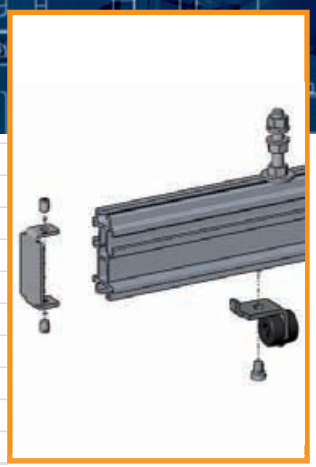

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Signs and symbols

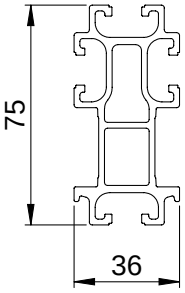
Notice: To prevent damages to equipment, property and the environment

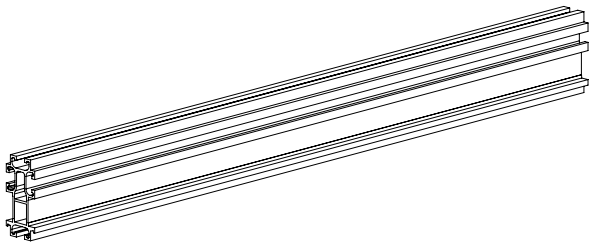
⚠ Dangerous situation that can lead to injury or death

Rail profile C75

Data sheet no. **B81E**
Edition: March 2010

The aluminium rail profile C75 without compressed air can be combined with the coupling set to form any length of line.
The rail profile is particularly well suited for assembly lines or work places which demand a high degree of flexibility. The process of picking up tools can be implemented extremely easily with the aid of carrier units. The fastening grooves on the rail profile enable the direct attachment of accessories, e.g. lamps, energy carrier systems, conductor rails etc.





If a compressed air rail system is required, this can be implemented with the A62 or A180 series.

1. Rail profile C75

Type		**12806.3**	**12806.6**
Length	mm	3000	6000
Weight	kg	5.5	11

Non-standard lengths
The rails are also available in non-standard lengths according to customer specification.
Length: max. 6000 mm.

2. Rail specification C75

Moment of inertia	36 cm^4
Weight	1.82 kg/m
Load capacity	65 kg as point load with 2 m bracing 80 kg with work stations with 2 m bracing
Rail material	aluminium, anodized colourless

3. Suspension

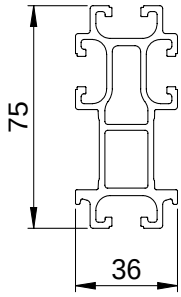
For reasons of stability, the rail profile must be suspended at regular intervals according to the load situation. The hanger can be used with a bolt set or in combination with the rail holder. These should be positioned as close as possible to the relevant rail connections to ensure smooth operation (refer to the data sheet E81E).

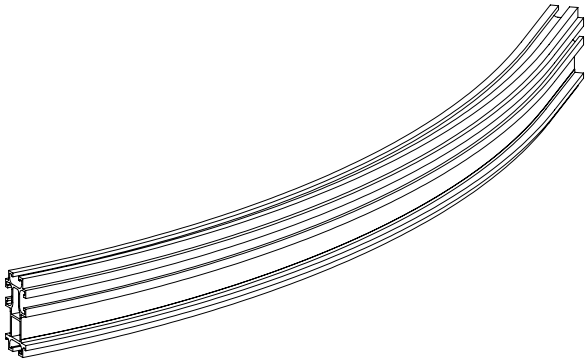
Curved rail C75

Data sheet no.
Edition: March 2010

B82E

The curved rail C75 made of aluminium can be connected using the same coupling set. The straight rail profiles can be used to realize any length of rail line or continuous ring lines.

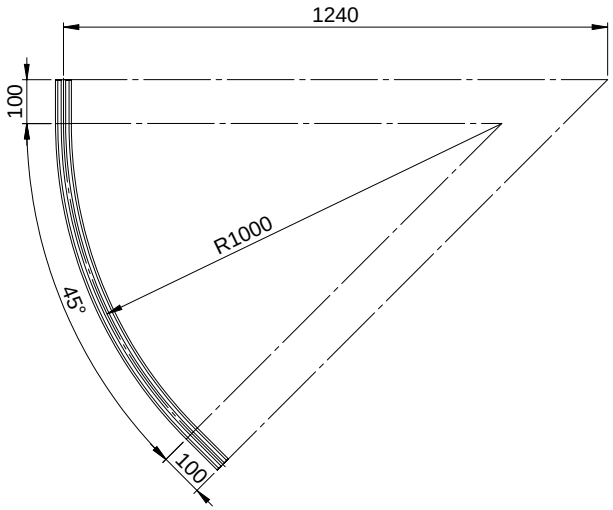




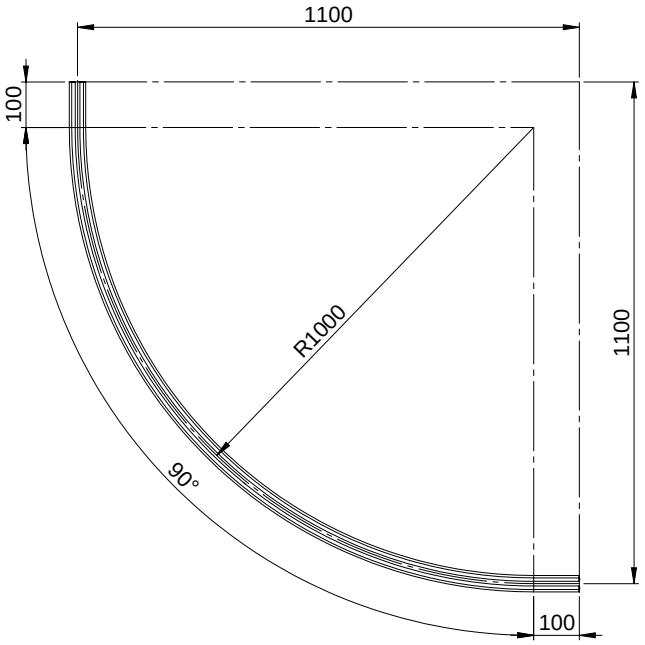
1. Curved rail C75

Type		**12807.45**	**12807.90**
Radius R	mm	1000	1000
Angle	°	45	90
Weight	kg	1.8	3.2
Material		aluminium, anodized colourless	

