# item



# Systematic innovation. New Products 2017/ I







Experience innovation – new item products for 2017/ I.

# MB Building Kit System

More control! **Forklift Pocket 8 St 240x90x40** ensures that trolleys, large load carriers and frames stay safely mounted on the forks of forklift trucks. The Forklift Pocket also protects the profile frame from damage.

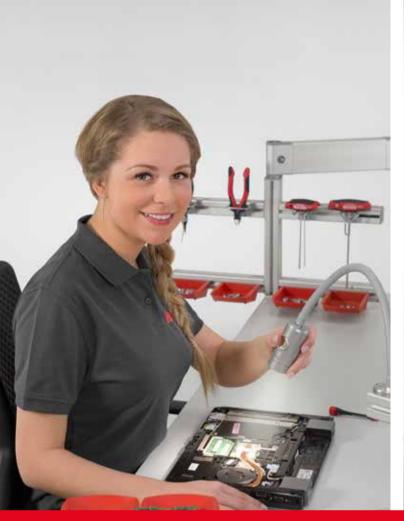
More load-carrying capacity! The new **Profiles 8 light** combine a low dead weight with exceptional resistance moment. Their shape makes them ideal for accommodating overlying loads.

More mobility! Jacking Castor D80 antistatic, with Foot Pedal is a strong castor and height-adjustable knuck-le foot in one. The castor is raised and lowered via a practical foot pedal. It is ideal for building work benches and racks that can be moved around but need a stable footing when in use.

# 18 Automation System

More performance! Linear Guide Rail PS 4-20 is a compact, easy-install solution that offers a high load-carrying capacity. Simply place it on a support profile and screw it into position – no further machining is necessary. All you have to do then is slide the corresponding Bearing Carriage PS 4-20 onto the Rail, and your heavyduty, easy running linear guide is good to go.

More communication! A **PROFINET Interface** is now available for all item Controllers. It connects an item linear motion unit<sup>®</sup> to a PLC or another overarching control system. To install it, simply insert the module into the corresponding slot.





# 22 Work Bench System

More organisation! These additions to the item hook and holder system offer even more efficient ways to organise your tools and equipment. The new **Container Holder 8** holds inherently stable containers safely in place. **Single Hooks 8** and **Double hook 8** are ideal for hanging up tools with corresponding eyes and items of clothing.

More light! State-of-the-art LED technology and maximum safety are the hallmarks of the item **Spotlights 6W LED**. The housing is dust-tight to IP 65 and protected against jets of water from all directions. The Spotlights are very bright, with a lighting strength of 20,000 Lux.

More flexibility! To provide flexible lighting options for working areas, **Spotlights 6W LED with Flexible Tube** feature a movable fixing.

# 29 Lean Production Building Kit System

More responsiveness! The compact Pivot Bearing Set D30-28.5 M8 can be used to build Karakuri / low-cost automation applications for lightweight containers and material. Thanks to a fixed and floating bearing, a profile can turn easily around its longitudinal axis.

More support! The unbroken aluminium web of **Double Profile Tube D30-60** connects two integrated Profile Tubes D30. This continuous connection significantly increases bending strength in vertical applications compared to when using two separate Profile Tubes D30.

More movement! They are the perfect solution for Karakuri / low-cost automation – **Tool Balancers with a synthetic fibre cable** from item. Synthetic fibre cables are extremely tear-resistant and can be easily re-routed via small pulleys.



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

Profiles 8 light
Forklift Pocket 8 St 260x90x40
Stacking Guide 8 St 120x80-30°
Jacking Castors D80 with Foot Pedal
Keys 2.5 A/F
Slide Strip 8 with Side Guide H24 ESD
Polyethylene panels
Lightweight Boards





# Profiles 8 light

This is how strong a lightweight beam can be! When you need low profile deflection and a low dead weight, Profile 8 240x40 8N180 light and Profile 8 160x40 4N180 light really come into their own thanks to their high area moment of inertia. Like an I-beam in steel construction techniques, this profile is ideal for accommodating overlying loads.

The lightweight engineering profiles feature two unbroken aluminium webs. Both ends of the profile are formed from Line 8 profiles, each with three system grooves. This ensures the profile can be connected to constructions. The profiles, which measure either 240 or 160 mm in height, ensure a high resistance moment.



#### Tip:

Use the item Machining Tool to find the right profile for your application. You can see at a glance which profiles meet specifications in terms of length, load, etc.: item24.de/machiningtool

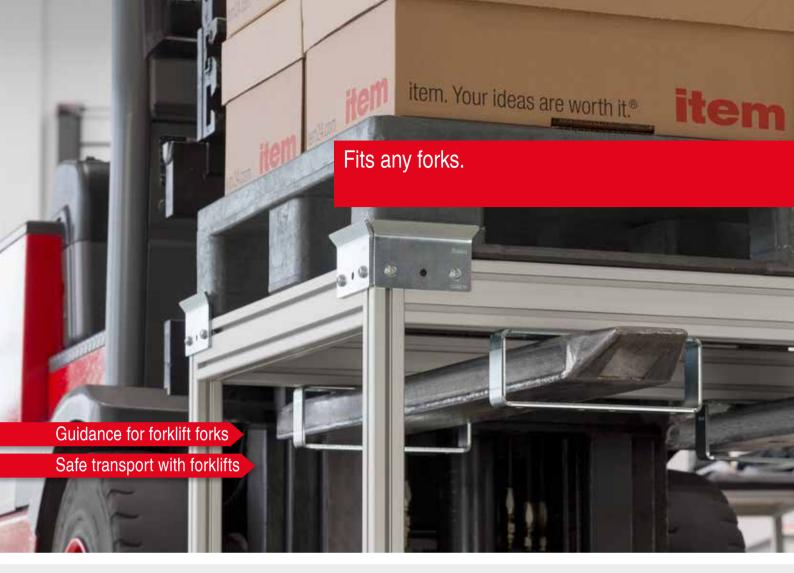




Profile 8	160x40 4N	180 light						÷
Al, anodi	zed							
A [cm <sup>2</sup> ]	m [kg/m]	I <sub>x</sub> [cm <sup>4</sup> ]	I <sub>y</sub> [cm <sup>4</sup> ]	It [cm4]	W <sub>x</sub> [cm <sup>3</sup> ]	W <sub>y</sub> [cm <sup>3</sup> ]		
16.78	4.53	34.76	495.13	68.02	17.38	61.89		
natural, o	cut-off max. 6	000 mm					0.0.678.	.85
natural, 1	pce., length	6000 mm					0.0.678.	.84



Profile 8 240x40 8N180 light							8
Al, anodiz	zed						
A [cm <sup>2</sup> ]	m [kg/m]	I <sub>x</sub> [cm <sup>4</sup> ]	I <sub>y</sub> [cm <sup>4</sup> ]	I <sub>t</sub> [cm <sup>4</sup> ]	W <sub>x</sub> [cm <sup>3</sup> ]	W <sub>y</sub> [cm <sup>3</sup> ]	
21.58	5.80	51.22	1,456.85	130.26	25.61	121.40	
natural, c	ut-off max. 6	000 mm					0.0.678.89
natural, 1	natural, 1 pce., length 6000 mm						0.0.678.88



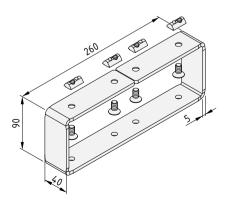


#### Forklift Pocket 8 St 260x90x40

Lift and move – the risk-free way! Forklift Pocket 8 St 260x90x40 helps you move trolleys and containers safely with forklift trucks. The Forklift Pocket acts as a guide for the forks during loading and unloading operations and stops goods slipping or tipping to the side.

