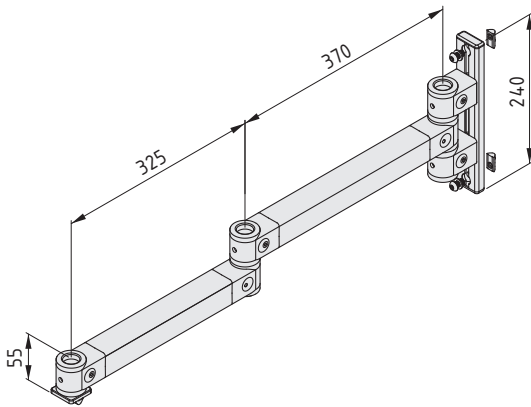
#### Pivot Arm 8 80-370 heavy-duty with Height Adjuster 8 240



Pivot Arm 8 80-370 heavy-duty  
Height Adjuster 8 240  
Preassembled  
m = 2.5 kg

1 set

0.0.664.44



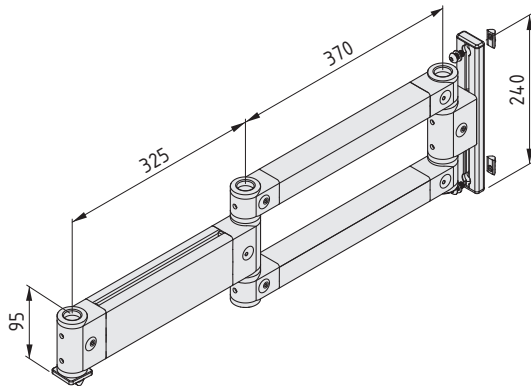
#### Double Pivot Arm 8 695 with Height Adjuster 8 240



Double Pivot Arm 8 695  
Height Adjuster 8 240  
Preassembled  
m = 2.9 kg

1 set

0.0.691.23



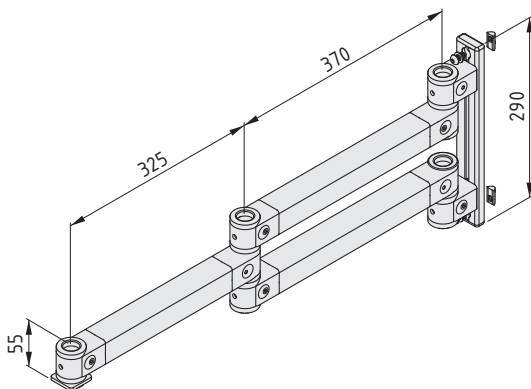
#### Double Pivot Arm 8 80 695 heavy-duty with Height Adjuster 8 240



Double Pivot Arm 8 80-695 heavy-duty  
Height Adjuster 8 240  
Preassembled  
m = 4.3 kg

1 set

0.0.664.43



#### Double Pivot Arm 8 695 heavy-duty with Height Adjuster 8 290



Double Pivot Arm 8 695 heavy-duty  
Height Adjuster 8 290  
Preassembled  
m = 4.1 kg

1 set

0.0.690.36

## Organisation par excellence

Ergonomic tool stowage

Usable on front and back

Pivot Arm includes Height Adjuster



### Toolpanel Pivot Arm 8 Toolpanel Double Pivot Arm 8

You can't get more customised than this! The combination of Toolpanel, (Double) Pivot Arm and Height Adjuster offers maximum freedom for organising tools and work benches.

A total of 19 system grooves on the front and back of the 540mm-wide Groove Plate Profile provide plenty of space for arranging Hooks, Holders, Parts Containers, etc. The item Toolpanel System has won the 2018 Red Dot Award for Product Design.

The Groove Plate Profile can be used on both sides and can be turned 360° on the Pivot Arm, meaning the two sides can also be used interchangeably. For example, the front and rear could each be kitted out with tools for a specific task. Thanks to the integrated Height Adjuster, the Pivot Arm can also be moved up and down to ensure tools are always available at an ergonomic working height for the current user.

Toolpanel Pivot Arm 8 370 light features two Friction Joints and can carry a total load of 12 kg.

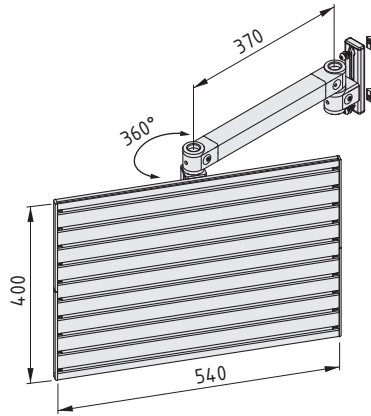
Toolpanel Double Pivot Arm 8 695 can reach twice as far and boasts even more flexibility thanks to its additional joint. Load-carrying capacity is 8 kg.

toolpanelsystem



reddot award 2018  
winner





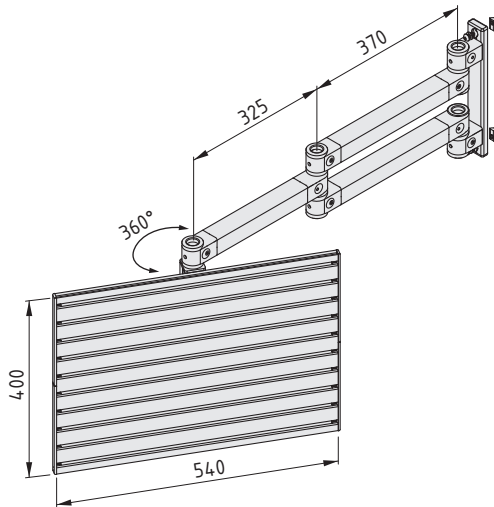
#### Toolpanel Pivot Arm 8 370 light



Pivot Arm 8 370 with Height Adjuster  
Profile 8 40x40 E  
Groove Plate Profile 8 400x14  
Fastening materials  
m = 5.1 kg

1 set

0.0.690.21



#### Toolpanel Double Pivot Arm 8 695



Double Pivot Arm 8 695 with Height Adjuster  
Profile 8 40x40 E  
Groove Plate Profile 8 400x14  
Fastening materials  
m = 7.4 kg

1 set

0.0.690.37



Draw!

For power tools up to 2 kg in weight

Easy to use, even with long key inserts

Includes storage for four bits



## Cordless Driver Holder 8

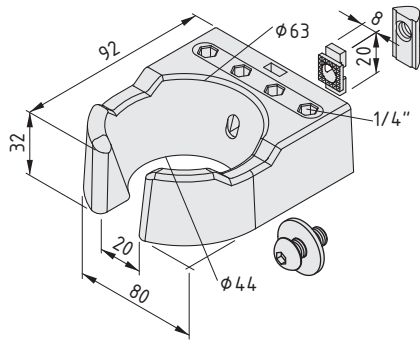
Just reach out and grab it! Thanks to robust Cordless Driver Holder 8, battery-powered tools weighing up to 2 kg can be kept close to hand at all times.

The opening in the front also means there is no need to remove even longer drill bits from the chuck. As a result, cordless drivers can be taken out and put back at a comfortable, natural angle without having to be lifted. Frequently used bits can be stored in four integrated storage spaces.

Cordless Driver Holder 8 can be fixed to any Line 8 groove. The anti-torsion feature included in the scope of supply ensures a firm hold in vertical grooves and even tools with a heavy grip are held firmly in place.

The Holder is available in grey and black. It complements the Hook and Holder System and supports efficient work bench design when used with the item Toolpanel System.