45° curve



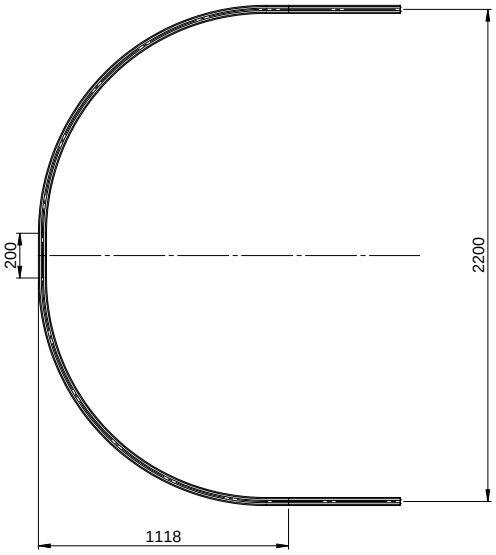
90° curve

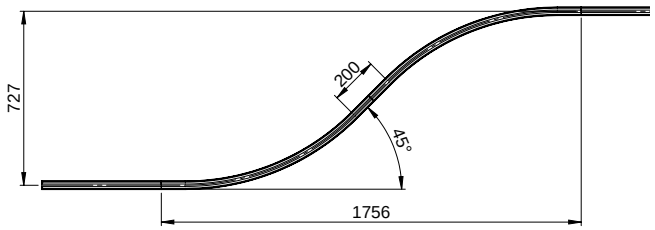


2. Suspension

For reasons of stability, the curved rail must be suspended at regular intervals according to the load situation. The hanger can be used with a bolt set or in combination with the rail holder. These should be positioned as close as possible to the relevant rail connections to ensure smooth operation (refer to the data sheet E81E).

2. Possible curve combinations





Type 12811 Rail termination C75

The rail termination is fastened to the face of the rail profile with the aid of two setscrews. As well as finishing off the end of the rail in terms of its appearance, it also acts as a mechanical stop.

Material	steel, zinc-plated blue
Weight	0.08 kg
Scope of supply	termination, M8 setscrews

Type 12812 Movable stopper C75

The movable stopper can be screwed to any point along the rail profile by means of an insertable sliding block and serves as a stop for tool carriers, work stations etc.

Material	Angle	steel, zinc-plated blue
	Buffer	elastomer, NBR (Perbunan)
Weight		0.1 kg
Scope of supply		bracket, buffer incl. insertable M8 sliding block

Type 12820 Tool slide C75

This tool slide is inserted into the groove on the rail profile and can be used to attach and slide lightweight accessories.
For the attachment of larger loads refer to the carrier unit data sheet I81E.

Material	PA black, fibreglass-reinforced
Max. load	approx. 5 kg
Weight	0.03 kg
Scope of supply	1x slide incl. carabiner

Type 12821 Rotatable eye bolt C75

Additional loads can be suspended from the rail profile with the aid of the eye bolt. It can be screwed to any point of the rail profile with the aid of the insertable sliding block.

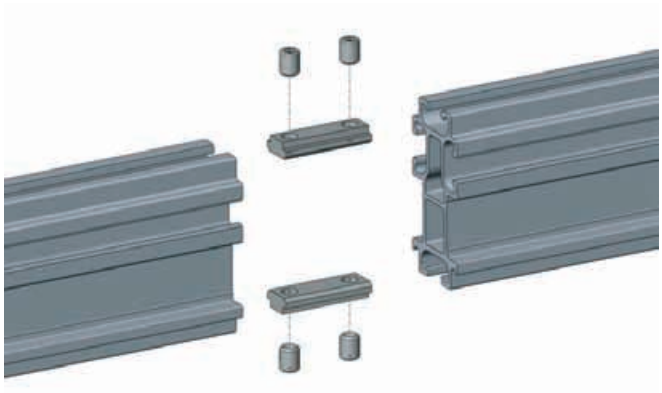
Material	steel, galvanized
Thread	M8
Max. load	approx. 20 kg
Weight	0.07 kg
Scope of supply	1x M8 eye bolt incl. insertable sliding block

Type 2787.09 Sliding block M8, insertable

This sliding block can be inserted at any point in the groove on the rail profile. The spring plate ensures that it remains in the desired position.

Material	steel, zinc-plated blue
Thread	M8
Weight	0.01 kg

The coupling set C75 is used as connecting element for the rail profiles C75. The sliding blocks are positioned in the upper and lower groove on the rail profile and secured with the aid of setscrews. The cup points of the setscrews generate the required tight fit. With the aid of the coupling set the rail profiles can be connected to any length of line.



1. Rail couplings C75

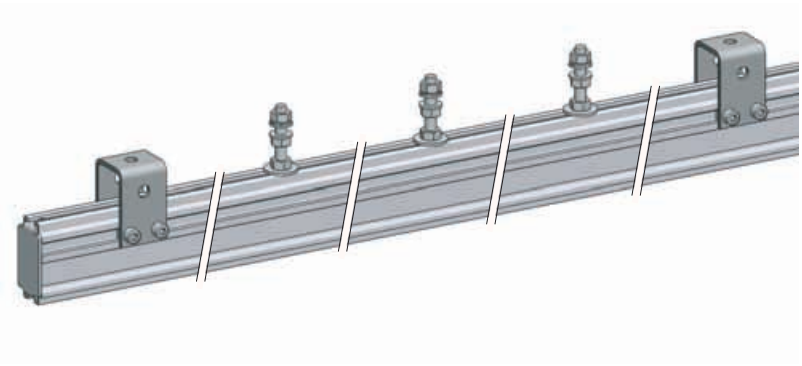
Type 12600 Coupling set C75
The coupling set is used as a simple means for connecting rail profiles to each other.