The item Forklift Pocket, which is made of robust sheet steel, fully encompasses forks and thus also stops the profile frame from getting damaged. Trolleys and boxes stay in place on the forks when driving around corners or over rough surfaces.

Forklift Pocket 8 St 260x90x40 can be retrofitted to profiles with a Line 8 groove. The position and spacing of Forklift Pockets can be tailored to the relevant weight distribution and the forklift truck in use.



#### Forklift Pocket 8 St 260x90x40



Sheet material, St, bright zinc-plated 4 Countersunk Screws DIN 7991 M8x16, St, bright zinc-plated

4 T-Slot Nuts V 8 St M8, bright zinc-plated

m = 1.0 kg

1 set 0.0.683.95



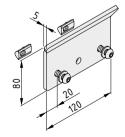


### Stacking Guide 8 St 120x80-30°

Always fits! Stacking Guide 8 St 120x80-30° ensures trolleys and boxes are always correctly positioned when stacked. Thanks to the robust centring aid, the next frame in the stack slides into the correct position when set down.

This makes it much easier to stack frames, since positioning errors are balanced out. Stacking Guide 8 St 120x80-30° can be retrofitted to profiles with a Line 8 groove. It is screwed into place on the outer ends of each profile.





#### Stacking Guide 8 St 120x80-30°

Sheet material, St, bright zinc-plated 2 Button-Head Screws ISO 7380-M8x18, St, bright zinc-plated

2 washers DIN 125-8.4, St, bright zinc-plated 2 T-Slot Nuts V 8 St M8, bright zinc-plated

m = 329.0 g

1 set 0.0.683.96

8

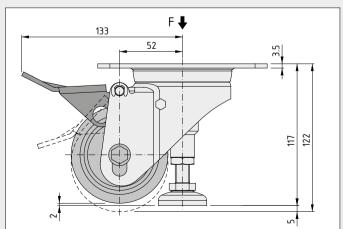


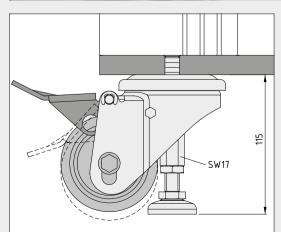


## Jacking Castors D80 with Foot Pedal

Put your foot down and get going! The item Jacking Castor D80 antistatic, with Foot Pedal combines a castor with a height-adjustable, non-slip knuckle foot. The foot pedal is used to lower or raise the castor without having to bend down. This means that mobile work benches or racks can be easily lifted out of their position and pushed to their next place of use.

Jacking Castors D80 come with an integrated connecting plate (140 x 110 mm) that is fixed in place with four screws. The design with the protruding screw is attached to an M12 thread.



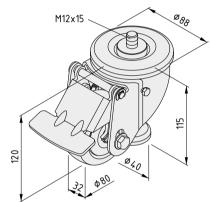


Carrying capacity 100 kg/castor





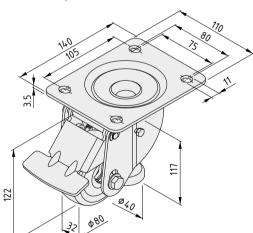
Jacking Castor D80 can still rotate around its vertical axle when the knuckle foot is down, so that the foot pedal can be moved out of the way.



#### Jacking Castor D80 antistatic, with Foot Pedal

Casing, St, bright zinc-plated Wheel axle with ball bearing Dust shield Wheel body PA; tyre, TPU, 94 Sh A, grey
Knuckle Foot, St, bright zinc-plated; foot plate, TPU, 80 Sh A, black
Load carrying capacity 100 kg/castor m = 1.5 kg

1 pce. 0.0.684.36



#### Jacking Castor D80 140x110 antistatic, with Foot Pedal

Casing, St, bright zinc-plated Wheel axle with ball bearing Dust shield Wheel body PA; tyre, TPU, 94 Sh A, grey
Knuckle Foot, St, bright zinc-plated; foot plate, TPU, 80 Sh A, black Load carrying capacity 100 kg/castor m = 1.7 kg

1 pce. 0.0.684.37



# Keys 2.5 A/F

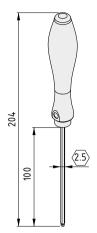
A firm hold at any angle! item Ball-Headed Keys are particularly suitable for screws that are difficult to reach (angles of inclination up to  $25^\circ$ ).

Keys with T-Handle are suitable for the maximum tightening torques of the various screws.

The keys are made of high-grade chrome-vanadium steel, matt-chrome plated. The ergonomic plastic handles have an elastic coating of TPE.



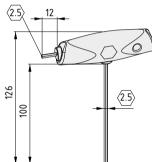




#### Ball-Headed Key 2.5 A/F

Wrench, chrome vanadium steel, matt chrome-plated Plastic grip, TPE  $m=31.0\ g$ 

1 pce. 0.0.678.74



### Key with T-Handle 2.5 A/F

Wrench, chrome vanadium steel, matt chrome-plated Plastic grip, TPE  $_{\mbox{\scriptsize m}}$  = 28.0 g

1 pce. 0.0.678.75







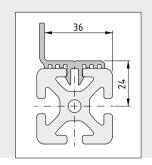
## Slide Strip 8 with Side Guide H24 ESD

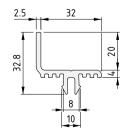
Keep things running properly! Slide Strip 8 with Side Guide H24 ESD transforms a Line 8 profile into a conveyor line. The Slide Strip simply clips into the Line 8 groove. Made of ultra-high molecular weight polyethylene, the low-friction plastic track makes it easy for users to move crates and workpiece carriers from A to B.

The 20 mm high side guide keeps small load carriers on track. Electrostatic charges are safely dissipated.

Screw-attached Slide Strip Wedge 8 (0.0.422.04) creates a gentle transition between the profile and the Slide Strip and protects the outer edge.

Note: Slide Strip 8 antistatic (0.0.457.99) is available as an alternative without a side guide.





ESD 8	ide Strip 8 with Side Guide H24 ESD
	E-UHMW = 180 g/m
.0.677.58	ack, 1 pce., length 2000 mm
).	ack, 1 pce., length 2000 mm





## **UHMW** Polyethylene Panel

Lightweight, strong and low-friction – ultra-high-molecular-weight polyethylene is a material with astounding properties. The shiny black panels made of high-quality polyethylene are ideal as cleanroom-compatible cladding, low-friction table tops for benches, and base layers for conveying systems.

Thanks to its low coefficient of sliding friction, the panels can reduce the drive energy needed on conveyor lines. The material has long-lasting self-lubricating properties.

It is impact-resistant and stable when used as a panel element between profiles. Its low friction characteristics make it ideal for all applications where staff need to work in a contaminant-free environment. The panels in thicknesses of 4, 8 and 10 mm can be used with Cover Profiles or Lip Seals. They are compatible with Line 8 or 10 system grooves.

