

**item**



**Systematic innovation**  
New Products 2020/1

## Experience innovation – new item products for 2020/ I



### 4 MB Building Kit System

Perfect lifting! The new **Transport Plates** give frames a stable lifting point so they can be hoisted up.

Perfect positioning! The new **Automatic T-Slot Nut** is revolutionising assembly work. It comes with a preinstalled screw and aligns itself independently in the groove as it is inserted.

Perfect stability! The new **Stand Foot Set 8 St 160x160** provides added safety, creates a solid floor fixing for enclosures and guards and is easier than ever to install.



### 14 Work Bench System

Stacking made simple! The new **Carrier Rail Fastening Sets 8** can be used to build storage systems for workpiece carriers and inherently stable containers in next to no time.

Lighting made simple! The new **LED Light Fittings E** are the economical solution for even and glare-free workplace lighting.

Organisation made simple! The new **Tool Block 320x160** keeps tools and bits neat and close to hand. The grid helps organise storage.



### 27 Lean Production Building Kit System

More control! Thanks to the new **Release Unit D30 Bar T2** loading and unloading operations triggered by shooters can now be implemented with very low actuation forces.

More support! Its integrated fastener makes the new **Flange D30 90x90-80** an exceptionally robust solution for fastening lean frames to the floor.

More space! The new central **Side Guide H13 c** keeps transported goods on track on both sides. That means fewer support profiles are needed on parallel conveyor lines.



**36** Automation System

Exceptional rigidity! High-performance multi-axis solutions based around **Transverse Carriage Plate KLE** can be designed faster and put into operation more easily. Just a few components are needed to design a reliable and strong all-in-one system for 2D applications.

Exceptional strength! When heavier loads need to be moved and held, the new **Gearbox 60-16** is the perfect choice. Thanks to a gear ratio of 1:16, the low-noise planetary gearbox generates a high drive torque with a medium motor speed.



**43** Online Tools

Dependable engineering! New functions such as a fixed zero point for designs and a rapid change of perspective are making the **item Engineeringtool** even more user friendly. What's more, Hinges and Ball Joint Fasteners are automatically positioned at the correct angle.



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

Automatic T-Slot Nut V 8 St M6

Stand Foot Set 8 St 160x160

Transport Plate Sets 8 St, M10

Lifting Point M10, WLL 0.4 t, rotating

Caps ESD

Cover Profiles ESD

Fast fixing

Particularly fast fixing

Aligns itself automatically

Fitted in a single step

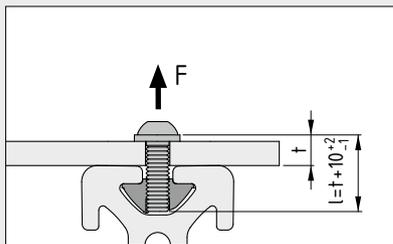
**8** Automatic T-Slot Nut V 8 St M6

Faster than ever! Thanks to its innovative shape, Automatic T-Slot Nut V 8 St M6 makes it easier to fasten accessories and panels in place.

The Automatic T-Slot Nut is preassembled with an M6 screw and, when inserted, positions itself in the profile groove entirely independently. There is no need to separately insert the T-Slot Nut into the groove and align it exactly prior to assembly. This comes in particularly useful when working with components that are fixed in place with multiple screws.

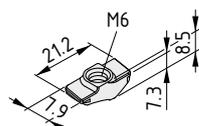
The tapered flanks of the Automatic T-Slot Nut help to guide it into the correct alignment when the screw is turned. Like a Hammerhead Nut, it finds the correct position in the groove itself. A patent application has been filed for the Automatic T-Slot Nut.

The integrated anti-torsion feature positions the T-Slot Nut in the profile groove and ensures the correct orientation for load transfer.



Profile	Permissible operating load
Profile 8 40x40	2800 N:
Profile 8 40x40, light	2500 N:
Profile 8 40x40, E	1750 N:

Recommended tightening torque: 14 Nm



Automatic T-Slot Nut V 8 St M6

St  
m = 4.0 g

stainless, 1 pce.

0.0.684.20



## Upstanding

For freestanding enclosures and guards

Static and dynamic safety

Perfectly adjustable



### Stand Foot Set 8 St 160x160

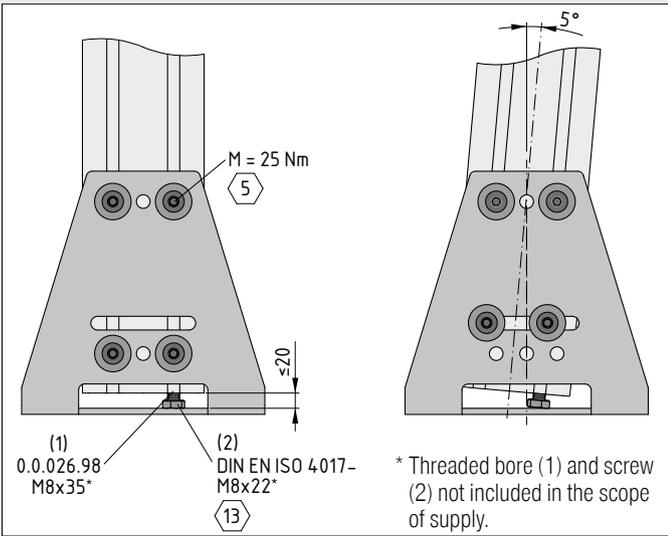
A smart solution for safe stability! Stand Foot Set 8 St 160x160 combines optimum protection with a compact design and is ideal for use with freestanding enclosures and guards. It enables a cost-effective and robust floor fixing while also supporting a range of safety concepts.

Profiles 8 80x40 or Profiles 8 40x40 are used as the stand profiles, or posts, for protective enclosures and guards. These profiles are fastened to the stand foot by screwing the fixings supplied in the Stand Foot Set into the grooves of the profiles. Two Screw Anchors ST 10x110, bright zinc-plated (0.0.688.05) are the ideal fixings for anchoring the entire construction to the floor.

The lower fixings of the Stand Foot Set can be installed in two different ways. While driving them through the drilled holes creates a rigid, mechanically locked connection, using the slot instead ensures the upright posts of the guard can be easily aligned.

When located in the slot, the screw fixings can help to cushion an impact by dynamically absorbing the force by means of friction resistance. Major collisions also leave clearly visible evidence. As a result, the enclosure or guard is more likely to be checked for damage, repaired with spare parts and then restored to full working order.

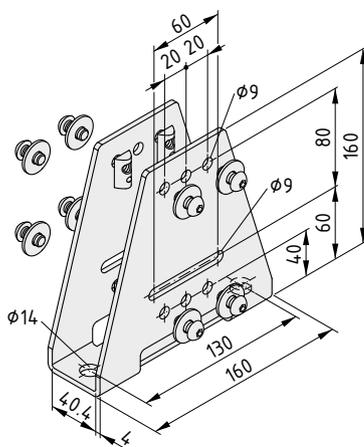
Thanks to its bright zinc-plated surface, the product can also be used with ESD-safe enclosures and guards.



Fixing options

Slant compensation

If required, height adjustment can be achieved using a DIN EN ISO 4017-M8x22 hexagon screw fitted into an M8x35 mm thread that has been tapped into a core bore at the end face of the stand profile. This screw also supports the profile with regard to slant compensation. It is not included in the scope of supply.



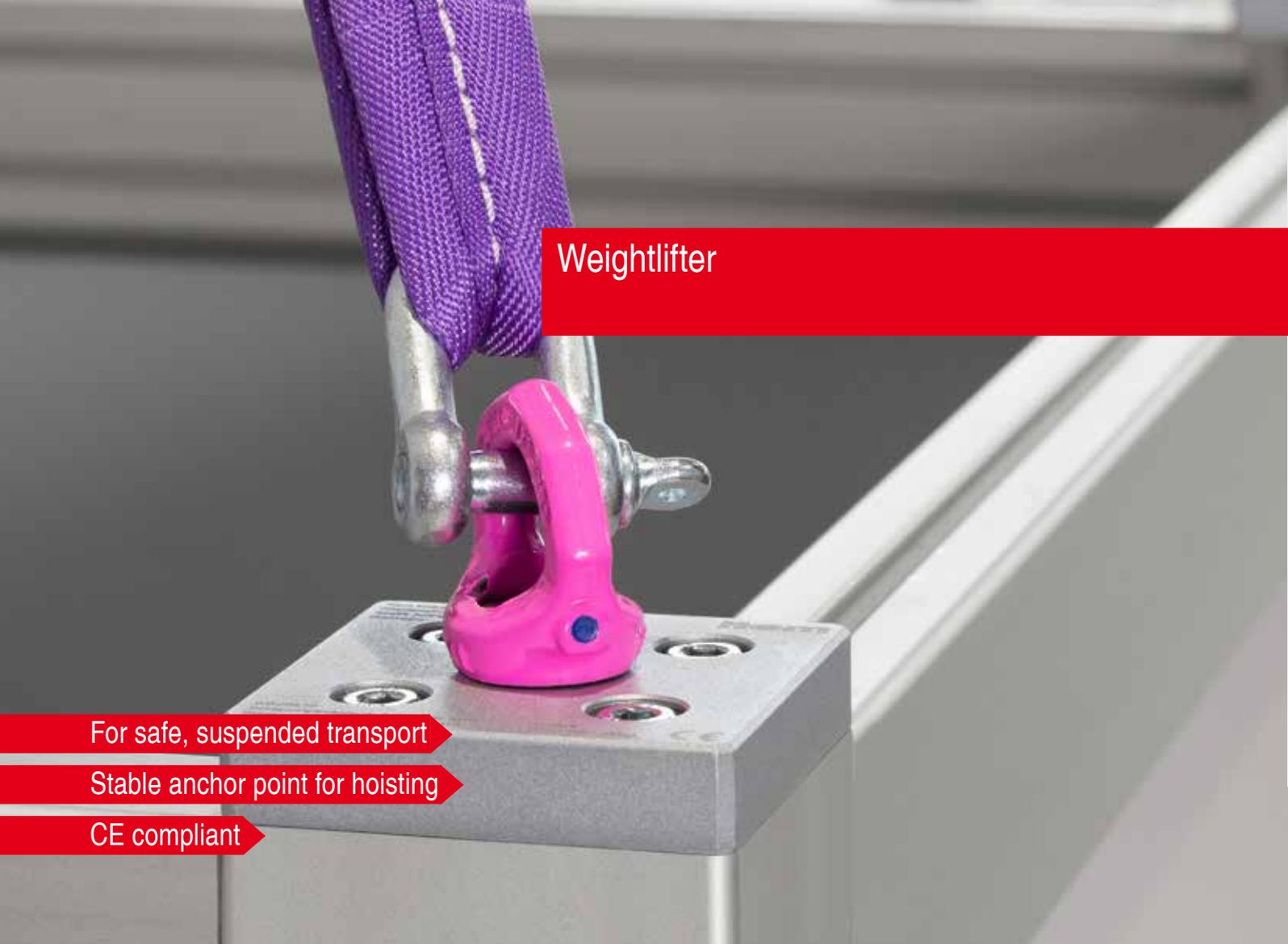
**Stand Foot Set 8 St 160x160**



- Stand foot 8 160x160, St, bright zinc-plated
- 8 T-Slot Nuts 8 St M8, bright zinc-plated
- 8 Button-Head Screws ISO 7380 M8x18, St, bright zinc-plated
- 8 washers 24x9.3x2-200HV, bright zinc-plated
- m = 1.0 kg

1 set

0.0.699.95



## Weightlifter

For safe, suspended transport

Stable anchor point for hoisting

CE compliant



### Transport Plate Sets 8 80x40 and 80x80 St, M10 Lifting Point M10, WLL 0.4 t, rotating

Lift to move! item Transport Plates are used as a load-carrying component when lifting frames from above to move them. The fixings included in the scope of supply are used to screw them to the core bores at the end face of a Profile 8 80x40 or Profile 8 80x80. Their M10 thread is used to install Lifting Point M10, WLL 0.4 t, rotating.