Material	steel, zinc-plated blue
Weight	0.06 kg
Scope of supply	2 fixed sliding blocks incl. 4x M8 setscrews

Rail mounting C75

Data sheet no. **E81E**
Edition: March 2010

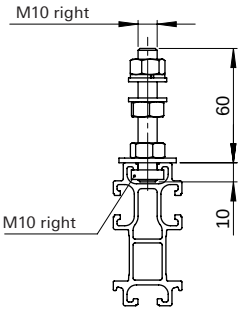
Two different fastening components are available so that the longitudinal extension of the rail line caused by temperature changes is not obstructed. The fixed point mounting is only used once per rail line, preferably at the start of the rail. It fixes the rail in all three planes.
The sliding hangers are used at all other suspension points and ensure problem-free longitudinal extension of the rail line.
The distance between hangers on the rail is 2 to 3 m depending on the load situation.

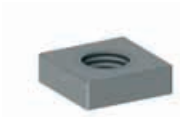


1. Hanger

The complete hanger comprises the groove elements and the screw fitting set.

1.1 Groove elements





Square nut, fixed	**Type 12615**
Thread	M10, right-handed
Material	steel, zinc-plated blue
Weight	0.01 kg

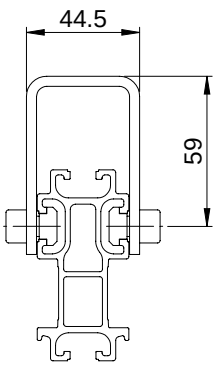
Sliding block	**Type 12614**
Thread	M10, right-handed
Material	steel, zinc-plated black
Weight	0.01 kg

1.2 Screw fitting set

Threaded bolt set	**Type 6628**
Thread	M10, right-handed
Material	steel, passivated yellow
Weight	0.1 kg

2. Rail holder

For improved fixing of the rail line we recommend the use of a fixed or sliding rail holder every 12 m. This is particularly recommended for applications with dynamic loads, or if work stations or energy carrier systems are used (see page 2).



Rail holder C75, fixed		**Type 12846**
Material	Holder	steel, zinc-plated blue
	Sliding block	steel, zinc-plated blue
Weight		0.32 kg
Scope of supply		holder incl. 2 sliding blocks (fixed)

Sliding rail holder C75		**Type 12847**
Material	Holder	steel, zinc-plated blue
	Sliding block	steel, zinc-plated black
Weight		0.32 kg
Scope of supply		holder incl. 2 sliding blocks (sliding)

Notice

Instead of the screw fitting sets, customer supplied fastening elements, e.g. M10 threaded bars, can also be used.

3. Fall protection C75 for rail profile

The lanyard rail is a safety component which prevents the rail line from falling down in the event of inappropriate handling, e.g. due to overloading of work stations or due to prohibited mechanical loads. Securing elements like ropes or chains are not included in the scope of supply and must be provided by the customer.

Type 12849 Fall protection C75

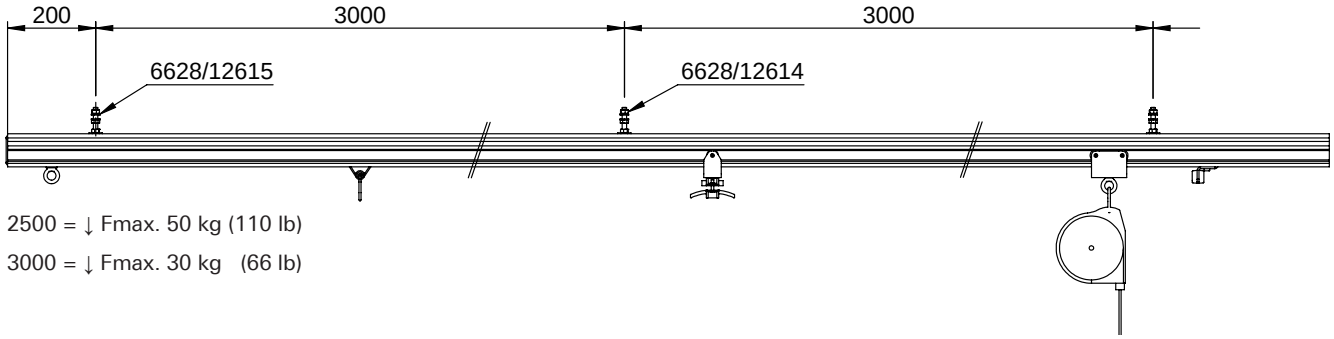
Max. load	140 kg
Material	steel, zinc-plated blue
Weight	0.07 kg
Scope of supply	1x M8 eye bolt incl. insertable sliding block

4. Positioning of hangers

The fixed point hanger is mounted close to the start of the rail. The sliding hangers are mounted in between at the distances described below. They should preferably be positioned in such a way that one hanger is positioned as close as possible to each rail connection. The maximum permitted node load per hanger is 120 kg.