Product	UHMW Polyethylene Panel	UHMW Polyethylene Panel ESD	UHMW Polyethylene Panel, reclaimed	
Features	Value	Value	Value	Test Standard
Density	0.94 g/cm <sup>3</sup>	0.95 g/cm <sup>3</sup>	0.94 g/cm <sup>3</sup>	DIN EN ISO 1183-1
Water absorption	<0.01 %	<0.01 %	<0.01 %	DIN EN ISO 62
Elongation at tear	>200 %	>200 %	>200 %	DIN EN ISO 527
Elastic modulus	700 N/mm <sup>2</sup>	700 N/mm <sup>2</sup>	700 N/mm <sup>2</sup>	DIN EN ISO 527
Notch impact strength	No break	No break	No break	DIN EN ISO 179
Coefficient of thermal expansion	150 - 230 10 <sup>-6</sup> K <sup>-1</sup>	150 - 230 10 <sup>-6</sup> K <sup>-1</sup>	150 - 230 10 <sup>-6</sup> K <sup>-1</sup>	DIN 53752
Surface resistance	>10 <sup>14</sup> Ω	>10 <sup>6</sup> Ω	>10 <sup>12</sup> \(\Omega\)	IEC 60093
Volume resistance	$>10^{14}\Omega$ cm	>10 <sup>6</sup> Ω cm	$>10^{14}\Omega$ cm	IEC 60093
Flammability (3 mm / 6 mm thickness)	НВ	НВ	HB	UL 94
Yield stress	21 N/mm <sup>2</sup>	22 N/mm <sup>2</sup>	22 N/mm <sup>2</sup>	DIN EN ISO 527
Shore hardness	63 D	63 D	65 D	DIN EN ISO 868
Disruptive strength	45 kV / mm	-	45 kV / mm	IEC 60243
Silicone	No	No	May contain silicone	

#### Materials used in all the following products:

PE-UHMW

	ESD
UHMW Polyethylene Panel 4mm ESD	Â
Compressed	
Pared surface	
Thickness tolerance – 15 % m = 3.80 kg/m <sup>2</sup>	
black similar to RAL 9005, cut-off max. 1970x972 mm	0.0.682.25
black similar to RAL 9005, 1 pce. panel dimensions. approx. 2000x1002 mm	0.0.682.24
Shak dililia to til 2 decet, i post parot dililonolo approxi 2000x 1002 illin	
UHMW Polyethylene Panel 8mm ESD	ESD (A)
Compressed	
Planed surface	
Thickness tolerance – 8 %	
$m = 7.55 \text{ kg/m}^2$	
black similar to RAL 9005, cut-off max. 1983x973 mm	0.0.682.31
black similar to RAL 9005, 1 pce. panel dimensions. approx. 2013x1003 mm	0.0.682.30
UHMW Polyethylene Panel 10mm ESD	ESD
	_( <u>&amp;</u> )_
Compressed Planed surface	
Thickness tolerance – 6 %	
$m = 9.45 \text{ kg/m}^2$	
black similar to RAL 9005, cut-off max. 1983x973 mm	0.0.682.37
black similar to RAL 9005, 1 pce. panel dimensions. approx. 2013x1003 mm	0.0.682.36



UHMW Polyethylene Panel 4mm	
Compressed Pared surface Thickness tolerance – 15 % m = 3.76 kg/m <sup>2</sup>	
black similar to RAL 9005, cut-off max. 1970x972 mm	0.0.682.23
black similar to RAL 9005, 1 pce. panel dimensions. approx. 2000x1002 mm	0.0.682.22
UHMW Polyethylene Panel 8mm	
Compressed Planed surface Thickness tolerance – 8 % m = 7.47 kg/m²	
black similar to RAL 9005, cut-off max. 1983x973 mm	0.0.682.29
black similar to RAL 9005, 1 pce. panel dimensions. approx. 2013x1003 mm	0.0.682.28
UHMW Polyethylene Panel 10mm	
Compressed Planed surface Thickness tolerance – 6 % m = 9.35 kg/m²	
black similar to RAL 9005, cut-off max. 1983x973 mm	0.0.682.35
black similar to RAL 9005, 1 pce. panel dimensions. approx. 2013x1003 mm	0.0.682.34
UHMW Polyethylene Panel 4mm, reclaimed  Compressed Pared surface Thickness tolerance – 15 % m = 3.76 kg/m²	
Compressed Pared surface	0.0.682.27
Compressed Pared surface Thickness tolerance – 15 % m = 3.76 kg/m <sup>2</sup>	0.0.682.27
Compressed Pared surface Thickness tolerance – 15 % m = 3.76 kg/m² black similar to RAL 9004, cut-off max. 1970x972 mm black similar to RAL 9004, 1 pce. panel dimensions. approx. 2000x1002 mm	
Compressed Pared surface Thickness tolerance – 15 % m = 3.76 kg/m² black similar to RAL 9004, cut-off max. 1970x972 mm	
Compressed Pared surface Thickness tolerance – 15 % m = 3.76 kg/m² black similar to RAL 9004, cut-off max. 1970x972 mm black similar to RAL 9004, 1 pce. panel dimensions. approx. 2000x1002 mm  UHMW Polyethylene Panel 8mm, reclaimed Compressed Planed surface Thickness tolerance – 8 %	
Compressed Pared surface Thickness tolerance – 15 % m = 3.76 kg/m² black similar to RAL 9004, cut-off max. 1970x972 mm black similar to RAL 9004, 1 pce. panel dimensions. approx. 2000x1002 mm  UHMW Polyethylene Panel 8mm, reclaimed  Compressed Planed surface Thickness tolerance – 8 % m = 7.47 kg/m²	0.0.682.26
Compressed Pared surface Thickness tolerance – 15 % m = 3.76 kg/m² black similar to RAL 9004, cut-off max. 1970x972 mm black similar to RAL 9004, 1 pce. panel dimensions. approx. 2000x1002 mm  UHMW Polyethylene Panel 8mm, reclaimed  Compressed Planed surface Thickness tolerance – 8 % m = 7.47 kg/m² black similar to RAL 9004, cut-off max. 1983x973 mm	0.0.682.26
Compressed Pared surface Thickness tolerance – 15 % m = 3.76 kg/m² black similar to RAL 9004, cut-off max. 1970x972 mm black similar to RAL 9004, 1 pce. panel dimensions. approx. 2000x1002 mm  UHMW Polyethylene Panel 8mm, reclaimed Compressed Planed surface Thickness tolerance – 8 % m = 7.47 kg/m² black similar to RAL 9004, cut-off max. 1983x973 mm black similar to RAL 9004, 1 pce. panel dimensions. approx. 2013x1003 mm	0.0.682.26
Compressed Pared surface Thickness tolerance – 15 % m = 3.76 kg/m² black similar to RAL 9004, cut-off max. 1970x972 mm black similar to RAL 9004, 1 pce. panel dimensions. approx. 2000x1002 mm  UHMW Polyethylene Panel 8mm, reclaimed Compressed Planed surface Thickness tolerance – 8 % m = 7.47 kg/m² black similar to RAL 9004, cut-off max. 1983x973 mm black similar to RAL 9004, 1 pce. panel dimensions. approx. 2013x1003 mm  UHMW Polyethylene Panel 10mm, reclaimed Compressed Planed surface Thickness tolerance – 6 %	0.0.682.26





# Lightweight Board Con-Pearl®

Secure coverage for minimal weight! Lightweight Boards Con-Pearl® are ideal panel elements for weight-optimised constructions. They feature an unbroken surface and are inherently stable and highly rigid thanks to their sandwich structure.

item Lightweight Boards Con-Pearl® are available in thicknesses of 4.8 and 9.9 mm. Select the antistatic or electrostatically dissipative version to suit your application.