# Cordless Driver Holder 8



PA-GF  
Fastening materials  
m = 100.0 g

black similar to RAL 9005, 1 set	0.0.689.62
grey similar to RAL 7042, 1 set	0.0.690.11



Spring into action

Spring mounted loops clamp tools in place

Simply twist into place in a Line 8 groove

Now also available in grey

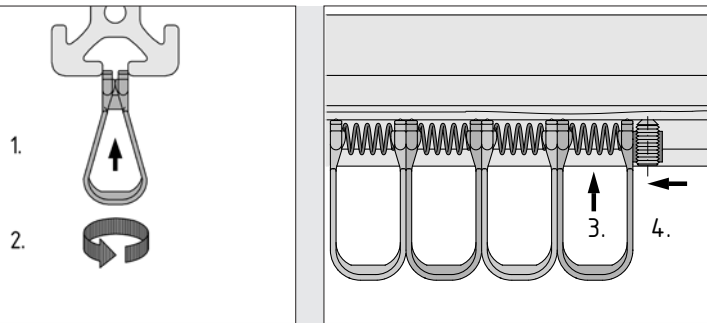


## Tool Holder 8

Simply clip your tool into place! Tool Holder 8 comprises ten individual plastic loops with compression springs. Adjusting the preload on the compression springs alters the clamping force between the elements.

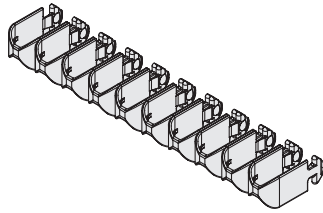
The loops can be twisted into place anywhere along a Line 8 profile groove and gentle pressure is all it takes to snap tools into position between the spring-mounted holders. The number of elements installed determines how many tools can be stored.

Tool Holder 8 keeps the workplace neat and tidy. It is part of the comprehensive Hook and Holder System from item and comes in grey or black.



Installation sequence:

1. Insert loop into groove
2. Turn 90°
3. Insert spring into groove
4. Use Hammerhead Nut 8 M6 and grub screw DIN 916 M6x12 to secure Tool Holder in groove



#### Tool Holder 8



10 loops, PA-GF, grey  
 10 compression springs, St  
 2 Hammerhead Nuts 8 M6, St, bright zinc-plated  
 2 grub screws DIN 916 M6x12, St, bright zinc-plated  
 m = 57.0 g

grey, 1 set	0.0.691.59
black, 1 set	0.0.474.50





A family affair

Useful hooks and holders in one package

Three basic configurations to choose from



## Holder Assortment Hook Assortment Hook and Holder Assortment

Fit out work benches fast! The Assortments contain a selection of essential Hooks and Holders that are incredibly useful for organising tools.

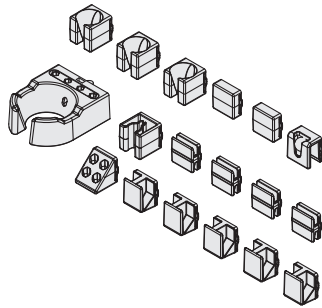
Three packages are available:

The Holder Assortment contains 18 holders that, except for Cordless Driver Holder 8, are simply twisted into the groove. They can all be arranged in next to no time and fitted without the need for any screw fixings so that spanners, screwdrivers and other tools can be quickly put into place.

The Hook Assortment contains 22 hooks in various designs. Made of stainless steel wire, the hooks can be used individually to hang up tools or combined to form adjustable ledges. Holder Support D70 with Container is an ideal storage solution for utensils of all types.

The Hook and Holder Assortment includes 17 components that are used for tool stowage at most work benches. Bottle Holder 8 can accommodate bottles and cans up to 100 mm in diameter. The insert protects against drips.

These practical basic assortments – available in grey or black – save you the trouble of having to make multiple individual orders.

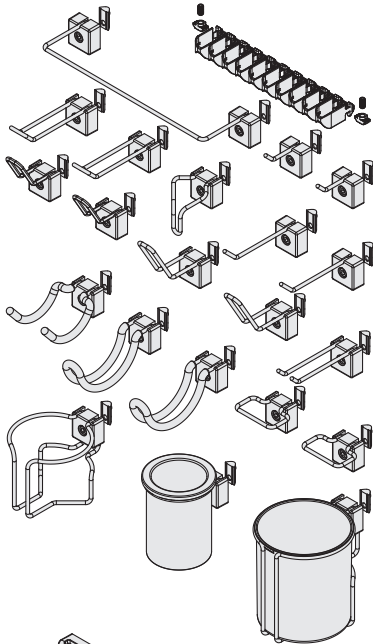


#### Holder Assortment



3x Tool Grip 8  
 2x Magnetic Holder 8 Nd  
 1x Document Holder 8  
 1x Cordless Driver Holder 8  
 1x Pen Holder 8  
 4x Semi-Open Fronted Box Holder 8  
 1x Bit Holder 8  
 5x Spanner Holder 8  
 m = 350.0 g

black similar to RAL 9005, 1 set	0.0.691.14
grey similar to RAL 7042, 1 set	0.0.691.18

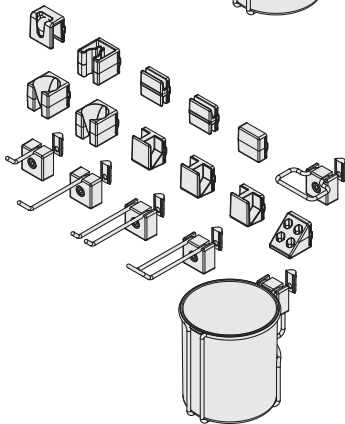


#### Hook Assortment



1x Tool Holder 8  
 1x Holder 8 240x80  
 2x Single Hook 8 40x20  
 2x Hook 8 80x20  
 1x Cloth Holder 8  
 2x Single Hook 8 80x20  
 2x Hook 8 40x40  
 2x Hook 8 80x40  
 1x Double Hook 80x20  
 1x Hook 8 R30  
 2x Hook 8 R40  
 2x Pliers Holder 8  
 1x Cup Holder 8  
 1x Holder Support D70 with Container  
 1x Bottle Holder 8 with Insert  
 m = 1.5 kg

black similar to RAL 9005, 1 set	0.0.691.15
grey similar to RAL 7042, 1 set	0.0.691.17



#### Hook and Holder Assortment



1x Document Holder 8  
 1x Pen Holder 8  
 2x Semi-Open Fronted Box Holder 8  
 1x Magnetic Holder 8 Nd  
 1x Pliers Holder 8  
 2x Tool Grip 8  
 3x Spanner Holder 8  
 1x Bit Holder 8  
 1x Single Hook 8 80x20  
 1x Single Hook 8 40x20  
 1x Double Hook 8 80x20  
 1x Hook 8 80x20  
 1x Bottle Holder with Insert  
 m = 600.0 g

black similar to RAL 9005, 1 set	0.0.691.16
grey similar to RAL 7042, 1 set	0.0.691.19



Seamless stacking

Connects together Groove Plate Profiles

Ensures optimum alignment



### Connecting Element, Groove Plate Profile 8

When you have something big in mind: Connecting Element, Groove Plate Profile 8 links together Groove Plate Profiles that are fitted one above the other, creating one seamless and harmonious unit.

The plastic elements are inserted at intervals along the top of Groove Plate Profile 8 400x14 and clip into another profile section. This means users can design large panels for organising tools of all types and keeping working areas clear and uncluttered.

toolpanelsystem

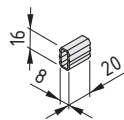
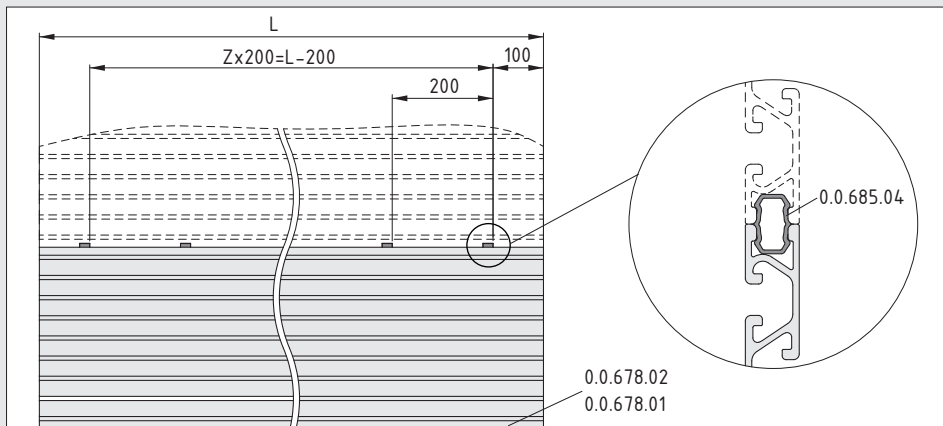


reddot award 2018  
winner



Calculating the necessary number Z of Connecting Elements, Groove Plate Profile 8 between two Toolpanels.

