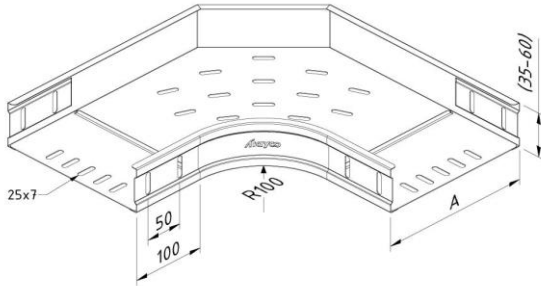


# Technical specifications

## CT-B90 (Cable Tray Bend)



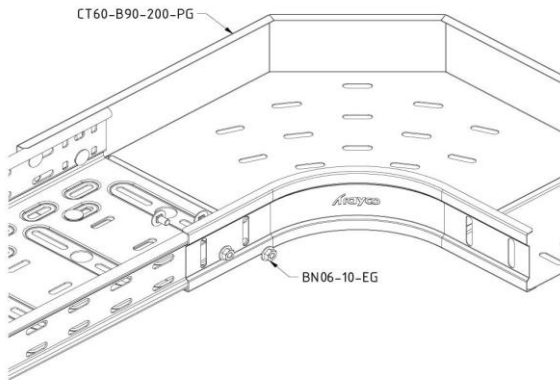
Finishing:		Pre-galvanized						
Product	Number	Height (mm)	Width (mm)	Length (mm)	Dim A (mm)	Fmax (kN)	Unit	Packaging (unit)
CT35-B90-050-PG	10064	35	50	0	50		ST	1
CT35-B90-075-PG	10065	35	75	0	75		ST	1
CT35-B90-100-PG	10066	35	100	0	100		ST	1
CT35-B90-150-PG	10067	35	150	0	150		ST	1
CT35-B90-200-PG	10068	35	200	0	200		ST	1
CT35-B90-300-PG	10069	35	300	0	300		ST	1
CT60-B90-050-PG	10070	60	50	0	50		ST	1
CT60-B90-075-PG	10071	60	75	0	75		ST	1
CT60-B90-100-PG	10072	60	100	0	100		ST	1
CT60-B90-150-PG	10073	60	150	0	150		ST	1
CT60-B90-200-PG	10074	60	200	0	200		ST	1
CT60-B90-300-PG	10075	60	300	0	300		ST	1
CT60-B90-400-PG	10076	60	400	0	400		ST	1
CT60-B90-500-PG	10077	60	500	0	500		ST	1
CT60-B90-600-PG	10078	60	600	0	600		ST	1
CT85-B90-100-PG	11594	85	100	0	100		ST	1
CT85-B90-150-PG	11595	85	150	0	150		ST	1
CT85-B90-200-PG	11596	85	200	0	200		ST	1
CT85-B90-300-PG	11597	85	300	0	300		ST	1
CT85-B90-400-PG	11598	85	400	0	400		ST	1
CT85-B90-500-PG	11599	85	500	0	500		ST	1
CT85-B90-600-PG	11600	85	600	0	600		ST	1
CT110-B90-150-PG	11925	110	150	0	150		ST	1
CT110-B90-200-PG	11926	110	200	0	200		ST	1
CT110-B90-300-PG	11927	110	300	0	300		ST	1
CT110-B90-400-PG	11928	110	400	0	400		ST	1
CT110-B90-500-PG	11929	110	500	0	500		ST	1

Finishing:		Dipped galvanized						
Product	Number	Height (mm)	Width (mm)	Length (mm)	Dim A (mm)	Fmax (kN)	Unit	Packaging (unit)
CT35-B90-050-DG	10388	35	50	0	50		ST	1
CT35-B90-075-DG	10389	35	75	0	75		ST	1
CT35-B90-100-DG	10390	35	100	0	100		ST	1

CT35-B90-150-DG	10391	35	150	0	150	ST	1
CT35-B90-200-DG	10392	35	200	0	200	ST	1
CT35-B90-300-DG	10393	35	300	0	300	ST	1
CT60-B90-050-DG	10394	60	50	0	50	ST	1
CT60-B90-075-DG	10395	60	75	0	75	ST	1
CT60-B90-100-DG	10396	60	100	0	100	ST	1
CT60-B90-150-DG	10397	60	150	0	150	ST	1
CT60-B90-200-DG	10398	60	200	0	200	ST	1
CT60-B90-300-DG	10399	60	300	0	300	ST	1
CT60-B90-400-DG	10400	60	400	0	400	ST	1
CT60-B90-500-DG	10401	60	500	0	500	ST	1
CT60-B90-600-DG	10402	60	600	0	600	ST	1
CT85-B90-100-DG	11771	85	100	0	100	ST	1
CT85-B90-150-DG	11772	85	150	0	150	ST	1
CT85-B90-200-DG	11773	85	200	0	200	ST	1
CT85-B90-300-DG	11774	85	300	0	300	ST	1
CT85-B90-400-DG	11775	85	400	0	400	ST	1
CT85-B90-500-DG	11776	85	500	0	500	ST	1
CT85-B90-600-DG	11777	85	600	0	600	ST	1
CT110-B90-150-DG	12035	110	150	0	150	ST	1
CT110-B90-200-DG	12036	110	200	0	200	ST	1
CT110-B90-300-DG	12037	110	300	0	300	ST	1
CT110-B90-400-DG	12038	110	400	0	400	ST	1
CT110-B90-500-DG	12039	110	500	0	500	ST	1