The load-carrying capacity of the Transport Plates and the Lifting Point is up to 4000 N. This means structures can be lifted from above and moved to a new location in line with CE requirements.

Lifting Point M10, WLL 0.4 t, rotating is intended for lifting and moving heavy loads. To ensure easy alignment, the lifting eye can still be rotated 360 degrees when installed. Lifting Point M10, WLL 0.4 t, rotating and Transport Plate Sets 8 comply with the European Machinery Directive 2006/42/EC.

Both products are perfectly coordinated and have been tested to German Social Accident Insurance (DGUV) regulation 100-500.

The striking bright pink colouring of the Lifting Point indicates that it can be used to accommodate loads.

**Note:** item Base Plates made of die-cast zinc are not approved for lifting frames!





Calculate the necessary load-carrying capacity of the individual Lifting Point for symmetrical and/or asymmetrical loading as per the following formula.

$$L = W_{LL} \cdot (n \cdot \cos \beta)$$

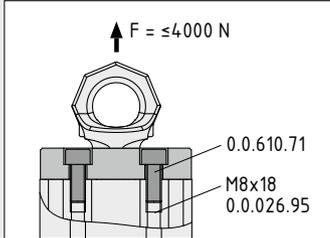
Where:

$W_{LL}$ : (Working Load Limit), maximum load-carrying capacity of a Transport Plate at the Lifting Point = 400 kg

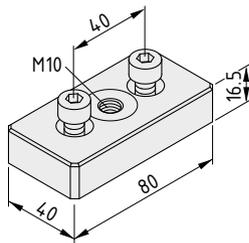
L: Maximum load that can be transported (kg)

N: Number of load-bearing lines

$\beta$ : Angle of inclination of a single line



Attachment type									
Number of lines n	1	1	2	2	2	2	3 or 4	3 or 4	3 or 4
Angle of inclination $\beta$	0°	0°	0°	0°-45°	45°-60°	Asym.	0°-45°	45°-60°	Asym.
Factor: $n \cdot \cos \beta$	1	1	2	1.4	1	1	2.1	1.5	1
$L = W_{LL} \cdot (n \cdot \cos \beta)$ Transport Plate 8 80x40 St, M10 Transport Plate 8 80x80 St, M10	Not possible*	400 kg	800 kg	560 kg	400 kg	400 kg	840 kg	600 kg	400 kg
* It is not permissible to install the Transport Plate on the grooves along the side of an aluminium profile.									

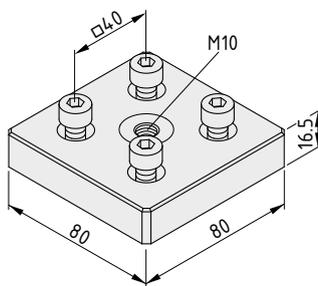


#### Transport Plate Set 8 80x40 St, M10

Transport plate 8 80x40 St, M10, St, white aluminium similar to RAL 9006  
2 Hexagon Socket Head Cap Screws DIN 912-M8x25, St, bright zinc-plated  
User guide  
m = 400.0 g

1 set

0.0.698.18

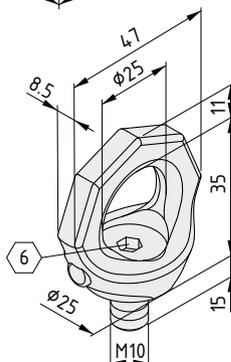


#### Transport Plate Set 8 80x80 St, M10

Transport plate 8 80x80 St, M10, St, white aluminium similar to RAL 9006  
4 Hexagon Socket Head Cap Screws DIN 912-M8x25, St, bright zinc-plated  
User guide  
m = 800.0 g

1 set

0.0.698.19



#### Lifting Point M10, WLL 0.4 t, rotating

St  
m = 130.0 g

1 pce.

0.0.698.34

## ESD safety capped

Clearly identifiable ESD safety

Covering for cut edges

Available in most popular sizes



### Caps ESD

Double the safety! The ESD-safe Caps from item are intended for production areas where sensitive electronic components are handled. Their electrostatically dissipative properties make them suitable for use in an EPA (electrostatic protected area).

The Caps, which feature rounded edges and a yellow ESD symbol, are made of a special glass-fibre-reinforced plastic. PA-ESD ensures a surface resistance of  $<10^6 \Omega$ .

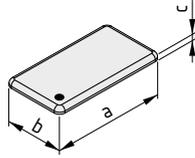
Simply push the Caps into the core bores of aluminium profiles to fasten them in place. They keep out dust and eliminate the need to deburr cut edges.

Their geometry ensures a secure hold even when subjected to vibrations and temperature fluctuations.



Materials used in all the following products:

PA-GF



<b>Cap 6 30x12 ESD</b>		
a = 30 mm    b = 12 mm    c = 3 mm    m = 1.0 g		
black, 1 pce.		0.0.696.50
<b>Cap 6 30x30 ESD</b>		
a = 30 mm    b = 30 mm    c = 3 mm    m = 2.0 g		
black, 1 pce.		0.0.696.48
<b>Cap 6 60x30 ESD</b>		
a = 60 mm    b = 30 mm    c = 3 mm    m = 5.0 g		
black, 1 pce.		0.0.696.49
<b>Cap 8 40x40 ESD</b>		
a = 40 mm    b = 40 mm    c = 4 mm    m = 5.0 g		
black, 1 pce.		0.0.696.27
<b>Cap 8 80x40 ESD</b>		
a = 80 mm    b = 40 mm    c = 4 mm    m = 10.0 g		
black, 1 pce.		0.0.696.28
<b>Cap 8 80x80 ESD</b>		
a = 80 mm    b = 80 mm    c = 4 mm    m = 16.5 g		
black, 1 pce.		0.0.696.29
<b>Cap 8 120x40 ESD</b>		
a = 120 mm    b = 40 mm    c = 4 mm    m = 13.0 g		
black, 1 pce.		0.0.696.30



ESD safety covered

ESD-safe panel fixing

Seals profile grooves

Compatible with Line 5 and 6 profiles

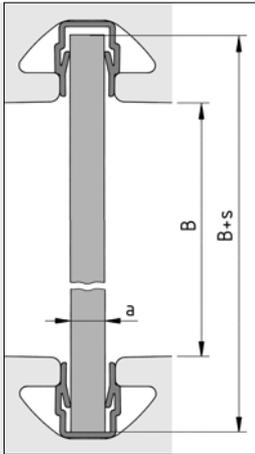


## Cover Profiles ESD

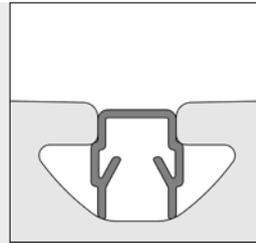
Cover Profiles have two different applications. When installed with the closed side facing out, they seal a groove to keep dirt out. When installed with the open side facing out, they can be used to accommodate panel elements, holding them securely in the profile groove and stopping them from rattling.

Cover Profile 5 ESD and Cover Profile 6 ESD are made of an electrostatically dissipative plastic (surface resistance  $<10^6 \Omega$ ). They are therefore ideal for use in ESD-safe constructions. You can find compatible electrostatically dissipative panel elements in the item Online Shop.

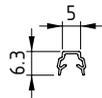
**Note:** Cover Profiles are available for all lines. Please note the maximum material thickness appropriate for a groove size.



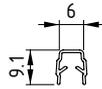
Cover Profile	a [mm]	s [mm]
5 ESD	1.5-2.0	10
6 ESD	2.0-3.5	16



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



<b>Cover Profile 5 ESD</b>	 
PP m = 11 g/m	
black, 1 pce., length 2000 mm	0.0.675.40



<b>Cover Profile 6 ESD</b>	 
PP m = 18 g/m	
black, 1 pce., length 2000 mm	0.0.675.39



## Ergonomic production – with the item Work Bench System

Carrier Rail Fastening Sets 8

LED Light Fittings E

Double Hook 8 40x20

Tool Block 320x160

Table Column Sets E 230 V

Drawer S1 H70



Rail traffic

Store inherently stable containers

Ramp for easy loading

Straightforward assembly



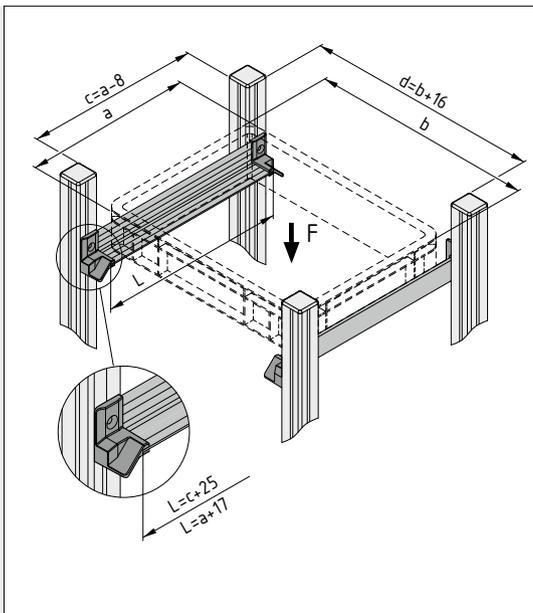
## Carrier Rail Fastening Sets 8

Racks without shelves! Parallel carrier rails made of Profiles M W 40x40x4 E (7.0.001.30) are ideal for holding workpiece carriers, crates and inherently stable rectangular containers. They help users build lighter transport trolleys with fewer materials.

Attaching the angled profiles to the profile frame couldn't be easier when using Carrier Rail Fastening Set 8, and cut edges do not need to be deburred. Thanks to the preassembled Automatic T-Slot Nuts, installation takes a matter of seconds.

The sets are available with and without a stop, so users can build trolleys that will either hold goods in place at one side or allow users to load and unload contents from either side. The integrated ramp ensures straightforward, fast and safe handling for containers in a wide range of shapes.