Recommended distance: Connecting Elements are placed 100 mm from the edge and 200 mm from each other.



#### Connecting Element, Groove Plate Profile 8



PA

m = 1.0 g

grey similar to RAL 7042, 1 pce.

0.0.685.04



Load up and dissipate

Electrostatically dissipative

Made from stainless steel

For SystemMobiles L and T



## Shelf St ESD

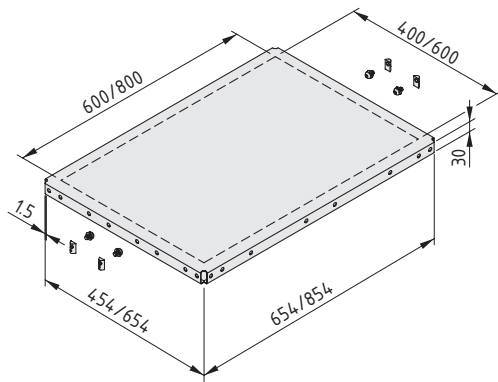
Strong and secure! Shelves St ESD form sturdy storage surfaces on SystemMobiles. Made of stainless steel, they are robust and electrostatically dissipative. They also have a level edge so that small load carriers, containers and cartons can be set down and picked up effortlessly. ESD-sensitive workpieces are particularly well protected.

Holes on the sides mean the Shelves can be mounted neatly on SystemMobiles L and T. Shelves St ESD come in sizes 600 x 400 mm and 800 x 600 mm, making them perfect for storing Euronorm containers. Fastening sets are included in the scope of supply. Each shelf can carry a load of 400 N.

**Note:** Shelf St 6x4 (0.0.646.40) and Shelf St 8x6 (0.0.646.41), which are made of powder-coated sheet steel, are available in the same sizes.







#### Shelf St 6x4 ESD



Shelf for SystemMobiles 6x4, stainless steel  
 4 T-Slot Nuts 8 St M8, St, bright zinc-plated  
 4 Button-Head Screws M8x14, St, bright zinc-plated  
 4 washers DIN 125 8.4, St, bright zinc-plated  
 m = 3.8 kg

1 set	0.0.691.12
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#### Shelf St 8x6 ESD



Shelf for SystemMobiles 8x6, stainless steel  
 4 T-Slot Nuts 8 St M8, St, bright zinc-plated  
 4 Button-Head Screws M8x14, St, bright zinc-plated  
 4 washers DIN 125 8.4, St, bright zinc-plated  
 m = 7.8 kg

1 set	0.0.691.13
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A secure link

Secure compressed-air connection

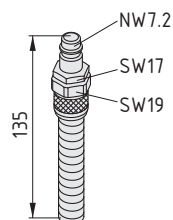
Stable stainless steel kink prevention



## Plug-in Adapter with Kink Prevention ND 7.2

Make working with pneumatic tools easy! Plug-in Adapter with Kink Prevention ND 7.2 connects a  $\varnothing_A$  10x1 pneumatic hose to a Compressed Air Manifold. The Plug-in Adapter creates a leak-tight connection to a quick-action coupling in next to no time.

The stable, stainless steel kink prevention ensures pneumatic lines that are very mobile don't get damaged and therefore achieve a long service life. When combined with the Spiral Hose for Tool Balancers (0.0.650.67), the Plug-in Adapter creates a dependable connection between a hose and the item Compressed Air Manifold (0.0.635.98).



### Plug-in Adapter with Kink Prevention ND 7.2

Male connector G 3/8" ND 7.2, brass, bright zinc-plated  
Kink prevention spring, stainless steel  
m = 80.0 g

1 pce.

0.0.691.00





## Build lean – with the Lean Production Building Kit System

Warning and Protective Profile D30 R28-90°

Fastener D30 T1

Handle D30-300

Parallel Clamp D30-80

Fastener D30, internal, Connector M6-12

Profile Tube D30-45° heavy duty



## Safety<sup>2</sup>

Hatched warning markings

Permanently elastic impact and scratch protection

Simply clip on and pull off

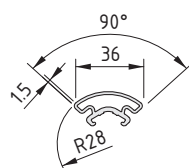
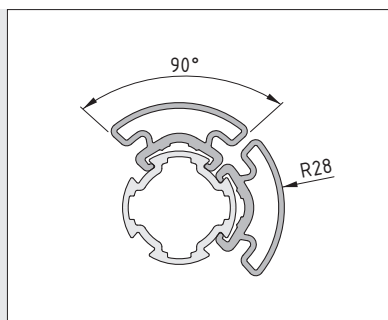
### Warning and Protective Profile D30 R28-90°

Doubly safe! Warning and Protective Profile D30 R28-90° combines Protective Profile D30 R28-90° with hatched yellow and black warning markings. The strikingly coloured impact protection can be used to highlight hazard areas such as exposed profiles and protect both man and material in equal measure. The elastic chamber of the Protective Profile deforms to absorb impacts.

Warning and Protective Profile D30 R28-90° can be fitted in seconds and is simply clipped onto the flank of a Profile Tube D30 or Profile 6 D30. It is resistant to typical, day-to-day impacts and prevents scratches, too. If the basic frame is modified, the Warning and Protective Profile can be easily removed without leaving any traces and can then be simply clipped back into place. This also makes it ideal as a temporary warning sign.

Warning and Protective Profile D30 R28-90° covers a quarter of a Profile Tube and leaves all other areas accessible. It can be used together with Protective Profile D30 R28-90°. Four Protective Profiles cover all the sides of a Profile Tube.





#### Warning and Protective Profile D30 R28-90°

PP/TPE

Black and yellow stripes

m = 212.5 g/m

yellow, similar to RAL 1023, 1 pce., length 2000 mm

0.0.675.25





True to line

High-strength, integrated anti-torsion feature

Insertion depth can be checked by sight

Also suitable for use with Double Profile Tube D30-60



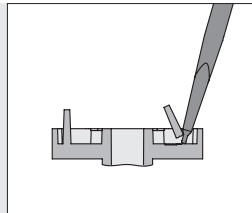
## Fastener D30 T1

The Fastener D30 that can do so much more! Fastener D30 T1 features an integrated and exceptionally robust anti-torsion feature made of aluminium. This ensures that Profile Tubes D30 are always arranged in precisely the orientation needed in right-angled structures. If required, the anti-torsion features can be broken off with a screwdriver so that Tubes D30, for example, can be secured in Fastener D30 T1.

