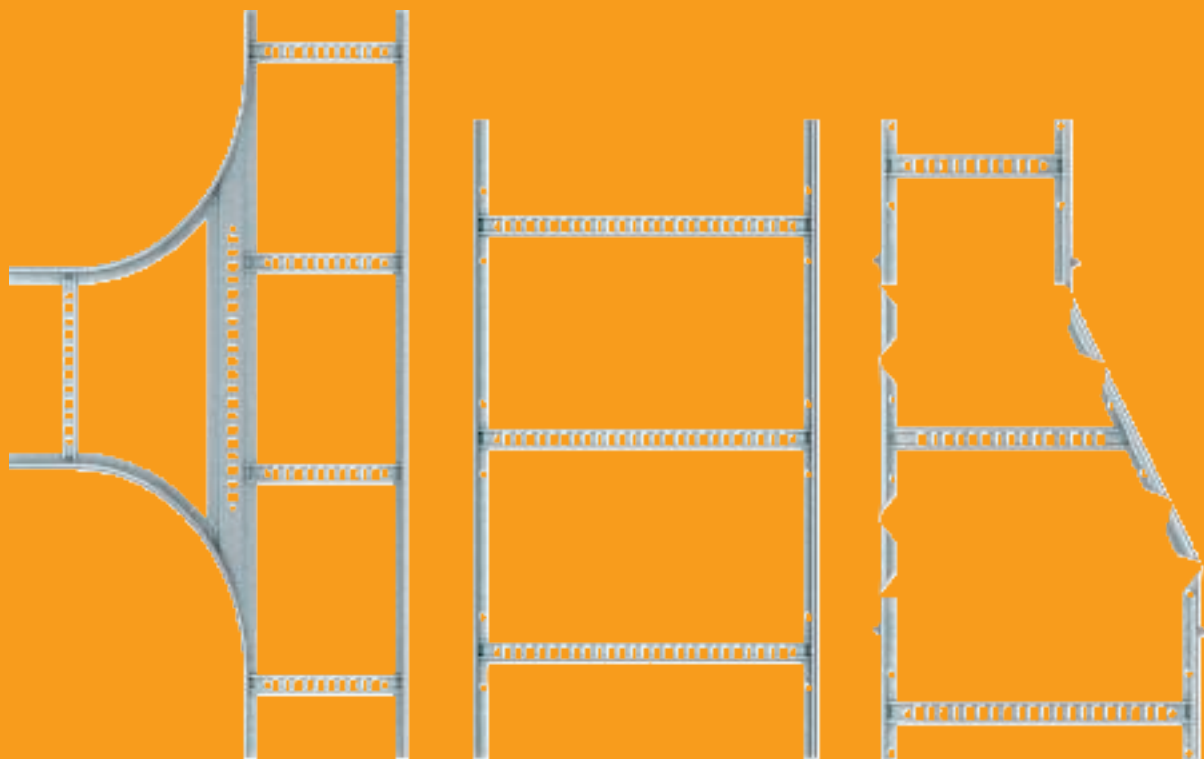




## Welded cable ladder system



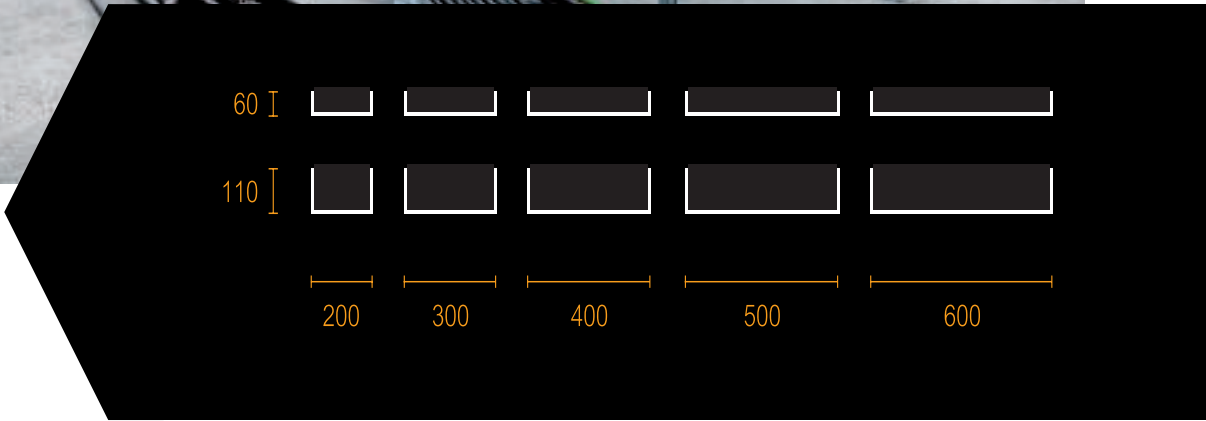
System information



## OBO - Pure cable ladder competence

Electricians have placed their trust in OBO Bettermann cable ladders for decades. The range stretches from riveted, clinched and welded cable ladders, which are used in countless industrial plants around the world. Customers can always rely on a robust and easy-to-mount structure of each individual component.





## Welded cable ladders

Now, OBO has reinvented the welded cable ladder and thus perfected the welded cable ladder system. Thanks to the special shape and innovative rung, the welded cable ladder can offer special technical properties and benefits during mounting. The range of materials is broad: Strip and hot-dip galvanised, A2 and A4 rust-proof stainless steel and powder-coated versions are available.



# Stable welding - extremely supportive

The highest level of stability, combined with the optimum space for vertical and horizontal cable assignment – that was what we strived for when developing the new generation of welded cable ladders. Here is the result.

## Highly resistant

The rungs are welded to the lower flange. The flush connection is highly resistant and can also withstand the greatest loads. The flush connection of the rung with the lower flange guarantees optimum force transmission.





## Practical covers

For horizontal installation, a cover on top offers protection of the cables against dust and dirt.



## Volume

The special position of the rung offers an additional benefit. Thanks to the welding of the rung to the underbelt, the cable ladder offers additional installation space for cables.

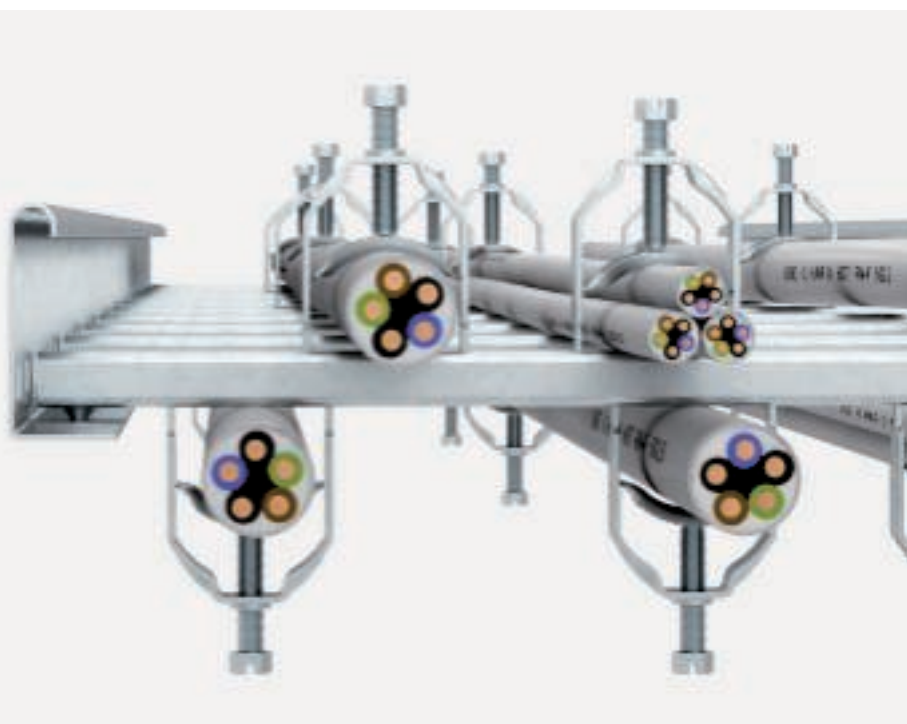


## Tested

Stability and reliable corrosion protection - also at the welding points: Both of these were checked in comprehensive testing in our own BET Test Centre. Thus, the cable ladders passed the salt spray and load tests perfectly.

## Innovative rung

OBO has reinvented the rung and patented it. Its well-thought-out hole pattern is perfectly tailored to the requirements of all kinds of industrial installations. The special feature: The rungs can be filled on both sides. This means that the ladder can be equipped flexibly whilst its carrying capacity can be used to the optimum. The result: Smaller ladder widths are often sufficient during mounting.



### Rungs – reimagined

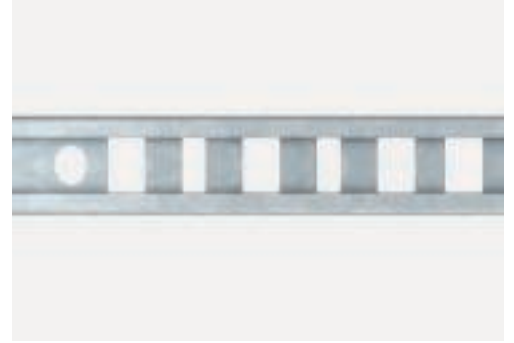
The double-sided filling of the rungs allows flexible installation and offers the maximum of installation space. The rungs are perfectly matched to the fastening elements (e.g. the U clamps, type 2056).





## One rung for all

The innovative rung is used in the whole cable ladder system up to a width of 600 mm.



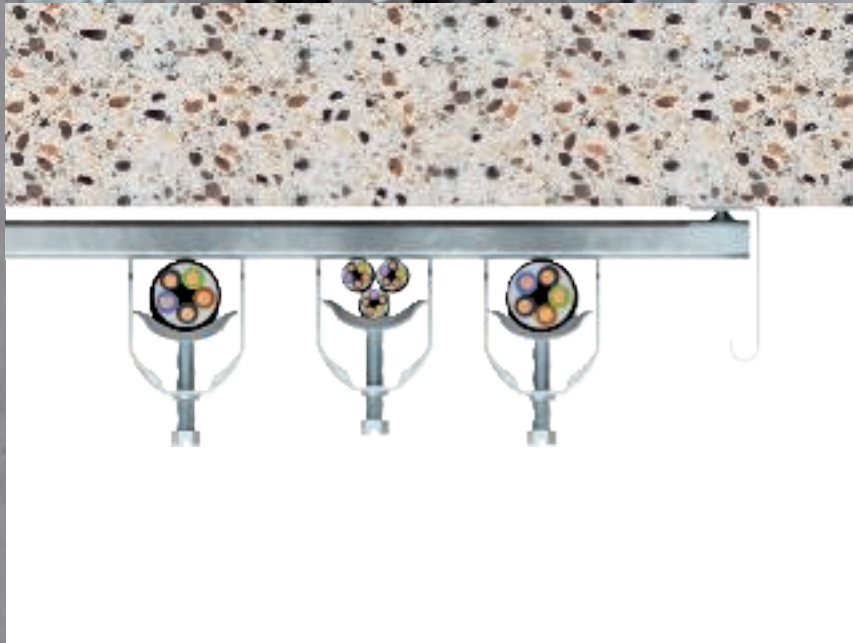
# Perfectly matched wall mounting

The welded cable ladder offers major advantages in horizontal and free-standing mounting. However, the cable ladder is also extremely practical when it is mounted directly on the wall.



## Free space

With wall mounting, the well-thought-out construction of the cable ladders ensures a spacing of approx. five mm between the rung and the wall. This provides space during the installation.







## Perfectly matched – the fittings

The fittings of the cable ladder system are the logical addition to the section material. They are also machined with welded rungs and are supplied in the materials and surfaces of the cable ladders.

### Easy handling

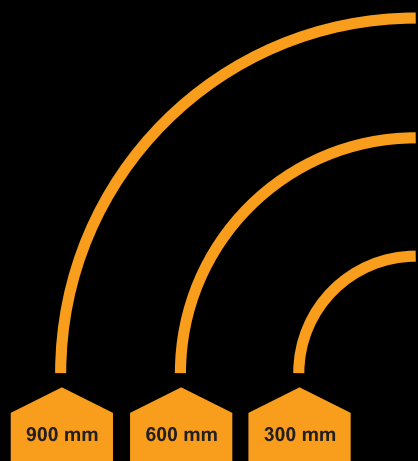
An optimised standard radius of 300 mm instead of the previous 490 mm makes the fittings more compact and thus easier to handle.



