



# Welded cable ladders

Stably welded, extremely robust



## Pure cable ladder competence from OBO

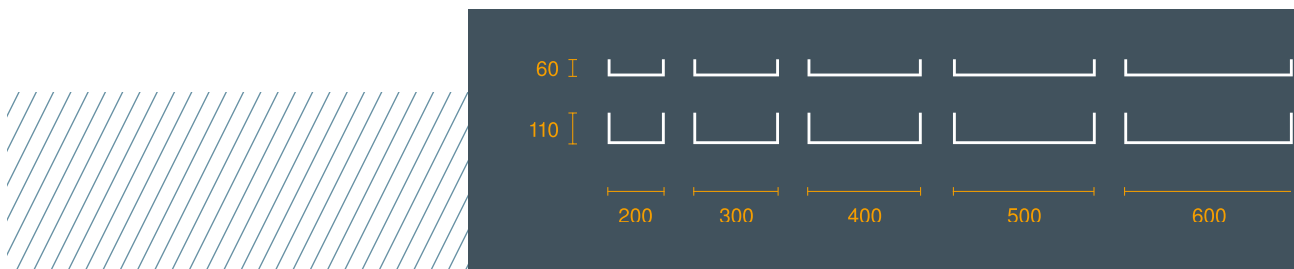
Electricians have placed their trust in OBO Bettermann cable ladders for decades. The portfolio ranges from riveted to welded cable ladders, which are used in millions of industrial systems throughout the world. Customers can always rely on the robust and easy-to-mount structure of each individual component.





## Welded cable ladders

OBO is continuously thinking ahead for its customers and has now reinvented and perfected the welded cable ladder. 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 rustproof stainless steel and powder-coated versions are available.



# High-resistance connection, sufficient installation space

The highest stability, combined with the optimum space for vertical and horizontal cable assignment – this was our target in developing the new generation of welded cable ladders. The result is certainly impressive.

## Highly resistant

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





## Practical covers

For horizontal installation, a cover on top protects 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 lower flange, the cable ladder offers additional installation space for cables.



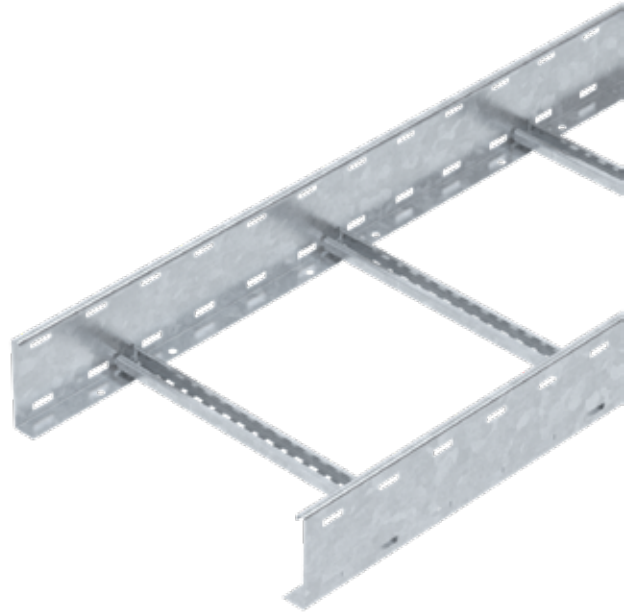
## Tested

Stability and reliable corrosion protection – even at the welding points. Both properties were tested in comprehensive testing in OBO's own BET Test Centre. Our cable ladders had no trouble in withstanding the salt spray and load tests.



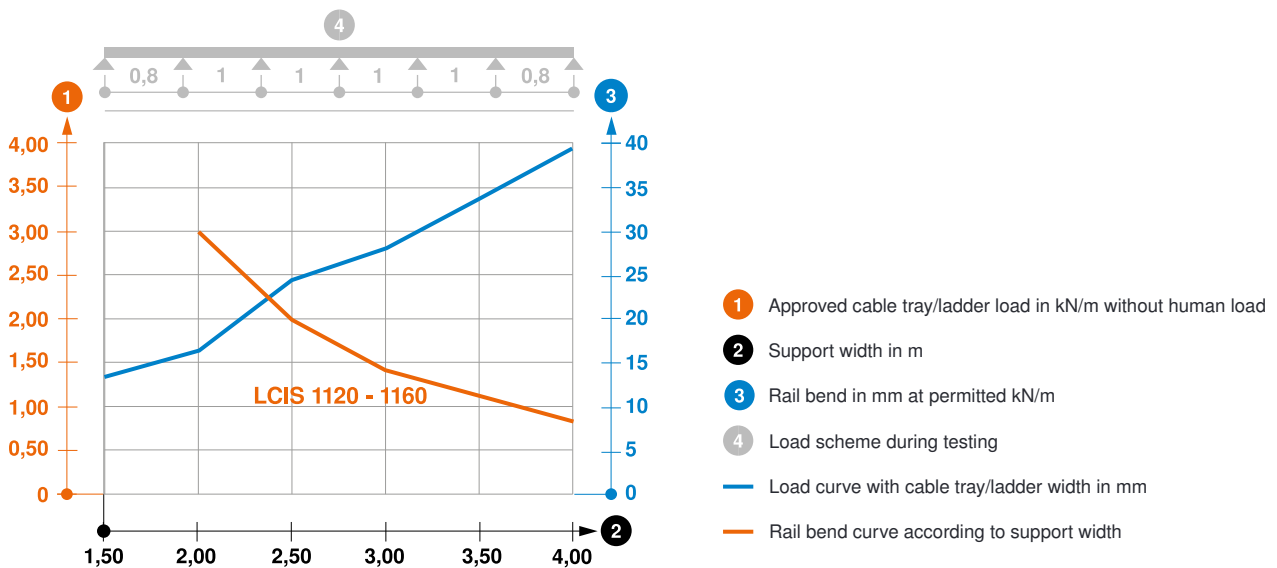
# LCIS cable ladder

Welded, light-duty cable ladder for the horizontal routing of cables according to DIN EN 61537. The light-duty cable ladder can be used in indoor and outdoor areas and is suitable for wall and ceiling mounting on support systems. Additional properties: screw connection, perforated and reinforced C-profile rung, assignable on both sides, with continuous rail perforation for connector and accessory mounting.



- Available in two different heights: 60 mm and 110 mm
- Available in lengths of up to 6 m
- Selection of various surfaces

## Load diagram, cable ladder, type LCIS 110



Height	Widths	Surfaces	Lengths
60 mm	200–600 mm	FS, FT, A2, A4	3 m, 6 m
110 mm	200–600 mm	FT	6 m

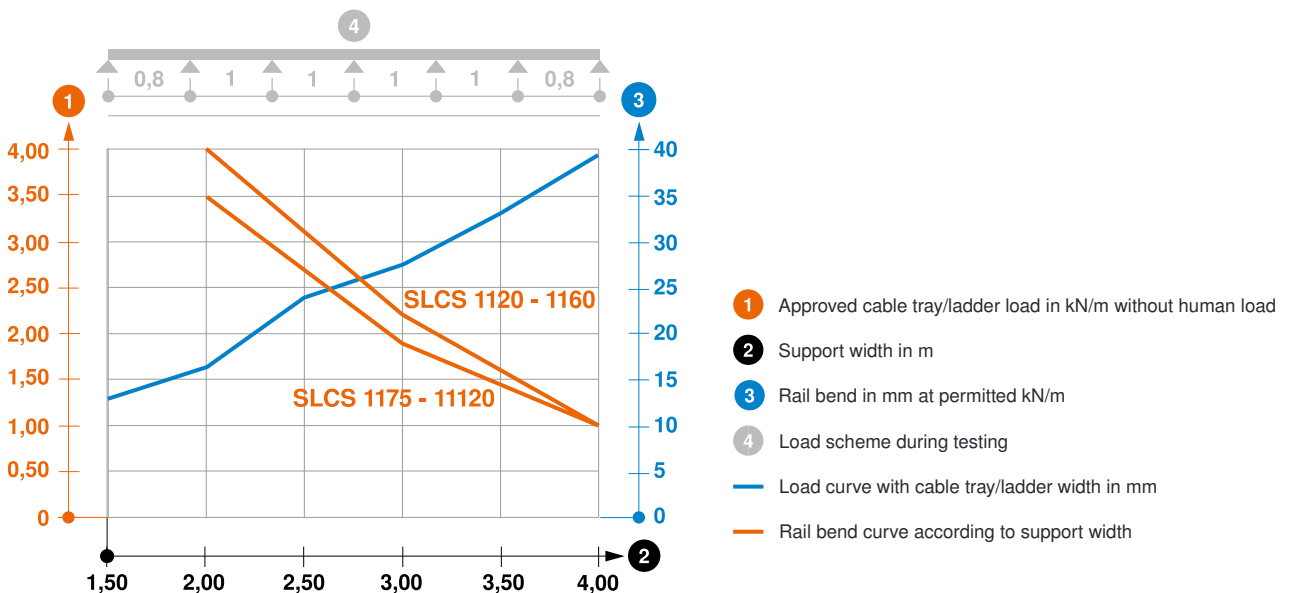
# SLCS cable ladder

Welded, heavy-duty cable ladder for the horizontal routing of cables according to DIN EN 61537. The heavy-duty cable ladder can be used in indoor and outdoor areas and is suitable for wall and ceiling mounting on support systems. Additional properties: screw connection, unperforated and reinforced C-profile rung, assignable on both sides, with continuous rail perforation for connector and accessory mounting.



- Up to 400 kg per metre
- Available in widths of up to 1,200 mm
- Additionally with particularly high corrosion protection in FTSO

## Load diagram, cable ladder, type SLCS 110



Height	Widths	Surfaces	Lengths
110 mm	200–1,200 mm	FT, FTSO	3 m

# Innovative rung

OBO has reinvented the rung and had it patented. 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. This means that smaller ladder widths are often sufficient during mounting.