F = max. 300 N

a = Container depth

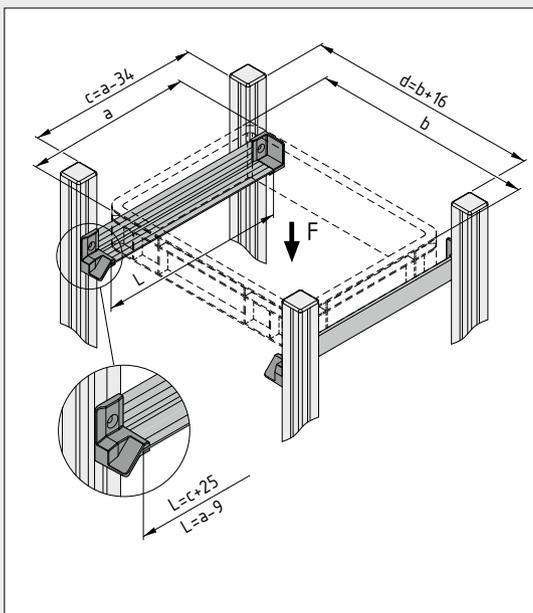
b = Container width

c = Profile spacing (depth)

d = Profile spacing (width)

L = Length of Profile M W 40x40x4 E (max. 1000 mm)

Standard container sizes			Dimensions of the carrier rail system		Standard container sizes		Dimensions of the carrier rail system	
a	c	L	b	d				
150	142	167	150	166				
200	192	217	200	216				
300	292	317	300	316				
400	392	417	400	416				
600	592	617	600	616				
800	792	817	800	816				



F = max. 300 N

a = Container depth

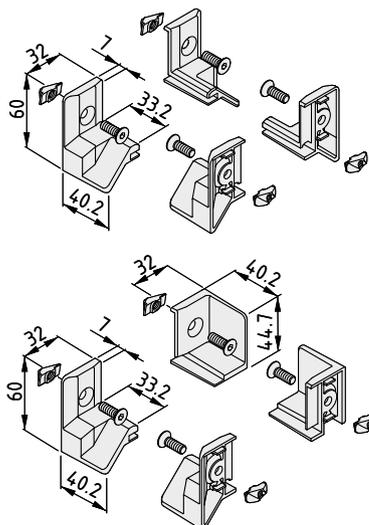
b = Container width

c = Profile spacing (depth)

d = Profile spacing (width)

L = Length of Profile M W 40x40x4 E (max. 1000 mm)

Standard container sizes			Dimensions of the carrier rail system		Standard container sizes		Dimensions of the carrier rail system	
a	c	L	b	d				
150	116	141	150	166				
200	166	191	200	216				
300	266	291	300	316				
400	366	391	400	416				
600	566	591	600	616				
800	766	791	800	816				



#### Carrier Rail Fastening Set 8



2 carrier rail fasteners 8 R, die-cast Al, natural

2 carrier rail fasteners 8 L, die-cast Al, natural

4 Countersunk Screws DIN 7991-M6x18

4 Automatic T-Slot Nuts V 8 St M6, stainless

m = 0.2 kg

1 set

0.0.689.41

#### Carrier Rail Fastening Set 8 with Stop



Carrier rail fastener 8 R, die-cast Al, natural

Carrier rail fastener 8 L, die-cast Al, natural

Carrier rail fastener 8 R with stop, die-cast Al, natural

Carrier rail fastener 8 L with stop, die-cast Al, natural

4 Countersunk Screws DIN 7991-M6x18

4 Automatic T-Slot Nuts V 8 St M6, stainless

m = 0.2 kg

1 set

0.0.689.40

A bright idea

Very economical lighting

Even distribution of light

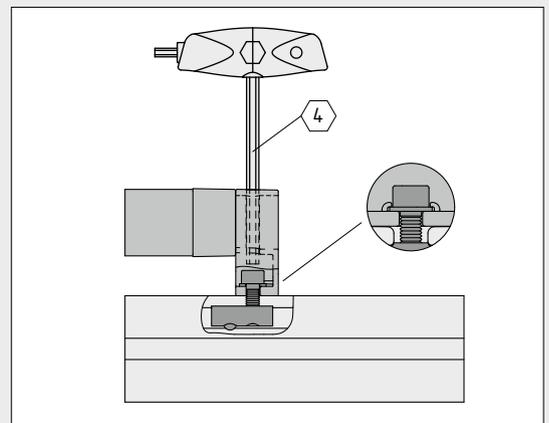
Microprisms eliminate glare

## LED Light Fittings E

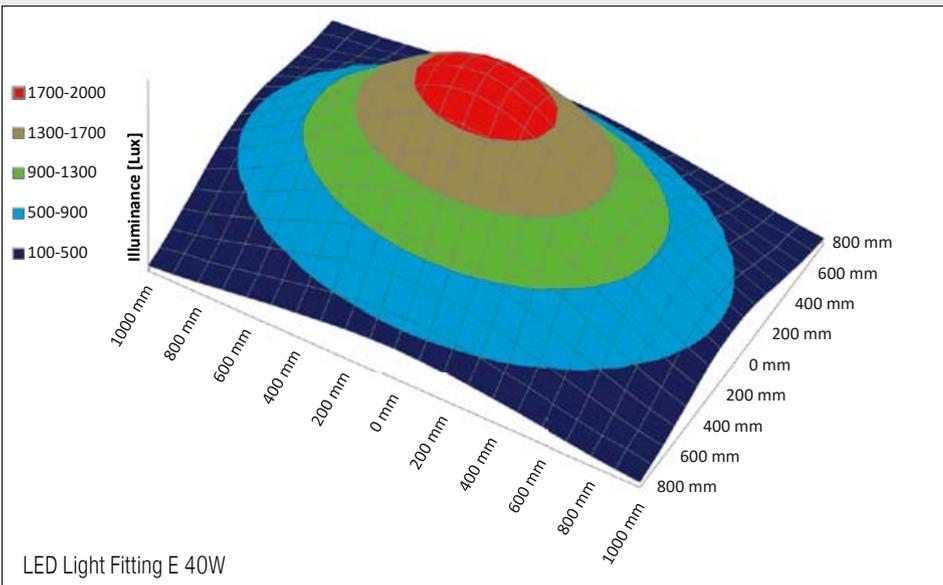
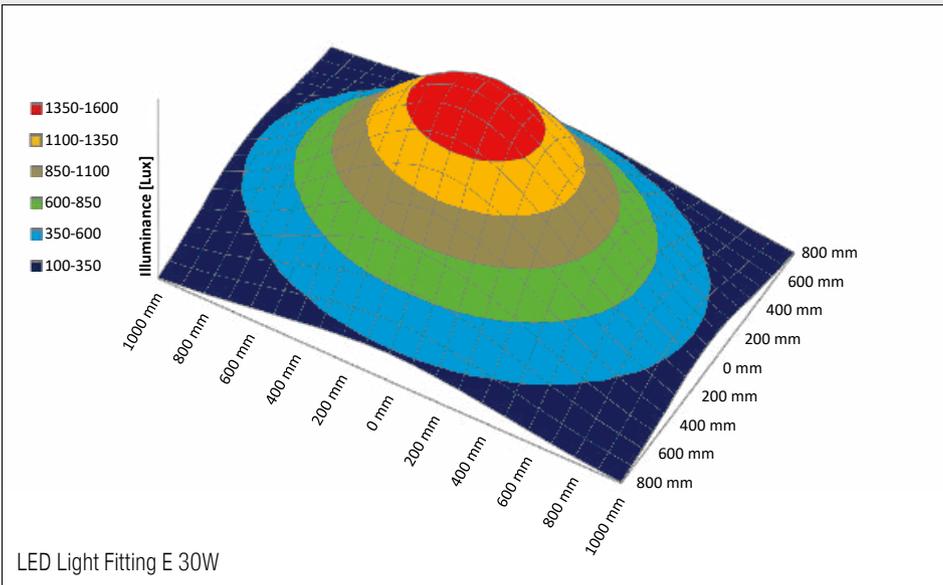
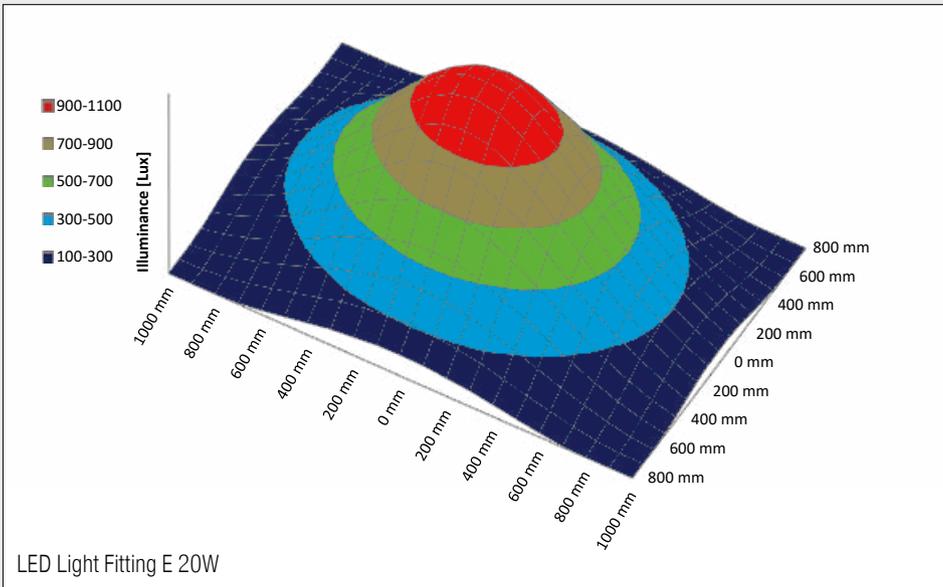
Let there be light! A diffusor panel and a microprism cover on LED Light Fittings E provide even, glare-free lighting of over 1000 Lux for work areas. The durable LED Light Fittings feature a stepless 360° pivoting mechanism to ensure they can be adjusted to the ideal alignment.

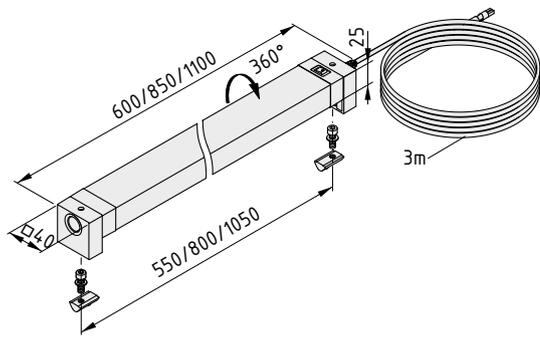
LED Light Fittings E are available in lengths of 600, 850 and 1100 mm. The space-saving housing features an on/off switch and a wired-in power cable with a system plug connector.

These energy-saving Light Fittings are available as a set with a Transformer. They can also be separately combined with Splitters, Wireless Dimmers and other Light Fittings from the item lighting system.



Distribution of illuminance [as measured from 900 mm]




**LED Light Fitting E 20W 40x40x600**


Aluminium housing  
 Rocker switch, on/off  
 Fastening elements  
 Rated voltage: 24 V DC via system socket connector  
 Protection class: III  
 Output: 20 W LED Light Fitting  
 Colour rendering index: Ra ≈ 85  
 Colour temperature: T ≈ 4000°K (neutral white)  
 m = 0.4 kg

1 set

0.0.694.21

**LED Light Fitting E 30W 40x40x850**


Aluminium housing  
 Rocker switch, on/off  
 Fastening elements  
 Rated voltage: 24 V DC via system socket connector  
 Protection class: III  
 Output: 30 W LED Light Fitting  
 Colour rendering index: Ra ≈ 85  
 Colour temperature: T ≈ 4000°K (neutral white)  
 m = 0.6 kg

1 set

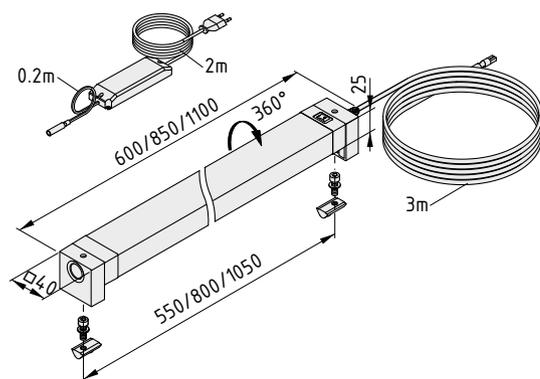
0.0.694.22

**LED Light Fitting E 40W 40x40x1100**


Aluminium housing  
 Rocker switch, on/off  
 Fastening elements  
 Rated voltage: 24 V DC via system socket connector  
 Protection class: III  
 Output: 40 W LED Light Fitting  
 Colour rendering index: Ra ≈ 85  
 Colour temperature: T ≈ 4000°K (neutral white)  
 m = 0.8 kg

1 set

0.0.694.23


**LED Light Set E 20W 40x40x600**


LED E Light Fitting 20W  
 Electronic Transformer LED 30 W 24 V  
 m = 0.7 kg

1 set

0.0.701.49

**LED Light Set E 30W 40x40x850**


LED E Light Fitting 30W  
 Electronic Transformer LED 30 W 24 V  
 m = 0.9 kg

1 set

0.0.701.48

**LED Light Set E 40W 40x40x1100**


LED E Light Fitting 40W  
 Electronic Transformer LED 75 W 24 V  
 m = 1.2 kg

1 set

0.0.701.47

Hang in there

For tools with a T-grip

Preassembled and ready to use

Includes Automatic T-Slot Nut

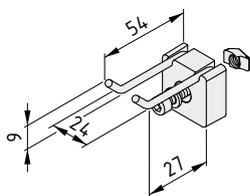


## Double Hook 8 40x20

Get organised in seconds! The compact Double Hook 8 40x20 with two angled prongs can be used to hold tools with a T-grip and similar accessories. The preassembled Automatic T-Slot Nut ensures it can be fitted to a profile groove in no time with less than a full turn of an Allen key.