### Continuous perforation

Thanks to the innovative rung, the fittings can also be filled on both sides. The continuous perforation allows the use of a wide range of OBO U clamps clips.





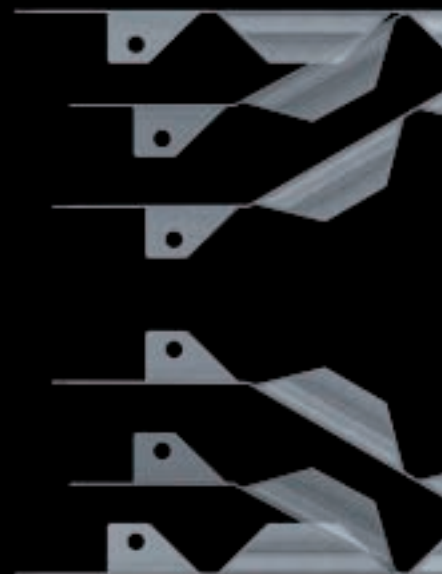
## Three system radii

The fittings are now available in three system radii. The standard system radius is 300 mm, although 600 and 900 mm radii are also available on request.



# One for all - the multifunctional connector

The new OBO component allows easy connection of cable ladders and, at the same time, flexible implementation of shape or direction changes.



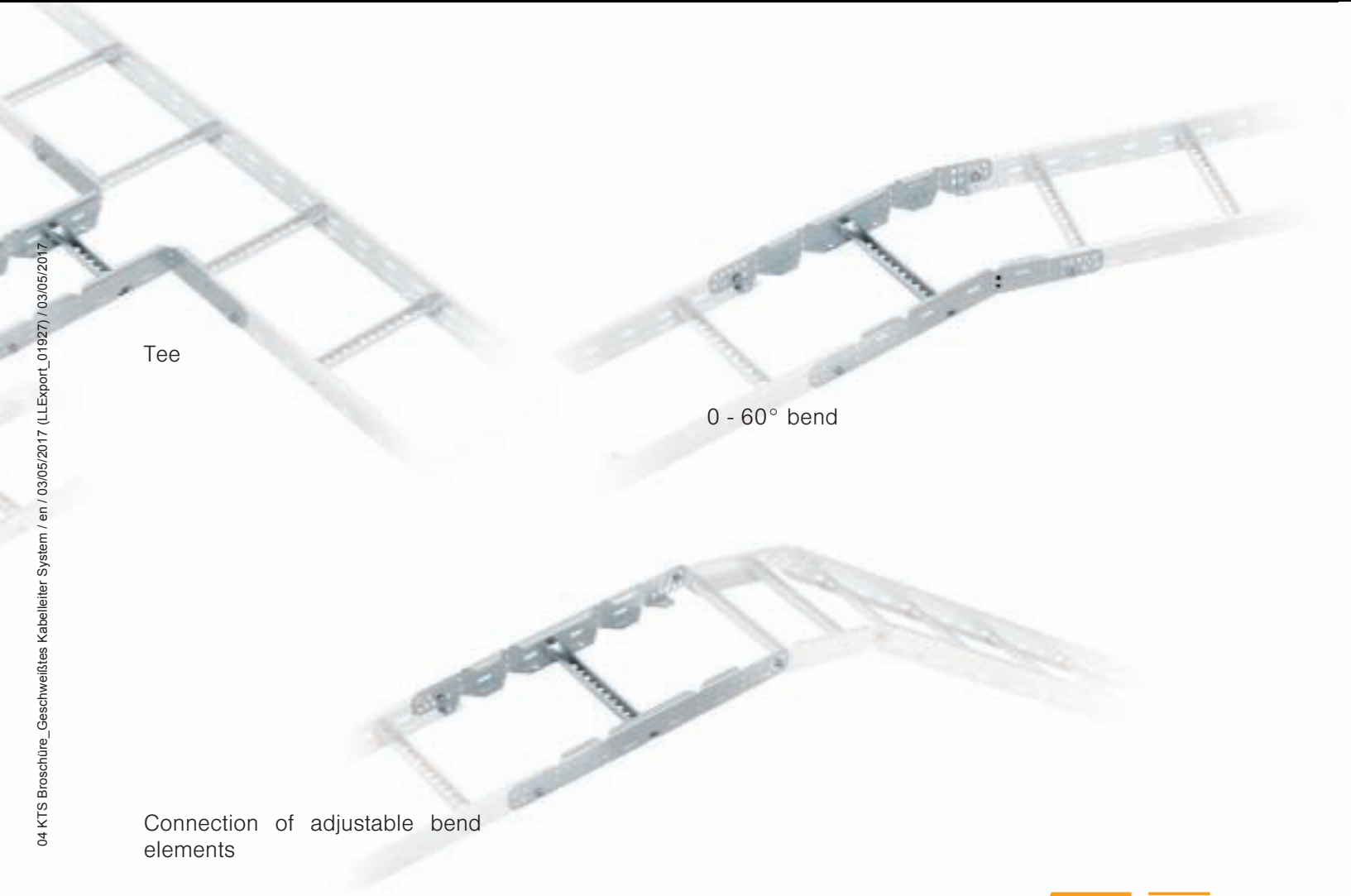
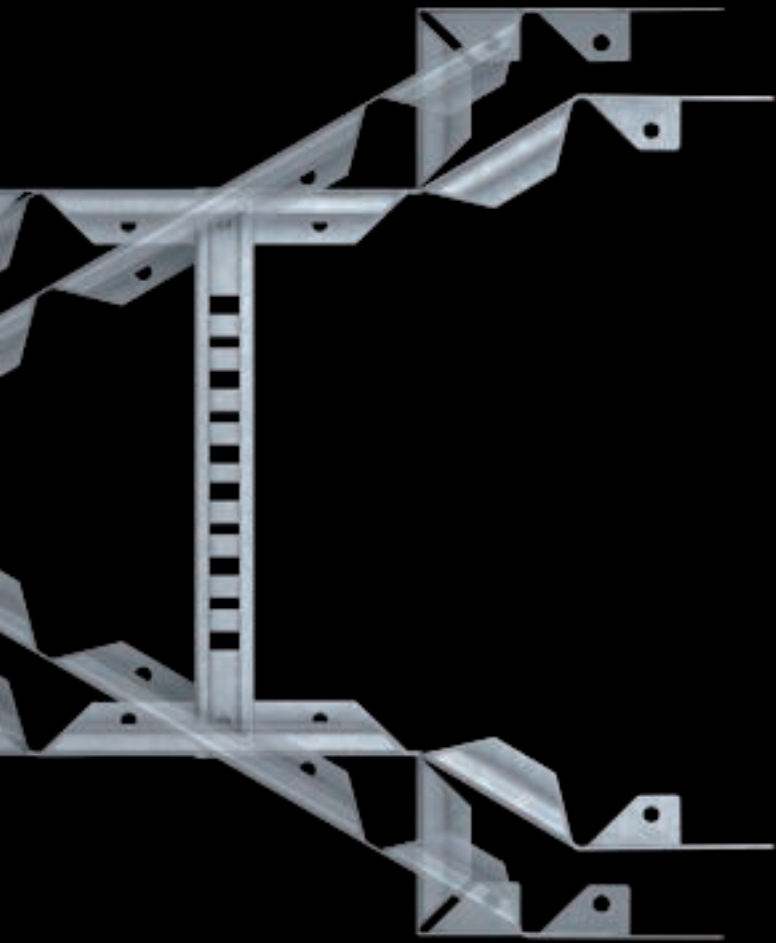
## Extraordinarily flexible

The side rails of the multifunctional connector can be adjusted to any angle and any installation situation, so that both symmetrical and asymmetrical reductions are possible.