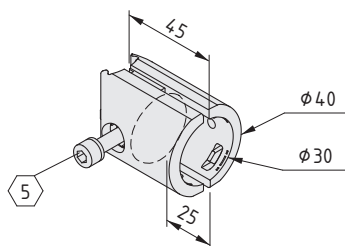
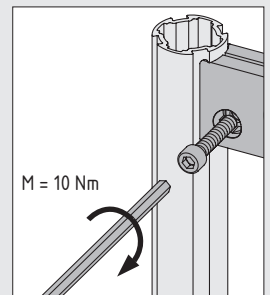
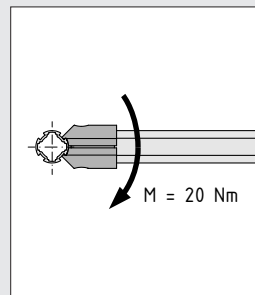
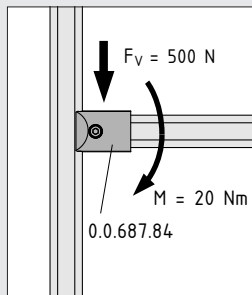
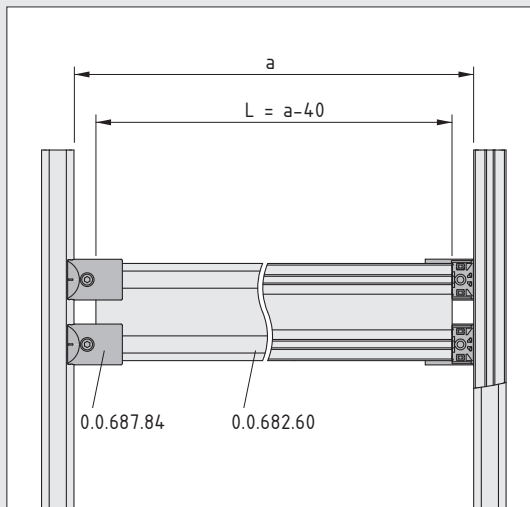
Fastener D30 T1 also has a narrow gap along its side so you can always see how far a (Profile) Tube is inserted into the Fastener. That makes the job of inspecting frames much easier. It also means that Fastener D30 T1 can be used with Double Profile Tube D30-60, as the gaps at the side of the fastener halves accommodate the connecting web on the Profile Tube.

Made of die-cast aluminium, Fastener D30 T1 also uses exactly the same external clamping technology as Fastener D30. Both variants are designed for the same loads.





Use a slotted screwdriver to break off the anti-torsion features.



#### Fastener D30 T1



Preassembled  
2 fastener halves, die-cast Al, natural  
Hexagon Socket Head Cap Screw similar to DIN 912 M6x29.4, St, bright zinc-plated  
Hexagon nut DIN 934 M6-5, St, bright zinc-plated  
M = 10 Nm      m = 94.0 g

1 pce.

0.0.687.84



Everything in hand

Ergonomic and standard-compliant

Secured against twisting

Pleasant to grip

## Handle D30 KH 300

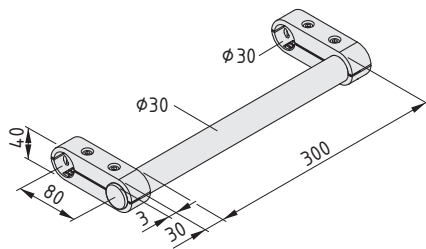
The perfect way to get hands-on! Handle D30-300 comes with everything you need to fit a standard-compliant handle to a transport trolley made from Profile Tubes D30 in next to no time.

The set includes two Parallel Clamps D30-80 and a 360mm-long Tube KH D30x11.6. The Tube is made from a 70 percent wood composite material that is more pleasant to handle than metal.

The length and arrangement of the Handle have been designed to ensure compliance with the DIN EN 1757-3 standard for manually operated industrial trucks and trolleys. The parallel clamping arrangement automatically positions the Handle with a slight offset to the inside. This creates a gap from the outside that ensures the user's hands aren't injured while moving the trolley along walls, for example. The Handle must be fastened to a Profile Tube D30 or Profile Tube D30 heavy duty because the grooves are responsible for ensuring the correct alignment and stop the grip twisting around. The integrated anti-torsion feature can also be removed, if required.

Handle D30-300 can be fastened to vertical or horizontal Profile Tubes D30. To make these Profile Tubes even more resistant to twisting during operation, it is advisable to use Fastener D30 T1, which features an especially robust aluminium anti-torsion feature.

**Note:** If the application in question requires a metal grip, a Tube D30 can be used.



#### Handle D30 KH 300

2 Parallel Clamps D30-80  
 Tube KH D30x11.6, 360 mm, anthracite  
 2 Caps KH D30, black  
 m = 685.0 g

1 set

0.0.690.98



Side by side

For building customised handles

For parallel struts spaced at 80 mm

## Parallel Clamp D30-80

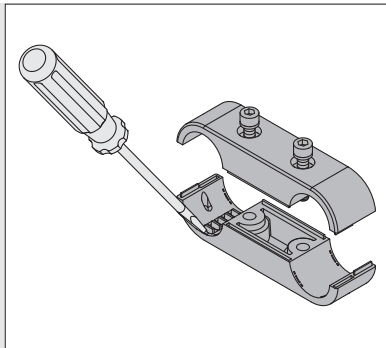
Custom handles in record time! Parallel Clamp D30-80 is a convenient solution that connects two parallel (Profile) Tubes D30 with a spacing of 80 mm. That makes it ideal for creating handles and grips in any length and using any grip material.

Parallel Clamp D30-80 makes it easy to ensure compliance with the DIN EN 1757-3 standard for partially or entirely manually operated industrial trucks and trolleys. To prevent hand injuries, the integrated anti-torsion feature creates a 45° offset to the inside to make sure the grip has sufficient clearance from the outside edge. A Profile Tube D30 or Profile Tube D30 heavy duty must be used to ensure torque can be safely accommodated in line with the standard. The anti-torsion feature located at the opening of the Clamp can also be removed, thus allowing users to adjust the handle to an angle of their choosing.

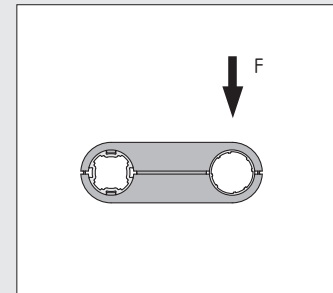
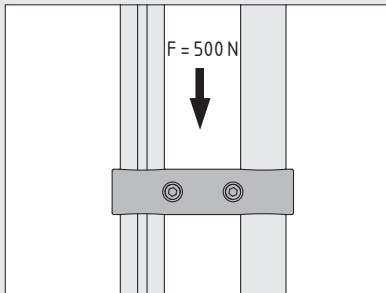
Parallel Clamp D30-80 can be used as a wide parallel fastener for lightweight struts, too. However, Parallel Fastener D30, which clamps onto the flanks of a Profile Tube, achieves higher holding forces.

**Note:** The Profile Tube D30 in the frame should also be secured against torsion. Fastener D30 T1 can be used for this purpose, as it features a series-standard and exceptionally robust anti-torsion feature made of aluminium.

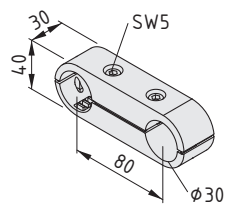




If required, the anti-torsion feature on Parallel Clamp D30-80 can be broken off with a screwdriver.