Double Hook 8 40x20 is part of the comprehensive item Hook and Holder System and is also compatible with the item toolpanel®, which can be used to create an entire wall of tools.

Note: Double Hook 8 80x20 (0.0.684.11) is a variant with longer prongs.



### Double Hook 8 40x20



Wire, St, stainless  
Wire mount, PA-GF  
Hexagon Socket Head Cap Screw DIN 912 M6x20  
Washer DIN 433-6.4  
Automatic T-Slot Nut V 8 St M6, stainless  
m = 44.0 g

black similar to RAL 9005, 1 pce.

0.0.698.00

grey similar to RAL 7042, 1 pce.

0.0.697.98

Bit by bit



For drills, bits and other accessories

Grid for neat organisation

Easy to machine



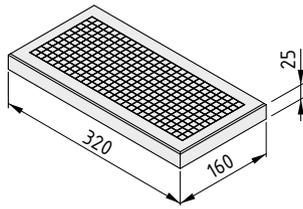
**Tool Block 320x160**  
**Tray 8 Tool Block 320x160**

Organisation on your terms! Tool Block 320x160 is a block of plastic with a grid printed over the top – and the perfect solution for keeping your drills, counter-sinks, thread taps and bits neatly arranged and close to hand.

You can drill the blind holes that will hold your tools and accessories wherever you like on the block. The robust material ensures your tools are always clearly arranged and in easy reach.

The Tool Block can be stowed in a drawer or mounted somewhere convenient using Container Holder 8 160 from item. Tray 8 Tool Block 320x160 contains both the Tool Block and Holder as a set. Thanks to the preassembled Automatic T-Slot Nuts, this handy solution can be installed in a Line 8 profile groove in just seconds.



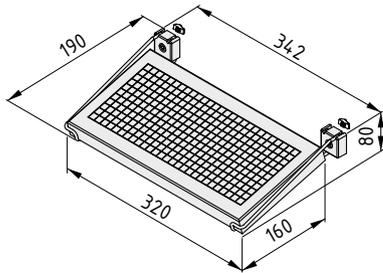


**Tool Block 320x160**



PP  
 m = 1.1 kg  
 natural, 1 pce.

0.0.690.77



**Tray 8 Tool Block 320x160**



Tool Block 320x160, PP, natural  
 Container Holder 8 160, black  
 m = 1.2 kg

black, 1 set

0.0.699.23

grey, 1 set

0.0.699.22



Up, up and away!

Now also available as one or three table columns

High load-carrying capacity, high speed

Digital height gauge

## Table Column Sets E 230V

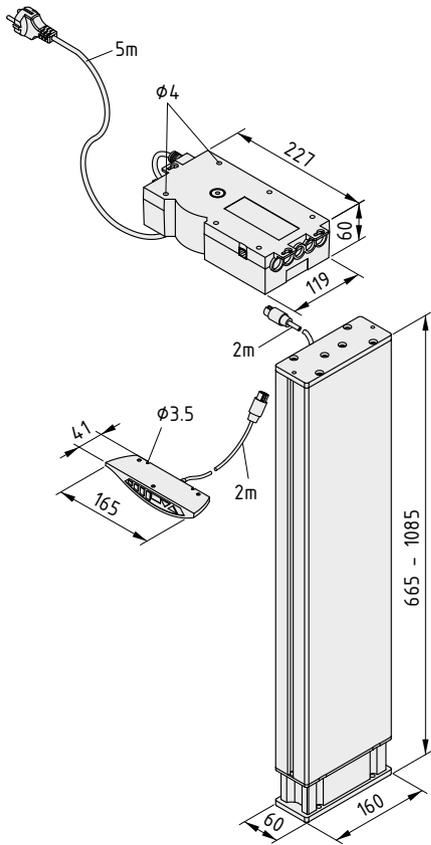
The solution for custom work benches! The electrically height-adjustable Table Columns from item are now also available individually and as a set of three. These new additions are ideal for creating corner solutions and special fixtures.

Every Table Column Set comes with a specially modified control system that operates the relevant number of table legs in sync. Depending on the set variant, anything from one to four – and, on request, up to eight – columns on a work bench can be raised or lowered in parallel!

The stable columns support a range of working positions with a maximum travel distance of 420 mm. As a result, they are an ergonomic solution that helps safeguard the health and wellbeing of staff. The control system features a digital height gauge and custom configuration functions such as storable positions.

The load-carrying capacity is 140 kg on the individual column and 300 kg on Table Column Set 3 E at a consistent travelling speed of 25 mm/s. Cantilever Foot Set 8 (0.0.676.18), Double Cantilever Foot Set 8 (0.0.676.19) and Table-Top Support Set 8 520x100 (0.0.676.17) can all be used to create robust table solutions.

**Note:** The columns are intended exclusively for the occasional adjustment of tables and fixtures and are not to be used in automation processes. The duty cycle must not exceed 10 percent of the total operating time. When maintaining the correct duty cycle, the Table Column Sets can be used in cleanrooms up to ISO class 5 to DIN EN ISO 14644-1:2016-06.

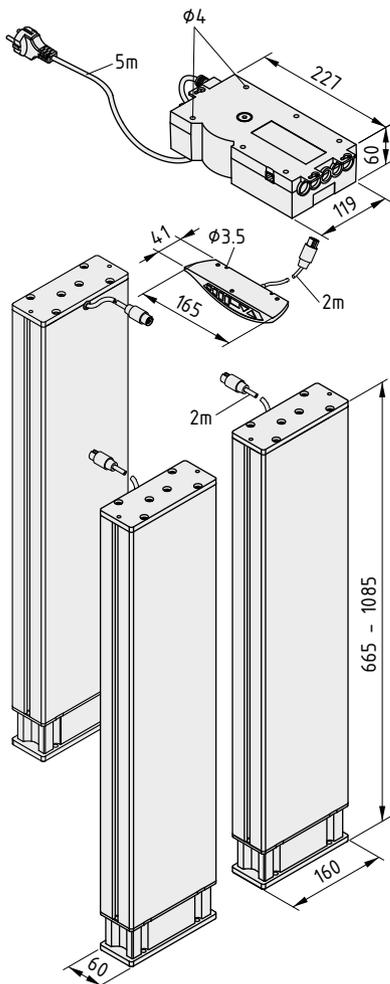


**Table Column Set 1 E 230V**



1 column, Al, anodized, natural, with 2 m cable  
 Control unit with 5 m mains cable,  
 Table switch panel, 3 positions storable, digital height gauge with 2 m cable  
 Nominal voltage: 230V~ 50/60 Hz  
 Total lifting force: 1400 N:  
 Lifting speed: 25 mm/s  
 Duty cycle: 10 %  
 Temperature range: -5 °C to 40 °C  
 Protection: IP 30  
 Conformity: CE  
 Notes on Use and Installation  
 m = 10.9 kg

1 set	0.0.693.89
-------	------------



**Table Column Set 3 E 230V**



3 columns, Al, anodized, natural, with 2 m cable  
 Control unit with 5 m mains cable,  
 Table switch panel, 3 positions storable, digital height gauge with 2 m cable  
 Nominal voltage: 230V~ 50/60 Hz  
 Total lifting force: 3000 N:  
 Lifting speed: 25 mm/s  
 Duty cycle: 10 %  
 Temperature range: -5 °C to 40 °C  
 Protection: IP 30  
 Conformity: CE  
 Notes on Use and Installation  
 m = 26.9 kg

1 set	0.0.693.90
-------	------------



Storage locked down!

Lockable single Drawer

Practical self-closing mechanism

Cable entry point at rear

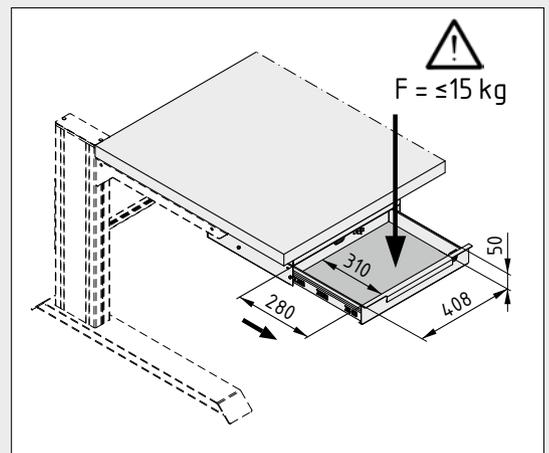
## Drawer S1 H70

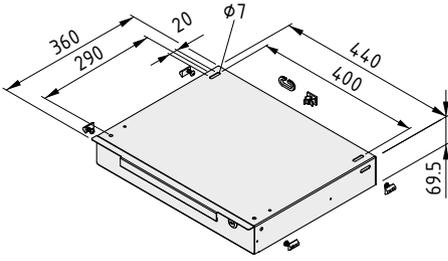
Safely stow your valuables! The lockable Drawer S1 H70 can be installed under a table top or on profiles. It safely and neatly stores personal items and work materials.

The single smooth-running Drawer pulls out to its full depth to ensure all its contents are in easy reach. Thanks to its self-closing mechanism, the Drawer always shuts completely. The cable entry point at the rear ensures that laptops and mobile phones can be charged while stored inside.

Drawer S1 H70, Adapter Set (0.0.701.28) is used to fit the Drawer flush to an item work bench for a gap-free appearance.

**Note:** If two, three or four drawers are required at a work bench, we recommend using the item Drawer Units.





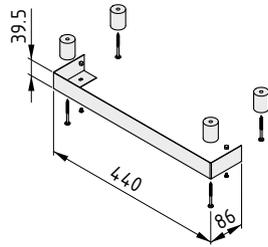
#### Drawer S1 H70



Drawer S1 H70, St, powder-coated, grey  
 4 Button-Head Screws - ISO 7380-M6x12 (ULS)  
 4 T-Slot Nuts 8 St M6  
 Cable grommet, TPE  
 Strain relief  
 Notes on Use and Installation  
 m = 4.4 kg

1 set

0.0.701.29



#### Drawer S1 H70, Adapter Set



Drawer S1 H70 trim, St, powder-coated, grey  
 4 spacers, POM  
 4 wood screws 5x60-TX25  
 2 Button-Head Screws ISO 7380-M4x6 (ULS)  
 2 hexagon domed cap nuts DIN 917-M4  
 Notes on Use and Installation  
 m = 0.5 kg