## Rung – reinvented

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. to the clamp clip, type 2056).





## One rung for every eventuality

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



# Perfectly matched wall mounting

The welded cable ladder offers major benefits in horizontal and freestanding mounting. Even with wall mounting, the cable ladder presents a practical installation advantage.

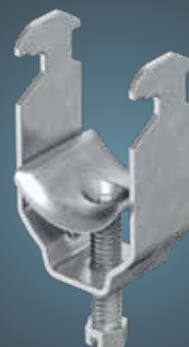
## Room to breathe

During wall mounting, the well-thought-out construction of the cable ladders offers a distance of approx. 5 millimetres between the rung and the wall. This provides space during the installation.



## Wide range of clamp clips

With a wide range of variants and sizes, OBO can offer the right clamp clip for any installation situation. An example: In areas with special requirements, such as those in industrial environments, clamp clips with a metal trough can be used.





# Perfectly matched fittings

The fittings of the cable ladder system are the next 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.

## 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 clamp clips.

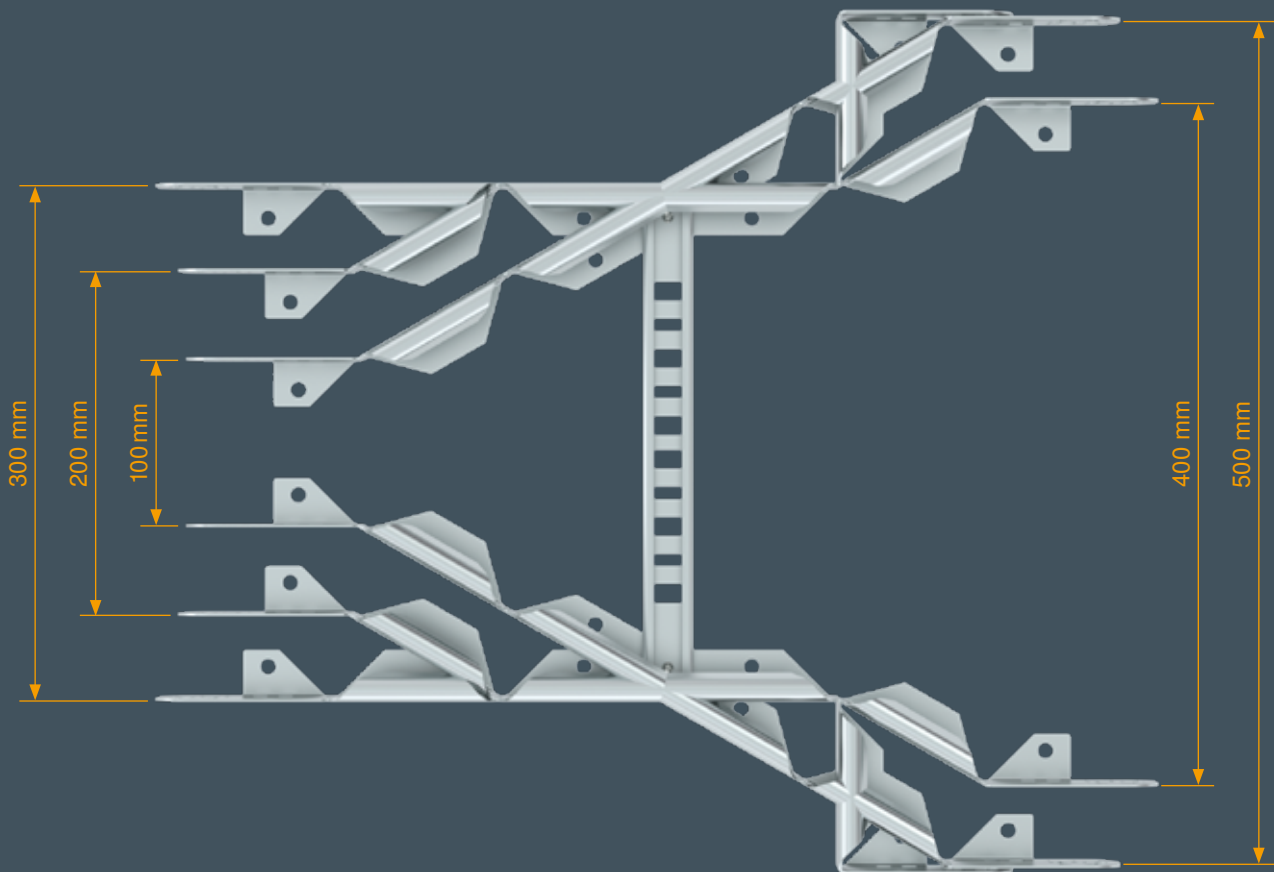


## Simple handling

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

# One for all – the multifunctional connector

With the component from OBO, cable ladders can be simply interconnected, whilst also flexibly implementing changes in shape and direction.

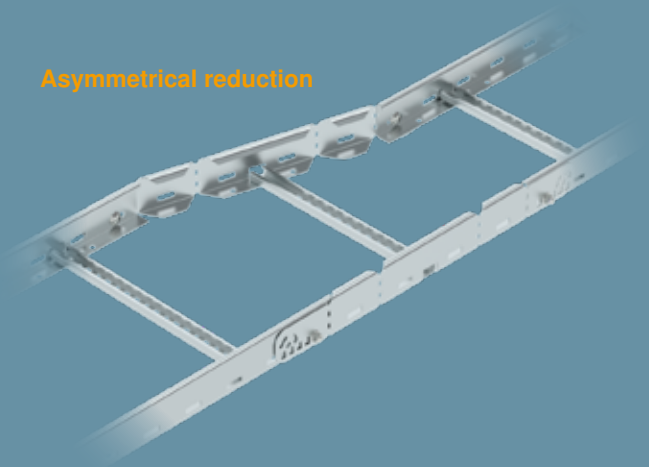




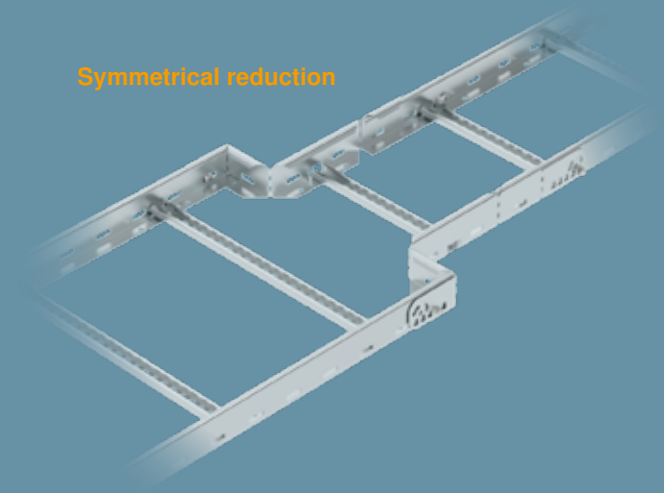
## Extraordinarily flexible

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.