F with anti-torsion feature = 1000 N  
F without anti-torsion feature = 500 N



#### Parallel Clamp D30-80

2 parallel clamp halves D30-80, die-cast Al, natural  
2 washers, St, bright zinc-plated  
2 hexagon nuts DIN 934 M6-5, St, bright zinc-plated  
2 Hexagon Socket Head Cap Screws DIN 912 M6x30, St, bright zinc-plated  
m = 193.0 g

1 set

0.0.686.65



## Inner connection

End-face connection for Profile 6 D30

Simple fastening to system groove

Universal suitability for panels

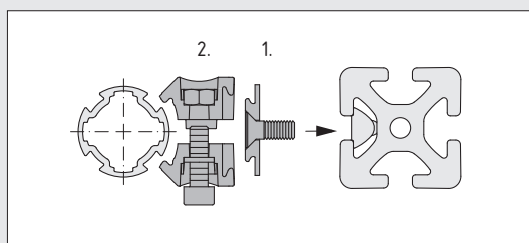
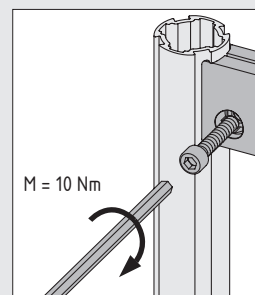
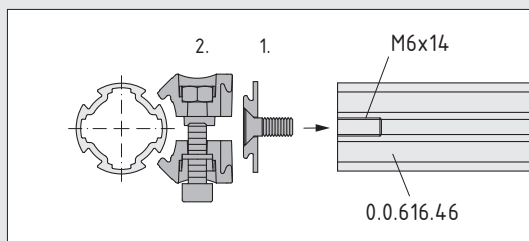
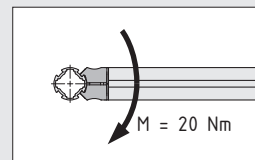
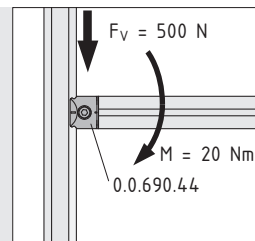
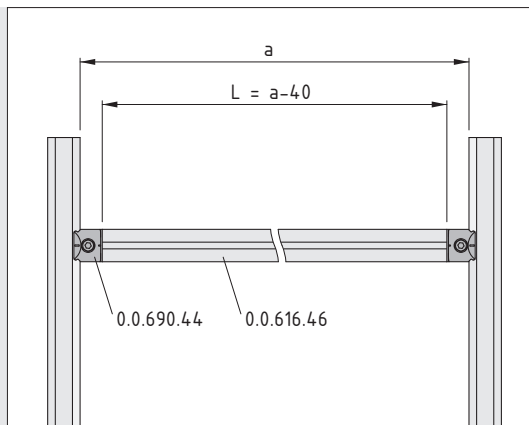


### Fastener D30, internal, Connector M6-12

It's the adapter that bridges divides! Thanks to its adapter flange, Fastener D30, internal, Connector M6-12 can be fastened to any elements that can be secured with the M6 Countersunk Screw included in the scope of supply. That includes profiles from the MB Building Kit System (with a Line 6 groove and up) and Profiles 6 D30, but also panel elements, floors and walls.

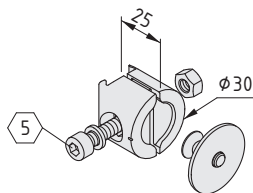
Fastener D30, internal, Connector M6-12 can be secured to the end face of a Profile 6 D30 by drilling an M6 thread into the core bore.

The internal clamping technology from item creates a smooth, elegant transition to a Profile 6 D30 that is secured to the Fastener via its end face. This frees up those few centimetres that make all the difference when Karakuri applications need to use the entire length of a strut, for example.



Fitting Fastener D30, internal, Connector M6-12 to a profile with a system groove:

1. First, screw the adapter flange to a suitable T-Slot Nut M6.
2. Next, position the Fastener on the Profile Tube D30 and the adapter flange and tighten.



#### Fastener D30, internal, Connector M6-12



2 internal Fastener D30 clamping jaws, die-cast Al, natural  
 Flange D30/D6-5, St, bright zinc-plated  
 Washer, St, bright zinc-plated  
 Hexagon nut DIN 934 M6-5, St, bright zinc-plated  
 Hexagon Socket Head Cap Screw DIN 912 M6x20, St, bright zinc-plated  
 Countersunk Screw DIN 7991 M6x16, St, bright zinc-plated  
 M = 10 Nm m = 53.0 g

1 set

0.0.690.44



Heavyweight

For 45° or 90° connections

Very low profile deflection

Available in lengths of 3000 and 6000 mm



### Profile Tube D30-45° heavy duty

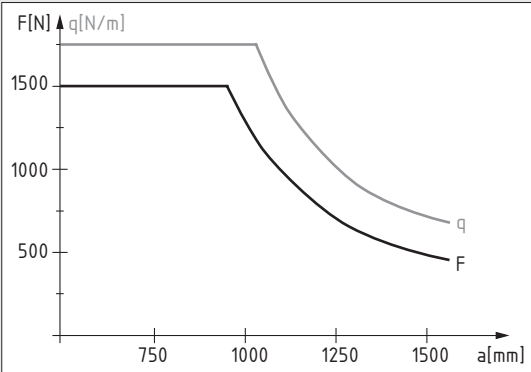
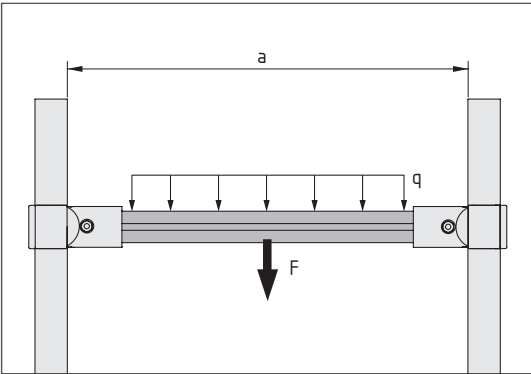
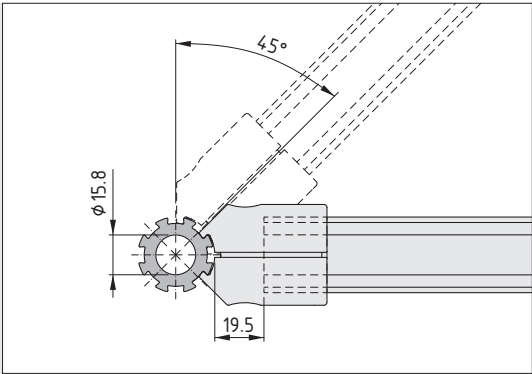
Exceptionally stable and versatile! Profile Tube D30-45° heavy duty features thick walls and a total of eight grooves. This means struts can be attached at angle increments of 45° without having to use special fasteners. In fact, 90° and 135° connections can be combined at the same intersection point.

All the same fastening principles apply and all fasteners and components can be used without modification.

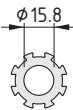
Profile Tube D30-45° can be ordered in the standard lengths of 3000 and 6000 mm and in custom cut-offs. This makes it easy to find the right size for your warehouse.

Profile Tube D30-45° is the ideal solution when there are high requirements for low profile deflection and increased buckling resistance. Heavy-duty threaded inserts that can withstand the highest compressive and tensile loads can be fitted to the end face.





Permissible loads for constructions built with Profile Tube D30 heavy duty.



**Profile Tube D30-45° heavy duty**



Al, anodized

A [cm²]	m [kg/m]	I <sub>x</sub> [cm⁴]	I <sub>y</sub> [cm⁴]	I <sub>z</sub> [cm⁴]	W <sub>x</sub> [cm³]	W <sub>y</sub> [cm³]
3.83	1.03	2.46	2.46	3.58	1.69	1.69
natural, 1 pce., length 3000 mm						0.0.690.30





**Work digitally from start to finish – with online tools from item**

item MotionDesigner®

item Engineeringtool



Design more, design faster

iMD

Straightforward design of cantilever axes

Reliable calculation of support spans

Dependable design of complex applications

## item MotionDesigner®

Get to the perfect Linear Unit even faster! Design and selection software item MotionDesigner® now offers even more functions and information to help you decide on the ideal turnkey system for your needs.

It now supports the design of cantilever axes, which feature a fixed carriage and moving linear unit. They are used as Z axes in a handling system and take care of pick-and-place tasks in multiple-axis gantries.

The cantilever axis has been added as an additional axis type in the "Mounting arrangement" section. All subsequent steps in item MotionDesigner® are unchanged. This gives engineers valuable support, including for particularly complex applications. The fixed carriage has to accommodate forces and torques generated by the axis itself as a result of dynamic motions, tools and applied loads. item MotionDesigner® takes care of all the calculations, thereby making the design and selection process easier. In just a few seconds, the software returns suitable combinations of Linear Unit, Gearbox, Motor and Controller.