The Lightweight Boards are also ideal for dividing various supply levels to guard against dirt dropping down from above.



Product	Lightweight Board Con-Pearl® 4.8 mm antistatic	Lightweight Board Con-Pearl® 9.9 mm antistatic	Lightweight Board Con-Pearl® 4.8 mm ESD	Lightweight Board Con-Pearl® 9.9 mm ESD	
Property	Value	Value	Value	Value	Test Standard
Tear strength	≥ 900 N/50 mm	≥ 2000 N/50 mm	≥ 900 N/50 mm	≥ 2000 N/50 mm	Similar to DIN EN ISO 527-2 Sample size: 200x50 mm
Surface resistance	≤ 10 <sup>12</sup> Ω	≤ 10 <sup>12</sup> Ω	≤ 10 <sup>5</sup> Ω	≤ 10 <sup>5</sup> Ω	EN 61340-5-1
Bending force at 3 % elongation	≥ 13 N/50 mm	≥ 170 N/50 mm	≥ 13 N/50 mm	≥ 170 N/50 mm	3-Point bending test Sample size: 200x50 mm Support span: 140 mm, 20 mm/min
Maximum bending force (F max.)	≥ 35 N/50 mm	≥ 210 N/50 mm	≥ 35 N/50 mm	≥ 210 N/50 mm	
Deflection at F max.	≤ 30 mm	≤ 16 mm	≤ 30 mm	≤ 16 mm	
Rate of combustion	≤ 100 mm/min	≤ 100 mm/min	≤ 100 mm/min	≤ 100 mm/min	DIN 75200 (FMVSS 302)



# Materials used in all the following products:

PP

Lightweight Board Con-Pearl® 4.8mm antistatic	
Thickness tolerance ± 7 % m = 1.00 kg/m <sup>2</sup>	
grey similar to RAL 7046, cut-off max. 2270x1570 mm	0.0.684.24
grey similar to RAL 7046, 1 pce. panel dimensions. approx. 2300x1600 mm	0.0.684.23
Lightweight Board Con-Pearl® 9.9mm antistatic	
Thickness tolerance $\pm$ 5 % m = 3.00 kg/m <sup>2</sup>	
grey similar to RAL 7046, cut-off max. 2270x1570 mm	0.0.684.26
grey similar to RAL 7046, 1 pce. panel dimensions. approx. 2300x1600 mm	0.0.684.25
Lightweight Board Con-Pearl® 4.8mm ESD	ESD (A)
Thickness tolerance $\pm 7 \%$ m = 1.00 kg/m <sup>2</sup>	
black, cut-off max. 2270x1570 mm	0.0.684.28
black, 1 pce. panel dimensions. approx. 2300x1600 mm	0.0.684.27
Lightweight Board Con-Pearl® 9.9mm ESD	ESD (A)
Thickness tolerance ± 5 % m = 3.00 kg/m <sup>2</sup>	
black, cut-off max. 2270x1570 mm	0.0.684.30
black, 1 pce. panel dimensions. approx. 2300x1600 mm	0.0.684.29



# Boost efficiency – with the item Automation System.

Bearing Carriage PS 4-20 Linear Guide Rail PS 4-20 Assembly Set 8 PS 4-20 Rail PROFINET Interface



# Linear guide system PS 4-20

High load-carrying capacity for minimum effort! Linear Guide Rail PS 4-20 is especially easy to anchor in the Line 8 groove of a support profile. Simply put the 20 mm-wide Rail in position and screw it into place – no further machining required. Push the corresponding Bearing Carriage PS 4-20 onto the Rail and it is ready for use.

Linear guide systems like this, which are based on a recirculating ball bearing guide, exhibit high load-carrying capacity and rigidity combined with excellent precision. The rows of balls have two-point contact and run on the raceway in a back-to-back arrangement at a contact angle of 45°. As a result, they can accommodate high loads and torque loads with low friction.

Linear Guide Rail PS 4-20 is up to 2960 mm long, features predrilled mounting openings and can be cut to any length. It is fixed in place using Assembly Set 8 PS 4-20.

The Carriage features four M5 threaded holes in the item modular dimension for attaching Line 6 and 8 profiles or a custom carriage plate. The ball bearing is low maintenance and durable.

Linear guide system PS 4-20 from item is a perfectly coordinated all-rounder that fills the gap between compact linear guide system PS 4-15 and exceptionally robust linear guide system PS 4-25.

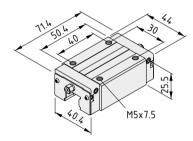


	PS 4-1	5 PS 4-20	PS 4-25
$F_y = F_z$	1000 N	1850 N	2500 N
M <sub>x</sub>	15 Nm	40 Nm	60 Nm
$M_y = M_z$	10 Nm	20 Nm	25 Nm
С	7200 N	13100 N	17900 N
$C_0$	14500 N	27000 N	37000 N
a <sub>max.</sub>	150 m/s <sup>2</sup>	150 m/s <sup>2</sup>	150 m/s <sup>2</sup>
V <sub>max.</sub>	5 m/s	5 m/s	5 m/s
θ	-10 °C - +100 °C	-10 °C - +100 °C	-10 °C - +100 °C
h <sub>min.</sub>	120 mm	150 mm	180 mm





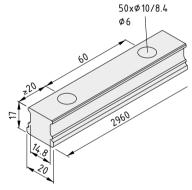




#### Bearing Carriage PS 4-20

Housing, St, hardened Wiper system, PA, black m = 480.0 g

0.0.666.39 1 pce.