Asymmetrical reduction

Symmetrical reduction

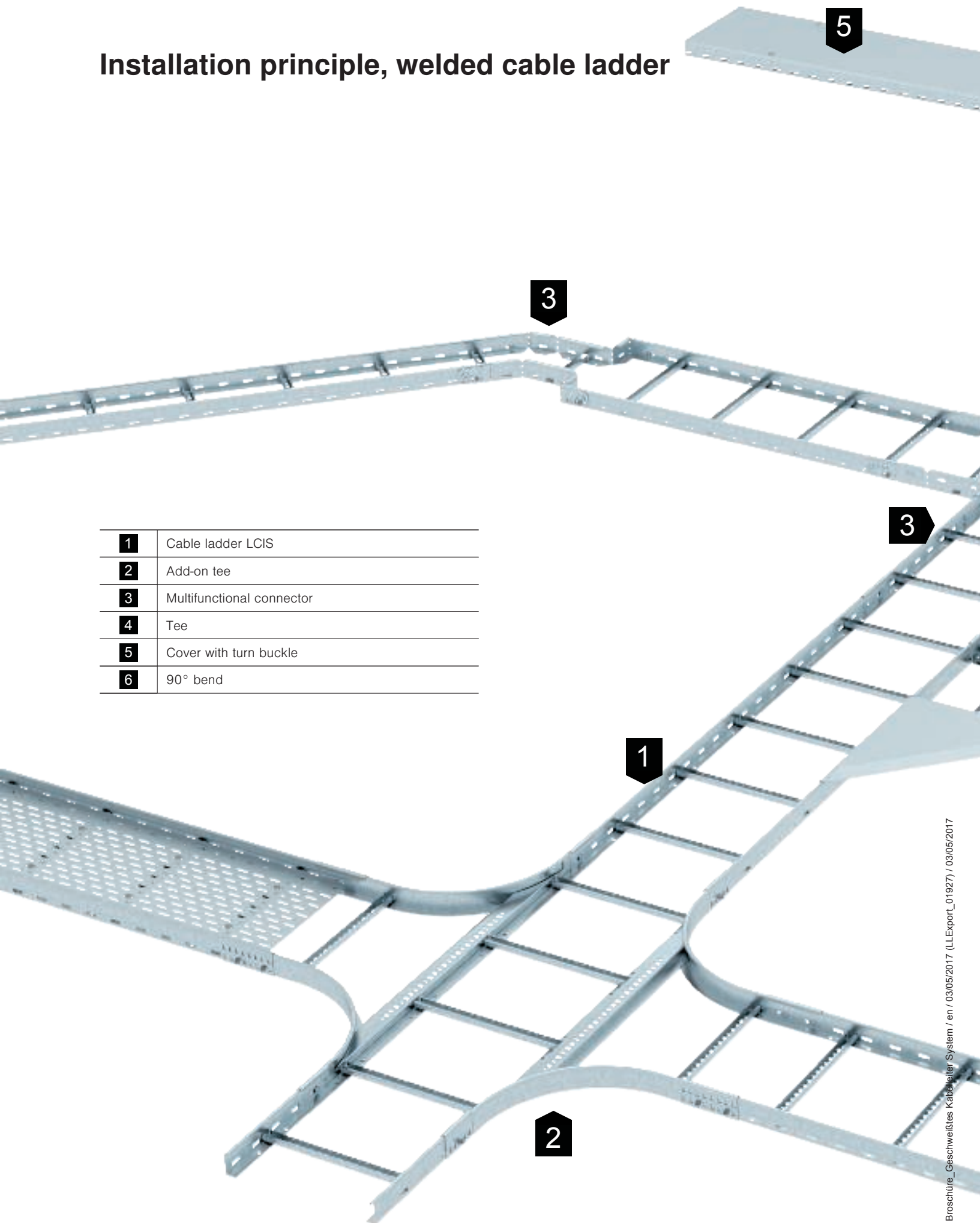


Tee

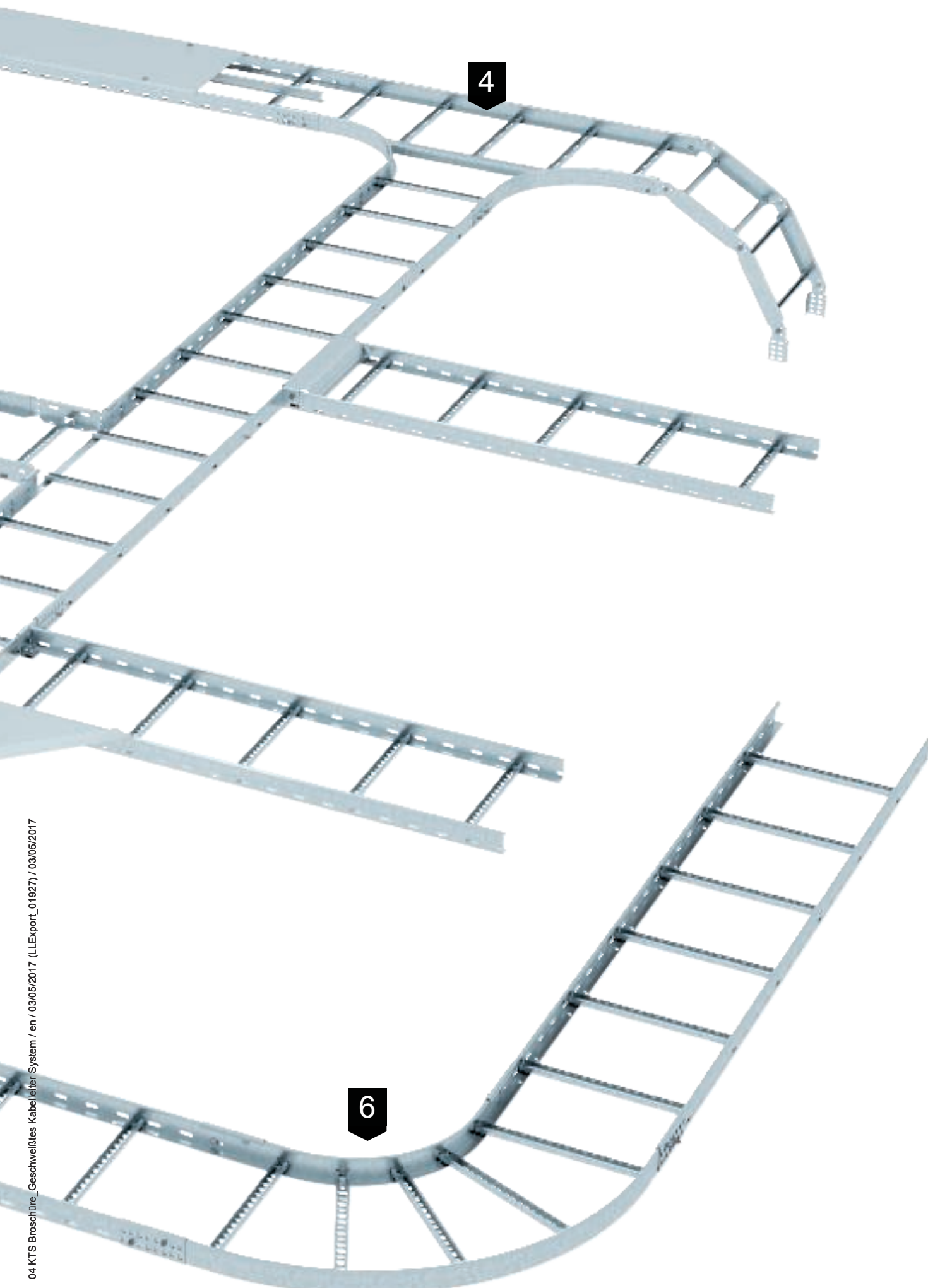
0 - 60° bend

Connection of adjustable bend elements

# Installation principle, welded cable ladder



1	Cable ladder LCIS
2	Add-on tee
3	Multifunctional connector
4	Tee
5	Cover with turn buckle
6	90° bend



4

6

## Tested safety



### The BET Test Centre

In our in-house BET Test Centre, OBO simulates the loads which the welded cable ladder systems have constantly to withstand. We determine the maximum load capacity and carrying capacity of the system, as well as its resistance to corrosion. We are able to prove standardised testing of EMC properties using test reports. This means that, as a systems provider, OBO places paramount importance on safety.







### **KTS testing system**

The KTS testing system was specially constructed for the testing of OBO Bettermann cable support systems. Thanks to its continuous further development and adaptation to the latest requirements, it can offer comprehensive testing options. For example, the tests required by DIN EN 61537 can be carried out. They can prove a safe working load (SWL) - the reliable carrying capacity of the systems.

Local around the world.  
3,000 employees. Over 60 countries.  
40 subsidiaries.

The values of our company are supported by continuous proximity to our customers. For us, customer proximity means that whenever borders open and new markets are created, we will be there. This regional proximity has proved its worth: OBO is present on every continent – with more than 3,000 employees in over 60 countries.





Production location



Subsidiary



Representative office



### Certified safety

Our high-quality range of products and services is globally certified and fulfils all the key international standards. This simplifies the planning and execution of deployments around the world and ensures cost optimisation. Efficient processes at OBO ensure that products are available at the right time. It doesn't matter where our customers are erecting or operating systems.

### Experience with major projects

When the building size and the challenge of use increases, the complexity of the electrical infrastructure also increases. For decades, our electrical systems have contributed to the success of major projects. The comprehensive product range allows precise matching to the appropriate deployment location. Our customers can profit from the matching service process, which stretches from project planning through to delivery and consultation on the construction site.

Side height 60 mm

## Cable ladder LCIS



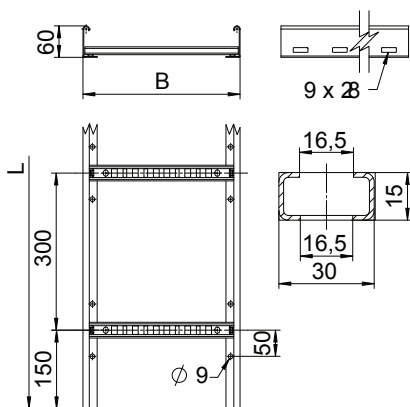
Type	Width mm	Rail thickness mm	Pack. m	Weight kg/100 m	Item No.
LCIS 620 3 FS	200	1.5	3	266.670	6209610
LCIS 630 3 FS	300	1.5	3	288.670	6209612
LCIS 640 3 FS	400	1.5	3	310.340	6209614
LCIS 650 3 FS	500	1.5	3	332.340	6209616
LCIS 660 3 FS	600	1.5	3	354.000	6209618
LCIS 620 6 FS	200	1.5	6	267.170	6209630
LCIS 630 6 FS	300	1.5	6	288.840	6209632
LCIS 640 6 FS	400	1.5	6	310.670	6209634
LCIS 650 6 FS	500	1.5	6	332.340	6209636
LCIS 660 6 FS	600	1.5	6	354.000	6209638
LCIS 620 3 FT	200	1.5	3	283.000	6209721
LCIS 630 3 FT	300	1.5	3	306.000	6209723
LCIS 640 3 FT	400	1.5	3	329.340	6209725
LCIS 650 3 FT	500	1.5	3	352.340	6209727
LCIS 660 3 FT	600	1.5	3	375.340	6209729
LCIS 620 6 FT	200	1.5	6	283.170	6209643
LCIS 630 6 FT	300	1.5	6	306.170	6209645
LCIS 640 6 FT	400	1.5	6	329.170	6209647
LCIS 650 6 FT	500	1.5	6	352.340	6209649
LCIS 660 6 FT	600	1.5	6	375.340	6209651

St Steel

FS Strip-galvanised FT Hot-dip galvanised

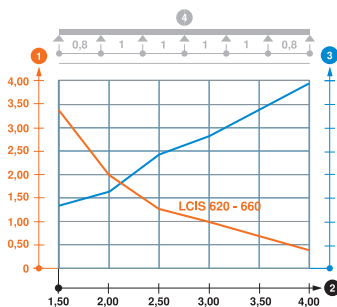
Cable ladder with 60 mm side height with welded C30 profile rungs which are open in an upwards direction. Rolled side rail for reinforcement and as edge protection. Fastening to the bracket takes place using clamps, type LKS 40. The slot dimension of the frame is 16.5 mm and the appropriate U clamps clip is type 2056.

### Dimensions



Type	Length mm	Width mm	Rail thickness mm	Useful cross- section cm <sup>2</sup>	Rung spacing mm
LCIS 620 3 FS	3000	200	1.5	80	300
LCIS 630 3 FS	3000	300	1.5	120	300
LCIS 640 3 FS	3000	400	1.5	160	300
LCIS 650 3 FS	3000	500	1.5	200	300
LCIS 660 3 FS	3000	600	1.5	240	300

### Load



Type	1.5 m kN/m	2.0 m kN/m	2.5 m kN/m	3.0 m kN/m	4.0 m kN/m
LCIS 620 3 FS	3.3	2	1.3	1	0.4
LCIS 630 3 FS	3.3	2	1.3	1	0.4
LCIS 640 3 FS	3.3	2	1.3	1	0.4
LCIS 650 3 FS	3.3	2	1.3	1	0.4
LCIS 660 3 FS	3.3	2	1.3	1	0.4

#### Load diagram LCIS 60

- 1 Permitted cable tray/ladder load in kN/m without man load
  - 2 Support width in m
  - 3 Rail bend in mm at permitted kN/m
  - 4 Load scheme during testing
- Load curve with cable tray/ladder width in mm  
— Strut bend curve according to support width

## Cable ladder LCIS

Type	Width mm	Rail thickness mm	Pack. m	Weight kg/100 m	Item No.
LCIS 620 6 A2	200	1.5	6	267.000	6207252
LCIS 630 6 A2	300	1.5	6	288.840	6207254
LCIS 640 6 A2	400	1.5	6	310.500	6207256
LCIS 650 6 A2	500	1.5	6	332.340	6207258
LCIS 660 6 A2	600	1.5	6	354.000	6207260
LCIS 620 6 A4	200	1.5	6	267.000	6207202
LCIS 630 6 A4	300	1.5	6	288.840	6207204
LCIS 640 6 A4	400	1.5	6	310.500	6207206
LCIS 650 6 A4	500	1.5	6	332.340	6207208
LCIS 660 6 A4	600	1.5	6	354.000	6207210

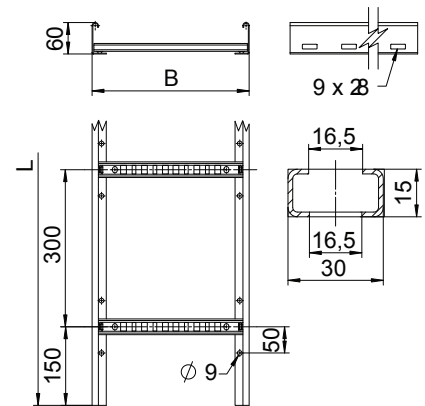
V2A Stainless steel, A2 V4A Stainless steel, A4

Cable ladder with 60 mm side height with welded C30 profile rungs which are open in an upwards direction. Rolled side rail for reinforcement and as edge protection. Fastening to the bracket takes place using clamps, type LKS 40. The slot dimension of the frame is 16.5 mm and the appropriate U clamps clip is type 2056.



Type	Length mm	Width mm	Rail thickness mm	Useful cross-section cm <sup>2</sup>	Rung spacing mm
LCIS 620 6 A2	6000	200	1.5	80	300
LCIS 630 6 A2	6000	300	1.5	120	300
LCIS 640 6 A2	6000	400	1.5	160	300
LCIS 650 6 A2	6000	500	1.5	200	300
LCIS 660 6 A2	6000	600	1.5	240	300

### Dimensions

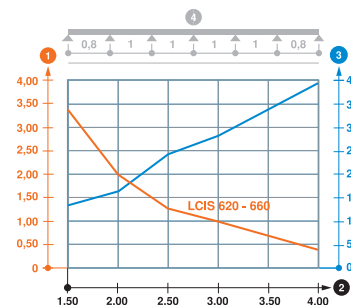


Type	1.5 m kN/m	2.0 m kN/m	2.5 m kN/m	3.0 m kN/m	4.0 m kN/m
LCIS 620 6 A2	3.3	2	1.3	1	0.4
LCIS 630 6 A2	3.3	2	1.3	1	0.4
LCIS 640 6 A2	3.3	2	1.3	1	0.4
LCIS 650 6 A2	3.3	2	1.3	1	0.4
LCIS 660 6 A2	3.3	2	1.3	1	0.4

### Load diagram LCIS 60

- 1 Permitted cable tray/ladder load in kN/m without man load
- 2 Support width in mm
- 3 Rail bend in mm at permitted kN/m
- 4 Load scheme during testing
- Load curve with cable tray/ladder width in mm
- Strut bend curve according to support width

### Load

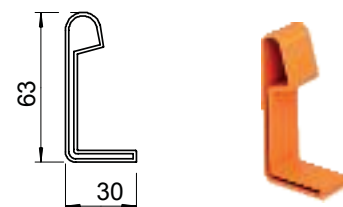


Type	Colour	Pack. pair	Weight kg/100 pairs	Item No.
SKH 60 OR	Pastel orange	40	1.072	6222537

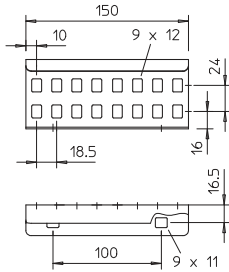
PE Polyethylene

End cap to cover cable ladder ends of side height 60 mm.