1 set

0.0.701.28



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

Release Unit D30 Bar T2

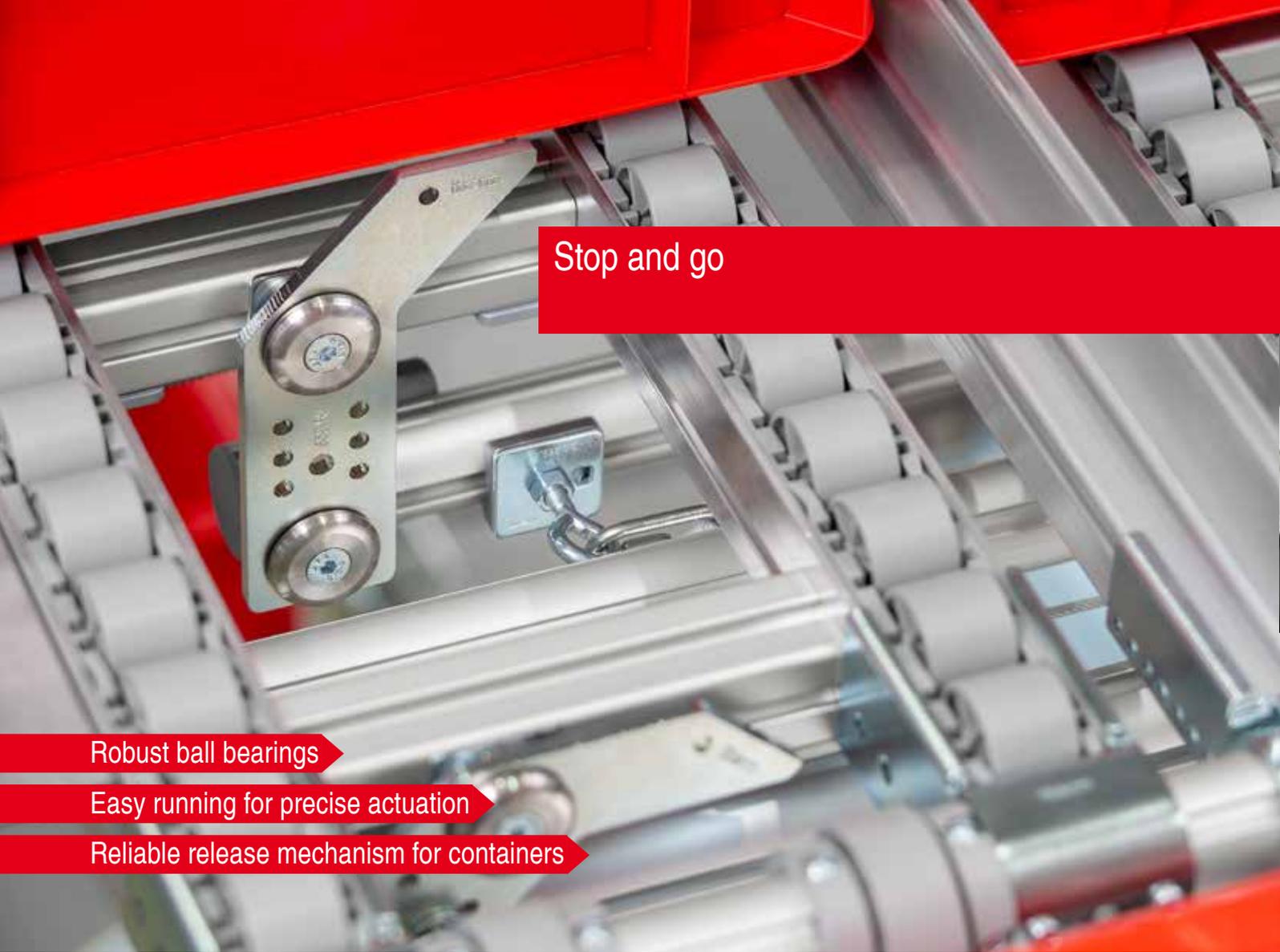
Fastening Set 6 D30 15mm with Countersunk Screw M6

Fastening Set 6 15mm with Countersunk Screw M6

Flange D30 90x90-80

Threaded Insert, Profile Tube D30 heavy duty M6

Slide Strips D30 with Side Guide H13 c



Stop and go

Robust ball bearings

Easy running for precise actuation

Reliable release mechanism for containers



## Release Unit D30 Bar T2 Fastening sets 6

More control with less force! This pivoting Bar is a core element of Release Unit D30 for automatic loading and unloading with shooters. The new Release Unit D30 Bar T2 features smooth-running ball and needle bearings, meaning lower actuation forces are required than with Release Unit D30 Bar T1.

The complex bearing system boosts process reliability. The Release Unit remains easy to actuate, even when the Bar is exposed to axial pressure from heavy containers. A coupling rod can be used to actuate multiple levers at once. The torques generated by bearing friction remain consistent throughout the product's service life. The same applies to the low bearing play.

This makes Release Unit D30 Bar T2 the perfect choice when containers need to be released with the application of minimal force. Release Unit D30 comprises several components such as an Actuator Roller, Ramp and Spring-Loaded Reset Device, all of which can be combined to suit particular needs. This means the Bar can also be used for other latching functions.

Installation is carried out using Fastening Set 6 D30 15mm with Countersunk Screw M6 (Profile 6 D30) or Fastening Set 6 15mm with Countersunk Screw M6 (Profile 6 30x30).







Keep it grounded!

Integrated fastener

High load-carrying capacity

Fasten to floors and walls



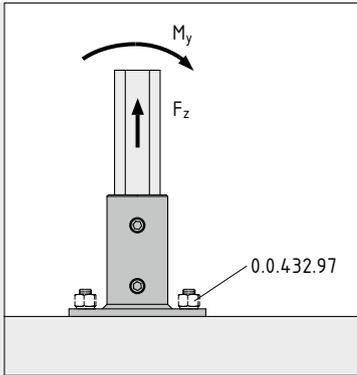
## Flange D30 90x90-80

Unshakeable! Flange D30 90x90-80 is the exceptionally strong floor fixing for lean frames. The integrated fastener on the connecting plate encompasses the Profile Tube and resists strong displacement forces. The plate is bolted to a solid surface (floor, wall or steel beam).

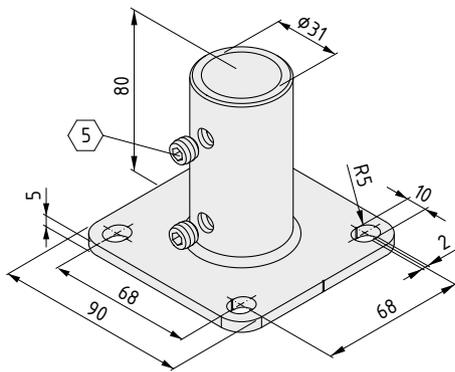
Due to the high flexural strength of the Flange, it is strongly advised to use it with Profile Tube D30 heavy duty. The increased wall thickness stops the Profile Tube from bending.

The Flange is fixed in place using Floor-Fastening Set M8x95 (0.0.432.97). The distance between the fixing holes is the same as on Flange D30-90x90 (0.0.655.54).

**Note:** In addition to the maximum load-carrying capacity of the Flange, it is important to take into account the load limits of the adjacent components in the construction.



$M_y = 200 \text{ Nm}$   
 $F_z = 1000 \text{ N}$



**Flange D30 90x90-80**



Flange D30 90x90-80, St, bright zinc-plated  
 Grub screw DIN 913-M10x8, St, bright zinc-plated  
 $m = 594.0 \text{ g}$

1 pce.

0.0.696.05



An (un)common thread!

M6 thread

Self-tapping steel Insert

For high tensile loads



### Threaded Insert, Profile Tube D30 heavy duty M6

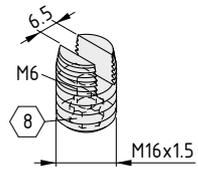
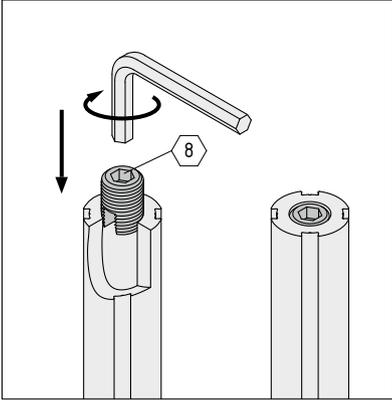
Heavy metal! Robust Threaded Insert, Profile Tube D30 heavy duty M6 can be used to screw all kinds of attachments to the end face of a Profile Tube D30 heavy duty or Profile Tube D30-45° heavy duty.

The M6 thread is needed for applications such as fitting a Profile Tube D30 heavy duty to a Tube Holder 6 D30 (0.0.642.23) or Tube Holder 8 D30 (0.0.642.05).

The metal Threaded Insert is self-tapping and is screwed into place via an 8 A/F hex socket.

Note: Please observe the load limits of an M6 screw connection.





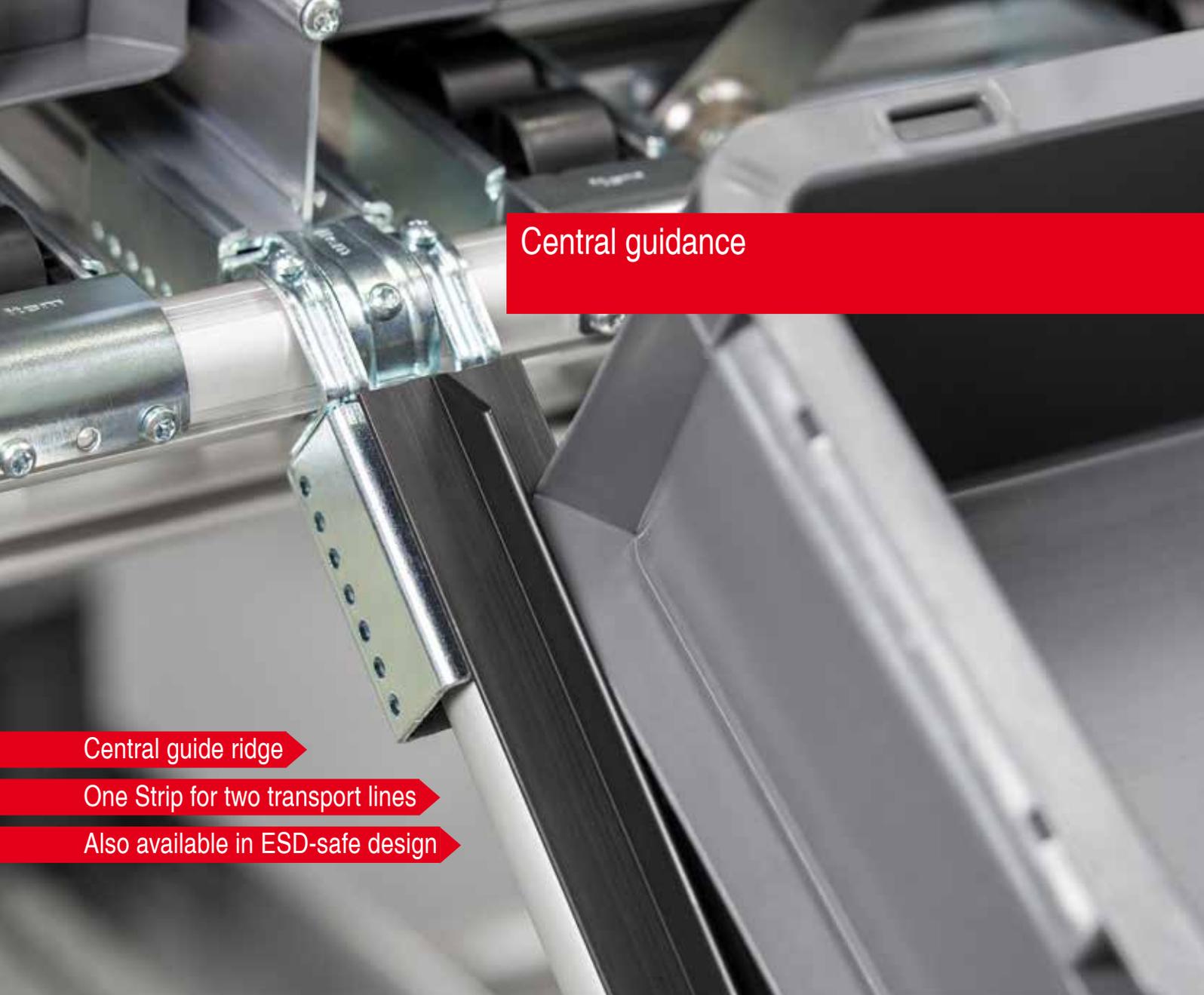
Threaded Insert, Profile Tube D30 heavy duty M6



St  
m = 23.0 g

bright zinc-plated, 1 pce.