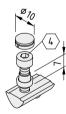


#### Linear Guide Rail PS 4-20



St, Cf53, hardened, polished m = 2.08 kg/m

0.0.675.53 cut-off max. 2960 mm 1 pce., length 2960 mm 0.0.666.40



#### Assembly Set 8 PS 4-20 Rail



10 PS 4-20 installation sleeves 10 Hexagon Socket Head Cap Screws DIN 912-M5x18, St, bright zinc-plated

10 PS 4-20 caps 10 T-Slot Nuts V 8 St M5 m = 149.0 g

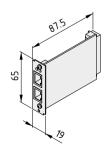
1 set 0.0.681.06



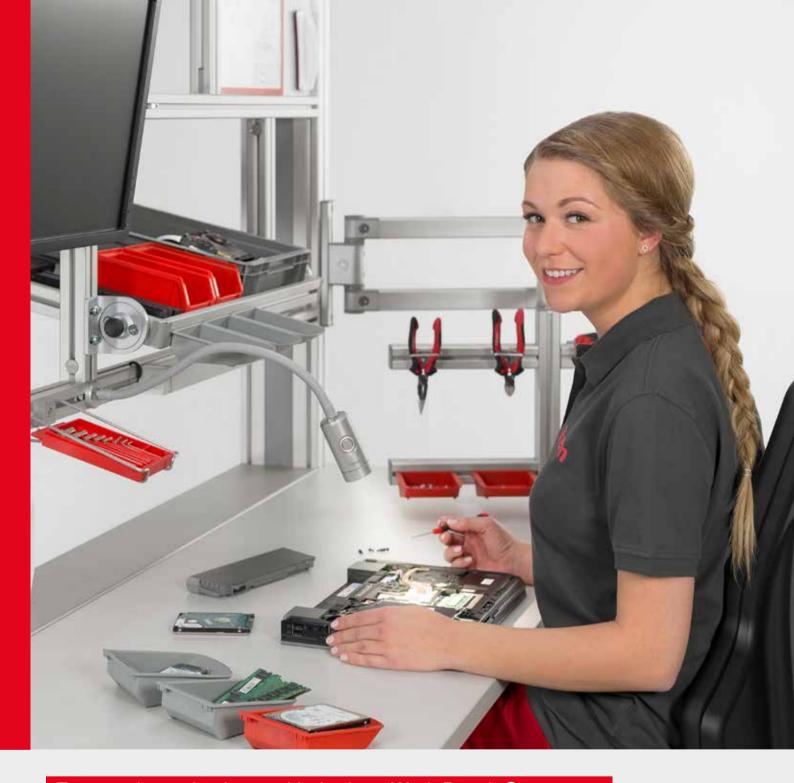
# **PROFINET Interface**

Plug in and go! The PROFINET Interface can be used with all item Controllers. This retrofit-table plug-in module is inserted into the corresponding slot on the item Controllers and can be used to connect an item linear motion unit® to a PLC or other overarching control system. The PROFINET Interface features two connections for network cables.





PROFINET Interface	
m = 46.0 g	
1 pce.	0.0.681.66



# Ergonomic production – with the item Work Bench System.

Spotlight 6W LED

Spotlight 6W LED with Flexible Tube

Single Hooks 8

Double Hook 8

Pliers Holder 8

Container Holder 8





# Spotlights 6W LED

On the spot! item Spotlights 6W LED combine cutting-edge LED technology with fine looks and excellent safety. The IP 65 housing is dust-tight and protected against jets of water from all directions. Depending on the model, the beam angle can be 10° for focussed lighting or 35° for wider area lighting.

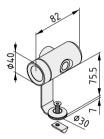
The energy-efficient lights are very bright, with a lighting strength of 20,000 Lux at a distance of 500 mm. This makes the pivoting Spotlights ideal for lighting up working processes in machine cabins. Specific sections of a work bench can also be lit up. The colour temperature of the lights is 4000 Kelvin (neutral white).

The Spotlights are compatible with other item system lighting components such as power packs, wireless dimmers, cables and splitters and other LED work and machine lights. This makes it easy to create the perfect lighting system for your specific needs. The bright Spotlight can also be dimmed as required via a button on the casing. The chosen setting is retained when switching on and off.

The long-life LED is designed to deliver a service life of 50,000 operating hours.





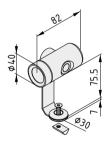


#### Spotlight 6W LED 10°



High-performance 6W LED
10° light beam
Dimmer switch
Aluminium housing
2 joints, fastening elements
M8 plug-in connector
Toughened glass protective pane
Protection: IP 65, EN 60529
Protection class III
Rated voltage: 24 V DC
m = 0.3 kg

1 set



#### Spotlight 6W LED 35°



0.0.676.42

High-performance 6W LED 35° light beam Dimmer switch Aluminium housing 2 joints, fastening elements M8 plug-in connector Toughened glass protective pane Protection: IP 65, EN 60529 Protection class III Rated voltage: 24 V DC m = 0.3 kg

1 set 0.0.681.60





# Spotlight 6W LED with Flexible Tube

When every detail counts. Thanks to their posable arm, which moves in all directions, Spotlights 6W LED with Flexible Tube can be lined up in seconds. This makes them especially versatile, enabling users to light up exactly the area they need to.

With a lighting strength of 20,000 Lux at a distance of 500 mm, the energy-efficient Spotlights are very bright. They can be dimmed via a button on the casing, with the setting retained when switching off and on. They are also compatible with a wireless remote dimming system.

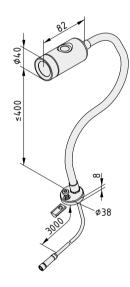
Two models are available: A lighting angle of 10° provides focussed lighting, while 35° lights up a wider area. The colour temperature of the lights is 4000 Kelvin (neutral white) and the colour rendering index is >0.85.

Spotlights 6W LED can be used with item power packs, cables and dimmers. The casing is protected to IP 65 and thus well equipped for use in wet or dusty environments.

With a service life of 50,000 operating hours and outstanding efficiency, the Spotlights help to improve sustainability and deliver energy savings.







#### Spotlight 6W LED 10° with Flexible Tube



High-performance 6W LED 10° light beam Dimmer switch Aluminium housing Flexible tube, fastening elements M8 plug-in connector Toughened glass protective pane Protection: IP 65, EN 60529 Protection class III Rated voltage: 24 V DC m = 0.5 kg

1 set 0.0.676.57

#### Spotlight 6W LED 35° with Flexible Tube



High-performance 6W LED 35° light beam Dimmer switch Aluminium housing Flexible tube, fastening elements M8 plug-in connector Toughened glass protective pane Protection: IP 65, EN 60529 Protection class III Rated voltage: 24 V DC m = 0.5 kg

1 set 0.0.681.61





Single Hook 8 40x20 Single Hook 8 80x20 Double Hook 8 80x20 Pliers Holder 8 60x30 Container Holder 8 160

Everything has its place! The item hook and holder system creates order at the work bench. These additions help you organise tools and equipment with the greatest of ease.

The practical Single Hooks 8 are ideal for hanging up tools with corresponding eyes and items of clothing. Made from stainless steel wire, the prong has an angled end to stop tools slipping off. Single Hook 8 is available in lengths of 40 and 80 mm.

Double Hook 8 80x20 features two separate stainless steel prongs housed in one fastening block. It is ideal for holding several long hand tools with grips.

Held firm: item Pliers Holder 8 can hold a whole range of pliers and similar tools to keep them neatly stored and in easy reach.

Container Holder 8 160 consists of two mirror-image holders that can be moved separately along a Line 8 groove to vary their spacing and can thus hold a whole range of inherently stable containers securely in place. For example, this is the ideal solution for positioning bit sets, small crates and similar such containers, which can be swapped out as required.

All elements in the item hook and holder system are available with either a black or grey fastening block.