5. Distance between hangers

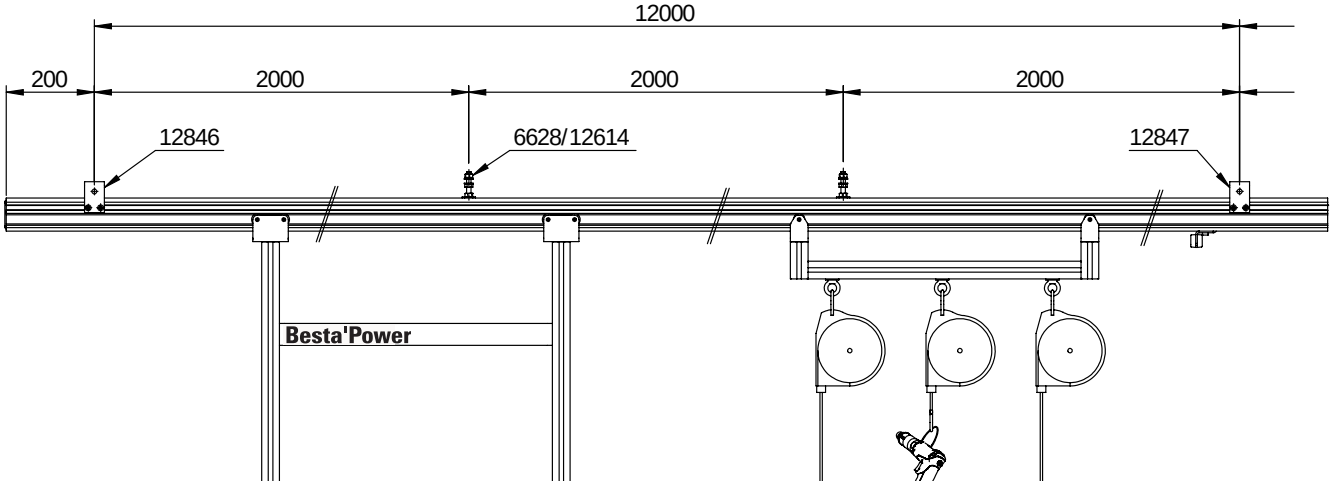
5.1. Installations without work stations, max. distance of 3000 mm between hangers



2500 = ↓ Fmax. 50 kg (110 lb)

3000 = ↓ Fmax. 30 kg (66 lb)

5.2. Installations with work stations, max. distance of 2000 mm between hangers

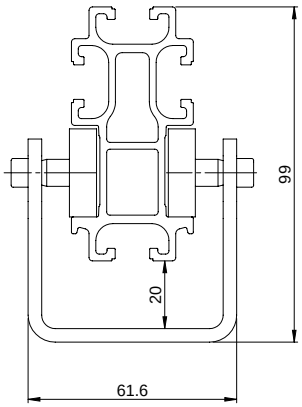


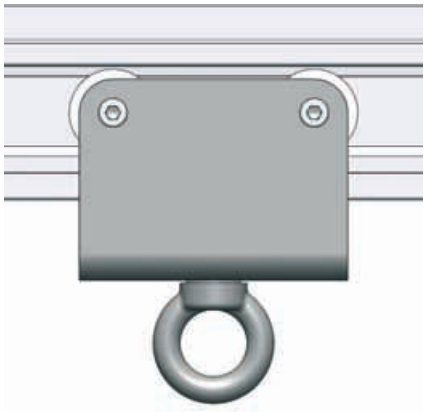
2000 = ↓ Fmax. 80 kg (180 lb)

Carrier unit C75

The carrier unit can be mounted at any point within the rail line. It is suitable for accommodating tools or additional loads, which can be fastened e.g. by means of a spring retainer to a rotatable eye bolt.

In combination, the carrier units can also be used as a festoon system for flat and round cables (see data sheet N81E).





1. Carrier unit C75

Type 12855 Carrier unit C75, single-axle
The single-axle carrier unit has two track rollers. The universal hole pattern enables permanent connection of our aluminium posts as well as the mounting of a rotary mounting. In addition, standard commercially available cable clips and cable saddles or a rotatable eye bolt can be mounted.

Material	steel, zinc-plated blue
Max. load	approx. 30 kg
Weight	0.3 kg
Cornering ability	yes

Type 12865 Carrier unit C75, double-axle
The double-axle carrier unit has four track rollers and is capable of carrying heavier loads as a result. The universal hole pattern enables permanent connection of our aluminium posts and the mounting of a rotary mounting. In addition, standard commercially available cable clips and cable saddles or a rotatable eye bolt can be mounted.

Material	steel, zinc-plated blue
Max. load[1)]	approx. 40 kg
Weight	0.55 kg
Cornering ability	yes

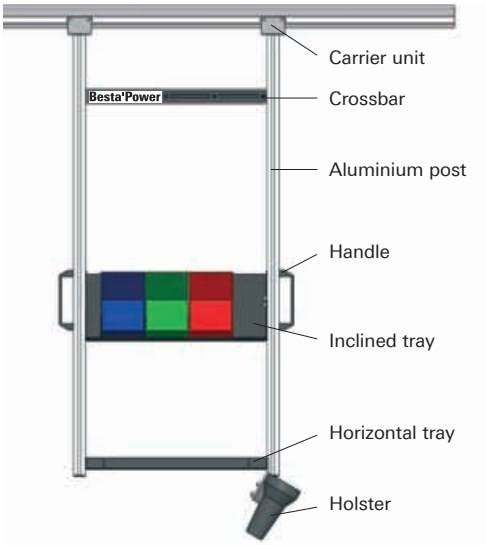
Type 12870 Eye bolt set C75 for carrier unit
Loads can be fastened directly to the carrier unit with the aid of the eye bolt. It is possible to individually choose a fixed or rotatable mounting of the eye bolt through the number of installed washers.

Material	steel, galvanized
Max. load	approx. 20 kg
Weight	0.07 kg
Scope of supply	1x M8 eye bolt with locknut, 3x washers and one support shim

Notice

1) This carrier unit is also approved for larger loads. However, at loads > 40 kg additional factors such as potential dynamic forces need to be taken into account, and the spacing between the hangers should be checked.