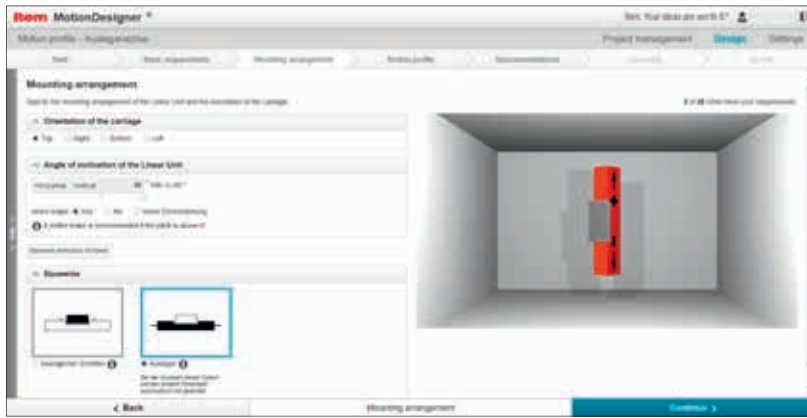
The high-speed calculations performed by the software make project engineering much easier. You can tell straight away what will work and whether an idea can actually be implemented. Possible modifications can be worked out fast, with detailed documentation that lists all the technical values also helping. When working with Linear Units that have a moving carriage, the software now also states the necessary support span, which makes the job of engineering the machine frame easier.

item MotionDesigner® is available to use online and there is no need to download any software: [motiondesigner.item24.co.uk](https://motiondesigner.item24.co.uk)



WWW.

item MotionDesigner® can be found here:  
[motiondesigner.item24.co.uk](https://motiondesigner.item24.co.uk)



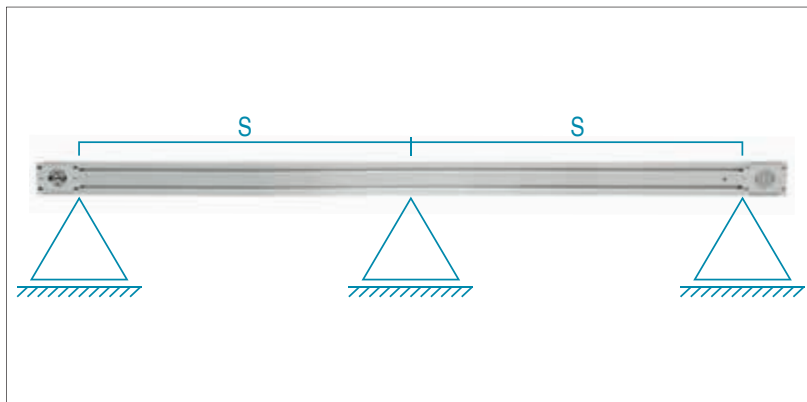
### Cantilever axis calculation

item MotionDesigner® now calculates cantilever axes as well as Linear Units with a moving carriage. As usual, the Linear Unit can be installed any way required and every position can be mapped in all three dimensions. Components are automatically preselected as appropriate to the mounting arrangement, such as Motors with a brake in the case of a vertical mounting arrangement. All other steps in the design process are unchanged and are tailored to the project requirements.



### Efficient results comparison

item MotionDesigner® factors in technical specifications to calculate all potentially suitable combinations of Linear Unit, Motor, Gearbox and Controller. The extended filter function allows users to further narrow down selection criteria so that the solutions can be more easily compared. This speeds up the selection process and helps save time.



### Automatic support span calculation

To ensure safe, error-free operation, the deflection on a horizontal linear unit must not exceed a maximum value. item MotionDesigner® now uses length and load data to calculate the necessary support span. This value is automatically included in product documentation. That saves users having to carry out the calculations themselves and speeds up the engineering process for the machine frame that will hold the item linear motion unit®.

## A lean team



Design lean factory equipment

Use additional components

Available in 41 countries

### item Engineeringtool

Lean is going digital! The item Engineeringtool now incorporates the components from the Lean Production Building Kit System. That means you can engineer factory equipment such as FIFO racks and mobile frames in next to no time on screen and then order the components at the touch of a button.

The item Engineeringtool is the ideal complement to lean production operations. Thanks to the rules-based placement of profiles, there's nothing stopping you from putting your ideas straight into practice. Factory equipment can be designed on screen and modified with ease.

For example, improvements designed to optimise material flow can be made to a material supply rack in the space of just a few minutes – even when reworking completed designs. Due to the end-to-end digital process chain from design to assembly, your solution is documented in full.

However, that is not the only way the item Engineeringtool has been improved – it now works even more closely with the item Online Shop. Profiles can be dragged straight from the Online Shop and dropped onto a construction. This new feature is particularly practical when working with two screens.

More products have also been incorporated from the MB Building Kit System to further extend functions. For example, flat and angle brackets can now be integrated into the 3D engineering process to incorporate extra strength and rigidity into frames.

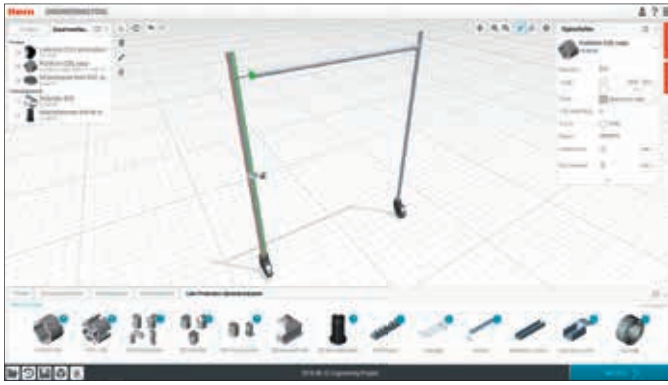
The item Engineeringtool is as international as your business, and is now available in 41 countries and a range of languages. That means you can work on projects together with colleagues around the world.

The item Engineeringtool can be used anywhere. Because there is no software to download, all the new functions and future improvements are automatically available: [item.engineering/tools/engineeringtool](http://item.engineering/tools/engineeringtool)



The item Engineeringtool can be found here:  
[item.engineering/tools/engineeringtool](http://item.engineering/tools/engineeringtool)





### Rapid results thanks to ease of use

It's as easy to use as Profile Tube System D30! The item Engineeringtool is the premier digital tool for frame building. The components from the Lean Production Building Kit System can be positioned on screen, aligned and automatically connected – all with the greatest of ease. Since the item Engineeringtool knows the profiles and their properties, it always combines them with the right fasteners and matching accessories.



### Custom-optimised constructions

The item Engineeringtool keeps you in full control of your constructions. You can insert profiles precisely where you want them to obtain a particular gradient between two struts, for example. Reinforcing, diagonal profiles can also be placed in the frame with ease. All the fasteners in the Lean Production Building Kit System are supported.



### Perfect for continuous improvement

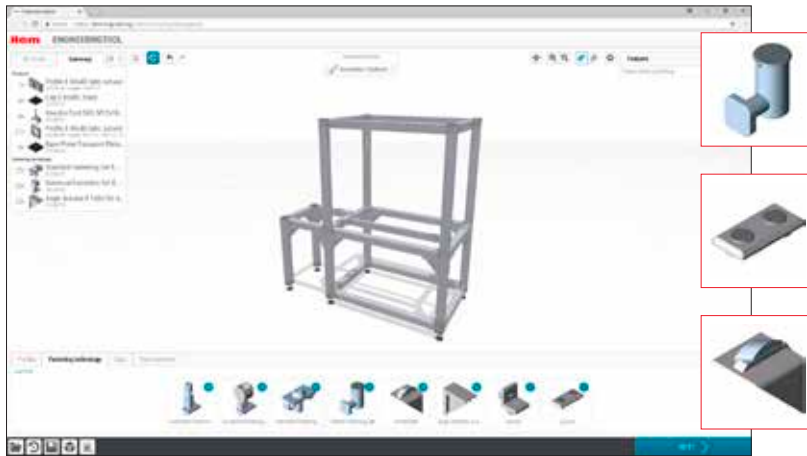
When working with 3D solutions, making small changes can often require a lot of work. That's not the case with the item Engineeringtool! Because the software treats the construction as a unit, it automatically adapts the length of all horizontal or vertical profiles when the frame is extended. All connections change automatically at the same time. That means you can scale your pre-existing model up or down in seconds.