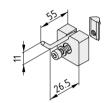




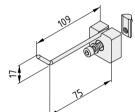


### The following applies to all the products below:

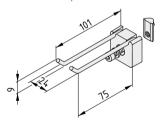
Wire, St, stainless
Wire mount, PA-GF
Hexagon Socket Head Cap Screw DIN 912-M6x20, St, bright zinc-plated
Washer DIN 433-6.4, St, bright zinc-plated
T-Slot Nut V 8 St M6, bright zinc-plated



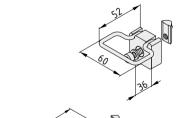
Single Hook 8 40x20	<u>.</u>
m = 39.0 g	
grey, 1 set	0.0.683.59
black, 1 set	0.0.683.53



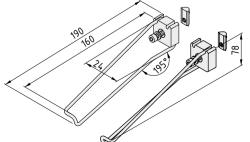
Single Hook 8 80x20	8
m = 45.0 g	
grey, 1 set	0.0.683.58
black, 1 set	0.0.683.54



Double Hook 8 80x20	8
m = 60.0 g	
grey, 1 set	0.0.684.11
black, 1 set	0.0.684.12



Pliers Holder 8 60x30	8
m = 55.0 g	
grey, 1 set	0.0.683.93
black, 1 set	0.0.683.94



Container Holder 8 160	8
m = 158.0 g	
grey, 1 set	0.0.684.18
black, 1 set	0.0.684.17



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

Pivot Bearing Set D30-28.5 M8

Double Pivot Bearing Unit D30-28.5 M8

Roller Set 8 D30-30

Roller D30/D6-16

Spacer Bushing D17/D6-12

Double Profile Tube D30-60

Slide Strip 48x2, plain Protective Profile D30 R28-90° ESD Tool Balancer 1-2 kg, Synthetic Fibre Cable Tool Balancer 2-3 kg, Synthetic Fibre Cable Tool Balancer 10-14 kg, Synthetic Fibre Cable



# Pivot Bearing Set D30-28.5 M8 Double Pivot Bearing Unit D30-28.5 M8

Responds to the smallest changes! Compact Pivot Bearing Set D30-28.5 M8 enables Karakuri/low-cost automation applications using light transported goods and is strong and very quiet.

The pivot bearing is fastened to the end face of a (Profile) Tube D30 using a Threaded Insert and to a Fastener D30. This ensures the profile can be rotated around its longitudinal axis. As the outside is left free, you can also build very compact axes of rotation with other connections.

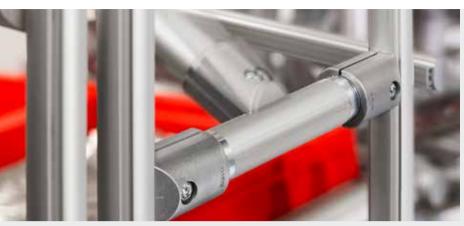
The Pivot Bearing Set comprises a fixed and a floating bearing with 2 mm of length compensation. This ensures axial loads can be accommodated and compensates for any expansion in the shaft caused by heat, without compromising precision. The ball-bearing mounted pivot bearing is easy running and exhibits low friction.

If only one bearing position is required or if very high loads occur, it is advisable to use Double Pivot Bearing Unit D30-28.5 M8. This features two ball bearings. Consequently, it can accommodate higher forces for rotating motions. As a fixed bearing, Double Pivot Bearing Unit D30 exhibits no play in the case of axial load.

item pivot bearings are maintenance-free and run very smoothly and quietly. They can also be fitted to profiles from the MB Building Kit System using T-Slot Nuts or a thread in a core bore.

Note: To build structures that allow both rotation and movement along an axis, use item Plain Bearings D30.



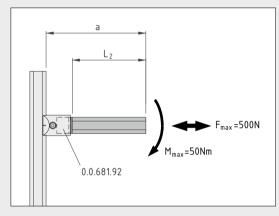


Use the relevant M8 Threaded Insert to create a fixing with the end-face of a D30 profile.

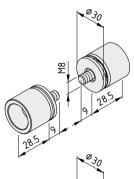
a	
L <sub>1</sub>	
F F=500N F	
0.0.683.99	

For Pivot Bearing Set D30-28.5 M8 (0.0.683.99) Loading values F correspond to Profile Tube D30

Profiles	Threaded Insert	L <sub>1</sub>	$L_2$
Profile Tube D30 0.0.628.28	Threaded Insert, Profile Tube D30 M8 AI 0.0.675.17	a-108	a-54
Tube D30 0.0.628.56	Threaded Insert D30 M8 0.0.640.96 Threaded Insert D30 M8 ESD 0.0.640.98	a-108	a-54
Profile Tube D40/D30 0.0.666.63	Threaded Insert, Profile Tube D40 M8 AI 0.0.673.71	a-108	a-54
Profile Tube D30 heavy duty 0.0.642.34	Threaded Insert, Profile Tube D30 heavy duty 0.0.672.18	a-98	a-49



For Double Pivot Bearing Unit D30-28.5 M8 (0.0.681.92)



#### Pivot Bearing Set D30-28.5 M8

Bearing Unit D30-28.5 M8, floating bearing, Al, St, bright zinc-plated Bearing Unit D30-28.5 M8, fixed bearing, Al, St, bright zinc-plated m = 159.0 g

1 set 0.0.683.99



2 deep groove ball bearings, St, bright zinc-plated Dome-head screw M8x35, St, bright zinc-plated 0-ring DIN ISO 3601 7x2, NBR

m = 97.0 g

1 pce. 0.0.681.92



## Roller Set 8 D30-30 Roller D30/D6-16 Spacer Bushing D17/D6-12

Precise movement on a Tube D30! Roller Set 8 D30-30 features a double ball-bearing mounted roller with a contour that matches (Profile) Tubes D30. This makes it ideal for guiding carriages, counterweights and cables with low friction over a profile frame.

Roller D30/D6-16 is extremely robust and features two ball bearings that help it run quietly, precisely and with low friction. Friction changes only minimally with load. This helps you design strong carriages that use a D30 profile for guidance. In Karakuri applications, Roller Set 8 D30-30 can be used to create moving components that don't require a separate guide profile because any (Profile) Tube D30 can be used instead.

The preassembled Roller Set with T-Slot Nut 8 can be fitted to a Profile Tube 8 D30 or any Line 8 system groove in next to no time. The Spacer Bushings are designed to ensure adequate clearance between the structural profiles and the carriage. The carriage can be built very simply, using Profile Tubes 8 D30.

Roller D30/D6-16 and Spacer Bushing D17/D6-12 are also available separately for custom applications. They are fastened using M6 screws in an item Multiblock D30, for example.

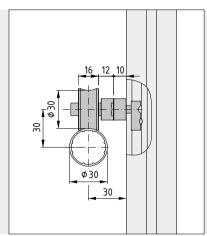
Spacer Bushing D17/D6-12 can be used to set the height of the carriage via the roller. To achieve larger distances, use several Bushings, one on top of the other. During installation, it is important to ensure the collar on the Spacer Bushing is always facing toward the ball bearing of the Roller.

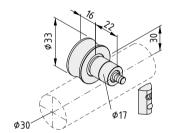


0.0.681.51





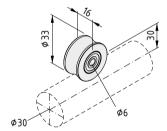




#### Roller Set 8 D30-30

Roller D30/D6-16, POM 2 Spacer Bushings D17/D6-12, St, bright zinc-plated Hexagon Socket Head Cap Screw M6x47, St, bright zinc-plated T-Slot Nut V 8 St M6, bright zinc-plated m = 79.0 g

1 set



#### Roller D30/D6-16

Roller D30, POM 2 deep groove ball bearings, St, bright zinc-plated Spacer, St, bright zinc-plated m = 28.0 g

1 set 0.0.681.68



#### Spacer Bushing D17/D6-12

St, bright zinc-plated m = 15.0 g

1 pce. 0.0.681.67



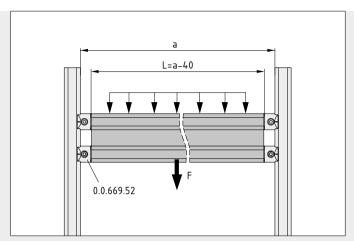
#### Double Profile Tube D30-60

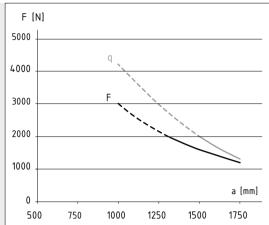
Double the hold! Double Profile Tube D30-60 consists of two Profile Tubes D30 that are connected by an unbroken aluminium web. This continuous connection significantly increases bending strength in vertical applications compared to when using two separate Profile Tubes D30.