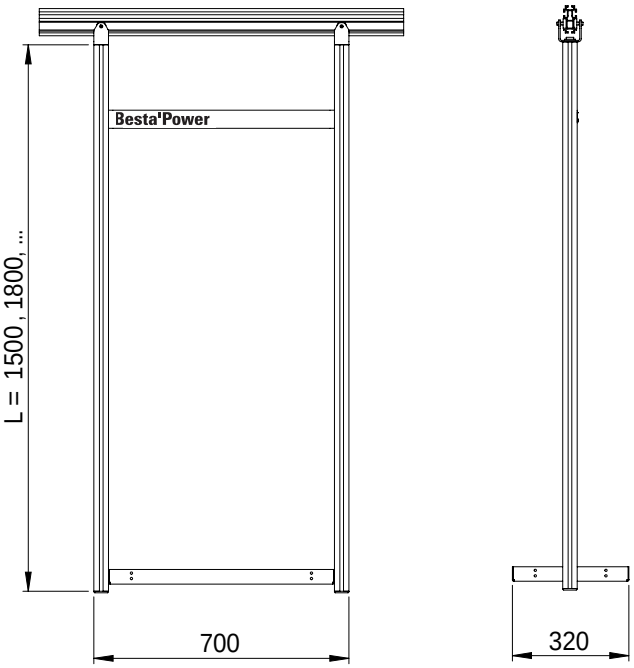
Work stations are ideal for conveniently depositing tools, assembly parts, measuring equipment etc. directly at the work place. The modular design is guaranteed to deliver tailor-made solutions which are fine-tuned to the requirements in terms of ergonomics, productivity and user comfort.
Work stations can be used with or without energy supply. An air supply is only provided in conjunction with an energy carrier system. If required, electric power supply can also be integrated, always in consideration of local regulations. Depending on the range of travel, conductor rails, energy carrier systems, loose cables or cable reels can be used.
The work station has cornering ability and can be equipped with single or double-axle carrier units according to the load situation.



Delivery condition

Work stations are supplied semi-assembled as follows:
- Carrier units with screwed-on aluminium posts. If a hinge set is included, then this is also fitted (the profile end caps are supplied loose for easier assembly on-site).
- Trays are supplied loose (incl. fastening materials).
- Crossbars are supplied loose (incl. fastening materials).
- Holsters, handles and other accessories are supplied loose (incl. fastening materials).

1. Work station C75 (standard)



Type 12880.1500
The standard version includes:
- 2 single-axle carrier units
- 2 aluminium posts 40/40 mm, length: 1500 mm, complete with profile end caps
- 1 crossbar
- 1 horizontal tray, 620x320x40 mm, with inserted rubber mat

max. load on tray	30 kg
max. total load (incl. work station)	60 kg
(for larger loads refer to the additional equipment)	
weight of work station (L 1500 mm)	14 kg

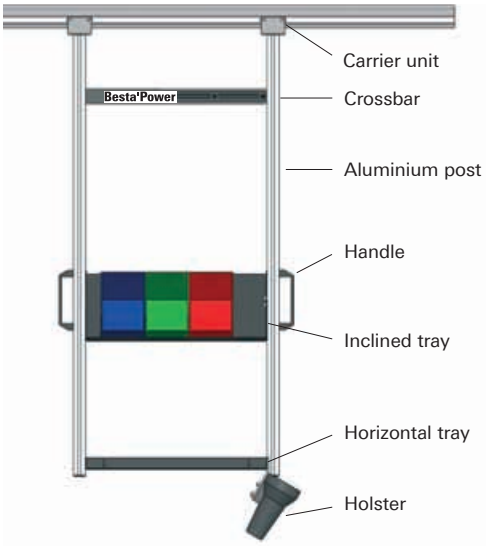
Additional equipment (optional):
- post length L: 1800, 2000, 2500 mm
- additional tray: Tray or angled tray
- handles
- hinge set 25° (increases overall length: L +78 mm)
- double-axle carrier unit for loads > 60 kg
- lanyard rail
- holster
- additional crossbar (e.g. at the bottom)

For details refer to the information about additional equipment in data sheet K82E.

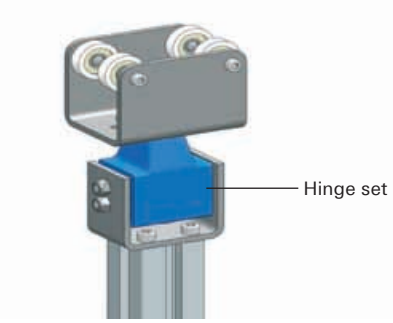
Notice
Work stations can also be supplied fully assembled on request (however, for packaging reasons certain items like hoses etc. will always be shipped loose). The additional assembly and packaging costs will be billed separately.

Additional equipment

The standard version according to data sheet K81E can be equipped with additional components depending on the requirements. The final part number for the complete work station will be automatically assigned during order processing.
The maximum weight of the work stations is 80 kg. Please contact us for information about heavier loads.



1. Additional equipment for the work station



Type 12869 Hinge set C75 (1set = 2 pcs.)
The hinge set allows lateral deflection of the workstation by 25° to either side. It is a safety component which e.g. prevents items from being trapped between the work station and an obstruction like a conveyor system etc., and it also protects the installation against the effects of lateral forces.
The hinge set is fitted between the carrier unit and the aluminium post.

Notice: All work stations with a post length L ≥ 2500 mm must be equipped with this component. The hinge set extends the build height of the basic version by 78 mm. Weight 1.1 kg (set).

Type 9001 Crossbar 620 mm
For reasons of stability, the crossbar is screwed between the aluminium posts of the work station.

Material	steel, black
Weight	1.6 kg

Notice: For reasons of stability, all work stations with a post length L ≥ 2000 mm are equipped with an additional crossbar.

Type 9010 Horizontal tray, 620 x 320 mm
The horizontal tray with inserted rubber mat is suitable for holding parts or equipment used on work benches or assembly lines. It has holes on each side to accommodate tool holsters.

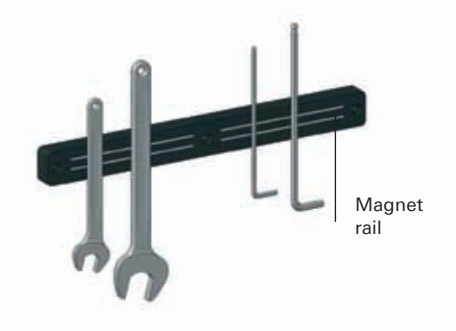
Max. load	30 kg
Material	steel, black
Weight	4.3 kg

Notice:
1x horizontal tray is included in the basic version.

Type 9019 Inclined tray, 620 x 320 mm

The angled tray is suitable for containers with small parts or as a surface on which to place documents etc. It is secured to the aluminium posts with the aid of sliding blocks and can be screwed on at an angle of 10° or 45°.