### Solutions for improved material flows

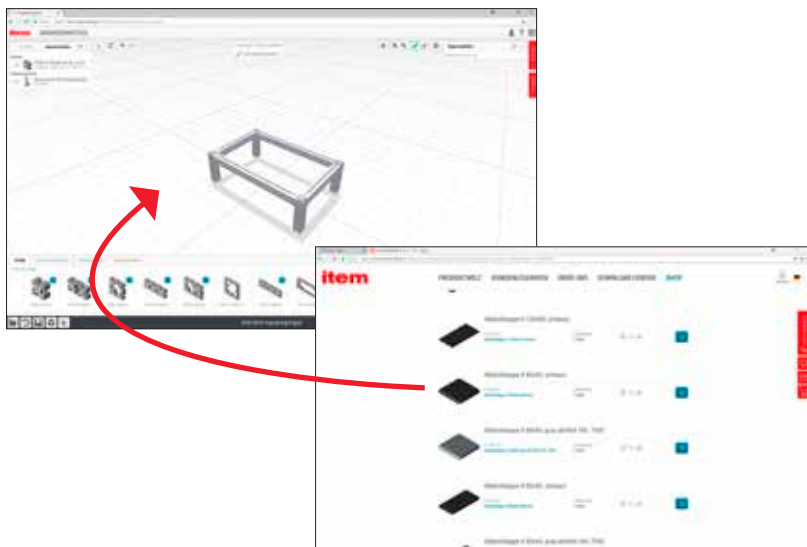
The item Engineeringtool also allows you to integrate roller conveyors into frames. That means you can design FIFO racks and other solutions for efficient material flows in next to no time. The engineering plans are safely archived in your personal project memory and changes can be made at any time. You will gradually build up your own personal project library that documents your tried-and-tested lean production solutions.





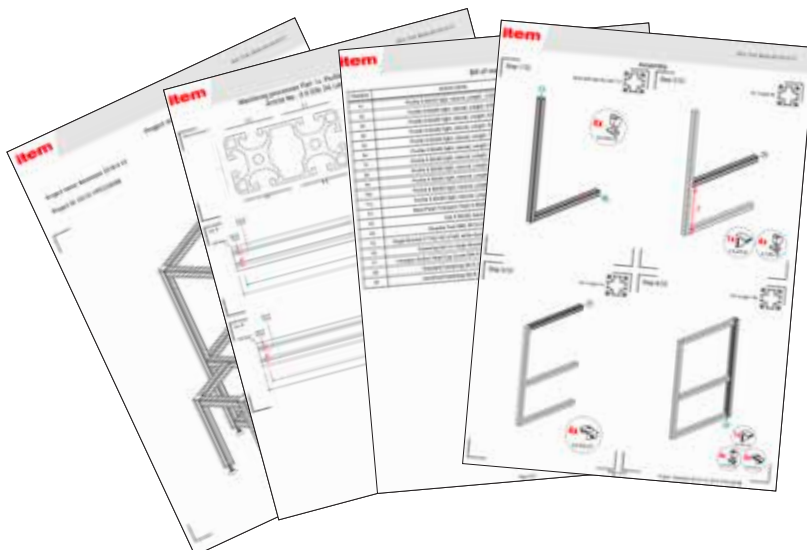
### Use more products from the item product world

The item Engineeringtool now supports brackets (both angled and flat) and additional components that help make constructions stronger and more rigid. Thanks to rules-based placement and automated error correction, the software automatically creates the right connections and selects the right accessories because it knows the properties of all components. That means you can achieve your goals quickly, efficiently and digitally.



### Work more efficiently with two screens

For added efficiency and speed, try working in the item Engineeringtool and the item Online Shop in parallel, with one on each screen. You can now drag components directly from the Online Shop and drop them onto your construction. This function also works if you have two browser windows displayed side by side on one screen. As always, the whole process takes place directly in your browser, with no need for expensive additional software – a simple and intuitive solution.



### Perfect project documentation

The item Engineeringtool supports an end-to-end digital process chain. You automatically obtain detailed documentation including drawings and a step-by-step assembly guide in PDF format. You can review all the profile machining steps and check the sequence in which the components are assembled, which ensures the design process and assembly work run seamlessly together. And even if documents get lost, you can simply download them again, as and when required.

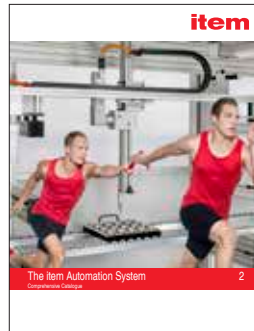


## Other item product catalogues



Work Bench System

[item24.de/en/epaper-wbs](http://item24.de/en/epaper-wbs)



Automation System

[item24.de/en/epaper-au](http://item24.de/en/epaper-au)



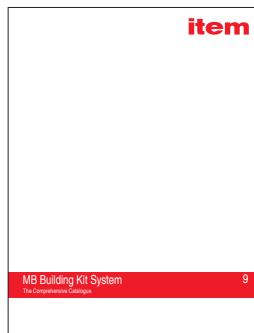
Line XMS

[item24.de/en/epaper-xm](http://item24.de/en/epaper-xm)



Lean Production Building Kit System

[item24.de/en/epaper-lp](http://item24.de/en/epaper-lp)



MB Building Kit System

[item24.de/en/epaper-mb](http://item24.de/en/epaper-mb)



Stairway/Platform System

[item24.de/en/epaper-tp](http://item24.de/en/epaper-tp)



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item product catalogues are available online as clearly laid out and convenient e-papers. Take your pick and get browsing!



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## Your head-start for know-how – the item online portfolio



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item is always there for you! You can find all the product information you could need on the item website – including CAD data. You will also discover the very latest news and a whole range of example applications. Complete parts lists and 3D PDFs provide the ideal basis for your own planning. What's more, you can access an entire media library, discover service offerings and get in touch with item – all at the click of a mouse.

[item24.com](http://item24.com)



### Plan fast and make the right decisions – the item online tools

You can count on us! The item Online Product Configurators and online tools such as the Deflection Calculator for profiles will save you a lot of time. State-of-the-art planning aids for work benches and SystemMobiles make it much easier for you to configure the perfect bespoke solution. When it comes to automation, you can track down the ideal Linear Unit using item MotionDesigner®. And the Query Assistant is ideal for helping you plan stairways and platforms with ease.

[item24.de/en/service/online-product-configurators](http://item24.de/en/service/online-product-configurators)



### See how it's done – with item on YouTube

They say a picture is worth more than 1000 words. So – at 25 images per second – you can imagine just how informative the item videos are. You can find assembly tips and useful information, all packaged up in moving images, on YouTube. Specialists also answer frequently asked questions relating to issues such as ergonomics and lean production. Tune in to the item channel and make the most of our comprehensive catalogue of videos.