0.0.696.61



Central guidance

Central guide ridge

One Strip for two transport lines

Also available in ESD-safe design



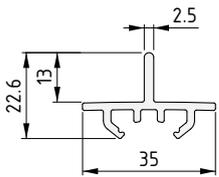
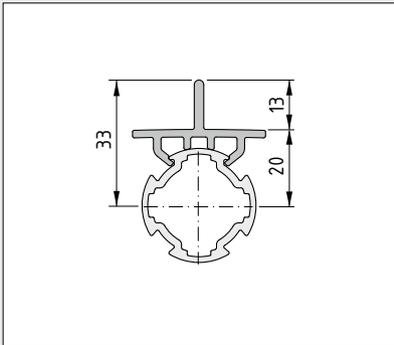
### Slide Strips D30 with Side Guide H13 c

One guide for two transport lines! The ridge running along the centre of Slide Strip D30 with Side Guide H13 c makes this product ideal for use on parallel conveyor lines. It helps to reduce the number of support profiles and fastenings needed to build these solutions.

Containers glide along the PE-HD strip with minimal friction while the guide ridge keeps them on track – on both sides. Slide Strip D30 with Side Guide H13 (0.0.671.30) in grey and Slide Strip D30 with Side Guide H13 ESD (0.0.671.33) in black are the ideal solutions for guiding transported goods at the outer side.

The Slide Strips simply clip onto the flank of a Profile Tube D30 or Profile 6 D30. To protect sensitive goods they are also available in an ESD-safe design, which is black in colour.

**Note:** Slide Strips D30 without side guides are available in a range of different colours.



**Slide Strip D30 with Side Guide H13 c**

PE-HD  
 m = 130.0 g/m  
 grey similar to RAL 7042, 1 pce., length 2000 mm 0.0.692.45

**Slide Strip D30 with Side Guide H13 c ESD** 

PE-HD  
 m = 148.0 g/m  
 black similar to RAL 9005, 1 pce., length 2000 mm 0.0.692.51



## Boost efficiency – with the item Automation System

Gearbox AP 60-16

Gearbox WP 60-16

Transverse Carriage Plate KLE 6 60x60

Transverse Carriage Plate KLE 8 80x80

## Powerhouse

Transmission ratio 1:16

High feed and holding forces

Particularly suitable for lifting applications

### Gearbox AP 60-16

### Gearbox WP 60-16

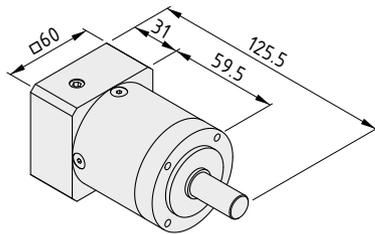
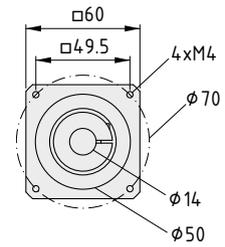
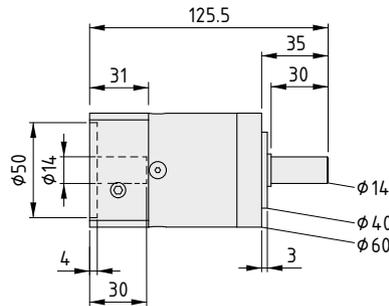
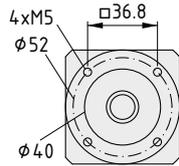
Full torque ahead! Gearboxes 60-16 provide a high drive torque at a medium motor speed. Their transmission ratio of 1:16 ensures solutions can move and hold heavier loads without needing an especially powerful motor. This makes sense for lifting applications that don't need to operate at high speed.

Gearbox 60 connects a motor to a drive set in an axial (AP) or bevel (WP) arrangement. As a plug-and-play solution, it can be combined with other components that have a 60 mm-wide housing without requiring any machining. The compact planetary gearbox is available in four fixed transmission ratios: 1:3, 1:5, 1:7 and 1:16.

The Gearbox runs quietly and has a long service life. It is maintenance free and does not require additional lubrication.

**Note:** The modular item Automation System can be used to configure solutions using pre-assembled components. Please ensure that the connection dimensions for the selected Motor, Gearbox and Drive Set are identical. item MotionDesigner® can help you find the ideal complete solution without any difficulty. This online tool ensures that all components are mutually compatible.



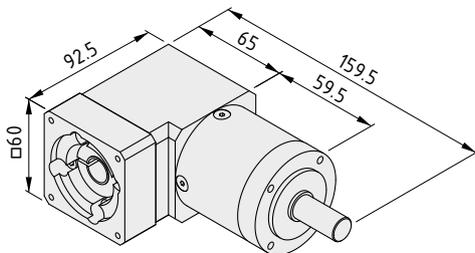
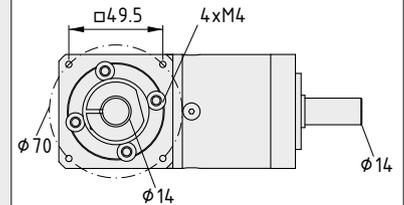
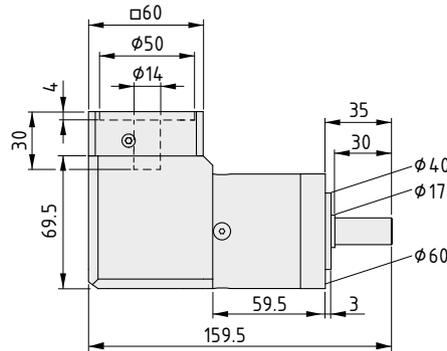
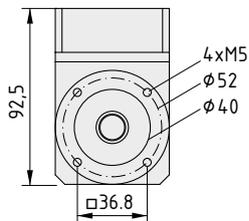


#### Gearbox AP 60-16

Gear ratio	i = 16
Efficiency at full load	0.96
Rated output torque	44 Nm
Max. mechanical input speed	13000 1/rpm
Mass moment of inertia	0.106 kg cm <sup>2</sup>
Standard backlash	< 12 arcmin
Tightening torque, clamping hub screw	4.5 Nm

white aluminium, similar to RAL 9006, 1 pce.

0.0.698.04



#### Gearbox WP 60-16

Gear ratio	i = 16
Efficiency at full load	0.93
Rated output torque	38.72 Nm
Max. mechanical input speed	13000 1/rpm
Mass moment of inertia	0.27 kg cm <sup>2</sup>
Standard backlash	< 18 arcmin
Tightening torque, clamping hub screw	4.5 Nm

white aluminium, similar to RAL 9006, 1 pce.

0.0.698.05



Mixed double

Connects Linear Units

For strong multi-axis systems

Simple and secure installation



### Transverse Carriage Plate KLE 6 60x60

### Transverse Carriage Plate KLE 8 80x80

Twice as good! Transverse Carriage Plates KLE significantly speed up the process of designing, building and commissioning multi-axis systems based on Linear Unit KLE. Only a small number of components are needed to design a safe and robust complete system.

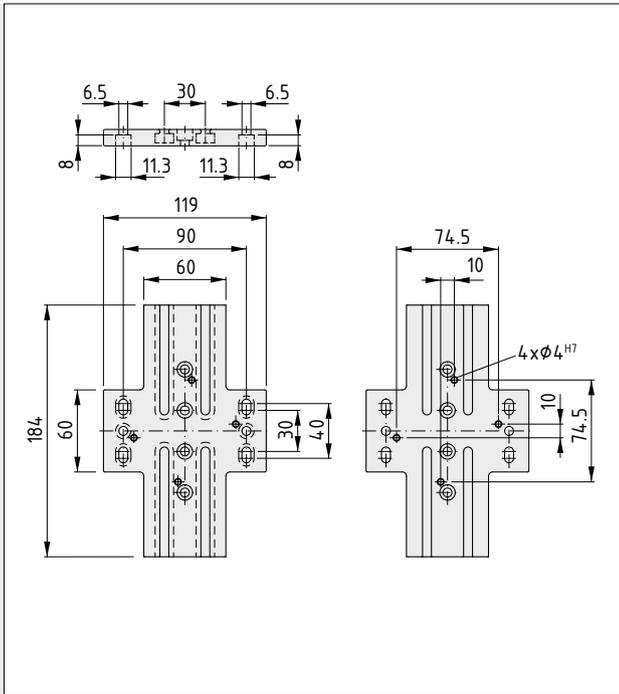
In the case of applications such as pick-and-place solutions, the connection between the two Linear Units is a critical element that requires complex fastening technology or specially milled parts. When using Transverse Carriage Plate KLE, a single component is all it takes to create a secure connection. This reduces the number of required parts and means multi-axis systems can be commissioned faster.

The Transverse Carriage Plate is screwed to the guide carriage of Linear Unit KLE and the secondary linear unit is fastened at a right angle to the primary linear unit's direction of travel. The large supporting surface area ensures a torsion-resistant connection.

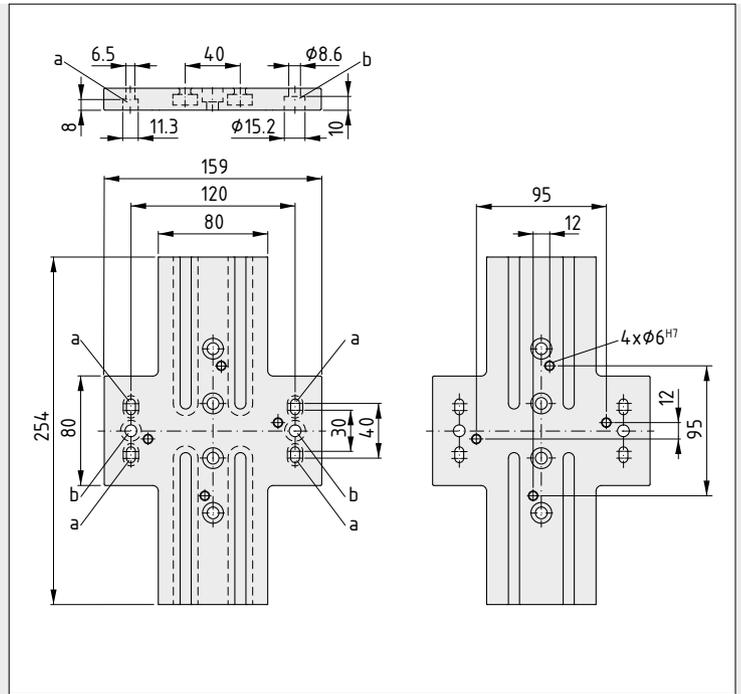
Models with suitable modular dimensions can be used as a secondary linear unit (see table). The Plate comes with all the necessary drilled holes and can be selected as an accessory for a Linear Unit KLE in item MotionDesigner®. This online software helps you design and select Linear Units so you can create an optimum complete solution.

The Transverse Carriage Plate is available for Linear Units KLE 6 and KLE 8 in a modular dimension of 60 mm and 80 mm.