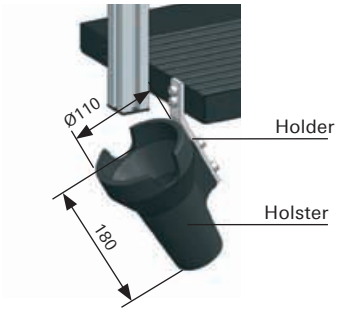
Max. load	30 kg
Material	steel, black
Weight	5.4 kg



Type 9011 Magnetic holder

The magnetic rail can be fastened to the upper crossbar. will hold tools or any other metal parts simply by magnetic attraction. (The tools shown are not included in the scope of delivery).

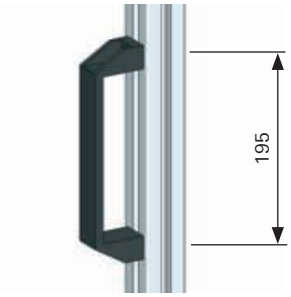
Length	350 mm
Weight	0.4 kg



Type 9014 Holster complete with bracket

The holster is designed to hold medium-sized tools. The holster (type 7405) and holster holder (type 7408) are also available as single items.

Material	Holder	steel, black
	Holster	elastomer, NBR (Perbunan)
Weight		0.9 kg



Type 9008 Handle

For added handling comfort a handle can be fitted to the vertical post. Sliding blocks allow easy mounting at any desired height.

Material	black PA, fibre-glass reinforced
Weight	0.1 kg

Type 12848 Fall protection C75 for work stations

The fall protection is a safety component which secures the work station with a rope loop to the crossbar. It will prevent the work station from falling down in the event of inappropriate handling, e.g. due to overloading of the work station or due to prohibited mechanical loads. It can be used in combination with or without a hinge set (see type 9012).

Material	Loop	steel
Weight		0.5 kg (set)

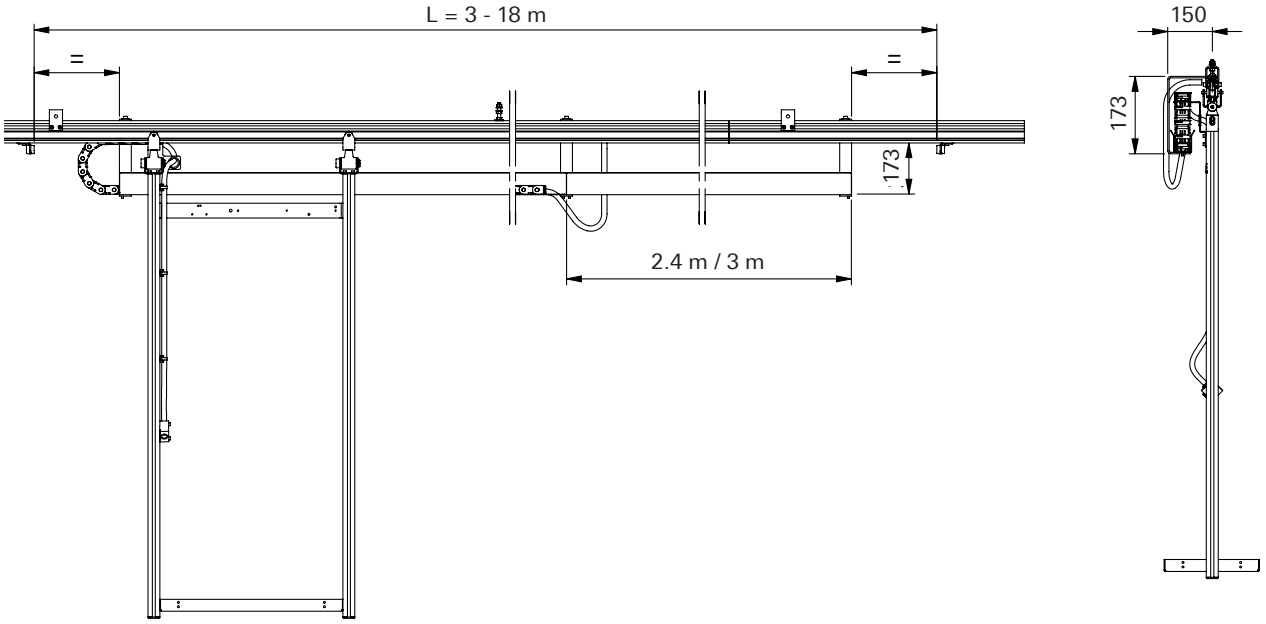
Energy carrier system C75 for air, power and data

The energy carrier system offers continuous energy supply (compressed air and/or electric power to a consumer over a distance of 3 to 18 metres. The system may be integrated in an existing C75 Bestapower installation and can be positioned anywhere along the rail.
The energy is supplied through the air hose and/or a power cable inside the energy chain. (Electric components are not included). Weight of a 6 m energy carrier system: approx. 15 kg.

Standard condition as delivered

Energy carrier systems are supplied as follows:
- Duct, chain and hose are pre-assembled. The brackets are enclosed loose.
- Optional additional equipment is supplied loose.

Energy carrier system C75 (basic type)



Energy supply (compressed air)
The compressed air supply is provided by an external compressed air source.

Example for C75:
- compressed air via a hose, tubing or pipe-work fitted to the C75 Profile

Type 1290.xxxx for C75
The basic unit includes the following items:
1-7 ducts incl. brackets (L = 3-18 m)
Material: sheet steel, light grey powder-coated
1 highly flexible PVC hose (CXL12), silicone-free standard length: L 1/2 + 5 m
1 energy chain incl. fixing elements
1 link plate
2 movable stoppers

Additional equipment (options): see page 2

Note
Caution: should a contaminated compressed air supply be connected (i.e. possibly containing oily residue), then the chemical resistance of the PVC hose must be mandatorily verified in advance.

Type 9026.5 Hose or cable clamp set for RK
The cable binding block, which can be inserted into the groove of the work station is used to attached the hose.

Material	PA black, fibreglass-reinforced
Weight	0.01 kg
Extent of the supply	Cable binder block with binder lugs for hoses, cables and leads.