Double Profile Tube D30-60 is also ideal for use in racks as a long horizontal strut with low support. It can accommodate forces efficiently when used in other load-bearing constructions, e.g. as a crossbar under a table top.

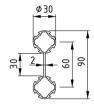
Fasteners D30, internal (0.0.669.52) are used for connections. These are located within the Profile Tube and form a stepless  $90^{\circ}$  connection.







Permissible loads for constructions built with Double Profile Tube  $\ensuremath{\mathrm{D}} 30\text{-}60$ 



Double Profile Tube D30-60							
Al, anodized							
A [cm <sup>2</sup> ]	m [kg/m]	I <sub>x</sub> [cm <sup>4</sup> ]	I <sub>y</sub> [cm <sup>4</sup> ]	It [cm4]	W <sub>x</sub> [cm <sup>3</sup> ]	W <sub>y</sub> [cm <sup>3</sup> ]	
4.54	1.22	3.43	39.37	4.95	2.29	8.75	
natural, cut-off max. 6000 mm					0.0.682.60		
natural, 1 pce., length 6000 mm					0.0.681.55		

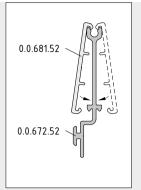


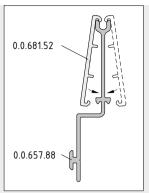
# Slide Strip 48x2, plain

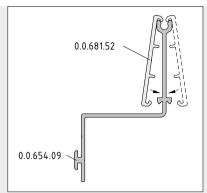
Protects without slowing down! Slide Strip 48x2 ensures that small load carriers and other goods being moved on item roller conveyors are neither slowed down nor damaged when they come into contact with the guide rails.

The plastic strip prevents scratches. It is low-friction and thus enables low angles of inclination on roller conveyors. The smooth surface makes it especially suitable for transporting containers that have protruding ribs or stacking edges.









Slide Strip 48x2 can be used with all aluminium item guide rails. It is simply clipped onto the guide rail at the side.



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### Protective Profile D30 R28-90° ESD

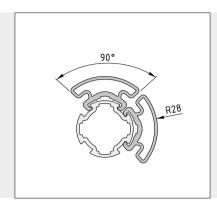
Also protects against static charges! The innovative Protective Profile D30 R28-90° is now also available in an ESD-safe design.

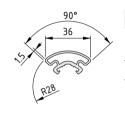
Protective Profile D30 R28-90° ESD is clipped onto the flank of a Profile Tube D30. Its elastic chamber deforms to absorb impacts. It can be used as impact protection for frames or as scratch protection for transported goods.

Unlike with foam, point loads do not result in permanent indentations. The Protective Profile covers a quarter of the profile, leaving other areas accessible. Four profiles offer all-round cover.

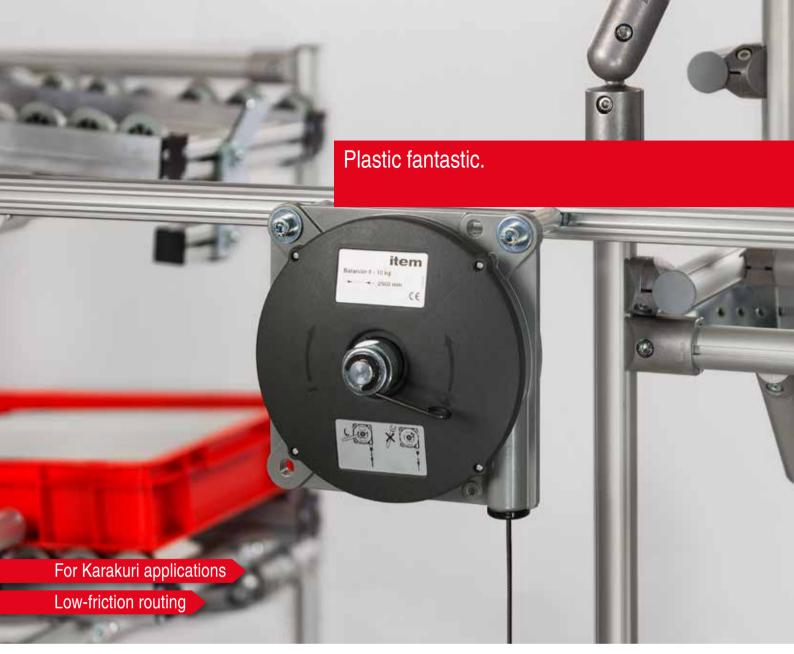
Black Protective Profile D30 R28-90° ESD safely dissipates static charges. It is also available without this ESD protection as Protective Profile D30 R28-90° (0.0.667.15) in grey.







Protective Profile D30 R28-90° ESD	ESD (A)
TPE, black m = 190.0 g/m	
black similar to RAL 9005, 1 pce., length 2000 mm	0.0.681.09



# Tool Balancers with a synthetic fibre cable

They can do it all! Tool Balancers with a synthetic fibre cable are extremely tear-resistant and, unlike steel cables, can be easily guided over small pulleys. This makes them perfect for Karakuri/low-cost automation applications.

Tool Balancers automatically pull tools or moving components back to their starting position. The adjustable retraction force of the item Tool Balancers enables precision setting, which is essential for Karakuri solutions. Synthetic fibre cables exhibit a high degree of efficiency and can be re-routed easily over pulleys.

The Tool Balancers with synthetic fibre cables come in three designs with a retraction weight of  $1-2\ kg,\ 2-3\ kg$  or  $10-14\ kg$ .





#### The following applies to all the products below:

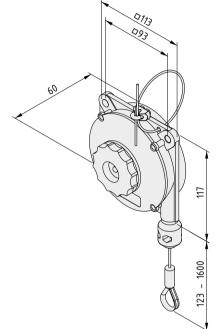
Casing die-cast Al

Synthetic fibre cable Ø 2 mm

Securing loop: Sheathed steel cable  $\varnothing$  2 mm, St, stainless; steel cable clamp,

St, bright zinc-plated

Spring Hook, St, stainless Notes on Use and Installation



# Tool Balancer 1-2 kg, Synthetic Fibre Cable

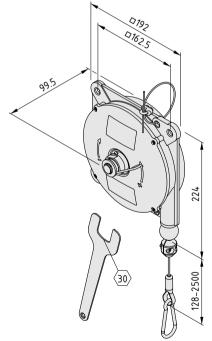
m = 664.0 g

0.0.682.87 1 pce.

#### Tool Balancer 2-3 kg, Synthetic Fibre Cable

m = 694.0 g

0.0.682.88 1 pce.