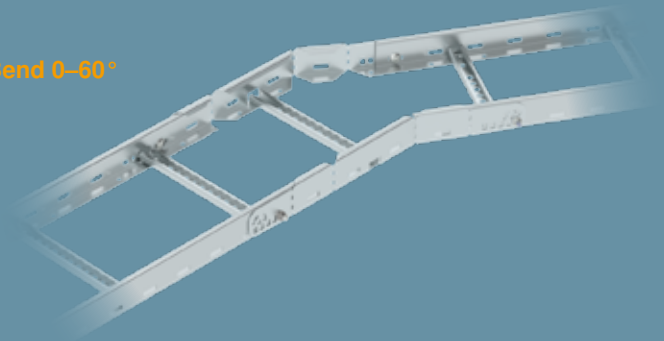
Asymmetrical reduction



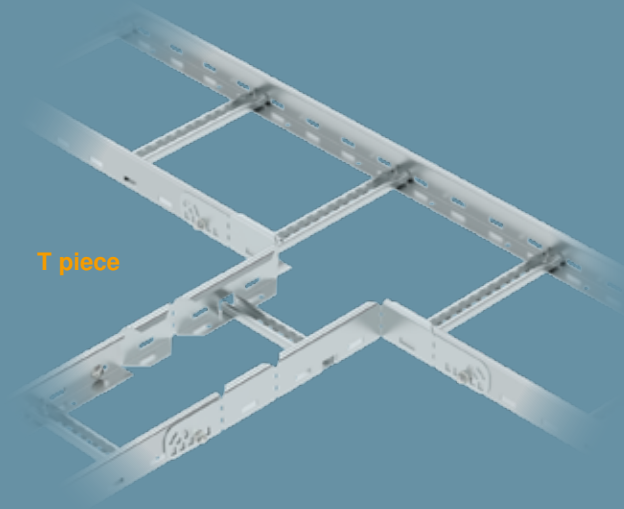
Symmetrical reduction



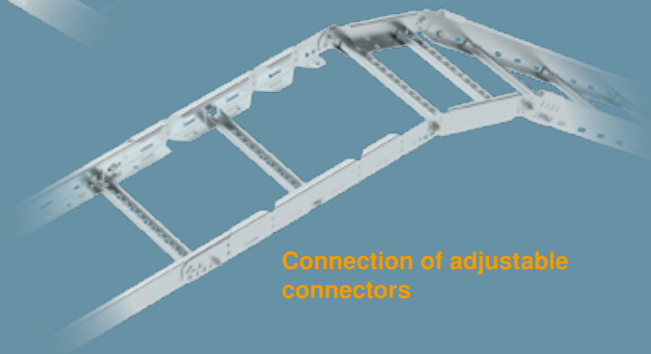
Bend 0–60°



T piece

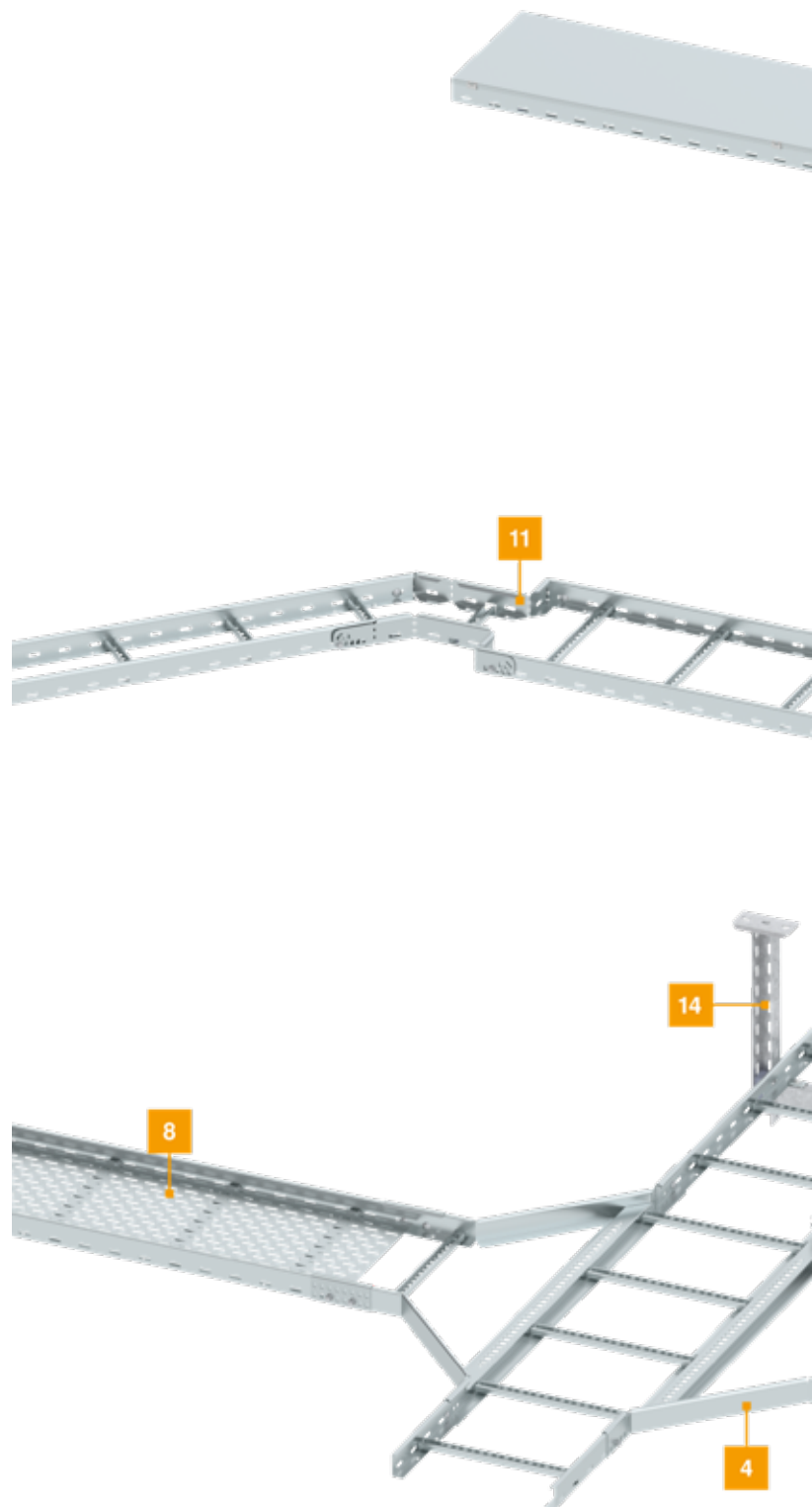


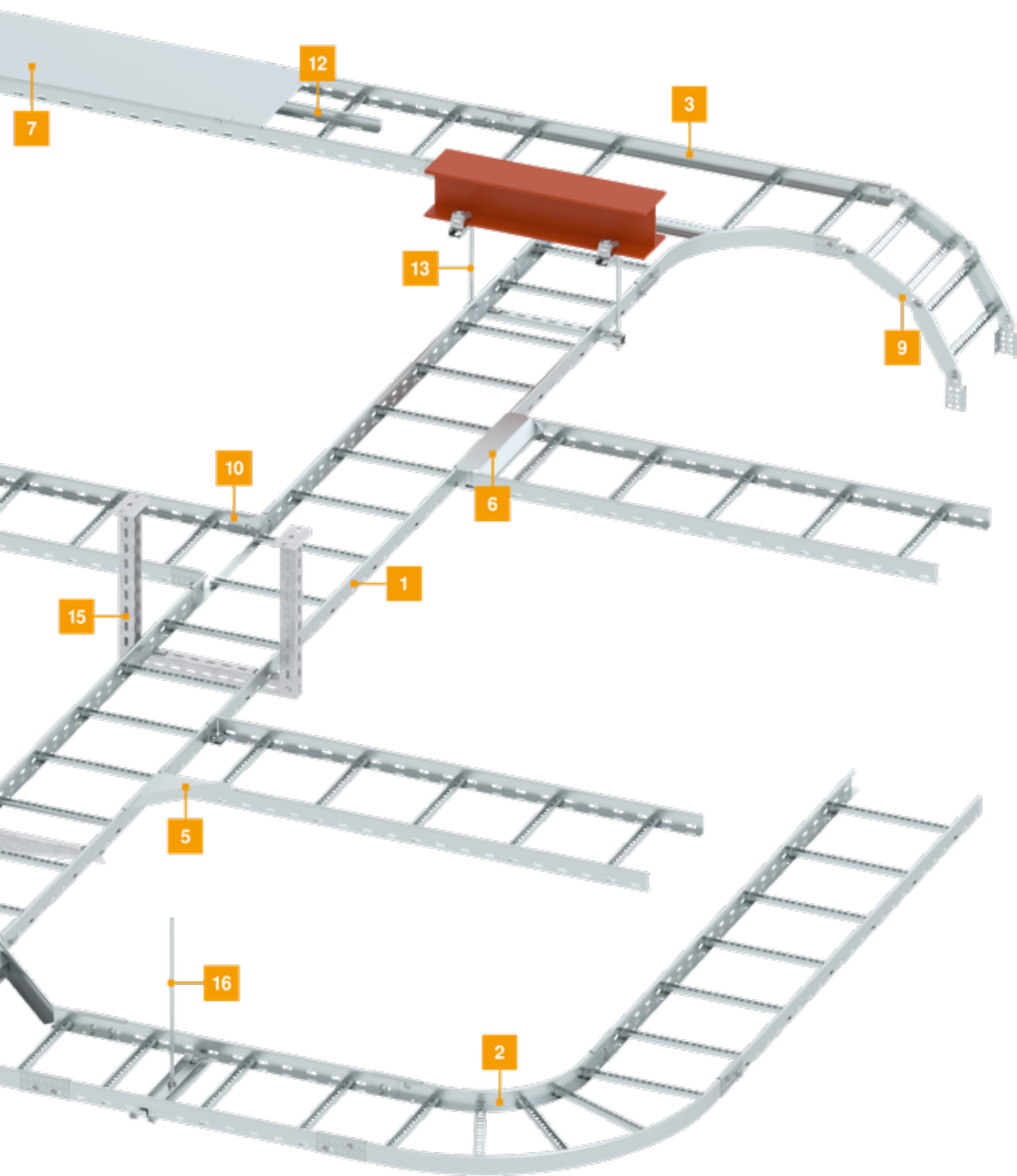
Connection of adjustable connectors



# Installation principle: welded cable ladders

- 1 Cable ladders
- 2 90° bend
- 3 T piece
- 4 Add-on tee
- 5 Connection piece
- 6 Support plate
- 7 Cover
- 8 Floor plate
- 9 Adjustable bend element
- 10 Angle connector
- 11 Multifunctional connector
- 12 Barrier strip
- 13 Pendulum suspension with threaded rods
- 14 Suspension with U supports
- 15 Suspended support + bracket
- 16 Centre suspension of threaded rod







# Tested safety

## The BET Test Centre

In the in-house BET Test Centre, OBO simulates the loads which the cable ladder system must withstand continuously. 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. In other words, 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. Here, a safe working load (SWL) is proven, which represents the reliable stability of the systems.



## Cable ladder LCIS 60, 3 m C30

St FS

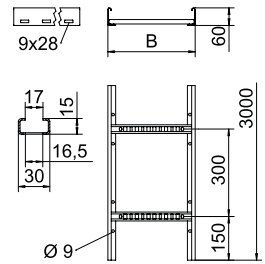


Type	Width mm	Pack m	Weight kg/100 m	Item no.
LCIS 620 3 FS	200	3	266.670	6209610
LCIS 630 3 FS	300	3	288.670	6209612
LCIS 640 3 FS	400	3	310.340	6209614
LCIS 650 3 FS	500	3	332.340	6209616
LCIS 660 3 FS	600	3	354.000	6209618

Cable ladder with a 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 hold-down clamps, type LKS 40. The slot dimension of the rung is 16.5 mm and the appropriate clamp clip is type 2056.