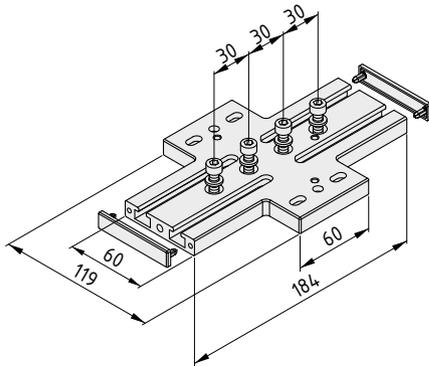




Transverse Carriage Plate KLE 6 60x60



Transverse Carriage Plate KLE 8 80x80



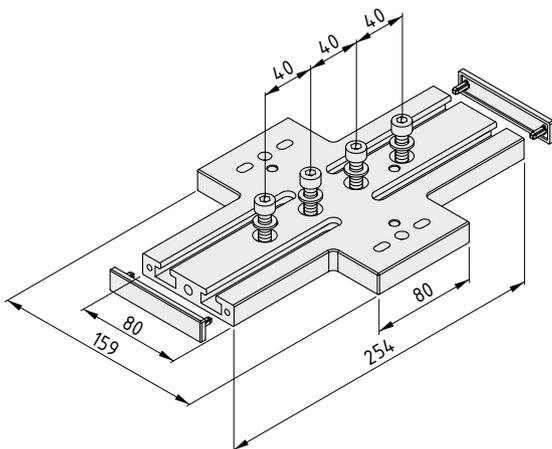
#### Transverse Carriage Plate KLE 6 60x60



- 1 Transverse Carriage Plate KLE 6 60x60, Al
- 2 Caps X 6 60x12, PA-GF, grey
- 4 Hexagon Socket Head Cap Screws DIN 912-M6x25, St, bright zinc-plated
- 4 washers DIN 433-6.4, St, bright zinc-plated
- m = 367.4 g

1 set

0.0.692.19



#### Transverse Carriage Plate KLE 8 80x80

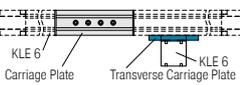
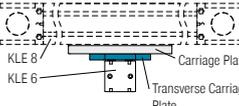
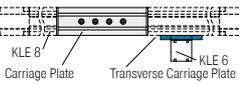
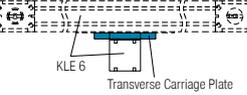
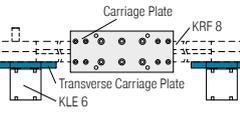
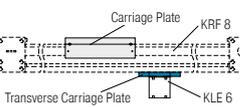
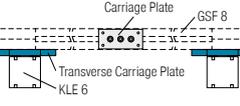
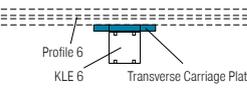
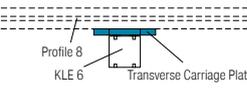


- 1 Transverse Carriage Plate KLE 8 80x80, Al
- 2 Caps X 8 80x16, PA-GF, grey
- 4 Hexagon Socket Head Cap Screws DIN 912-M8x30, St, bright zinc-plated
- 4 washers DIN 433-8.4, St, bright zinc-plated
- m = 931.2 g

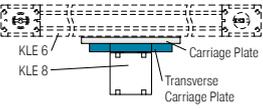
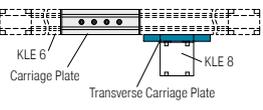
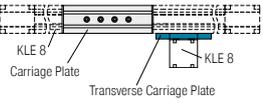
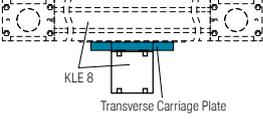
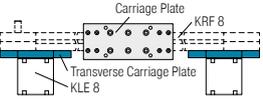
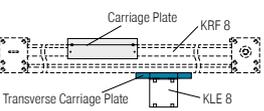
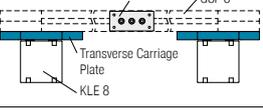
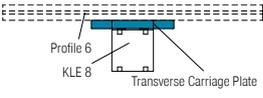
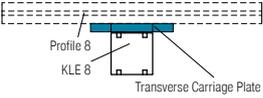
1 set

0.0.692.61

Overview of installation combinations using Transverse Carriage Plate KLE 6 60x60

<b>KLE 6 60x60 LR</b> (0.0.605.07) with Transverse Carriage Plate KLE 6 60x60 (0.0.692.19) +	Direct connection	Carriage on transverse carriage	Installation on side Axis on Transverse Carriage Plate	Installation on bottom Axis on Transverse Carriage Plate
<b>KLE 6 60x60 LR</b> (0.0.605.07) with Carriage Plate KLE 6 60x60 (0.0.609.25)	<i>Not appropriate</i>	×		×
<b>KLE 8 80x80 LR</b> (0.0.605.02) with Carriage Plate KLE 8 80x80 (0.0.609.24)	<i>Not appropriate</i>			×
<b>KLE 6 60x60 LR</b> (0.0.605.07)		×	✓	×
<b>KLE 8 80x80 LR</b> (0.0.605.02)	×	×	✓	×
<b>KRF 8 80x40 ZR,</b> right-hand input shaft (0.0.648.66) <b>KRF 8 80x40 ZR,</b> left-hand input shaft (0.0.641.21)	×	×		
<b>GSF 8 40 R10</b> (0.0.655.98)	×	×		×
<b>Profile 6</b> 		×	✓	✓
<b>Profile 8</b> 		×	✓	✓

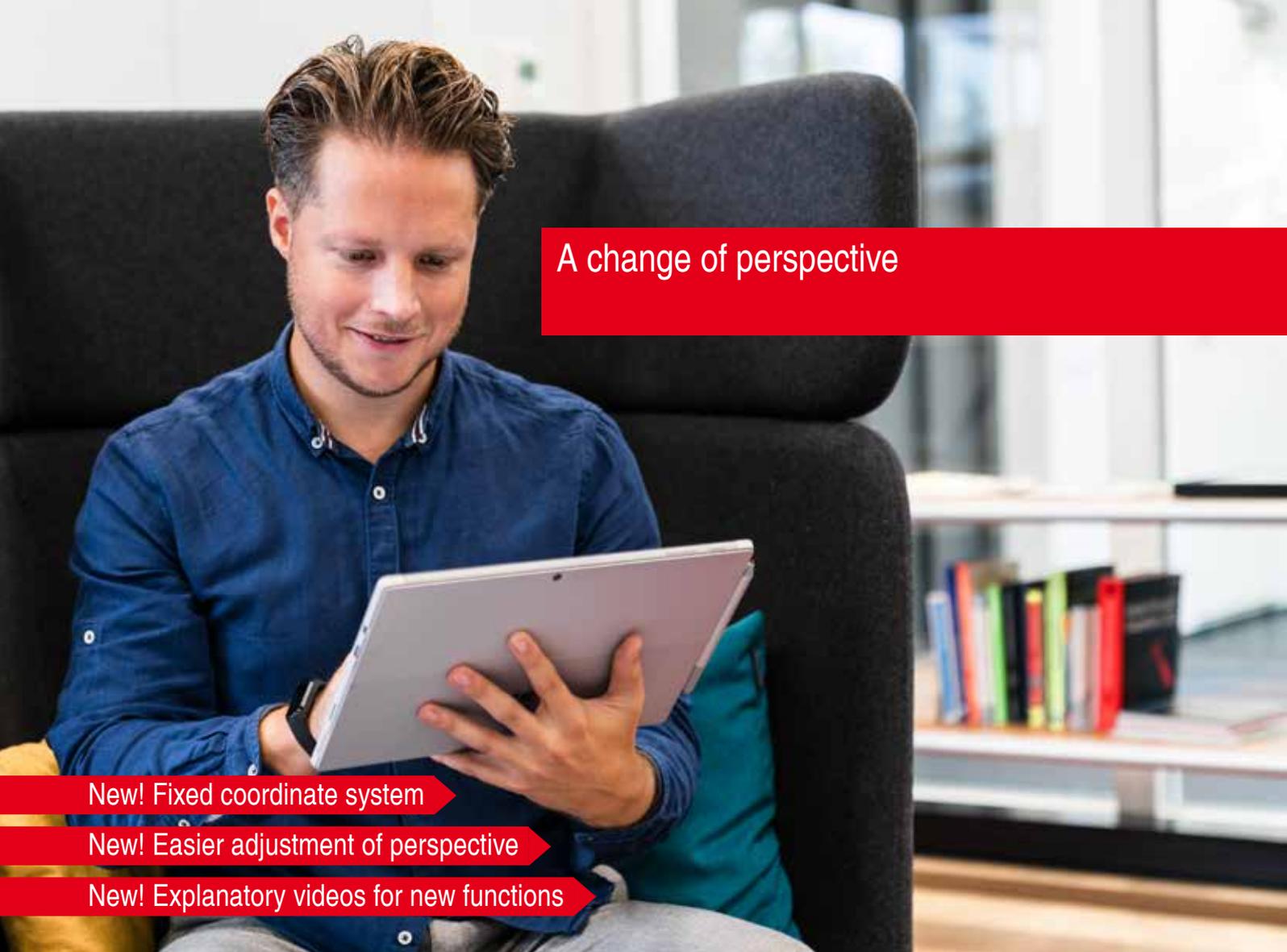
Overview of installation combinations using Transverse Carriage Plate KLE 8 80x80

<b>KLE 8 80x80 LR</b> (0.0.605.02) with Transverse Carriage Plate KLE 8 80x80 (0.0.692.61) +	Direct connection	Carriage on transverse carriage	Installation on side Axis on Transverse Carriage Plate	Installation on bottom Axis on Transverse Carriage Plate
<b>KLE 6 60x60 LR</b> (0.0.605.07) with Carriage Plate KLE 6 60x60 (0.0.609.25)	<i>Not appropriate</i>			✗
<b>KLE 8 80x80 LR</b> (0.0.605.02) with Carriage Plate KLE 8 80x80 (0.0.609.24)	<i>Not appropriate</i>	✗		✗
<b>KLE 6 60x60 LR</b> (0.0.605.07)	✗	✗	✓	✗
<b>KLE 8 80x80 LR</b> (0.0.605.02)		✗	✓	✗
<b>KRF 8 80x40 ZR,</b> right-hand input shaft (0.0.648.66) <b>KRF 8 80x40 ZR,</b> left-hand input shaft (0.0.641.21)	✗	✗		
<b>GSF 8 40 R10</b> (0.0.655.98)	✗	✗		✗
<b>Profile 6</b> 		✗	✓	✓
<b>Profile 8</b> 		✗	✓	✓



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

item Engineeringtool



## A change of perspective

New! Fixed coordinate system

New! Easier adjustment of perspective

New! Explanatory videos for new functions

### item Engineeringtool

Everything under control! The item Engineeringtool now speeds up 3D design work with new elements that help you quickly and precisely change your perspective and set a fixed zero point.

At the click of a mouse, or with a nifty keyboard shortcut, you can look at designs from all sides and change your view in 90° increments. Using an onscreen 3D cube to rapidly switch between different views makes it easier to keep track of where you are and delivers an altogether more user-friendly experience.

The new list display for components also provides a better overview. The catalogue built into the item Engineeringtool now displays products in both the standard gallery view with clear illustrations and also in a compact list. This makes it easier to compare technical data, for example.

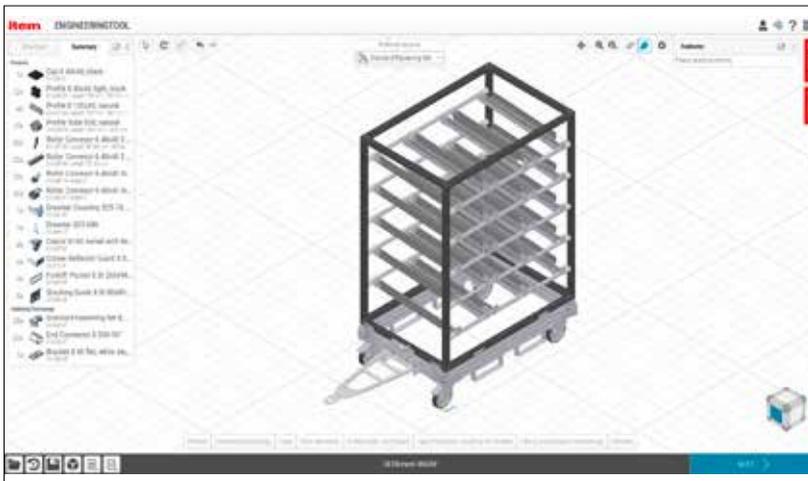
It's even easier to adjust the conveyor lines on frames fitted with roller conveyors. The properties menu can be used to change the type of roller element being used and specify whether the raised edges of flanged wheels are on the right or left – without having to incorporate your roller conveyors all over again from scratch. All the latest developments and updates are summarised in the change log.