### End cap



## Straight connector

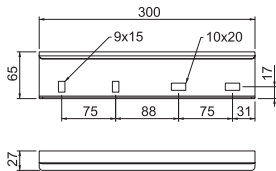
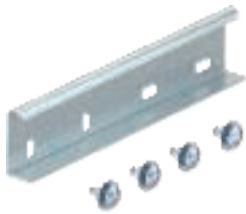


Type	Side height mm	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>LVG 60 FS</b>	60	10	22.000	<b>6208840</b>
<b>LVG 60 FT</b>	60	10	23.000	<b>6208843</b>
<b>LVG 60 VA4301</b>	60	10	22.000	<b>6208846</b>
<b>LVG 60 VA4571</b>	60	10	22.000	<b>6208835</b>

**St** Steel    **V2A** Stainless steel, grade 304    **V4A** Stainless steel, grade 316 Ti  
**FS** Strip-galvanised    **FT** Hot-dip galvanised

The bolt fastening ensures the continuity of the equipotential bonding.

## Connector for expansion



Type	Side height mm	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>LDVG 60 FT</b>	60	2	61.700	<b>6208970</b>

**St** Steel  
**FT** Hot-dip galvanised

Connector for expansion for compensation of linear thermal expansion. The tightening torques of the self-locking screws on the loose bearing side are 5 Nm.

### Positioning of expansion connectors

Metal temperature difference	Maximum spacing between expansion connectors
10 °C	70 metre
25 °C	47 metre
40 °C	35 metre
50 °C	28 metre
65 °C	23 metre
80 °C	20 metre

Further information can be found in our mounting instruction.

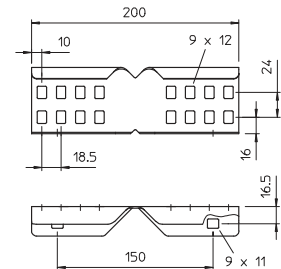
### Angle connector

Type	Side height mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LWVG 60 FS	60	10	24.000	6208895
LWVG 60 VA4301	60	10	24.000	6208898
LWVG 60 VA4571	60	10	24.000	6208891

St Steel V2A Stainless steel, grade 304 V4A Stainless steel, grade 316 Ti

FS Strip-galvanised

The bolt fastening ensures the continuity of the equipotential bonding.



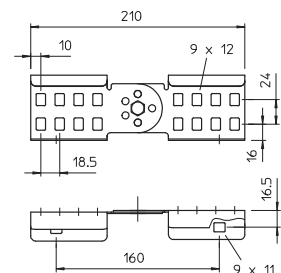
### Adjustable connector

Type	Side height mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LGVG 60 FS	60	10	27.000	6208941
LGVG 60 FT	60	10	29.000	6208944
LGVG 60 VA4301	60	10	29.000	6208947
LGVG 60 VA4571	60	10	29.000	6208932

St Steel V2A Stainless steel, grade 304 V4A Stainless steel, grade 316 Ti

FS Strip-galvanised FT Hot-dip galvanised

The bolt fastening ensures the continuity of the equipotential bonding.



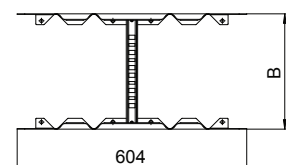
### Multifunctional connector

Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LMFV 620 FS	200	1.5	1	123.200	6225710
LMFV 630 FS	300	1.5	1	129.700	6225712
LMFV 640 FS	400	1.5	1	136.200	6225714
LMFV 650 FS	500	1.5	1	142.800	6225716
LMFV 660 FS	600	1.5	1	149.300	6225718
LMFV 620 FT	200	1.5	1	130.600	6225730
LMFV 630 FT	300	1.5	1	137.500	6225732
LMFV 640 FT	400	1.5	1	144.400	6225734
LMFV 650 FT	500	1.5	1	151.300	6225736
LMFV 660 FT	600	1.5	1	158.200	6225738

St Steel

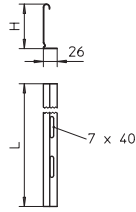
FS Strip-galvanised FT Hot-dip galvanised

Multifunctional connector for joining cable ladders with a side height of 60 mm. Symmetric and asymmetric reductions, bends between 0–60° and mounting/branch pieces can be created.



Side height 60 mm

## Barrier strip



Type	Dimen- sion H mm	Dimen- sion L mm	Pack. Weight		Item No.
			m	kg/100 m	
<b>TSG 45 FS</b>	45	3000	3	46.700	<b>6062033</b>
<b>TSG 45 DD</b>	45	3000	3	46.700	<b>6062321</b>
<b>TSG 45 VA4301</b>	45	3000	3	47.000	<b>6062025</b>
<b>TSG 45 VA4571</b>	45	3000	3	48.000	<b>6062028</b>

**Si** Steel **V2A** Stainless steel, grade 304 **V4A** Stainless steel, grade 316 Ti

**FS** Strip-galvanised **DD** Strip galvanised zinc/aluminium, Double Dip

Barrier strip for separation of cables of different voltages or functions.

## Barrier strip connector

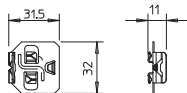


Type	Pack. Weight		Item No.
	pcs	kg/100 pcs.	
<b>TSGV VA4310</b>	10	0.923	<b>6067970</b>

**V2A** Stainless steel, grade 301

Barrier strip connector for screwless connection of the TSG barrier strip in all side heights.

## Hold-down clamp for barrier strip fastening

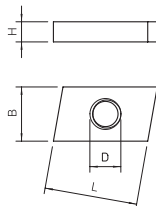


Type	Pack. Weight		Item No.
	pcs	kg/100 pcs.	
<b>KS KL VA4310</b>	30	0.512	<b>6062284</b>

**V2A** Stainless steel, grade 301

Hold-down clamp for screwless fastening of barrier strips in cable ladders.

## Slide nut



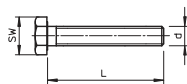
Type	Length mm	Width mm	Height mm	Thread	Pack. Weight		Item No.
					pcs	kg/100 pcs.	
<b>ACMSN M6 ZL</b>	31	16.5	4	M6	100	1.740	<b>1147056</b>
<b>ACMSN M6 A4</b>	31	16.5	4	M6	100	1.650	<b>1147076</b>

**Si** Steel **V4A** Stainless steel, A4

**ZL** Zinc scale

Slide nut for use with C30 profile rungs.

## Hexagonal bolt



Type	Resistance class	Dimen- sion d mm	Dimen- sion L mm	SW mm	Pack. Weight		Item No.
					pcs	kg/100 pcs.	
<b>SKS 6x10 A2</b>	A2-70	6	10	10	100	0.420	<b>3156605</b>

**V2A** Stainless steel, A2

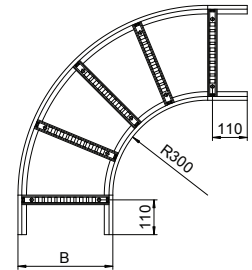


Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LB 90 620 R3 FS	200	1.5	1	254.500	6225042
LB 90 630 R3 FS	300	1.5	1	318.300	6225044
LB 90 640 R3 FS	400	1.5	1	368.700	6225046
LB 90 650 R3 FS	500	1.5	1	451.900	6225048
LB 90 660 R3 FS	600	1.5	1	508.900	6225050
LB 90 620 R3 FT	200	1.5	1	269.800	6225062
LB 90 630 R3 FT	300	1.5	1	338.500	6225064
LB 90 640 R3 FT	400	1.5	1	392.100	6225066
LB 90 650 R3 FT	500	1.5	1	480.700	6225068
LB 90 660 R3 FT	600	1.5	1	536.500	6225070
LB 90 620 R3 A2	200	1.5	1	257.800	6225082
LB 90 630 R3 A2	300	1.5	1	322.300	6225084
LB 90 640 R3 A2	400	1.5	1	373.400	6225086
LB 90 650 R3 A2	500	1.5	1	457.700	6225088
LB 90 660 R3 A2	600	1.5	1	515.400	6225090
LB 90 620 R3 A4	200	1.5	1	261.000	6225102
LB 90 630 R3 A4	300	1.5	1	326.400	6225104
LB 90 640 R3 A4	400	1.5	1	378.200	6225106
LB 90 650 R3 A4	500	1.5	1	463.500	6225108
LB 90 660 R3 A4	600	1.5	1	521.900	6225110

St Steel V2A Stainless steel, A2 V4A Stainless steel, A4

FS Strip-galvanised FT Hot-dip galvanised

Connectors should be ordered separately and in the appropriate quantity.



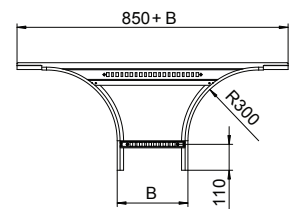
### Mounting/branch piece

Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LAA 620 R3 FS	200	1.5	1	316.300	6225850
LAA 630 R3 FS	300	1.5	1	342.600	6225852
LAA 640 R3 FS	400	1.5	1	368.900	6225854
LAA 650 R3 FS	500	1.5	1	395.200	6225856
LAA 660 R3 FS	600	1.5	1	421.300	6225858
LAA 620 R3 FT	200	1.5	1	332.700	6225870
LAA 630 R3 FT	300	1.5	1	360.500	6225872
LAA 640 R3 FT	400	1.5	1	388.100	6225874
LAA 650 R3 FT	500	1.5	1	415.700	6225876
LAA 660 R3 FT	600	1.5	1	440.200	6225878

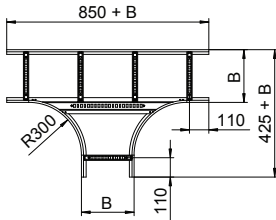
St Steel

FS Strip-galvanised FT Hot-dip galvanised

Connectors should be ordered separately and in the appropriate quantity.



## Tee for cable ladder



Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LT 620 R3 FS	200	1.5	1	468.700	6225210
LT 630 R3 FS	300	1.5	1	531.000	6225212
LT 640 R3 FS	400	1.5	1	619.700	6225214
LT 650 R3 FS	500	1.5	1	688.600	6225216
LT 660 R3 FS	600	1.5	1	757.400	6225218
LT 620 R3 FT	200	1.5	1	494.800	6225230
LT 630 R3 FT	300	1.5	1	595.500	6225232
LT 640 R3 FT	400	1.5	1	656.500	6225234
LT 650 R3 FT	500	1.5	1	729.500	6225236
LT 660 R3 FT	600	1.5	1	797.100	6225238
LT 620 R3 A2	200	1.5	1	474.600	6225250
LT 630 R3 A2	300	1.5	1	537.800	6225252
LT 640 R3 A2	400	1.5	1	627.700	6225254
LT 650 R3 A2	500	1.5	1	697.400	6225256
LT 660 R3 A2	600	1.5	1	767.200	6225258
LT 620 R3 A4	200	1.5	1	480.600	6225270
LT 630 R3 A4	300	1.5	1	544.700	6225272
LT 640 R3 A4	400	1.5	1	635.600	6225274
LT 650 R3 A4	500	1.5	1	706.200	6225276
LT 660 R3 A4	600	1.5	1	776.900	6225278

St Steel V2A Stainless steel, A2 V4A Stainless steel, A4

FS Strip-galvanised FT Hot-dip galvanised

Connectors should be ordered separately and in the appropriate quantity.

## Adjustable bend element

Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LGBE 620 FS	200	1.5	1	84.000	6225450
LGBE 630 FS	300	1.5	1	97.000	6225452
LGBE 640 FS	400	1.5	1	109.900	6225454
LGBE 650 FS	500	1.5	1	122.900	6225456
LGBE 660 FS	600	1.5	1	135.900	6225458
LGBE 620 FT	200	1.5	1	89.000	6225470
LGBE 630 FT	300	1.5	1	102.600	6225472
LGBE 640 FT	400	1.5	1	116.400	6225474
LGBE 650 FT	500	1.5	1	130.200	6225476
LGBE 660 FT	600	1.5	1	144.000	6225478

Sl Steel

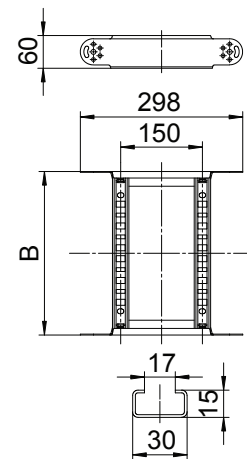
FS Strip-galvanised FT Hot-dip galvanised

Adjustable bend element with welded rung for use in the cable ladder types with a side height of 60 mm.