Type	Length mm	Dim. B mm	Rail thickness mm	Usable 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

### Dimensions

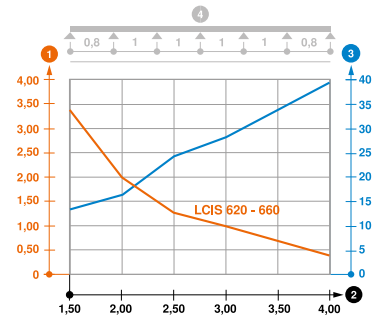


	1.5 m	2.0 m	2.5 m	3.0 m	4.0 m
	kN/m	kN/m	kN/m	kN/m	kN/m
LCIS 620 3 FS	3.3	2	1.3	1	0.4
LCIS 630 3 FS	3.3	2	1.3	1	0.4
LCIS 640 3 FS	3.3	2	1.3	1	0.4
LCIS 650 3 FS	3.3	2	1.3	1	0.4
LCIS 660 3 FS	3.3	2	1.3	1	0.4

### Load

#### 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



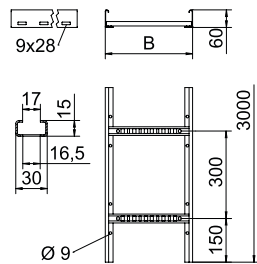




Cable ladder with a 60 mm side height with welded C30 profile rungs which are open in an upwards direction. Rolled side rail for reinforcement and as edge protection. Fastening to the bracket takes place using hold-down clamps, type LKS 40. The slot dimension of the rung is 16.5 mm and the appropriate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

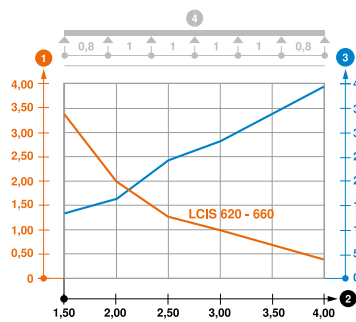
Type	Width mm	Pack m	Weight kg/100 m	Item no.
LCIS 620 3 FT	200	3	283.000	6209721
LCIS 630 3 FT	300	3	306.000	6209723
LCIS 640 3 FT	400	3	329.340	6209725
LCIS 650 3 FT	500	3	352.340	6209727
LCIS 660 3 FT	600	3	375.340	6209729

Dimensions



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

Load



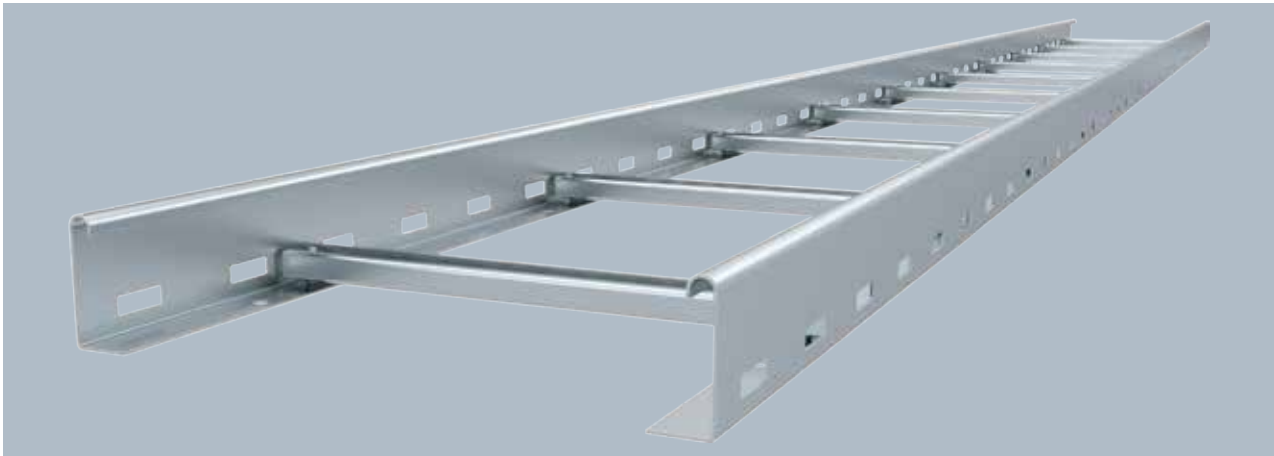
	1.5 m kN/m	2.0 m kN/m	2.5 m kN/m	3.0 m kN/m	4.0 m kN/m
LCIS 620 3 FT	3.3	2	1.3	1	0.4
LCIS 630 3 FT	3.3	2	1.3	1	0.4
LCIS 640 3 FT	3.3	2	1.3	1	0.4
LCIS 650 3 FT	3.3	2	1.3	1	0.4
LCIS 660 3 FT	3.3	2	1.3	1	0.4

Load diagram LCIS 60

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## Cable ladder LCIS 60, 6 m C30

St FS

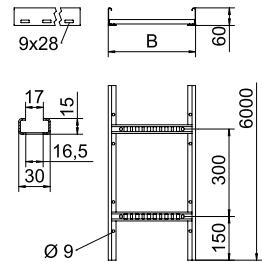


Type	Width mm	Pack m	Weight kg/100 m	Item no.
LCIS 620 6 FS	200	6	267.170	6209630
LCIS 630 6 FS	300	6	288.840	6209632
LCIS 640 6 FS	400	6	310.670	6209634
LCIS 650 6 FS	500	6	332.340	6209636
LCIS 660 6 FS	600	6	354.000	6209638

Cable ladder with a 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 hold-down clamps, type LKS 40. The slot dimension of the rung is 16.5 mm and the appropriate clamp clip is type 2056.

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

### Dimensions

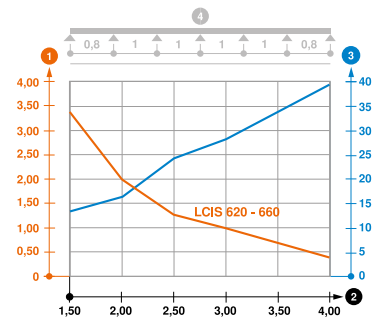


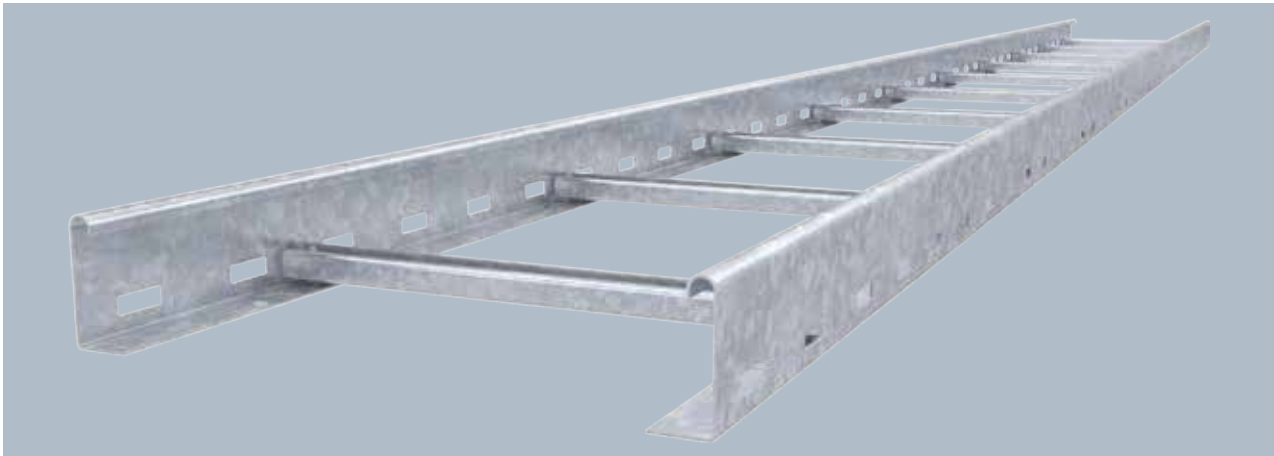
	1.5 m	2.0 m	2.5 m	3.0 m	4.0 m
	kN/m	kN/m	kN/m	kN/m	kN/m
LCIS 620 6 FS	3.3	2	1.3	1	0.4
LCIS 630 6 FS	3.3	2	1.3	1	0.4
LCIS 640 6 FS	3.3	2	1.3	1	0.4
LCIS 650 6 FS	3.3	2	1.3	1	0.4
LCIS 660 6 FS	3.3	2	1.3	1	0.4

### Load

#### Load diagram LCIS 60

- ① Permitted cable tray/ladder load in kN/m without man load
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- Strut bend curve according to support width

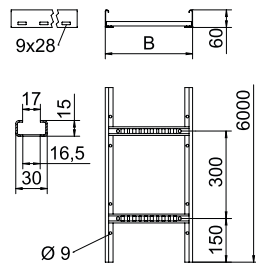




Cable ladder with a 60 mm side height with welded C30 profile rungs which are open in an upwards direction. Rolled side rail for reinforcement and as edge protection. Fastening to the bracket takes place using hold-down clamps, type LKS 40. The slot dimension of the rung is 16.5 mm and the appropriate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

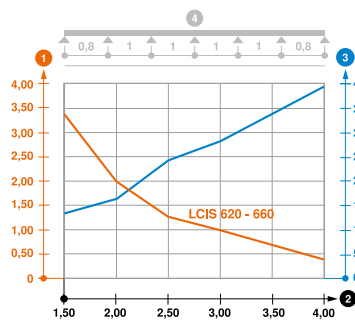
Type	Width mm	Pack m	Weight kg/100 m	Item no.
LCIS 620 6 FT	200	6	283.170	6209643
LCIS 630 6 FT	300	6	306.170	6209645
LCIS 640 6 FT	400	6	329.170	6209647
LCIS 650 6 FT	500	6	352.340	6209649
LCIS 660 6 FT	600	6	375.340	6209651

Dimensions



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

Load



	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 FT	3.3	2	1.3	1	0.4
LCIS 630 6 FT	3.3	2	1.3	1	0.4
LCIS 640 6 FT	3.3	2	1.3	1	0.4
LCIS 650 6 FT	3.3	2	1.3	1	0.4
LCIS 660 6 FT	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
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- 4 Load scheme during testing
- Load curve with cable tray/ladder width in mm
- Strut bend curve according to support width

## Cable ladder LCIS 60, 6 m C30

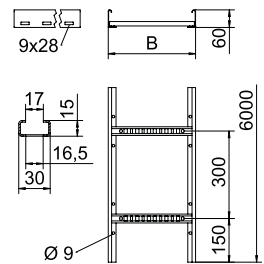


Type	Width mm	Pack m	Weight kg/100 m	Item no.
LCIS 620 6 A2	200	6	267.000	6207252
LCIS 630 6 A2	300	6	288.840	6207254
LCIS 640 6 A2	400	6	310.500	6207256
LCIS 650 6 A2	500	6	332.340	6207258
LCIS 660 6 A2	600	6	354.000	6207260

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 clamp clip is type 2056.