The rules-based functions of the item Engineeringtool prevent errors and simplify the 3D design process. Thanks to a consistent digital process chain from design through to assembly, your solution is documented in full and can be ordered directly through the item Online Shop. Project data, parts lists and assembly guides are available worldwide.



Good to go! You don't have to install any software to use the item Engineeringtool:

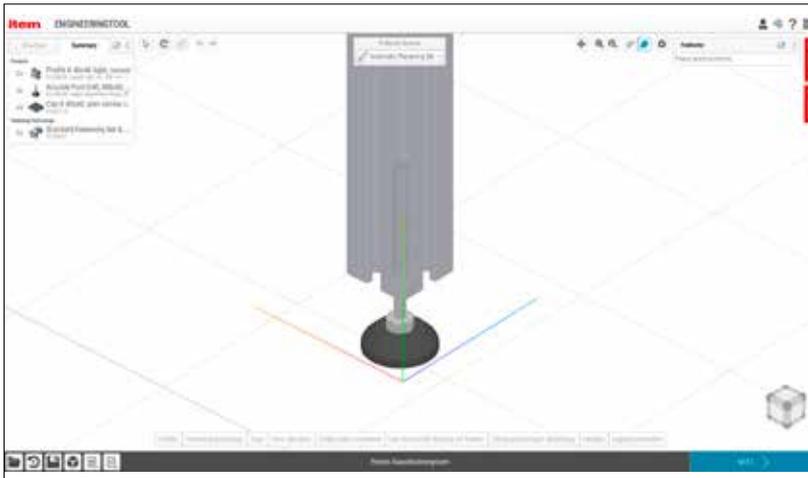
[item.engineering/tools/engineeringtool](http://item.engineering/tools/engineeringtool)



**New: Adjust onscreen view and orientation with ease.**

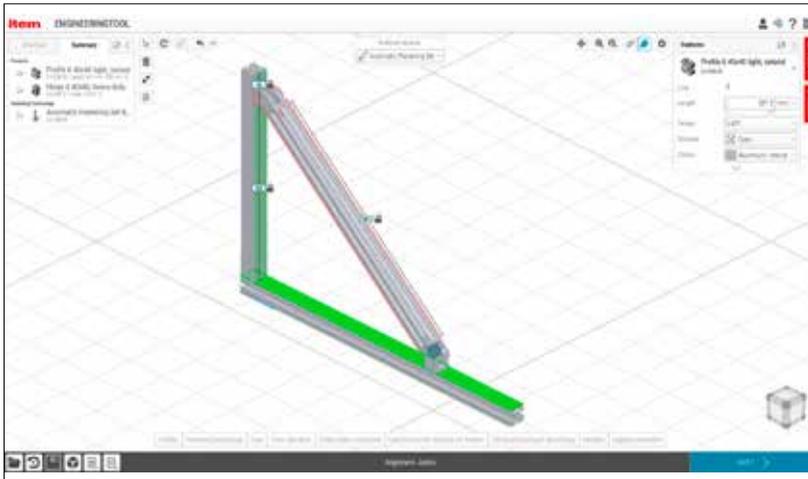
There is now a 3D cube in the bottom-right corner of the screen for controlling the onscreen view. It enables you to set the exact angle at which your construction is displayed – whether from above, from the side, diagonally from above or rotated by 90°. The view can be further fine-tuned using the mouse or keyboard shortcuts.

The new “Set to ground” function accessed via the context menu also speeds up work.



**New: Fixed coordinate system for CAD data**

When working with more complex designs, it helps to have a fixed zero point when aligning all your components. That's why the item Engineeringtool now gives you the option to activate a clear coordinate dimensioning function. Once an origin has been selected, it is adopted in the CAD data, thus ensuring the design is automatically positioned in the right place when components are being placed. The coordinate system can also be positioned on a different object by selecting it in the 3D engineering area and right-clicking to open the context menu.



**New: Automatically align diagonal profiles.**

Hinges in the MB Building Kit System can be used to install struts at freely defined angles. To do this, all you need to do is place the profile and fastener at its start point and then drag the end of the profile to the end point. The item Engineeringtool takes care of everything else. It calculates the required length of the profile and incorporates the fasteners at the correct angle. That means you don't need to do any calculations yourself. This function also works with the Ball Joint Fasteners of the Lean Production Building Kit System and when determining the angle of inclination on roller conveyors.



**New: Online help with explanatory videos**

We are constantly developing the item Engineeringtool. As the software is online, new functions are available immediately and there is no need to perform an update. All changes are listed in the change log. Brief videos that explain new functions step by step are now also available here and in the online help section. The new Engineeringtool tips offer easy-to-follow explanations that describe processes and show how different elements work together.



## 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)



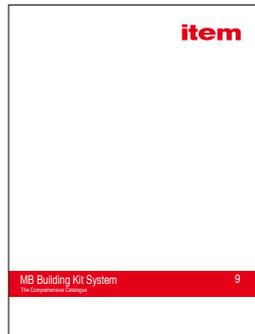
XMS machine cabins

[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)



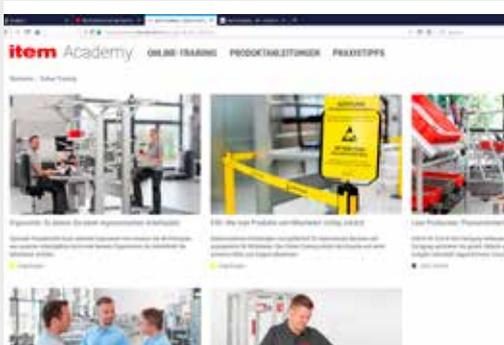
Stairway/Platform System

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



All the information you need at your fingertips  
 item product catalogues are available online as clearly  
 laid out and convenient e-papers. Take your pick and  
 get browsing!

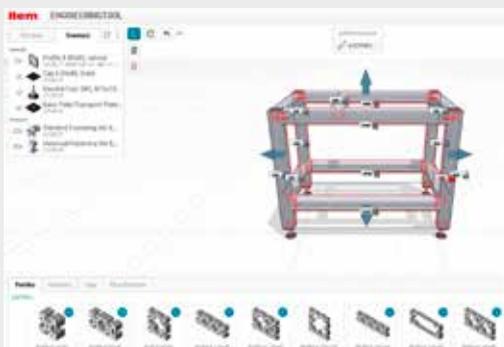
## Your head-start for know-how – the item online portfolio



### Further training just in time – the item Academy

Learn online – whenever, wherever and whatever you like! The item Academy offers online training, step-by-step guides and practical tips related to all aspects of mechanical engineering and the item product world. There is a huge range of offerings to choose from. The online learning platform presents wide-ranging specialist know-how on key issues such as lean principles and ESD safety and provides tricks and methods that can be put to use straight away. The Academy's content is available in multiple languages and is being constantly expanded.

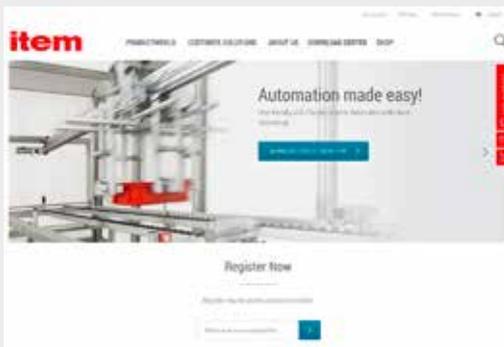
[academy.item24.com](http://academy.item24.com)



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

You can count on us! The item online 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®. What's more, the Query Assistant is ideal for helping you plan stairways and platforms with ease.

[item24.de/en/configurators](http://item24.de/en/configurators)



### Service and information around the clock – item24.com

item is always there for you! The item website presents all product details, 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 and access to a media library provides additional assistance. Find out about service offerings or get in touch with item – all at the click of your mouse.

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



## Alphabetical Register

### A

Automatic T-Slot Nut V 8 St M6

### C

Cap 6 30x12 ESD

Cap 6 30x30 ESD

Cap 6 60x30 ESD

Cap 8 120x40 ESD

Cap 8 40x40 ESD

Cap 8 80x40 ESD

Cap 8 80x80 ESD

Carrier Rail Fastening Sets 8

Cover Profile 5 ESD

Cover Profile 6 ESD

### D

Double Hook 8 40x20

Drawer S1 H70

### E

Engineeringtool

### F

Fastening Set 6 15mm with Countersunk Screw M6

Fastening Set 6 D30 15mm with Countersunk Screw M6

Flange D30 90x90-80

### G

Gearbox AP 60-16

Gearbox WP 60-16

### L

5 LED Light Fitting E 20W 40x40x600

LED Light Fitting E 30W 40x40x850

LED Light Fitting E 40W 40x40x1100

10 LED Light Set E 20W 40x40x600

10 LED Light Set E 30W 40x40x850

10 LED Light Set E 40W 40x40x1100

10 Lifting Point M10, WLL 0.4 t, rotating

### R

10 Release Unit D30 Bar T2

### S

12 Slide Strip D30 with Side Guide H13 c

Slide Strip D30 with Side Guide H13 c ESD

12 Stand Foot Set 8 St 160x160

### T

20 Table Column Set 1 E 230V

25 Table Column Set 3 E 230V

44 Threaded Insert, Profile Tube D30 heavy duty M6

Tool Block 320x160

Transport Plate Set 8 80x40 St, M10

Transport Plate Set 8 80x80 St, M10

28 Transverse Carriage Plate KLE 6 60x60

30 Transverse Carriage Plate KLE 8 80x80

Tray 8 Tool Block 320x160

17

17

17

17

17

17

8

28

34

34

6

23

23

32

21

8

8

39

39

21



Always there for you.

Always up to date: Our website at [item24.com](http://item24.com) offers further information on all the products and technologies that item supplies.

#### **Patents**

Any copying of protected products is a violation of these rights and, as such, shall be liable to compensation. Data and illustrations in this catalogue do not discharge the user from the obligation to carry out his own checks to determine whether the industrial property rights of third parties are infringed.

#### **Product liability**

item shall be liable, within the framework of the applicable legal provisions, for the promised characteristics of the products shown in this catalogue. Any claims for liability above and beyond such – in particular relating to products created by third parties using products included in this catalogue – are expressly excluded.

#### **Conditions of use**

The products in the item building kit systems are suitable for use in dry conditions and over the temperature range -20 °C to +70 °C, unless otherwise indicated. item must be consulted where products are to be used for applications outside these limits.

#### **Conformity with Directive 2011/65/EU (“RoHS”)**

item has made a voluntary undertaking to refrain from using hazardous substances as defined in Directive 2011/65/EU in the products it sells, irrespective of their subsequent purpose which, in the majority of cases, does not fall under this Directive.

#### **Concept, design and realisation**

item Industrietechnik GmbH

#### **Photographs**

item Industrietechnik GmbH

Technical modifications and errors reserved.

All rights reserved. Use of texts and illustrations or reprints of any kind only permitted with prior written consent from item. This applies in particular to reproduction, translation or use in electronic systems.

**item** and the item claim are a registered trademark of item Industrietechnik GmbH.

© item Industrietechnik GmbH 2020

Your distribution and service partner

**item**

item Industrietechnik GmbH  
Friedenstrasse 107-109  
42699 Solingen  
Germany

Telephone +49 212 6580 0  
Fax +49 212 6580 310

info@item24.com  
item24.com

Your ideas are worth it.®