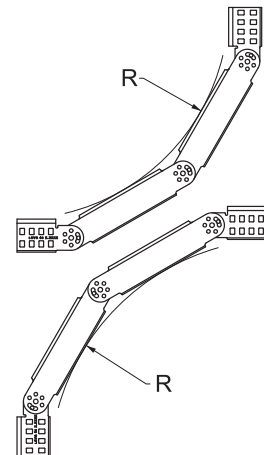
Type	Dimension B mm	Rail thickness mm
LGBE 620 FS	200	1.5
LGBE 630 FS	300	1.5
LGBE 640 FS	400	1.5
LGBE 650 FS	500	1.5
LGBE 660 FS	600	1.5



## Dimensions



## Installation



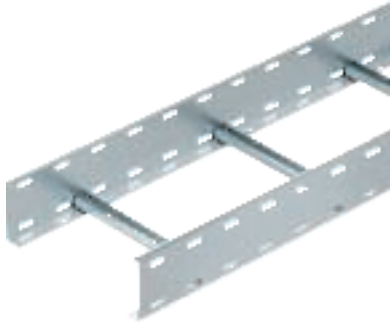
## Radius table

Quantity of elements	Radius
1	approx. 300 mm
2	approx. 450 mm
3	approx. 600 mm
4	approx. 750 mm
5	approx. 900 mm

Please order two LGVG 60 articulated connectors separately.

Side height 110 mm

## Cable ladder LCIS



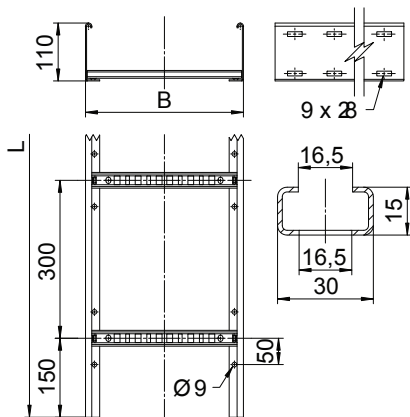
Type	Rail		Pack. m	Weight kg/100 m	Item No.
	Width mm	thickness mm			
LCIS 1120 6 FT	200	1.5	6	399.500	6209820
LCIS 1130 6 FT	300	1.5	6	422.500	6209822
LCIS 1140 6 FT	400	1.5	6	445.670	6209824
LCIS 1145 6 FT	450	1.5	6	454.670	6209825
LCIS 1150 6 FT	500	1.5	6	468.670	6209826
LCIS 1160 6 FT	600	1.5	6	491.670	6209828

SI Steel

FT Hot-dip galvanised

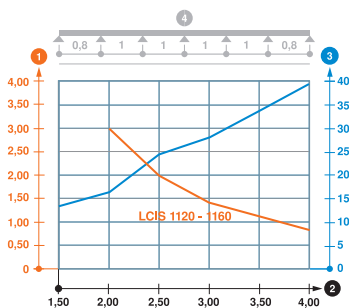
Cable ladder with 110 mm side height with welded C30 profile rungs which are open in an upwards direction. Rolled side rail for reinforcement and as edge protection. Fastening to the bracket takes place using clamps, type LKS 40. The slot dimension of the frame is 16.5 mm and the appropriate U clamps clip is type 2056.

### Dimensions



Type	Length mm	Width mm	Rail thickness mm	Useful cross-section cm <sup>2</sup>	Rung spacing mm
LCIS 1130 6 FT	6000	300	1.5	270	300
LCIS 1140 6 FT	6000	400	1.5	360	300
LCIS 1145 6 FT	6000	450	1.5	405	300
LCIS 1150 6 FT	6000	500	1.5	450	300
LCIS 1160 6 FT	6000	600	1.5	540	300

### Load



Type	2.0 m 2.5 m 3.0 m 4.0 m			
	kN/m	kN/m	kN/m	kN/m
LCIS 1120 6 FT	3	2	1.4	0.8
LCIS 1130 6 FT	3	2	1.4	0.8
LCIS 1140 6 FT	3	2	1.4	0.8
LCIS 1145 6 FT	3	2	1.4	0.8
LCIS 1150 6 FT	3	2	1.4	0.8
LCIS 1160 6 FT	3	2	1.4	0.8

#### Load diagram, cable ladder, type LCIS 110

- ① Permitted cable tray/ladder load in kN/m without man load
- ② Support width in m
- ③ Rail bend in mm at permitted kN/m
- ④ Load scheme during testing
- Load curve with cable tray/ladder width in mm
- Strut bend curve according to support width

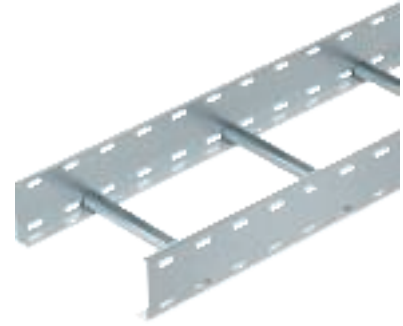
## Heavy-duty cable ladder SLCS

Type	Width mm	Rail thickness mm	Pack. m	Weight kg/100 m	Item No.
SLCS 1120 3 FT	200	2	3	529.670	6207302
SLCS 1130 3 FT	300	2	3	563.670	6207304
SLCS 1140 3 FT	400	2	3	597.170	6207306
SLCS 1145 3 FT	450	2	3	614.170	6207308
SLCS 1150 3 FT	500	2	3	630.670	6207310
SLCS 1160 3 FT	600	2	3	664.670	6207312
SLCS 1175 3 FT	750	2	3	715.670	6207314
SLCS 1180 3 FT	800	2	3	731.840	6207316
SLCS 1190 3 FT	900	2	3	765.670	6207318
SLCS 11100 3 FT	1000	2	3	799.340	6207320
SLCS 11120 3 FT	1200	2	3	866.840	6207322

Sl Steel

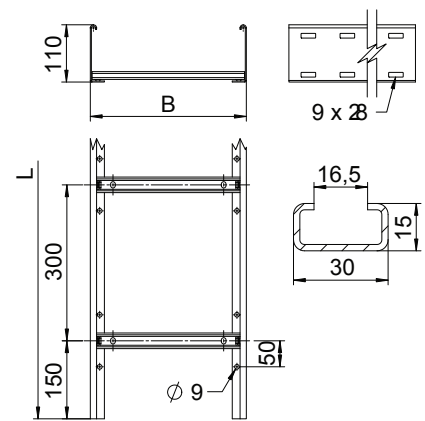
FT Hot-dip galvanised

Cable ladder with 110 mm side height with welded C30 profile rungs which are open in an upwards direction. Rolled side rail for reinforcement and as edge protection. Fastening to the bracket takes place using clamps, type LKS 40. The slot dimension of the frame is 16.5 mm and the appropriate U clamps clip is type 2056.



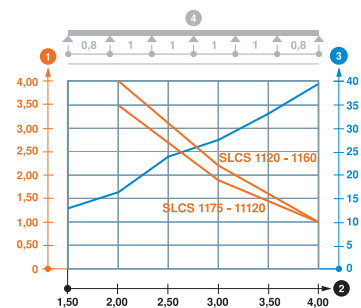
Type	Length mm	Width mm	Rail thickness mm	Useful cross- section cm <sup>2</sup>	Rung spacing mm
SLCS 1120 3 FT	3000	200	2	180	300
SLCS 1130 3 FT	3000	300	2	270	300
SLCS 1140 3 FT	3000	400	2	360	300
SLCS 1145 3 FT	3000	450	2	405	300
SLCS 1150 3 FT	3000	500	2	450	300
SLCS 1160 3 FT	3000	600	2	540	300
SLCS 1175 3 FT	3000	750	2	675	300
SLCS 1180 3 FT	3000	800	2	720	300
SLCS 1190 3 FT	3000	900	2	810	300
SLCS 11100 3 FT	3000	1000	2	900	300
SLCS 11120 3 FT	3000	1200	2	1180	300

### Dimensions



Type	2.0 m kN/m	3.0 m kN/m	4.0 m kN/m
SLCS 1120 3 FT	4	2.3	1
SLCS 1130 3 FT	4	2.3	1
SLCS 1140 3 FT	4	2.3	1
SLCS 1145 3 FT	4	2.3	1
SLCS 1150 3 FT	4	2.3	1
SLCS 1160 3 FT	4	2.3	1
SLCS 1175 3 FT	3.5	1.9	1
SLCS 1180 3 FT	3.5	1.9	1
SLCS 1190 3 FT	3.5	1.9	1
SLCS 11100 3 FT	3.5	1.9	1
SLCS 11120 3 FT	3.5	1.9	1

### Load

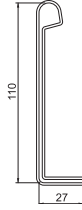


#### Load diagram, cable ladder, type SLCS 110

- 1 Permitted cable tray/ladder load in kN/m without man load
- 2 Support width in m
- 3 Rail bend in mm at permitted kN/m
- 4 Load scheme during testing
- Load curve with cable tray/ladder width in mm
- Strut bend curve according to support width

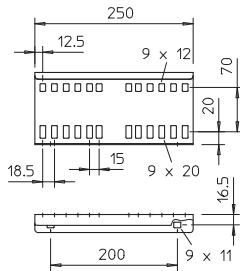
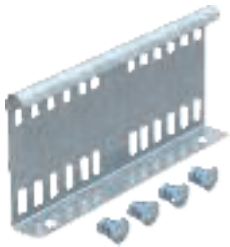
Side height 110 mm

## End cap



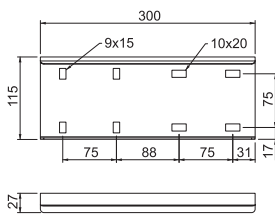
Type	Colour	Pack. Weight		Item No.
		pair	kg/100 pairs	
<b>SKH 110 OR</b>	Pastel orange	20	1.345	6222553
PE Polyethylene				
End cap to cover cable ladder ends of side height 110 mm				

## Straight connector



Type	Side height mm	Pack. Weight		Item No.
		pcs	kg/100 pcs.	
<b>LVG 110 FT</b>	110	10	44.900	6216548
St Steel				
FT Hot-dip galvanised				
The bolt fastening ensures the continuity of the equipotential bonding.				

## Connector for expansion



Type	Side height mm	Pack. Weight		Item No.
		pcs	kg/100 pcs.	
<b>LDVG 110 FT</b>	110	2	100.500	6216670
St Steel				
FT Hot-dip galvanised				
Connector for expansion for compensation of linear thermal expansion. The tightening torques of the self-locking screws on the loose bearing side are 5 Nm.				

### Positioning of expansion connectors

Metal temperature difference	Maximum spacing between expansion connectors
10 °C	70 metre
25 °C	47 metre
40 °C	35 metre
50 °C	28 metre
65 °C	23 metre
80 °C	20 metre

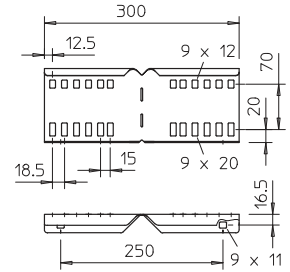
Further information can be found in our mounting instruction.

### Angle connector

Type	Side height mm	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>LWVG 110 VA4301</b>	110	10	48.800	<b>6216590</b>

V2A Stainless steel, grade 304

The bolt fastening ensures the continuity of the equipotential bonding.



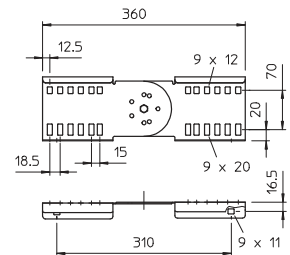
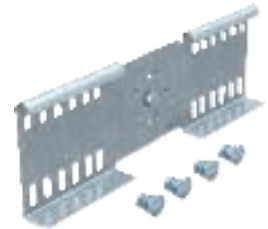
### Adjustable connector

Type	Side height mm	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>LGVG 110 FT</b>	110	10	65.000	<b>6216653</b>

St Steel

FT Hot-dip galvanised

The bolt fastening ensures the continuity of the equipotential bonding.