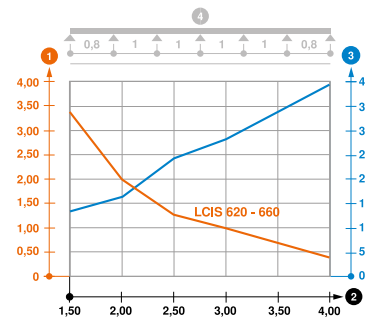
Type	Length mm	Dim. B mm	Rail thick- ness mm	Usable cross- section cm <sup>2</sup>	Rung spacing mm
LCIS 620 6 A2	6000	200	1.5	80	300
LCIS 630 6 A2	6000	300	1.5	120	300
LCIS 640 6 A2	6000	400	1.5	160	300
LCIS 650 6 A2	6000	500	1.5	200	300
LCIS 660 6 A2	6000	600	1.5	240	300

### Dimensions



	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



### Load diagram LCIS 60

- ① Permitted cable tray/ladder load in kN/m without man load
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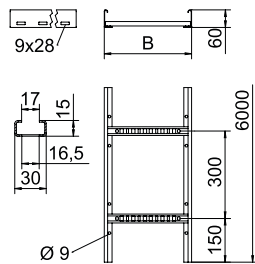




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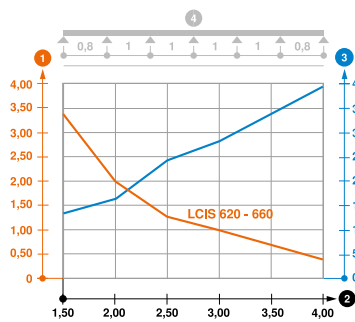
Type	Width mm	Pack m	Weight kg/100 m	Item no.
LCIS 620 6 A4	200	6	267.000	6207202
LCIS 630 6 A4	300	6	288.833	6207204
LCIS 640 6 A4	400	6	310.500	6207206
LCIS 650 6 A4	500	6	332.340	6207208
LCIS 660 6 A4	600	6	354.000	6207210

Dimensions



Type	Length mm	Dim. B mm	Rail thickness mm	Usable cross-section cm <sup>2</sup>	Rung spacing mm
LCIS 620 6 A4	6000	200	1.5	80	300
LCIS 630 6 A4	6000	300	1.5	120	300
LCIS 640 6 A4	6000	400	1.5	160	300
LCIS 650 6 A4	6000	500	1.5	200	300
LCIS 660 6 A4	6000	600	1.5	240	300

Load

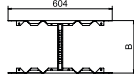


	1.5 m kN/m	2.0 m kN/m	2.5 m kN/m	3.0 m kN/m	4.0 m kN/m
LCIS 620 6 A4	3.3	2	1.3	1	0.4
LCIS 630 6 A4	3.3	2	1.3	1	0.4
LCIS 640 6 A4	3.3	2	1.3	1	0.4
LCIS 650 6 A4	3.3	2	1.3	1	0.4
LCIS 660 6 A4	3.3	2	1.3	1	0.4

Load diagram LCIS 60

- 1 Permitted cable tray/ladder load in kN/m without man load
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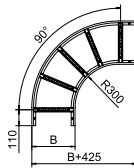
## Multifunctional connector 60



Type	Dim. B mm	Side height mm	Metal thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
LMFV 620 FS	200	60	1.50	1	123.200	6225710
LMFV 630 FS	300	60	1.50	1	129.700	6225712
LMFV 640 FS	400	60	1.50	1	136.200	6225714
LMFV 650 FS	500	60	1.50	1	142.800	6225716
LMFV 660 FS	600	60	1.50	1	149.300	6225718
LMFV 620 FT	200	60	1.50	1	130.600	6225730
LMFV 630 FT	300	60	1.50	1	137.500	6225732
LMFV 640 FT	400	60	1.50	1	144.400	6225734
LMFV 650 FT	500	60	1.50	1	151.300	6225736
LMFV 660 FT	600	60	1.50	1	158.200	6225738

Multifunctional connector for joining cable ladders with a side height of 60 mm. Symmetrical and asymmetrical reductions, infinitely-adjustable bends between 0–60° and add-on tees can be created.

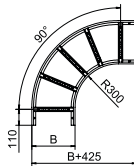
## 90° bend 60



Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	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	458.600	6225048
LB 90 660 R3 FS	600	1.5	1	524.600	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	492.600	6225068
LB 90 660 R3 FT	600	1.5	1	562.700	6225070

90° bend, horizontal, with welded rung for all cable ladder types of 60 mm side height. Connectors should be ordered separately and in the appropriate quantity.

## 90° bend 60



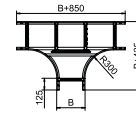
Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
LB 90 620 R3 A2	200	1.5	1	257.800	6225082
LB 90 630 R3 A2	300	1.5	1	322.300	6225084
LB 90 640 R3 A2	400	1.5	1	373.400	6225086
LB 90 650 R3 A2	500	1.5	1	458.600	6225088
LB 90 660 R3 A2	600	1.5	1	524.600	6225090
LB 90 620 R3 A4	200	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	458.600	6225108
LB 90 660 R3 A4	600	1.5	1	524.600	6225110

90° bend, horizontal, with welded rung for all cable ladder types of 60 mm side height. Connectors should be ordered separately and in the appropriate quantity.

St FS FT

## T piece 60

Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	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

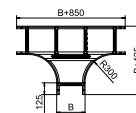


T piece, horizontal, with welded rung for all cable ladder types of 60 mm side height.  
Connectors should be ordered separately and in the appropriate quantity.

A2 A4 2B

## T piece 60

Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
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

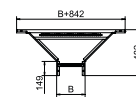


T piece, horizontal, with welded rung for all cable ladder types of 60 mm side height.  
Connectors should be ordered separately and in the appropriate quantity.

A2 A4 2B

## Add-on tee 60

Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
LAA 620 R3 A2	200	1.5	1	304.000	6225882
LAA 630 R3 A2	300	1.5	1	326.000	6225884
LAA 640 R3 A2	400	1.5	1	348.000	6225886
LAA 650 R3 A2	500	1.5	1	371.000	6225888
LAA 660 R3 A2	600	1.5	1	393.000	6225890
LAA 620 R3 A4	200	1.5	1	304.000	6225894
LAA 630 R3 A4	300	1.5	1	326.000	6225896
LAA 640 R3 A4	400	1.5	1	348.000	6225898
LAA 650 R3 A4	500	1.5	1	371.000	6225900
LAA 660 R3 A4	600	1.5	1	393.000	6225902



Mounting/branch with welded rung for use in the cable ladder types with a side height of 60 mm.  
Connectors should be ordered separately and in the appropriate quantity.





A2 VA 2B

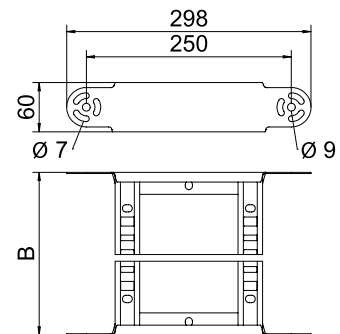
## Adjustable bend element 60

Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
LGBE 620 A2	200	1.5	1	84.000	6225460
LGBE 630 A2	300	1.5	1	97.000	6225462
LGBE 640 A2	400	1.5	1	109.900	6225464
LGBE 650 A2	500	1.5	1	122.900	6225466
LGBE 660 A2	600	1.5	1	135.900	6225468
LGBE 620 A4	200	1.5	1	84.000	6225480
LGBE 630 A4	300	1.5	1	97.000	6225482
LGBE 640 A4	400	1.5	1	109.900	6225484
LGBE 650 A4	500	1.5	1	122.900	6225486
LGBE 660 A4	600	1.5	1	135.900	6225488



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

### Dimensions

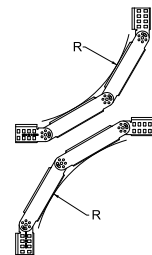


### Radius table

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

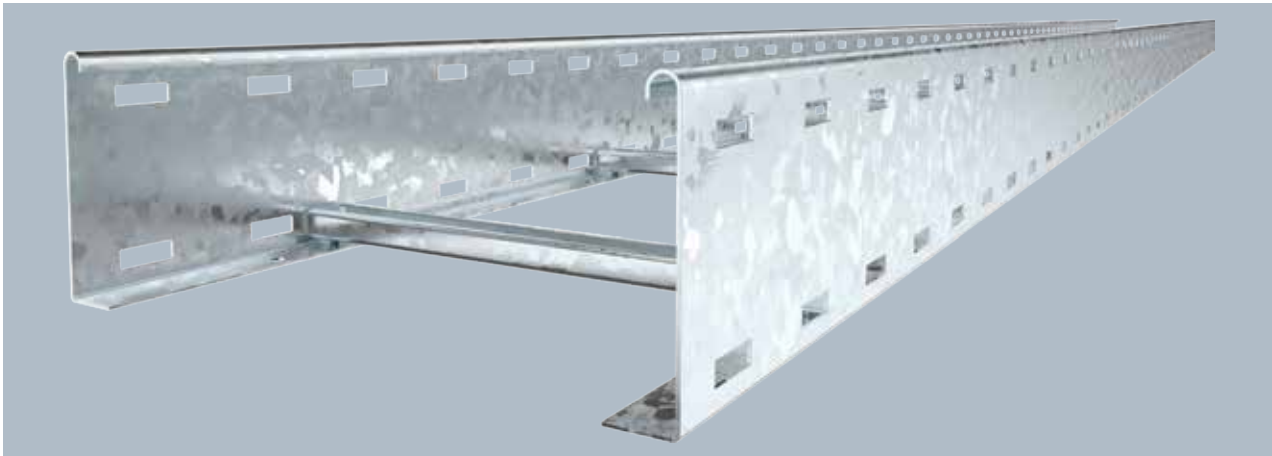
Please order two LGVG 60 adjustable connectors separately.