#### Tool Balancer 10-14 kg, Synthetic Fibre Cable

Casing die-cast Al

Synthetic fibre cable Ø 2 mm

Securing loop: Sheathed steel cable Ø 2 mm, St, stainless; steel cable clamp,

St, bright zinc-plated
Spring Hook, St, stainless
Wrench 30 A/F, St, bright zinc-plated

Notes on Use and Installation

m = 3.2 kg

0.0.681.00 1 set



## Work Bench System



item24.de/en/epaper-wbs

#### **Automation System**



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#### Line XMS



item24.de/en/epaper-xm

# Lean Production Building Kit System



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#### MB Building Kit System



item24.de/en/epaper-mb

#### Stairway/Platform System



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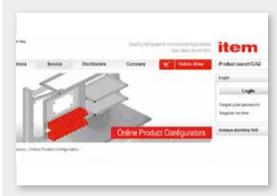


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item24.de/en/configurators



#### See how it's done - with item on YouTube.

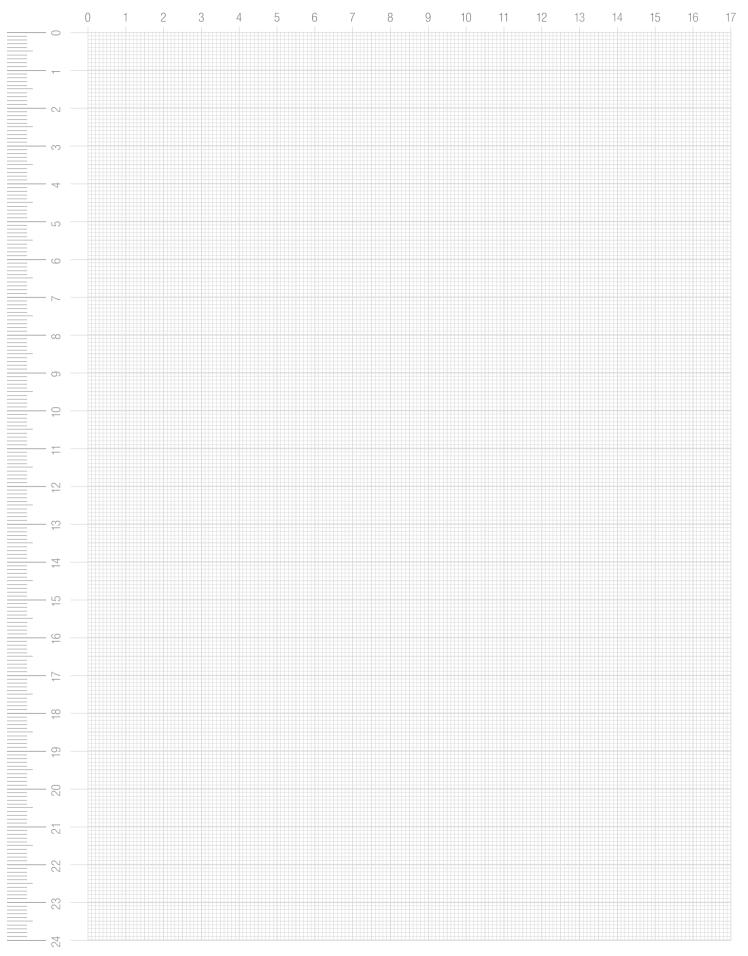
They say a picture is worth more than 1000 words. So – at 25 images per second – you can imagine just how informative the item videos are. You can find assembly tips and useful information, all packaged up in moving images, on YouTube. Specialists also answer frequently asked questions relating to issues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

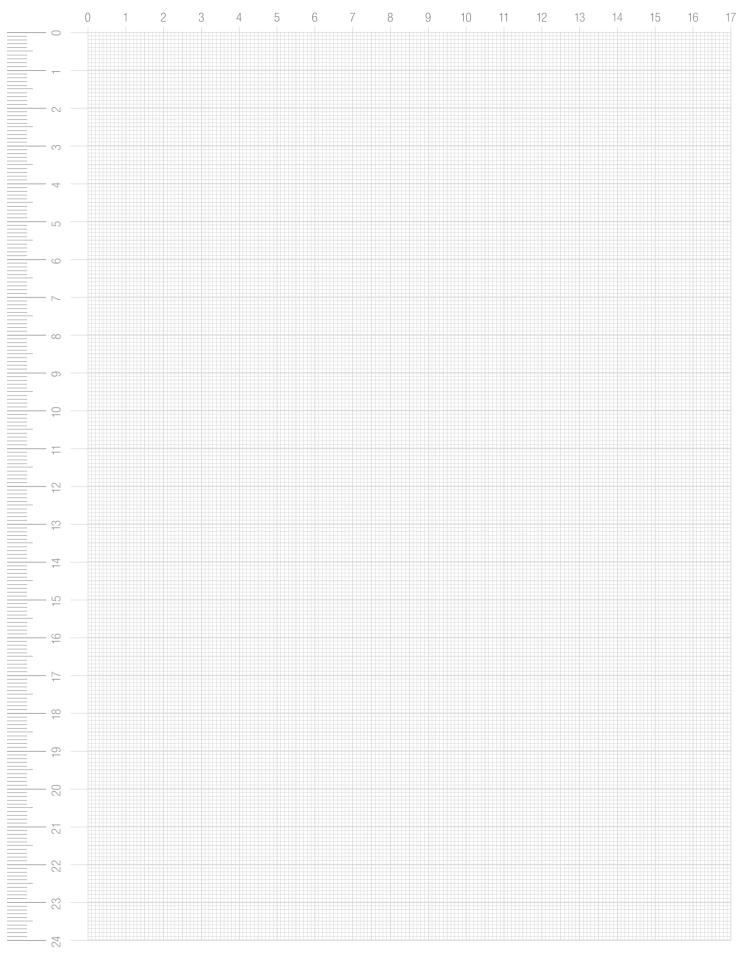
youtube.com/item24com



Α		R	
Assembly Set 8 PS 4-20 Rail	19	Roller D30/D6-16	32
В		Roller Set 8 D30-30	32
Ball-Headed Key 2.5 A/F	10	S	
Bearing Carriage PS 4-20	19	Single Hook 8 40x20	27
С		Single Hook 8 80x20 Slide Strip 48x2, plain	27 36
Container Holder 8 160	27	Slide Strip 8 with Side Guide H24 ESD	12
D		Spacer Bushing D17/D6-12	32
Double Hook 8 80x20	27	Spotlight 6W LED with Flexible Tube	25
Double Pivot Bearing Unit D30-28.5 M8	30	Spotlights 6W LED Stacking Guide 8 St 120x80-30°	23 7
Double Profile Tube D30-60	34		,
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Forklift Pocket 8 St 260x90x40	6	Tool Balancer 10-14 kg, Synthetic Fibre Cable Tool Balancer 1-2 kg, Synthetic Fibre Cable	40 40
J		Tool Balancer 2-3 kg, Synthetic Fibre Cable	40
Jacking Castor D80 140x110 antistatic, with Foot Pedal	8	U	
Jacking Castor D80 antistatic, with Foot Pedal	8	UHMW Polyethylene Panel	13
K		UHMW Polyethylene Panel ESD UHMW Polyethylene Panel, reclaimed	13 13
Key with T-Handle 2.5 A/F	10		
L			
Lightweight Board Con-Pearl® antistatic	16		
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Profile 8 240x40 8N180 light	5		
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# Concept, design and realisation

item Industrietechnik GmbH

#### Photographs

item Industrietechnik GmbH

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

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