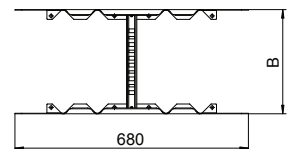
### Multifunctional connector

Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>LMFV 1120 FT</b>	200	1.5	1	221.300	<b>6225770</b>
<b>LMFV 1130 FT</b>	300	1.5	1	228.200	<b>6225772</b>
<b>LMFV 1140 FT</b>	400	1.5	1	235.100	<b>6225774</b>
<b>LMFV 1145 FT</b>	450	1.5	1	238.500	<b>6225776</b>
<b>LMFV 1150 FT</b>	500	1.5	1	241.900	<b>6225778</b>
<b>LMFV 1160 FT</b>	600	1.5	1	248.800	<b>6225780</b>

St Steel

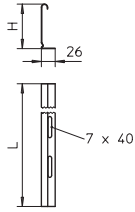
FT Hot-dip galvanised

Multifunctional connector for joining cable ladders with a side height of 110 mm. Symmetric and asymmetric reductions, bends between 0–60° and mounting/branch pieces can be created.



Side height 110 mm

## Barrier strip



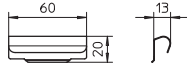
Type	Dimen- sion H mm	Plate thickness mm	Dimen- sion L mm	Pack. m	Weight kg/100 m	Item No.
<b>TSG 85 DD</b>	85	0.75	3000	3	70.300	<b>6062331</b>

**SI** Steel

**DD** Strip galvanised zinc/aluminium, Double Dip

Barrier strip for separation of cables of different voltages or functions.

## Barrier strip connector

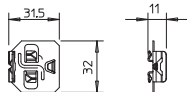


Type	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>TSGV VA4310</b>	10	0.923	<b>6067970</b>

**V2A** Stainless steel, grade 301

Barrier strip connector for screwless connection of the TSG barrier strip in all side heights.

## Hold-down clamp for barrier strip fastening

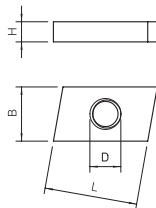


Type	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>KS KL VA4310</b>	30	0.512	<b>6062284</b>

**V2A** Stainless steel, grade 301

Hold-down clamp for screwless fastening of barrier strips in cable ladders.

## Slide nut



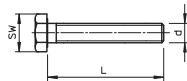
Type	Length mm	Width mm	Height mm	Thread	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>ACMSN M6 ZL</b>	31	16.5	4	M6	100	1.740	<b>1147056</b>
<b>ACMSN M6 A4</b>	31	16.5	4	M6	100	1.650	<b>1147076</b>

**SI** Steel **V4A** Stainless steel, A4

**ZL** Zinc scale

Slide nut for use with C30 profile rungs.

## Hexagonal bolt



Type	Resistance class	Dimen- sion d mm	Dimen- sion L mm	SW mm	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>SKS 6x10 A2</b>	A2-70	6	10	10	100	0.420	<b>3156605</b>

**V2A** Stainless steel, A2



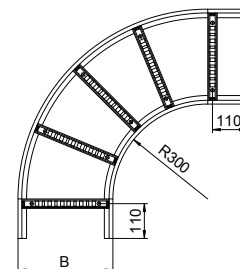
## 90° bend

Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LB 90 1120 R3 FT	200	1.5	1	379.700	6225142
LB 90 1130 R3 FT	300	1.5	1	457.900	6225144
LB 90 1140 R3 FT	400	1.5	1	521.400	6225146
LB 90 1145 R3 FT	450	1.5	1	555.800	6225148
LB 90 1150 R3 FT	500	1.5	1	619.600	6225150
LB 90 1160 R3 FT	600	1.5	1	688.700	6225152

St Steel

FT Hot-dip galvanised

Connectors should be ordered separately and in the appropriate quantity.



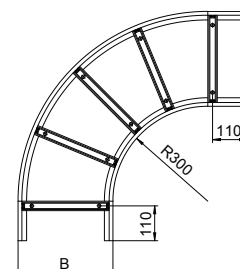
## 90° bend, heavy-duty

Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
SLB 90 1120R3 FT	200	2	1	493.100	6225172
SLB 90 1130R3 FT	300	2	1	593.200	6225174
SLB 90 1140R3 FT	400	2	1	678.300	6225176
SLB 90 1145R3 FT	450	2	1	720.700	6225178
SLB 90 1150R3 FT	500	2	1	809.600	6225180
SLB 90 1160R3 FT	600	2	1	919.200	6225182
SLB 90 1175R3 FT	750	2	1	1,116.100	6225184
SLB 90 1180R3 FT	800	2	1	1,167.900	6225186
SLB 90 1190R3 FT	900	2	1	1,356.500	6225188
SLB90 11100R3 FT	1000	2	1	1,470.000	6225190
SLB90 11120R3 FT	1200	2	1	1,856.200	6225194

St Steel

FT Hot-dip galvanised

Connectors should be ordered separately and in the appropriate quantity.



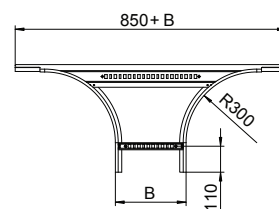
## Mounting/branch piece

Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LAA 1120 R3 FT	200	1.5	1	426.100	6225930
LAA 1130 R3 FT	300	1.5	1	454.600	6225932
LAA 1140 R3 FT	400	1.5	1	482.200	6225934
LAA 1145 R3 FT	450	1.5	1	497.200	6225936
LAA 1150 R3 FT	500	1.5	1	509.800	6225938
LAA 1160 R3 FT	600	1.5	1	536.300	6225940

St Steel

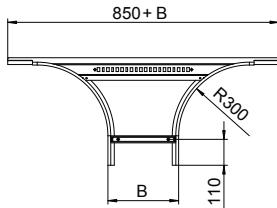
FT Hot-dip galvanised

Connectors should be ordered separately and in the appropriate quantity.



Side height 110 mm

## Mounting/branch piece, heavy-duty



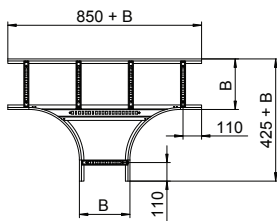
Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
SLAA 1120 R3 FT	200	2	1	498.800	6225950
SLAA 1130 R3 FT	300	2	1	528.200	6225952
SLAA 1140 R3 FT	400	2	1	558.400	6225954
SLAA 1145 R3 FT	450	2	1	574.100	6225956
SLAA 1150 R3 FT	500	2	1	588.500	6225958
SLAA 1160 R3 FT	600	2	1	621.100	6225960
SLAA 1175 R3 FT	750	2	1	664.500	6225962
SLAA 1180 R3 FT	800	2	1	678.900	6225964
SLAA 1190 R3 FT	900	2	1	709.100	6225966
SLAA 11100 R3 FT	1000	2	1	739.300	6225968
SLAA 11120 R3 FT	1200	2	1	804.700	6225970

**St** Steel

**FT** Hot-dip galvanised

Connectors should be ordered separately and in the appropriate quantity.

## Tee for cable ladder



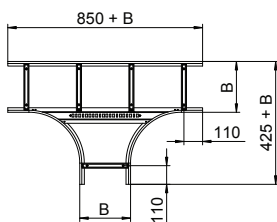
Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LT 1120 R3 FT	200	1.5	1	651.500	6225310
LT 1130 R3 FT	300	1.5	1	781.100	6225312
LT 1140 R3 FT	400	1.5	1	882.600	6225314
LT 1145 R3 FT	450	1.5	1	926.800	6225316
LT 1150 R3 FT	500	1.5	1	963.100	6225318
LT 1160 R3 FT	600	1.5	1	982.900	6225320

**St** Steel

**FT** Hot-dip galvanised

Connectors should be ordered separately and in the appropriate quantity.

## Tee for cable ladder, heavy-duty



Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
SLT 1120 R3 FT	200	2	1	807.400	6225350
SLT 1130 R3 FT	300	2	1	969.800	6225352
SLT 1140 R3 FT	400	2	1	1,099.200	6225354
SLT 1145 R3 FT	450	2	1	1,150.300	6225356
SLT 1150 R3 FT	500	2	1	1,200.500	6225358
SLT 1160 R3 FT	600	2	1	1,251.100	6225360
SLT 1175 R3 FT	750	2	1	1,524.900	6225362
SLT 1180 R3 FT	800	2	1	1,579.500	6225364
SLT 1190 R3 FT	900	2	1	1,690.600	6225366
SLT 11100 R3 FT	1000	2	1	1,801.700	6225368
SLT 11120 R3 FT	1200	2	1	2,092.200	6225372

**St** Steel

**FT** Hot-dip galvanised

Connectors should be ordered separately and in the appropriate quantity.

## Adjustable bend element

Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LGBE 1120 FT	200	1.5	1	133.100	6225510
LGBE 1130 FT	300	1.5	1	146.100	6225512
LGBE 1140 FT	400	1.5	1	160.500	6225514
LGBE 1145 FT	450	1.5	1	167.400	6225516
LGBE 1150 FT	500	1.5	1	174.300	6225518
LGBE 1160 FT	600	1.5	1	188.100	6225520

Sl Steel

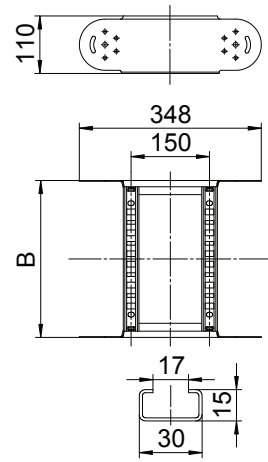
FT Hot-dip galvanised

Adjustable bend element with welded rung for use in the cable ladder types with a side height of 110 mm.

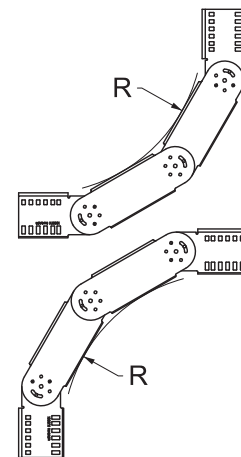


Type	Dimension B mm	Rail thickness mm
LGBE 1120 FT	200	1.5
LGBE 1130 FT	300	1.5
LGBE 1140 FT	400	1.5
LGBE 1145 FT	450	1.5
LGBE 1150 FT	500	1.5
LGBE 1160 FT	600	1.5

### Dimensions



### Installation



### Radius table

Quantity of elements	Radius
1	approx. 300 mm
2	approx. 450 mm
3	approx. 600 mm
4	approx. 750 mm
5	approx. 900 mm

Please order two LGVG 110 articulated connectors separately.

Side height 110 mm

## Adjustable bend element, heavy-duty



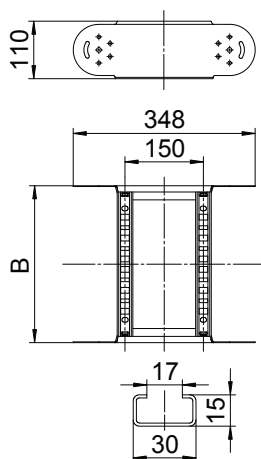
Type	Dimension B mm	Rail thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
SLGBE 1120 FT	200	2	1	172.800	6225530
SLGBE 1130 FT	300	2	1	191.800	6225532
SLGBE 1140 FT	400	2	1	210.800	6225534
SLGBE 1145 FT	450	2	1	220.200	6225536
SLGBE 1150 FT	500	2	1	229.600	6225538
SLGBE 1160 FT	600	2	1	248.600	6225540
SLGBE 1175 FT	750	2	1	277.000	6225542
SLGBE 1180 FT	800	2	1	286.400	6225544
SLGBE 1190 FT	900	2	1	305.400	6225546
SLGBE 11100 FT	1000	2	1	324.400	6225548
SLGBE 11120 FT	1200	2	1	362.200	6225550

Sl Steel

FT Hot-dip galvanised

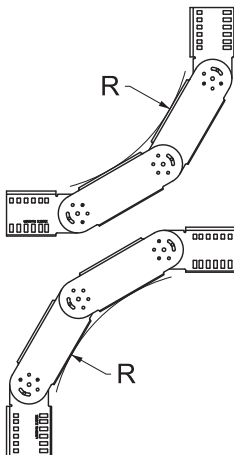
Adjustable bend element, heavy-duty, with welded rung for use in the cable ladder types with a side height of 110 mm.