### Installation



## Cable ladder LCIS 110, 6 m C30

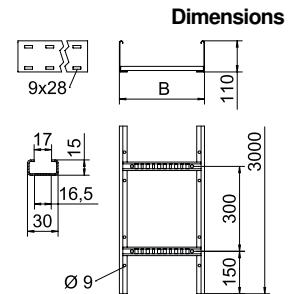
St FT



Type	Width mm	Pack m	Weight kg/100 m	Item no.
LCIS 1120 6 FT	200	6	399.200	6209820
LCIS 1130 6 FT	300	6	422.534	6209822
LCIS 1140 6 FT	400	6	446.200	6209824
LCIS 1145 6 FT	450	6	459.534	6209825
LCIS 1150 6 FT	500	6	469.867	6209826
LCIS 1160 6 FT	600	6	491.670	6209828

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 clamp clip is type 2056.

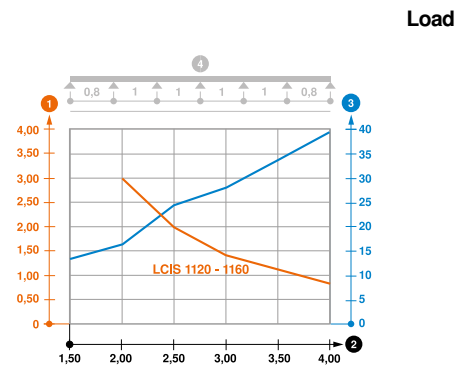
Type	Length mm	Dim. B mm	Rail thickness mm	Usable cross-section cm <sup>2</sup>	Rung spacing mm
LCIS 1120 6 FT	6000	200	1.5	180	300
LCIS 1130 6 FT	6000	300	1.5	270	300
LCIS 1140 6 FT	6000	400	1.5	360	300
LCIS 1145 6 FT	6000	450	1.5	405	300
LCIS 1150 6 FT	6000	500	1.5	450	300
LCIS 1160 6 FT	6000	600	1.5	540	300

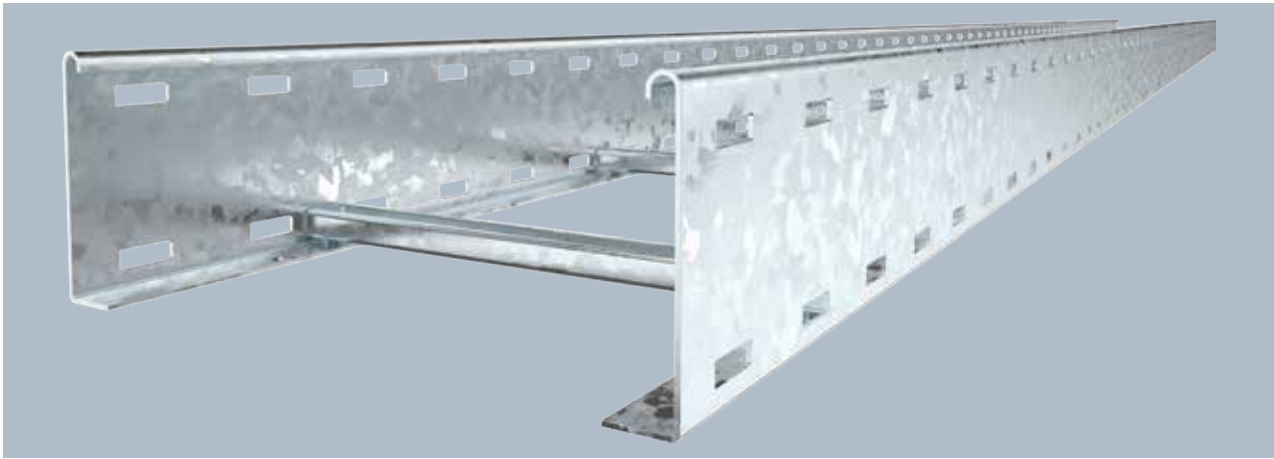


	2.0 m kN/m	2.5 m kN/m	3.0 m kN/m	4.0 m kN/m
LCIS 1120 6 FT	3	2	1.4	0.8
LCIS 1130 6 FT	3	2	1.4	0.8
LCIS 1140 6 FT	3	2	1.4	0.8
LCIS 1145 6 FT	3	2	1.4	0.8
LCIS 1150 6 FT	3	2	1.4	0.8
LCIS 1160 6 FT	3	2	1.4	0.8

### 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

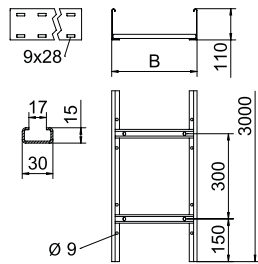




Cable ladder with 110 mm side height with welded C30 profile rungs which are open in an upwards direction. Rolled side rail for reinforcement and as edge protection. Fastening to the bracket takes place using clamps, type LKS 40. The slot dimension of the frame is 16.5 mm and the appropriate clamp clip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

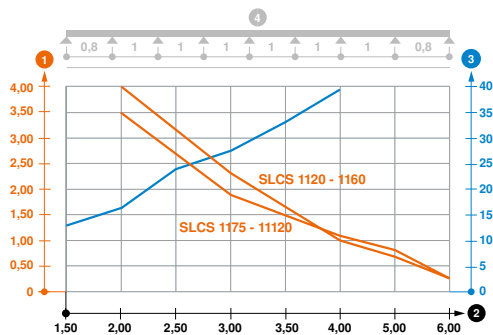
Type	Width mm	Pack m	Weight kg/100 m	Item no.
SLCS 1120 3 FT	200	3	521.800	6207302
SLCS 1130 3 FT	300	3	555.800	6207304
SLCS 1140 3 FT	400	3	589.467	6207306
SLCS 1145 3 FT	450	3	612.800	6207308
SLCS 1150 3 FT	500	3	623.133	6207310
SLCS 1160 3 FT	600	3	656.800	6207312
SLCS 1175 3 FT	750	3	707.467	6207314
SLCS 1180 3 FT	800	3	724.133	6207316
SLCS 1190 3 FT	900	3	758.133	6207318
SLCS 11100 3 FT	1000	3	791.800	6207320
SLCS 11120 3 FT	1200	3	859.133	6207322

Dimensions



Type	Length mm	Dim. B mm	Rail thick- ness mm	Usable 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	1100	2	1180	300

Load

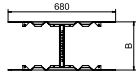


	2.0 m kN/m	3.0 m kN/m	4.0 m kN/m	5.0 m kN/m	6.0 m kN/m
SLCS 1120 3 FT	4	2.3	1	0.7	0.25
SLCS 1130 3 FT	4	2.3	1	0.7	0.25
SLCS 1140 3 FT	4	2.3	1	0.7	0.25
SLCS 1145 3 FT	4	2.3	1	0.7	0.25
SLCS 1150 3 FT	4	2.3	1	0.7	0.25
SLCS 1160 3 FT	4	2.3	1	0.7	0.25
SLCS 1175 3 FT	3.5	1.9	1	0.8	0.25
SLCS 1180 3 FT	3.5	1.9	1	0.8	0.25
SLCS 1190 3 FT	3.5	1.9	1	0.8	0.25
SLCS 11100 3 FT	3.5	1.9	1	0.8	0.25
SLCS 11120 3 FT	3.5	1.9	1	0.8	0.25

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

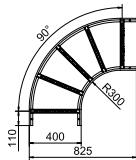
Multifunctional connector 110



Type	Dim. B mm	Side height mm	Metal thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
LMFV 1120 FS	200	110	1.50	1	208.100	6225750
LMFV 1130 FS	300	110	1.50	1	214.600	6225752
LMFV 1140 FS	400	110	1.50	1	221.100	6225754
LMFV 1150 FS	500	110	1.50	1	227.600	6225756
LMFV 1160 FS	600	110	1.50	1	234.000	6225758
LMFV 1120 FT	200	110	1.50	1	221.300	6225770
LMFV 1130 FT	300	110	1.50	1	228.200	6225772
LMFV 1140 FT	400	110	1.50	1	235.100	6225774
LMFV 1145 FT	450	110	1.50	1	238.500	6225776
LMFV 1150 FT	500	110	1.50	1	241.900	6225778
LMFV 1160 FT	600	110	1.50	1	248.800	6225780

Multifunctional connector for joining cable ladders with a side height of 110 mm. Symmetrical and asymmetrical reductions, infinitely-adjustable bends between 0–60° and add-on tees can be created.

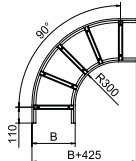
90° bend 110



Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
LB 90 1120 R3 FS	200	1.5	1	355.300	6225122
LB 90 1130 R3 FS	300	1.5	1	428.300	6225124
LB 90 1140 R3 FS	400	1.5	1	488.000	6225126
LB 90 1150 R3 FS	500	1.5	1	580.400	6225128
LB 90 1160 R3 FS	600	1.5	1	646.500	6225130
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

90° bend, horizontal, with welded rung for all cable ladder types of 110 mm side height. Connectors should be ordered separately and in the appropriate quantity.