[youtube.com/item24com](http://youtube.com/item24com)



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Plug-in Adapter with Kink Prevention ND 7.2 38

Polycarbonate 5mm ESD, clear 13

Profile Tube D30-45° heavy duty 50

Pushbutton, 22mm 15

### S

Selector Switch 60°, 22mm 15

Shelf St 6x4, stainless ESD 36

Shelf St 8x6, stainless ESD 36

### T

Tablet Arm 8, 5 Joints 20

Tablet Holder 8, 2 Joints 20

Tool Holder 8 30

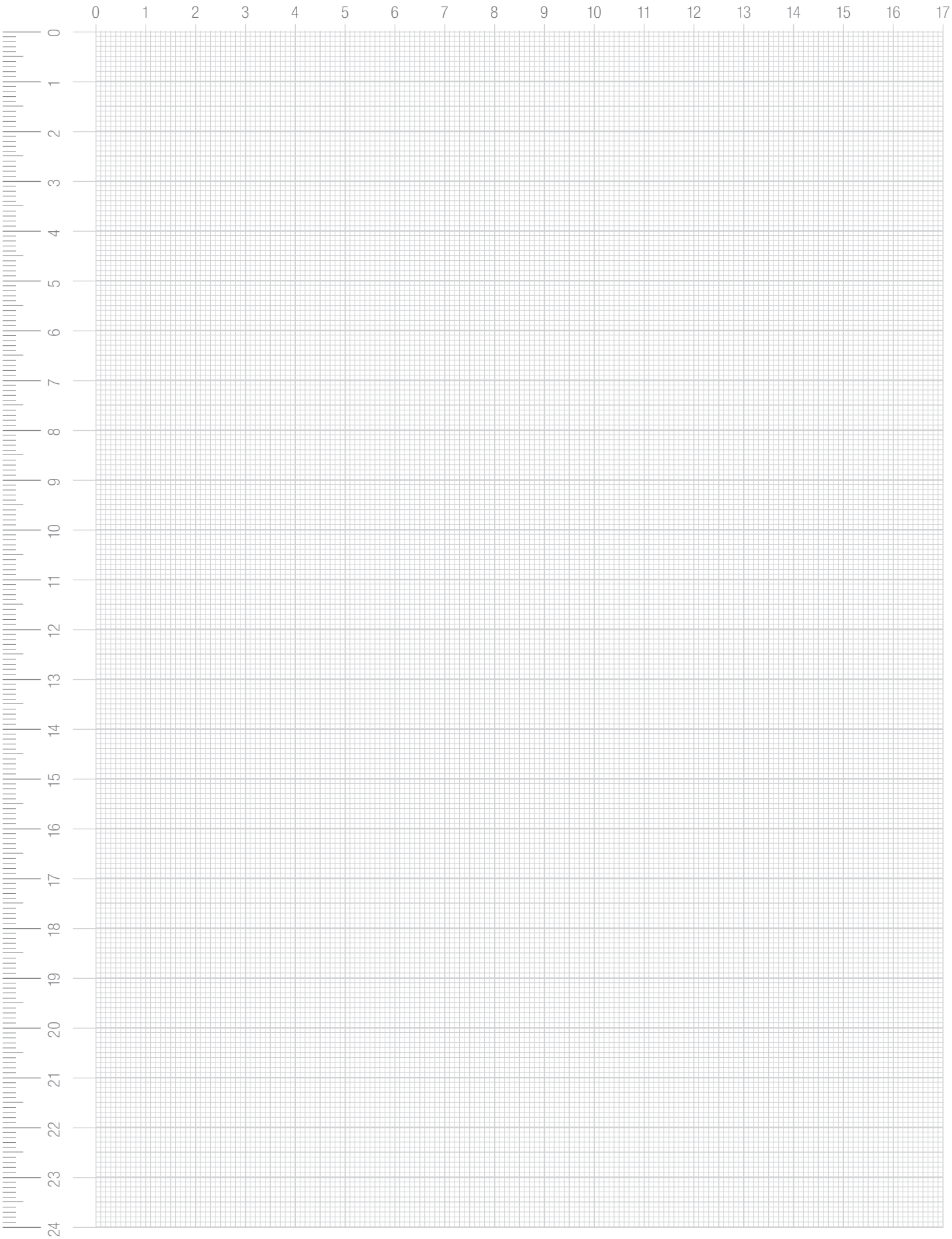
Toolpanel Double Pivot Arm 8 695 26

Toolpanel Pivot Arm 8 370 light 26

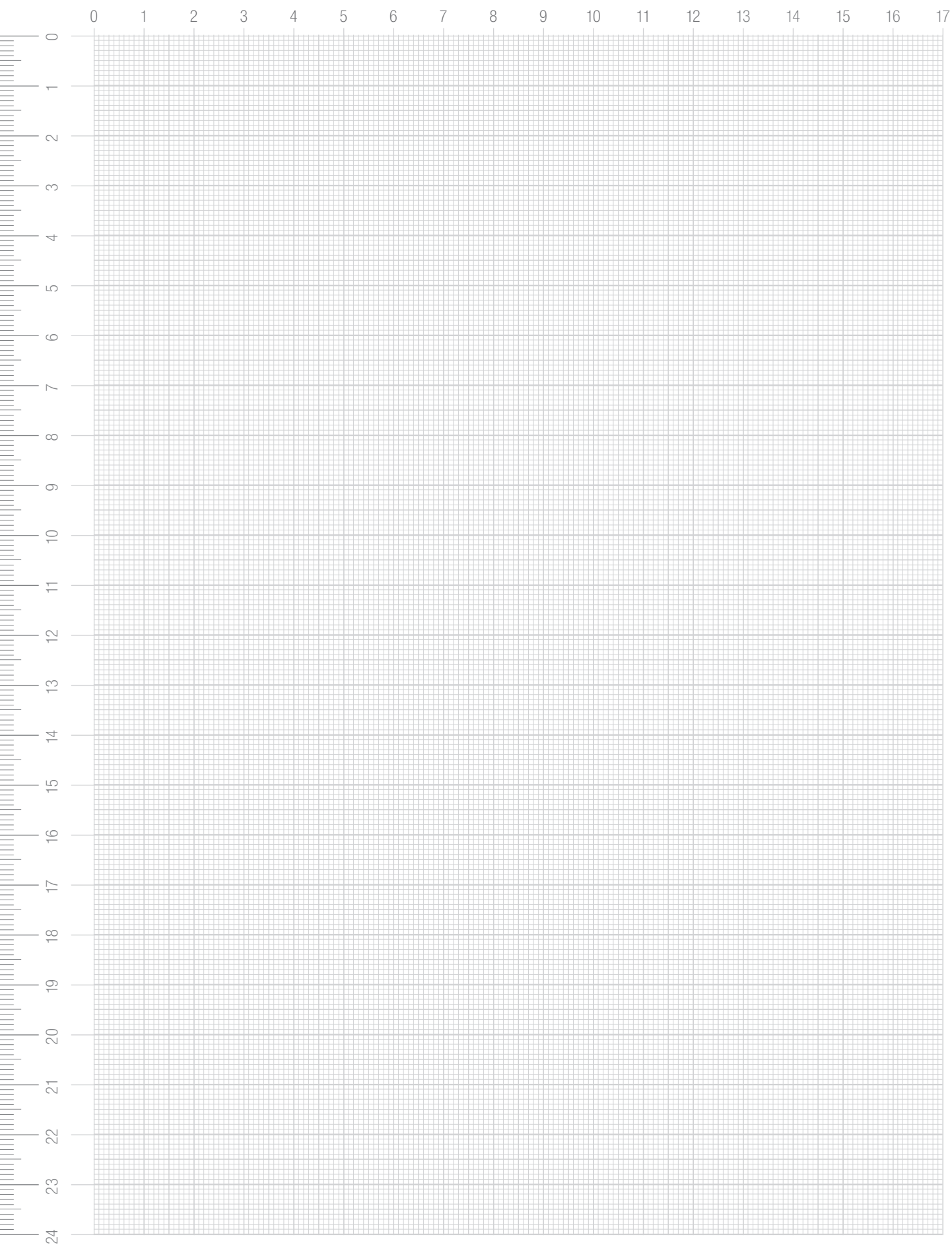
### W

Warning and Protective Profile 8 40x16 18

Warning and Protective Profile D30 R28-90° 40









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