### Dimensions



Type	Dimension B mm	Rail thickness mm
SLGBE 1120 FT	200	2
SLGBE 1130 FT	300	2
SLGBE 1140 FT	400	2
SLGBE 1145 FT	450	2
SLGBE 1150 FT	500	2
SLGBE 1160 FT	600	2
SLGBE 1175 FT	750	2
SLGBE 1180 FT	800	2
SLGBE 1190 FT	900	2
SLGBE 11100 FT	1000	2
SLGBE 11120 FT	1200	2

### Installation



### Radius table

Quantity of elements	Radius
1	approx. 300 mm
2	approx. 450 mm
3	approx. 600 mm
4	approx. 750 mm
5	approx. 900 mm

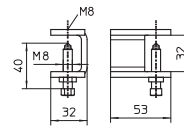
Please order two LGVG 110 articulated connectors separately.

### Cable ladder clamping piece

Type	Side height mm	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>KLL 32 FT</b>	32	10	17.500	<b>6221061</b>
<b>KLL 32 VA4301</b>	32	10	17.100	<b>6221063</b>

**St** Steel **V2A** Stainless steel, grade 304  
**FT** Hot-dip galvanised

Beam clamp for fastening cable ladders to steel girders.

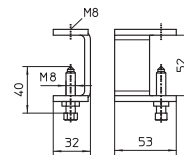


### Cable ladder clamping piece

Type	Side height mm	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>KLL 52 FT</b>	52	10	21.400	<b>6221071</b>
<b>KLL 52 VA4301</b>	52	10	21.000	<b>6221073</b>

**St** Steel **V2A** Stainless steel, grade 304  
**FT** Hot-dip galvanised

Beam clamp for fastening cable ladders to steel girders.

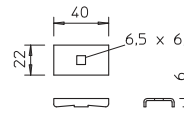


### Hold-down clamp

Type	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>LKS 40 FS</b>	10	3.400	<b>6221076</b>
<b>LKS 40 FT</b>	10	3.400	<b>6221084</b>
<b>LKS 40 VA4301</b>	10	2.500	<b>6017134</b>

**St** Steel **V2A** Stainless steel, grade 304  
**FS** Strip-galvanised **FT** Hot-dip galvanised

Hold-down clamp for fastening cable ladders.

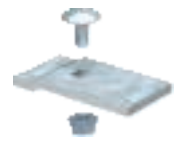
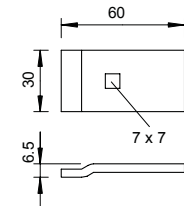


### Hold-down clamp

Type	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>LKS 60 4 FT</b>	10	6.500	<b>6221122</b>
<b>LKS 60 4 VA4301</b>	10	8.000	<b>6221130</b>
<b>LKS 60 4 VA4571</b>	10	7.000	<b>6221157</b>

**St** Steel **V2A** Stainless steel, grade 304 **V4A** Stainless steel, grade 316 Ti  
**FT** Hot-dip galvanised

Hold-down clamp for fastening cable ladders.

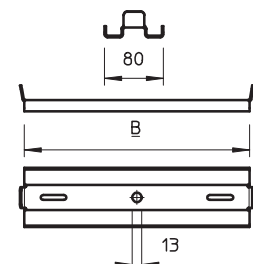
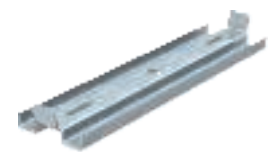


### Centre suspension for cable ladder

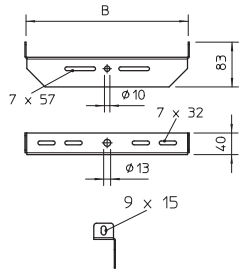
Type	Width mm	Pack. pcs	Weight kg/100 pcs.	Item No.
<b>MAHL 200 FT</b>	200	10	41.900	<b>6358659</b>
<b>MAHL 300 FT</b>	300	10	61.800	<b>6358667</b>
<b>MAHL 400 FT</b>	400	10	85.000	<b>6358675</b>
<b>MAHL 500 FT</b>	500	10	101.700	<b>6358683</b>
<b>MAHL 600 FT</b>	600	10	126.000	<b>6358687</b>

**St** Steel  
**FT** Hot-dip galvanised

On filling, please ensure an even load distribution (no one-sided filling).



## Centre suspension, universal



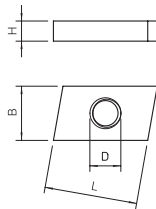
Type	Width mm	Pack. pcs	Weight kg/100 pcs.	Item No.
MAHU 200 FS	200	20	27.500	6358853
MAHU 300 FS	300	20	39.300	6358856
MAHU 400 FS	400	20	68.800	6358860
MAHU 500 FS	500	20	85.800	6358864
MAHU 600 FS	600	15	103.300	6358868
MAHU 200 FT	200	20	28.700	6358884
MAHU 300 FT	300	20	43.300	6358888
MAHU 400 FT	400	20	71.300	6358892
MAHU 500 FT	500	20	89.100	6358896
MAHU 600 FT	600	15	107.000	6358900

St Steel

FS Strip-galvanised FT Hot-dip galvanised

Preferred use of this central suspension in combination with cable ladders and mesh cable trays.  
Universal central suspension for fastening to threaded rods and supports.

## Slide nut



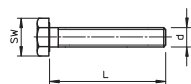
Type	Length mm	Width mm	Height mm	Thread	Pack. pcs	Weight kg/100 pcs.	Item No.
ACMSN M6 ZL	31	16.5	4	M6	100	1.740	1147056
ACMSN M6 A4	31	16.5	4	M6	100	1.650	1147076

St Steel V4A Stainless steel, A4

ZL Zinc scale

Slide nut for use with C30 profile rungs.

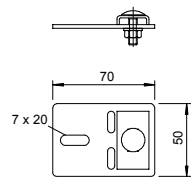
## Hexagonal bolt



Type	Resistance class	Dimen- sion d mm	Dimen- sion L mm	SW mm	Pack. pcs	Weight kg/100 pcs.	Item No.
SKS 6x10 A2	A2-70	6	10	10	100	0.420	3156605

V2A Stainless steel, A2

## Support



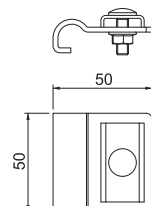
Type	Pack. pcs	Weight kg/100 pcs.	Item No.
LAL 70 FS	20	10.200	6221009
LAL 70 VA4301	20	10.200	6221017

St Steel V2A Stainless steel, grade 304

FS Strip-galvanised

Support for fastening rising or falling cable ladders.

## Support angle



Type	Pack. pcs	Weight kg/100 pcs.	Item No.
LAW FT	10	9.200	6221513

St Steel

FT Hot-dip galvanised

Support bracket for creation of branches at different heights at a later date.

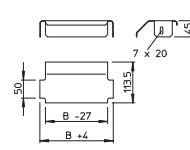
### Support plate

Type	Width mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LALB 20 FT	200	10	37.700	6221858
LALB 30 FT	300	10	53.000	6221866
LALB 40 FT	400	10	73.000	6221874
LALB 50 FT	500	10	86.000	6221882
LALB 60 FT	600	10	116.000	6221890

St Steel

FT Hot-dip galvanised

Support plate to increase the cable volume and for cable protection



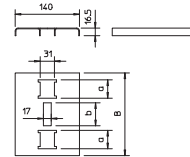
### Rung support plate for function maintenance

Type	Pack. pcs	Weight kg/100 pcs.	Item No.
SAB20 FS	25	31.000	6222943
SAB30 FS	25	50.000	6222951
SAB40 FS	25	65.000	6222978

St Steel

FS Strip-galvanised

Rung support plates to increase the support area for the cables in the fittings for routing types with cable ladders for function maintenance to DIN 4102 Part 12. Use the support plates to ensure the largest possible support surface in the cable ladder fittings for the function maintenance cables in case of fire. The rung support plates are just laid loosely on the rungs of the cable ladder fittings. The lugs pointing down prevent slippage.



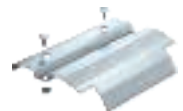
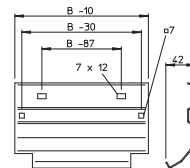
### Drop-out plate

Type	Width mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LAB 20 FT	200	20	37.000	6220436
LAB 30 FT	300	25	58.000	6220444
LAB 40 FT	400	25	78.000	6220452
LAB 50 FT	500	15	99.000	6220460
LAB 60 FT	600	15	120.000	6220479

St Steel

FT Hot-dip galvanised

Exit plate for installation on the rung for vertically exiting cables.



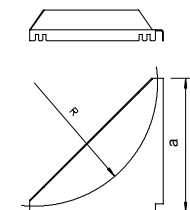
### Corner plate

Type	radius mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LEB 25 FS	250	1	64.300	6221203
LEB 50 FS	500	1	206.200	6221246
LEB 25 DD	250	1	63.600	6221216
LEB 50 DD	500	1	205.500	6221259

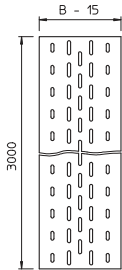
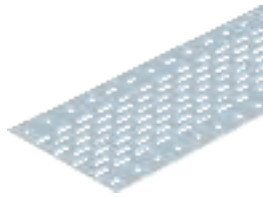
St Steel

FS Strip-galvanised DD Strip galvanised zinc/aluminium, Double Dip

Corner plate to increase the radius and the cable supporting surface.



## Insert plate



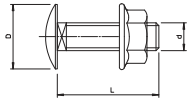
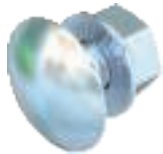
Type	Plate			Pack.	Weight	Item No.
	Width mm	thickness mm	Length mm			
ELB-L 20 FS	200	1.00	3000	3	129.000	6103235
ELB-L 30 FS	300	1.00	3000	3	202.000	6103251
ELB-L 40 FS	400	1.00	3000	3	270.000	6103286
ELB-L 50 FS	500	1.00	3000	3	339.000	6103316
ELB-L 60 FS	600	1.00	3000	3	396.000	6103332
ELB-L 20 DD	200	1.00	3000	3	138.340	6103352
ELB-L 30 DD	300	1.00	3000	3	202.670	6103356
ELB-L 40 DD	400	1.00	3000	3	268.000	6103360
ELB-L 50 DD	500	1.00	3000	3	333.340	6103364
ELB-L 60 DD	600	1.00	3000	3	398.340	6103368

St Steel

FS Strip-galvanised DD Strip galvanised zinc/aluminium, Double Dip

Insert plate for use in cable ladders.

## Truss-head bolt with flange nut



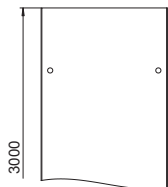
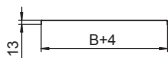
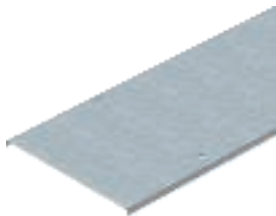
Type	Dimension mm	Dimen- sion L mm	Dimen- sion D mm	Pack.	Weight	Item No.
FRSB 6X30 F	M 6 x 30	30	13.5	100	1.200	6406907

St Steel

F Hot-dip galvanised

Truss-head bolt with square neck including flange nut.

## Cover



Type	Plate			Pack.	Weight	Item No.
	Width mm	thickness mm	Length mm			
DRL 200 FS	200	1.00	3000	3	180.000	6052207
DRL 300 FS	300	1.00	3000	3	259.270	6052304
DRL 400 FS	400	1.00	3000	3	337.670	6052401
DRL 500 FS	500	1.25	3000	3	622.340	6052509
DRL 600 FS	600	1.25	3000	3	740.340	6052606
DRL 200 FT	200	1.00	3000	3	196.330	6051367
DRL 300 FT	300	1.00	3000	3	282.000	6051383
DRL 400 FT	400	1.50	3000	3	534.467	6051413
DRL 500 FT	500	1.50	3000	3	659.330	6051448
DRL 600 FT	600	1.50	3000	3	784.330	6051472
DRL 200 DD	200	1.00	3000	3	180.000	6052709
DRL 300 DD	300	1.00	3000	3	259.000	6052712
DRL 400 DD	400	1.00	3000	3	337.670	6052715
DRL 500 DD	500	1.25	3000	3	622.340	6052718
DRL 600 DD	600	1.25	3000	3	740.340	6052724

St Steel

FS Strip-galvanised FT Hot-dip galvanised DD Strip galvanised zinc/aluminium, Double Dip

Transverse bead from 500 mm width.