Type 9026.7 Hose or cable clamp set for Rails
As per 9026.5. Can be mounted by turning into recess of the rail profile to serve as an attachment for the hose or cable.

Type 9026.6 Hose clamp set
Used to attach the hose to the crossbar.

Type 12812 Movable stopper C75
The movable stopper can be screwed to any point along the rail profile by means of an insertable sliding block and serves as a stop for tool carriers, work stations etc.

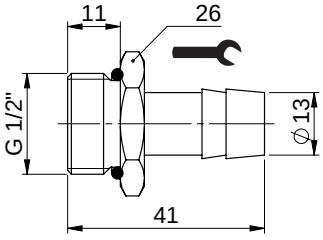
Material	Angle	steel, zinc-plated blue
	Buffer	elastomer, NBR (Perbunan)
Weight		0.1 kg
Scope of supply		bracket, buffer incl. insertable M8 sliding block

Type 9094 Manifold 3xG 1/2"
The manifold can be fitted to the post of the workstation or the tool holder using sliding blocks. It is intended for use at the open end of the highly flexible hose (CXL12) and is supplied complete with 3 hose clamp sets. One outlet port is factory sealed with a plug.

Material	aluminium, colourless anodized
Weight	0.3 kg

Type 6796 Ball valve Set with Elbow Piece 1/2"
The Ball Cock Set can be employed as a stop cock unit for the power transmission system, thus enabling a controllable compressed air supply at the work station.

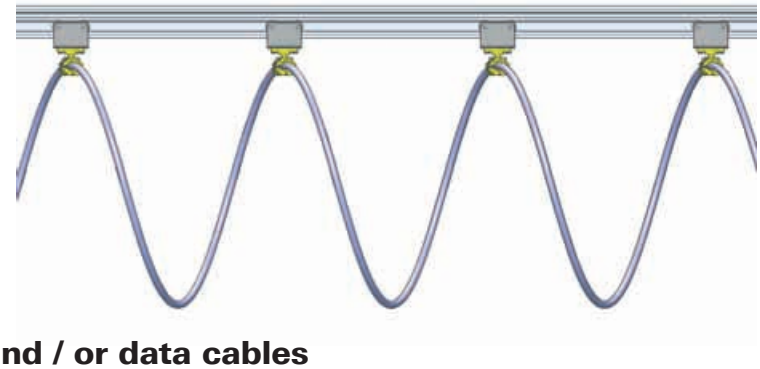
Working material	Ball valve	brass, Nickel plated
	Elbow piece	brass, Nickel plated
Weight	0.28 kg	
Extent of supply		Ball valve G1/2'' i/o incl. angle piece 90° G1/2'' i/o



Type 6790 Hose Nozzle G 1/2"-Ø 13 mm
The hose nozzle with parallel thread is employed for the fixing of the CXL Hose by means of a 1-lug hose clip.

Thread	G ½'' ISO 228-1
Working material	brass, Nickel plated
O-ring	NBR (perbunane)
Weight	0.05 kg

Festoon systems can be designed for power cables, data cables and compressed air hoses. They offer a continuous energy supply within a defined working area or work cycle. (Power and data cables are not part of our scope of supply).