90° bend 110



Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	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 1150R3 FT	500	2	1	809.600	6225180
SLB 90 1160R3 FT	600	2	1	919.200	6225182

90° bend, horizontal, with welded rung for all cable ladder types of 110 mm side height. Connectors should be ordered separately and in the appropriate quantity.



St FT

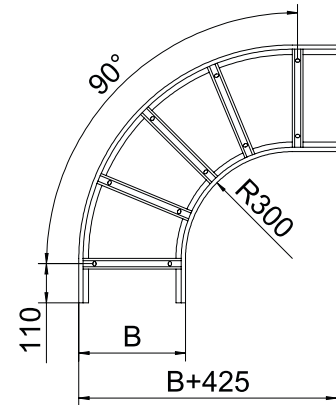
## 90° bend 110

Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
SLB 90 1145R3 FT	450	2	1	720.700	6225178
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



90° bend, horizontal, with welded rung for all cable ladder types of 110 mm side height.  
Connectors should be ordered separately and in the appropriate quantity.

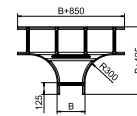
### Dimensions



St FS FT

## T piece 110

Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
LT 1120 R3 FS	200	1.5	1	611.800	6225290
LT 1130 R3 FS	300	1.5	1	680.000	6225292
LT 1140 R3 FS	400	1.5	1	774.500	6225294
LT 1150 R3 FS	500	1.5	1	849.300	6225296
LT 1160 R3 FS	600	1.5	1	924.000	6225298
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

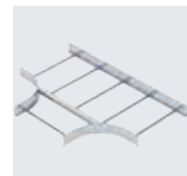
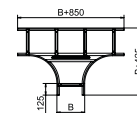


T piece, horizontal, with welded rung for all cable ladder types of 110 mm side height.  
Connectors should be ordered separately and in the appropriate quantity.

St FT

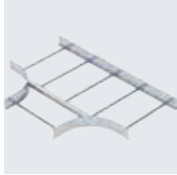
## T piece 110

Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	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 1150 R3 FT	500	2	1	1,200.500	6225358
SLT 1160 R3 FT	600	2	1	1,251.100	6225360



T piece, horizontal, with welded rung for all cable ladder types of 110 mm side height.  
Connectors should be ordered separately and in the appropriate quantity.

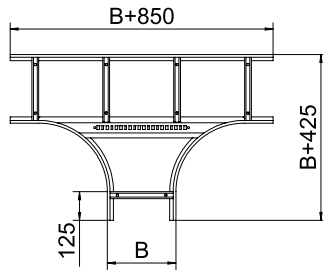
## T piece 110



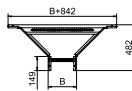
Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
SLT 1145 R3 FT	450	2	1	1,150.300	6225356
SLT 1175 R3 FT	750	2	1	1,524.900	6225362
SLT 1180 R3 FT	800	2	1	1,579.500	6225364
SLT 1190 R3 FT	900	2	1	1,690.600	6225366
SLT 11100 R3 FT	1000	2	1	1,801.700	6225368
SLT 11120 R3 FT	1200	2	1	2,092.200	6225372

T piece, horizontal, with welded rung for all cable ladder types of 110 mm side height. Connectors should be ordered separately and in the appropriate quantity.

### Dimensions



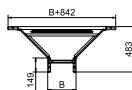
## Add-on tee 110



Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
LAA 1120 R3 FS	200	1.5	1	389.000	6225910
LAA 1130 R3 FS	300	1.5	1	411.000	6225912
LAA 1140 R3 FS	400	1.5	1	434.000	6225914
LAA 1150 R3 FS	500	1.5	1	457.000	6225916
LAA 1160 R3 FS	600	1.5	1	480.000	6225918
LAA 1120 R3 FT	200	1.5	1	401.000	6225930
LAA 1130 R3 FT	300	1.5	1	426.000	6225932
LAA 1140 R3 FT	400	1.5	1	449.000	6225934
LAA 1145 R3 FT	450	1.5	1	461.000	6225936
LAA 1150 R3 FT	500	1.5	1	472.000	6225938
LAA 1160 R3 FT	600	1.5	1	497.000	6225940

Add-on tee with welded rung for all cable ladder types of 110 mm side height. Connectors should be ordered separately and in the appropriate quantity.

## Add-on tee 110



Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
SLAA 1120 R3 FT	200	2	1	524.000	6225950
SLAA 1130 R3 FT	300	2	1	545.000	6225952
SLAA 1140 R3 FT	400	2	1	587.000	6225954
SLAA 1150 R3 FT	500	2	1	617.000	6225958
SLAA 1160 R3 FT	600	2	1	649.000	6225960
SLAA 1145 R3 FT	450	2	1	602.000	6225956
SLAA 1175 R3 FT	750	2	1	696.000	6225962
SLAA 1180 R3 FT	800	2	1	711.000	6225964
SLAA 1190 R3 FT	900	2	1	743.000	6225966
SLAA 11100 R3 FT	1000	2	1	774.000	6225968
SLAA 11120 R3 FT	1200	2	1	837.000	6225970

Add-on tee with welded rung for all cable ladder types of 110 mm side height. Connectors should be ordered separately and in the appropriate quantity.

St FS FT

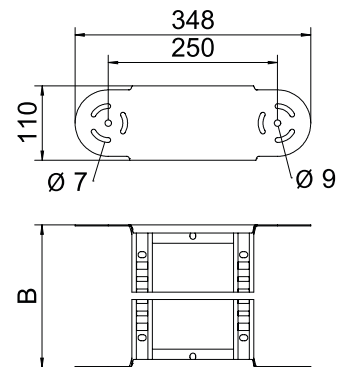
Adjustable bend element 110

Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
LGBE 1120 FS	200	1.5	1	128.000	6225490
LGBE 1130 FS	300	1.5	1	142.100	6225492
LGBE 1140 FS	400	1.5	1	155.300	6225494
LGBE 1150 FS	500	1.5	1	168.600	6225496
LGBE 1160 FS	600	1.5	1	181.800	6225498
LGBE 1120 FT	200	1.5	1	136.900	6225510
LGBE 1130 FT	300	1.5	1	150.900	6225512
LGBE 1140 FT	400	1.5	1	165.100	6225514
LGBE 1145 FT	450	1.5	1	173.100	6225516
LGBE 1150 FT	500	1.5	1	179.300	6225518
LGBE 1160 FT	600	1.5	1	193.300	6225520



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

Dimensions

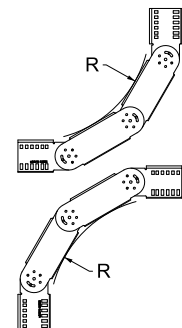


Radius table

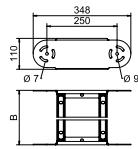
Quantity of elements	Radius
1	approx. 300 mm
2	approx. 450 mm
3	approx. 600 mm
4	approx. 750 mm
5	approx. 900 mm

Please order two LGVG 110 articulated connectors separately.

Installation



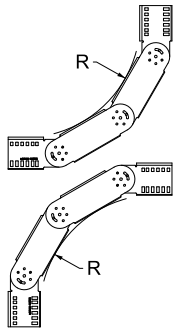
Adjustable bend element 110



Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	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 1150 FT	500	2	1	229.600	6225538
SLGBE 1160 FT	600	2	1	248.600	6225540

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

Installation

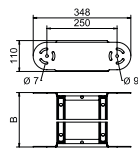


Radius table

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.

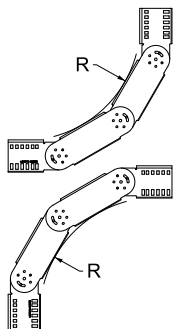
Adjustable bend element 110



Type	Dim. B mm	Rail thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
SLGBE 1145 FT	450	2	1	220.200	6225536
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