Cover for cable trays and cable ladders with three pairs of turn buckles.

When using covers outdoors, additional measures against the influence of wind must be taken.



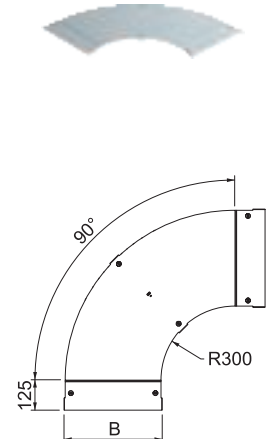
Cover for 90° bend

Type	Dimension B mm	Plate thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LBD 90 200 R3 FS	200	1.00	1	145.000	6225990
LBD 90 300 R3 FS	300	1.00	1	232.000	6225992
LBD 90 400 R3 FS	400	1.00	1	331.000	6225994
LBD 90 500 R3 FS	500	1.25	1	550.000	6225996
LBD 90 600 R3 FS	600	1.25	1	705.000	6225998
LBD 90 200 R3 FT	200	1.00	1	158.000	6226010
LBD 90 300 R3 FT	300	1.00	1	251.000	6226012
LBD 90 400 R3 FT	400	1.00	1	359.000	6226014
LBD 90 450 R3 FT	450	1.25	1	513.000	6226016
LBD 90 500 R3 FT	500	1.25	1	589.000	6226018
LBD 90 600 R3 FT	600	1.25	1	755.000	6226020
LBD 90 750 R3 FT	750	1.25	1	857.000	6226022
LBD 90 800 R3 FT	800	1.25	1	939.000	6226024
LBD 90 900 R3 FT	900	1.25	1	1,388.000	6226026
LBD 90 1000 R3 FT	1000	1.25	1	1,624.000	6226028
LBD 90 1200 R3 FT	1200	1.25	1	2,143.000	6226032
LBD 90 200 R3 A2	200	1.00	1	158.000	6226050
LBD 90 300 R3 A2	300	1.00	1	246.000	6226052
LBD 90 400 R3 A2	400	1.00	1	346.000	6226054
LBD 90 500 R3 A2	500	1.25	1	568.000	6226056
LBD 90 600 R3 A2	600	1.25	1	725.000	6226058
LBD 90 200 R3 A4	200	1.00	1	159.000	6226070
LBD 90 300 R3 A4	300	1.00	1	248.000	6226072
LBD 90 400 R3 A4	400	1.00	1	350.000	6226074
LBD 90 500 R3 A4	500	1.25	1	575.000	6226076
LBD 90 600 R3 A4	600	1.25	1	734.000	6226078

St Steel V2A Stainless steel, A2 V4A Stainless steel, A4

FS Strip-galvanised FT Hot-dip galvanised

Cover with turn buckles for covering 90° cable ladder bends with welded rung.



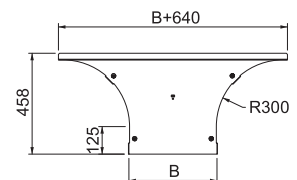
Cover for add-on tee

Type	Dimension B mm	Plate thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LAAD 200 R3 FS	200	1.00	1	124.000	6226310
LAAD 300 R3 FS	300	1.00	1	159.000	6226312
LAAD 400 R3 FS	400	1.00	1	195.000	6226314
LAAD 500 R3 FS	500	1.25	1	287.000	6226316
LAAD 600 R3 FS	600	1.25	1	331.000	6226318
LAAD 200 R3 FT	200	1.00	1	134.000	6226330
LAAD 300 R3 FT	300	1.00	1	172.000	6226332
LAAD 400 R3 FT	400	1.00	1	211.000	6226334
LAAD 450 R3 FT	450	1.25	1	283.000	6226336
LAAD 500 R3 FT	500	1.25	1	312.000	6226338
LAAD 600 R3 FT	600	1.25	1	355.000	6226340
LAAD 750 R3 FT	750	1.25	1	445.000	6226342
LAAD 800 R3 FT	800	1.25	1	469.000	6226344
LAAD 900 R3 FT	900	1.25	1	517.000	6226346
LAAD 1000 R3 FT	1000	1.25	1	565.000	6226348
LAAD 1200 R3 FT	1200	1.25	1	661.000	6226352

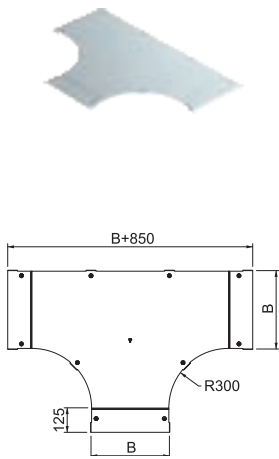
St Steel

FS Strip-galvanised FT Hot-dip galvanised

Cover with turn buckles for covering Add-on tee with welded rungs.



## Cover for Tee



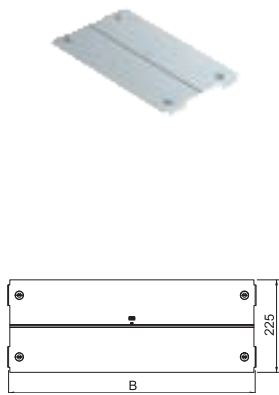
Type	Dimension B mm	Plate thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LTD 200 R3 FS	200	1.00	1	274.000	6226100
LTD 300 R3 FS	300	1.00	1	413.000	6226102
LTD 400 R3 FS	400	1.00	1	567.000	6226104
LTD 500 R3 FS	500	1.25	1	737.000	6226106
LTD 600 R3 FS	600	1.25	1	922.000	6226108
LTD 200 R3 FT	200	1.00	1	298.000	6226120
LTD 300 R3 FT	300	1.00	1	450.000	6226122
LTD 400 R3 FT	400	1.00	1	617.000	6226124
LTD 450 R3 FT	450	1.25	1	696.000	6226126
LTD 500 R3 FT	500	1.25	1	775.000	6226128
LTD 600 R3 FT	600	1.25	1	989.000	6226130
LTD 750 R3 FT	750	1.25	1	1,687.000	6226132
LTD 800 R3 FT	800	1.25	1	1,836.000	6226134
LTD 900 R3 FT	900	1.25	1	2,151.000	6226136
LTD 1000 R3 FT	1000	1.25	1	2,488.000	6226138
LTD 1200 R3 FT	1200	1.25	1	3,222.000	6226142
LTD 200 R3 A2	200	1.00	1	287.000	6226160
LTD 300 R3 A2	300	1.00	1	429.000	6226162
LTD 400 R3 A2	400	1.00	1	585.000	6226164
LTD 500 R3 A2	500	1.25	1	757.000	6226166
LTD 600 R3 A2	600	1.25	1	943.000	6226168
LTD 200 R3 A4	200	1.00	1	291.000	6226180
LTD 300 R3 A4	300	1.00	1	434.000	6226182
LTD 400 R3 A4	400	1.00	1	592.000	6226184
LTD 500 R3 A4	500	1.25	1	766.000	6226186
LTD 600 R3 A4	600	1.25	1	955.000	6226188

St Steel V2A Stainless steel, A2 V4A Stainless steel, A4

FS Strip-galvanised FT Hot-dip galvanised

Cover with turn buckles for covering T pieces with welded rungs.

## Cover for articulated bend element



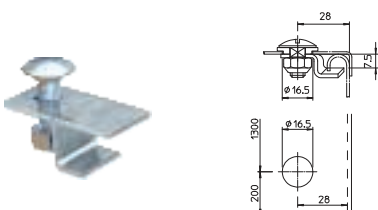
Type	Dimension B mm	Plate thickness mm	Pack. pcs	Weight kg/100 pcs.	Item No.
LGBED 200 FS	200	1.00	1	42.000	6226210
LGBED 300 FS	300	1.00	1	60.000	6226212
LGBED 400 FS	400	1.00	1	78.000	6226214
LGBED 500 FS	500	1.25	1	117.000	6226216
LGBED 600 FS	600	1.25	1	139.000	6226218
LGBED 200 FT	200	1.00	1	45.000	6226230
LGBED 300 FT	300	1.00	1	65.000	6226232
LGBED 400 FT	400	1.00	1	85.000	6226234
LGBED 450 FT	450	1.25	1	113.000	6226236
LGBED 500 FT	500	1.25	1	125.000	6226238
LGBED 600 FT	600	1.25	1	149.000	6226240
LGBED 750 FT	750	1.25	1	184.000	6226242
LGBED 800 FT	800	1.25	1	196.000	6226244
LGBED 900 FT	900	1.25	1	219.000	6226246
LGBED 1000 FT	1000	1.25	1	243.000	6226248
LGBED 1200 FT	1200	1.25	1	290.000	6226252

St Steel

FS Strip-galvanised FT Hot-dip galvanised

Cover with sash locks for covering articulated bends with welded rungs.

## Turn buckle



Type	Pack. pcs	Weight kg/100 pcs.	Item No.
DRLM 316 DD	10	2.800	6222366
DRLM 316 VA4301	10	2.800	6222358

St Steel V2A Stainless steel, grade 304

DD Strip galvanised zinc/aluminium, Double Dip

Use for cover widths of 50–600 mm.

Turn buckle for additional installation or installation at a later date.

## Cover for stand-off mounting

Type	Width mm	Plate		Pack. m	Weight kg/100 m	Item No.
		thickness mm	Length mm			
DRL FAM 230 FT	230	1.50	3000	3	323.600	6051222
DRL FAM 330 FT	330	1.50	3000	3	450.800	6051224
DRL FAM 430 FT	430	1.50	3000	3	577.930	6051226
DRL FAM 530 FT	530	1.50	3000	3	705.130	6051228
DRL FAM 630 FT	630	1.50	3000	3	832.270	6051230
DRL FAM 230 V2A	230	1.50	3000	3	299.670	6051192
DRL FAM 330 V2A	330	1.50	3000	3	417.330	6051194
DRL FAM 430 V2A	430	1.50	3000	3	535.000	6051196
DRL FAM 530 V2A	530	1.50	3000	3	653.000	6051198
DRL FAM 630 V2A	630	1.50	3000	3	770.670	6051200
DRL FAM 230 V4A	230	1.50	3000	3	299.670	6051210
DRL FAM 330 V4A	330	1.50	3000	3	417.330	6051212
DRL FAM 430 V4A	430	1.50	3000	3	535.000	6051214
DRL FAM 530 V4A	530	1.50	3000	3	653.000	6051216
DRL FAM 630 V4A	630	1.50	3000	3	770.670	6051218

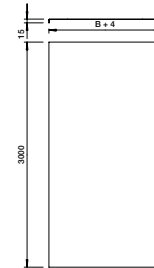
St Steel V2A Stainless steel, grade 304 V4A Stainless steel, grade 316 Ti

FT Hot-dip galvanised

Spacers must be ordered separately under article number 6065475 for cable trays and cable ladders and under article number 6065477 for wide span systems. A cover length of 3 meters requires 8 spacers.

Cover for stand-off mounting. Not suitable for the vertical ladders SLM and SLS.

When using covers outdoors, additional measures against the influence of wind must be taken.

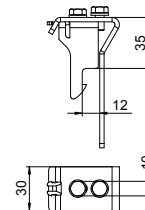


## Spacer

Type	Side height mm	Pack. pcs	Weight kg/100 pcs.	Item No.

V2A Stainless steel, grade 304

Spacers for stand off cover mounting on cable trays and cable ladders. Space height 35 mm, stainless steel 1.4301.

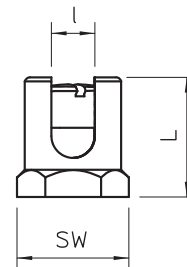


## Earthing terminal

Type	Dimen- sion L mm	Dimen- sion l mm	Cross- section mm <sup>2</sup>	SW mm	Thread	Accessories	Pack. pcs	Weight kg/100 pcs.	Item No.

CuZn Brass

Earthing terminal for fastening the equipotential bonding wire to the cable support system.



OBO Bettermann GmbH & Co. KG  
PO Box 1120  
58694 Menden, Germany

Customer Service Germany  
Tel. +49 (0)2373 89-1700  
Fax +49 (0)2373 89-1238  
E-mail: [export@obo.de](mailto:export@obo.de)

[www.obo-bettermann.com](http://www.obo-bettermann.com)

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