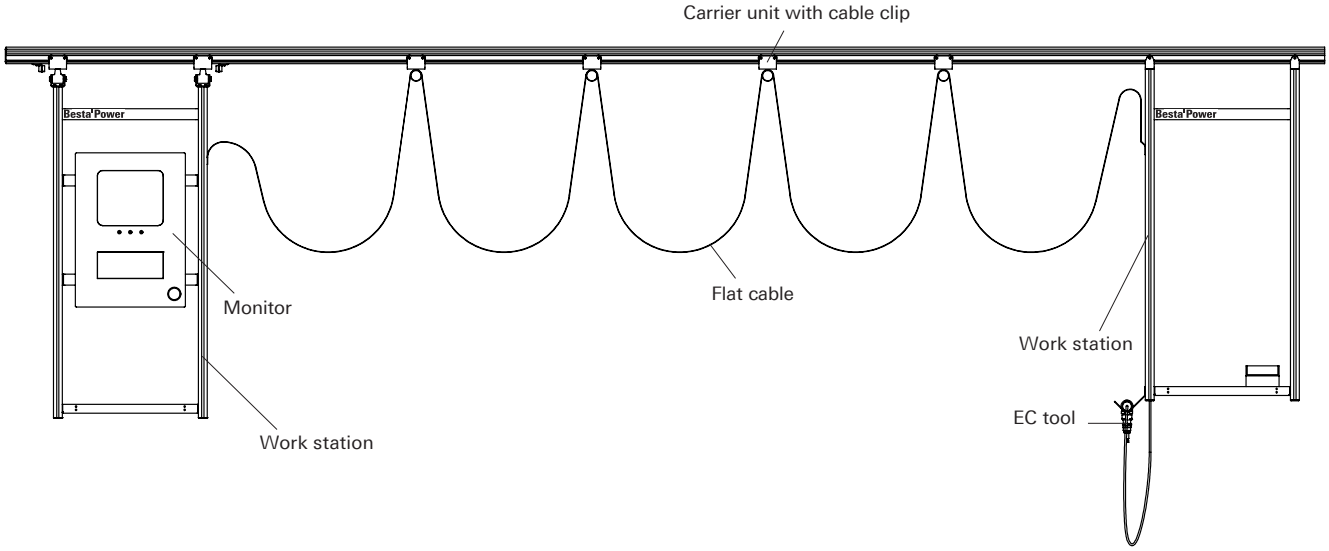


1. Systems for electric power and / or data cables

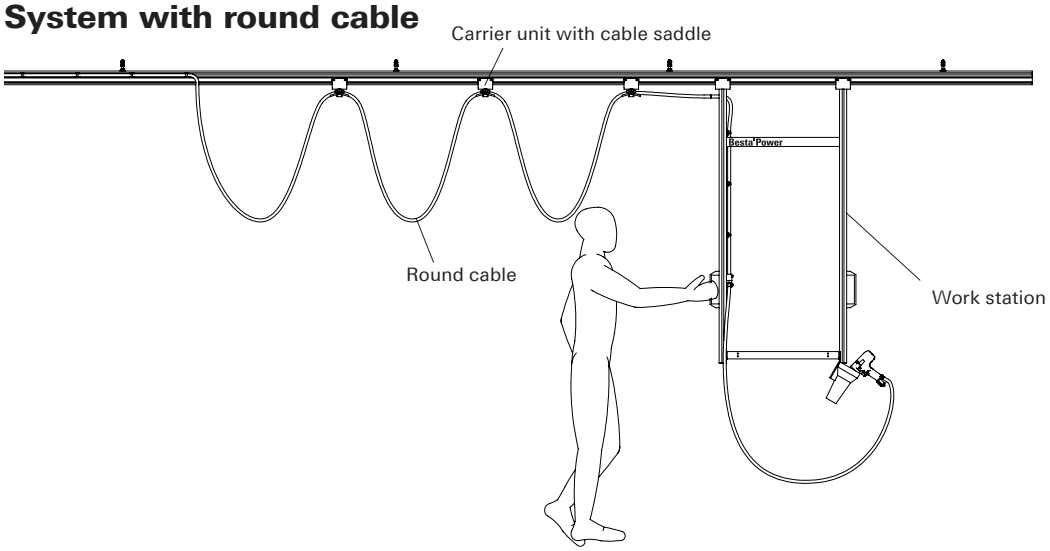
The Bestapower festoon systems can be used for flat and round cables. Typical applications are work areas with electronically controlled torque drivers (e.g. Tensor systems from Atlas Copco, CVI systems from Georges Renault, Stanley systems etc.).
Festoon systems offer stationary or flexible use of monitors and tools and can be easily integrated into existing or new Bestapower C75 systems, This dispenses with the need for an additional parallel installation (e.g. C-rail system etc.).

The basic system modules include:
- monitor carrier (similar to work station type 1288x.xxxx – see data sheet K81E)
- carrier units, cable clips and cable saddles

System with flat cable

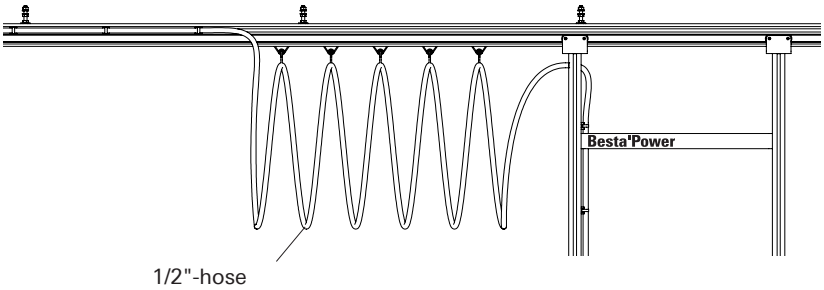


System with round cable



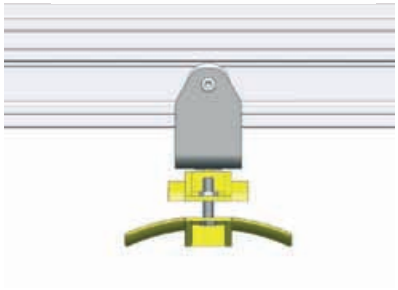
2. Systems with 1/2" compressed air hose

Festoon systems can be combined with work stations (see data sheet K81E). In the case of a festoon system with compressed air hose, it is important to note that the air supply must be provided via a separate supply line and that the hose arrangement will take up a relatively large amount of space. As an alternative we therefore recommend using an energy carrier system.



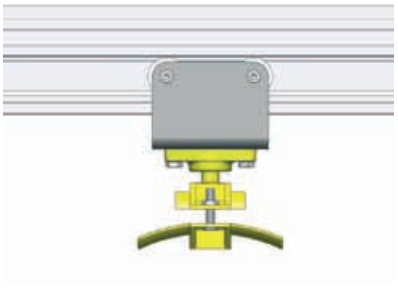
3. Accessories for festoon systems

Type 12855 / 12865 Carrier unit C75
These are used as a tow trolley for flat cables, round cables or compressed air hoses. The universal hole pattern enables the attachment of standard commercially available cable clips and cable saddles (see data sheet I81E).



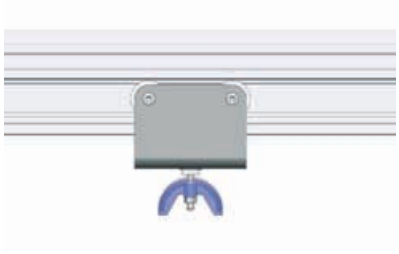
Type 12871 cable saddle (small) C75
The complete cable saddle (small) for round cables Ø 10-16 mm includes the holder, ball joint and fastening materials.

Material	plastic, yellow
Weight	0.08 kg



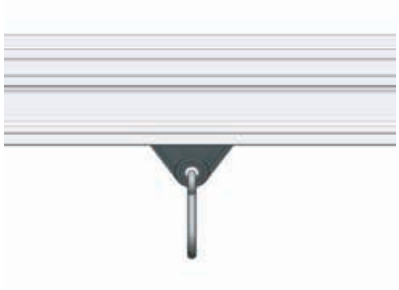
Type 12872 Cable saddle (large) C75
The complete cable saddle (large) for round cables Ø 17-25 mm includes the holder, ball joint and fastening materials.
(Also suitable for 1/2" compressed-air hose).

Material	plastic, yellow
Weight	0.10 kg



Type 12873 Cable saddle C75
The complete cable saddle for flat cables includes the saddle, clamp and fastening materials.

For flat cables	up to a max. width of 44 mm, min. thickness 4 mm
Material	plastic, blue
Weight	0.02 kg



Type 12820 Tool slide C75
The tool slides are the simplest alternative available. Here, the round cable or compressed air hose is attached directly to the slide with the aid of cable ties (see data sheet I83E).