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

Installation

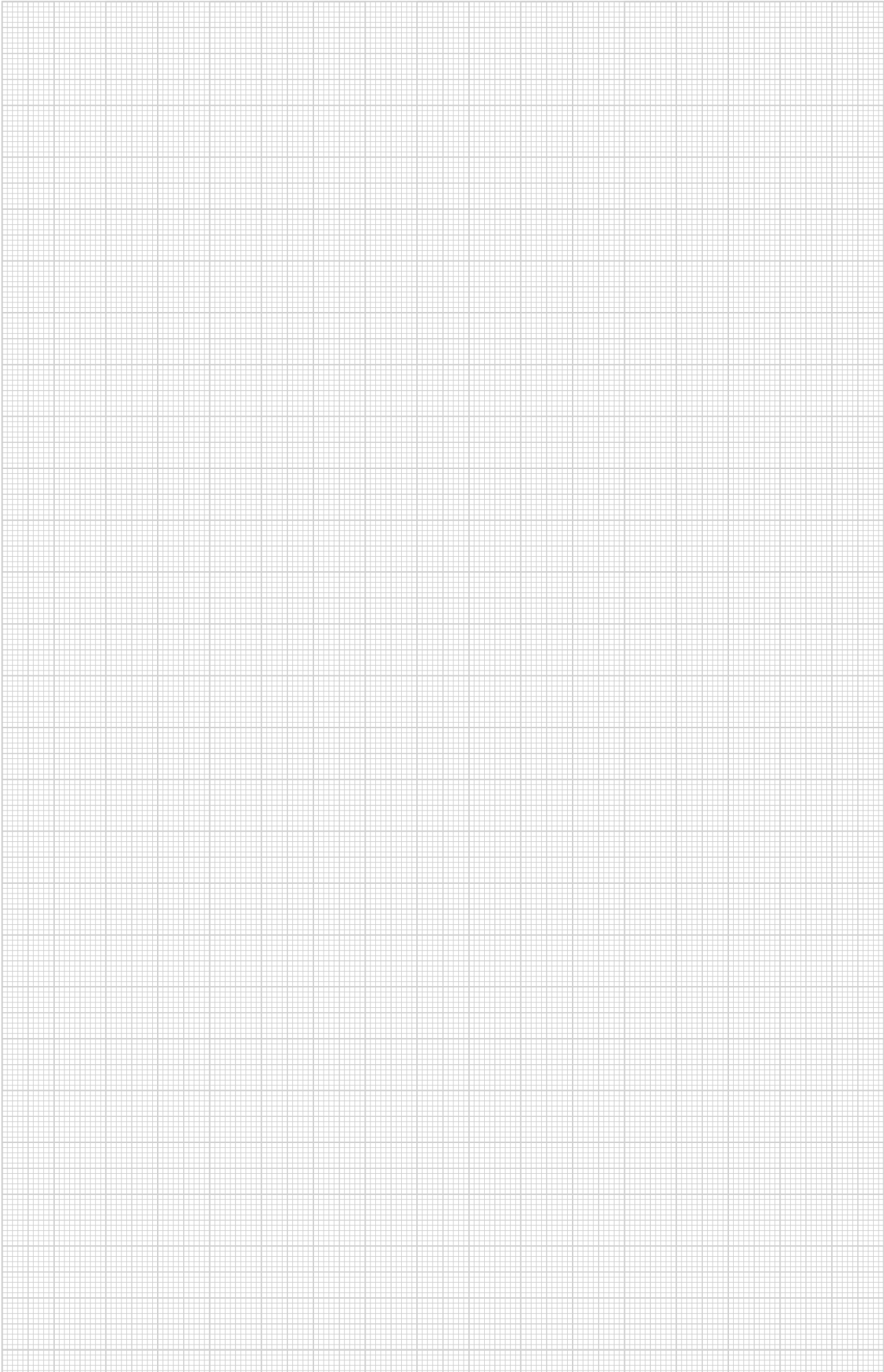


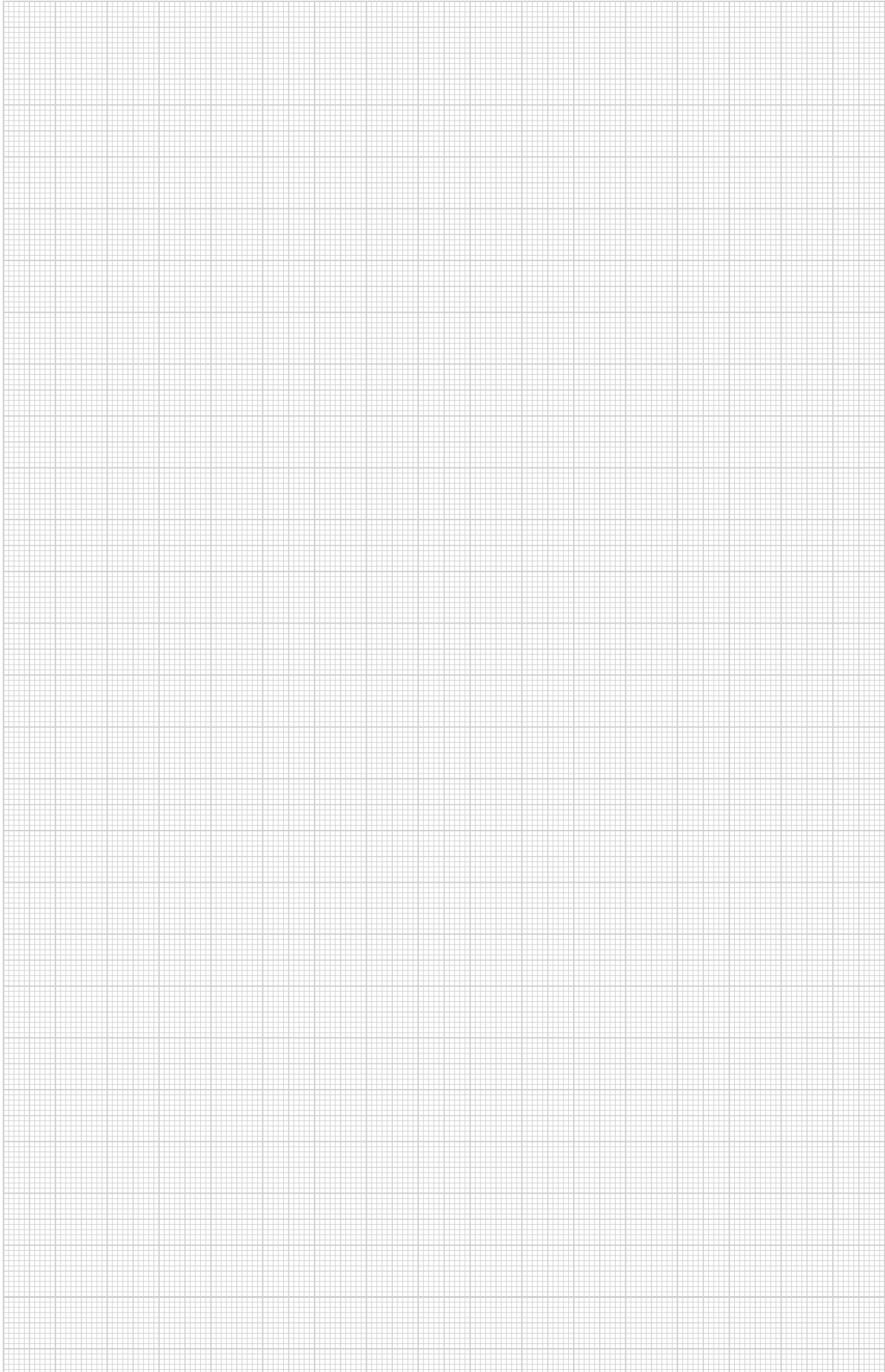
Radius table

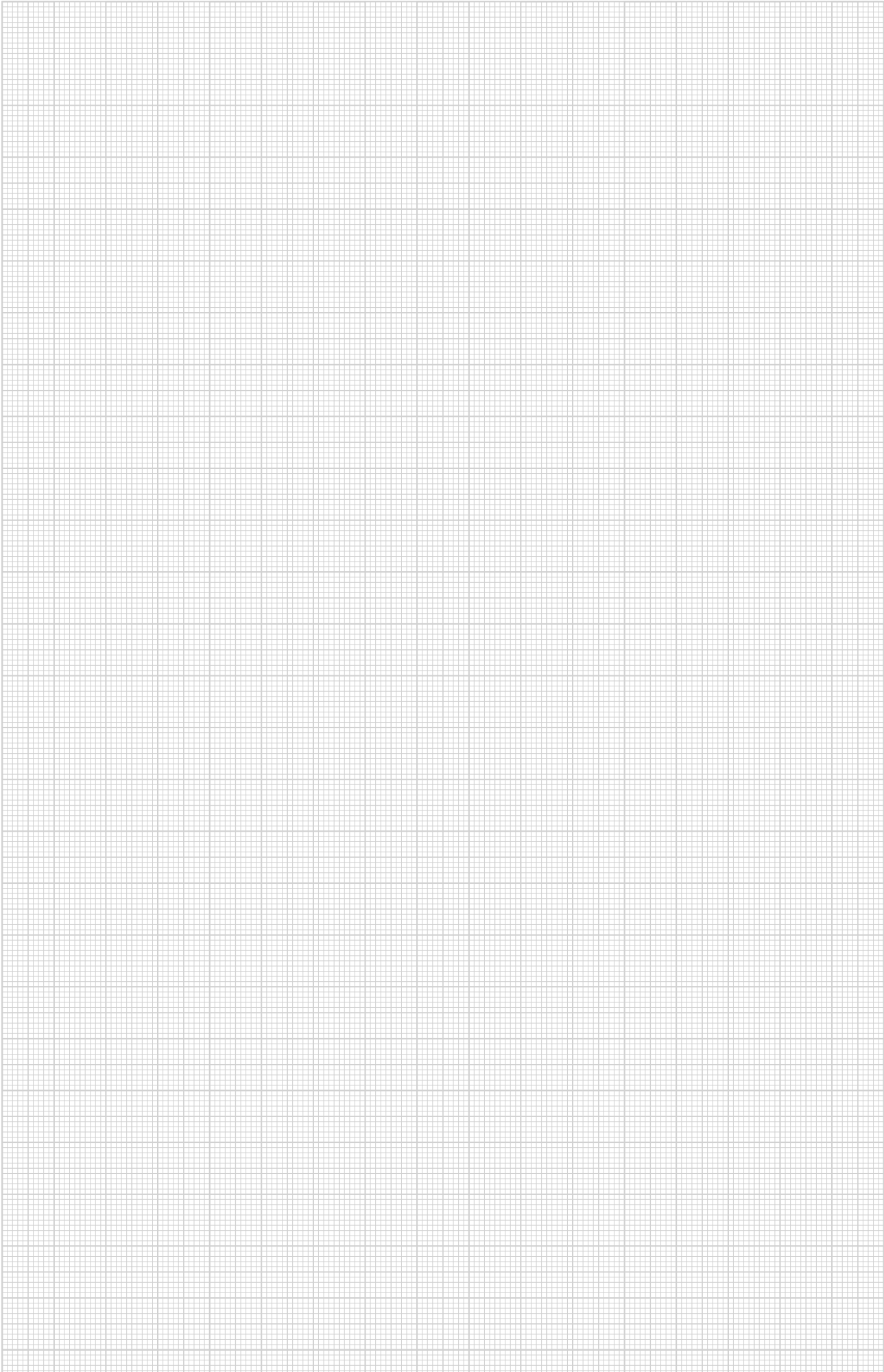
Quantity of elements	Radius
1	approx. 300 mm
2	approx. 450 mm
3	approx. 600 mm
4	approx. 750 mm
5	approx. 900 mm

Please order two LGVG 110 articulated connectors separately.









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**Building Connections**