Finishing:		Coated						
Product	Number	Height (mm)	Width (mm)	Length (mm)	Dim A (mm)	Fmax (kN)	Unit	Packaging (unit)
CT35-B90-050-CO	10716	35	50	0	50		ST	1
CT35-B90-075-CO	10717	35	75	0	75		ST	1
CT35-B90-100-CO	10718	35	100	0	100		ST	1
CT35-B90-150-CO	10719	35	150	0	150		ST	1
CT35-B90-200-CO	10720	35	200	0	200		ST	1
CT35-B90-300-CO	10721	35	300	0	300		ST	1
CT60-B90-050-CO	10722	60	50	0	50		ST	1
CT60-B90-075-CO	10723	60	75	0	75		ST	1
CT60-B90-100-CO	10724	60	100	0	100		ST	1
CT60-B90-150-CO	10725	60	150	0	150		ST	1
CT60-B90-200-CO	10726	60	200	0	200		ST	1
CT60-B90-300-CO	10727	60	300	0	300		ST	1
CT60-B90-400-CO	10728	60	400	0	400		ST	1
CT60-B90-500-CO	10729	60	500	0	500		ST	1
CT60-B90-600-CO	10730	60	600	0	600		ST	1
CT85-B90-100-CO	11827	85	100	0	100		ST	1
CT85-B90-150-CO	11828	85	150	0	150		ST	1
CT85-B90-200-CO	11829	85	200	0	200		ST	1
CT85-B90-300-CO	11830	85	300	0	300		ST	1
CT85-B90-400-CO	11831	85	400	0	400		ST	1
CT85-B90-500-CO	11832	85	500	0	500		ST	1
CT85-B90-600-CO	11833	85	600	0	600		ST	1
CT110-B90-150-CO	11883	110	150	0	150		ST	1
CT110-B90-200-CO	11884	110	200	0	200		ST	1
CT110-B90-300-CO	11885	110	300	0	300		ST	1
CT110-B90-400-CO	11886	110	400	0	400		ST	1
CT110-B90-500-CO	11887	110	500	0	500		ST	1

Mounting instructions:



**Load capacity:**

Standard: -

Max. load: -

Load diagram: -

**Information:**

Coupler: BN06-10-EG

Equipotential bonding: IEC61537

EC declaration: EC directive 2006/95/EC (Low voltage) as modified by directive 93/68/EEC (CE marking)

**PG**

**Sendzimir galvanized (EN 10143) PG (pre-galvanized)**

Products made of Sendzimir (pre-galvanized) or continuous hot-dip galvanized steel sheet and coils are mostly used wherever limited chemical contamination is likely, for example, in offices, industrial buildings, covered parking lots, etc.

Characteristic of this steel type is that – prior to mechanical deformation – it is given a zinc coating by means of a continuous dipping process. This zinc coating is easily deformed. A cathodic action occurs on cut surfaces (up to 1.5mm) that protects against oxidation.

First, the steel is chemical cleaned and roughened in order to achieve a good bond. After the dipping process, the surplus zinc is blown off and one obtains an extra passivating coat (an ultra-thin protective coat) to prevent oxidation of the zinc coating (white rust). The coating thickness is usually expressed in g/m<sup>2</sup>. The most deployed type of Sendzimir steel is Z 275 = 275g/m<sup>2</sup> (weighed on both sides), this corresponds to 18-20 µm (micron).

Sendzimir galvanized steel sourced from modern galvanizing lines has, in general, a uniform, shiny appearance. The previous, common flowery surface is scarcely seen these days. This effect is obtained under the influence of lead but has no effect on the quality of the coating. The use of lead was banned due to the ever more stringent environmental standards.

**DG**

Hot-dip galvanized (EN ISO 1461) DG (dipped-galvanised)

Whenever cable support systems are exposed to the elements and/or caustic substances (such as petrochemical applications), they are given an additional treatment in the form of hot-dip galvanizing.

Hot-dip galvanizing is a materials science process designed to render the steel non-corroding. If this coating is breached, the zinc will act as a sacrificial anode, so that the iron is protected by the zinc (aka cathodic protection). During galvanization, three alloys are formed: an iron-zinc alloy, a zinc-iron alloy and also a zinc alloy. The pre-treatment of the steel is crucially important in order to achieve a good bond.

The following process steps are involved: degreasing, rinsing, pickling, re-rinsing, fluxing, drying and hot-dipping. The coating thickness depends on the steel composition, the material thickness and the time spent in the zinc bath. In the galvanizing standard NEN-EN-ISO 1461, the minimum coating thickness are prescribed (as shown in following overview), just as the zinc shrinkage per year which will depend on environmental factors (see table entitled 'Corrosion classes'). In addition, the zinc coating forms an excellent substrate for other post-treatments, such as applying a powder coating and coats of paint (better known as the duplex system).

An added advantage of hot-dip galvanizing is that along the edges and pointy bits, where objects are usually extra susceptible to corrosion, the zinc coating is thicker because of the behaviour of the liquid.

Minimum thicknesses of the zinc coating according to ISO 1461

- Using the hot-dip method

Material thickness  $\geq 6$  mm = min. zinc coating thickness (average) 85 $\mu$ m

Material thickness  $\geq 3$  mm to  $< 6$  mm = min. zinc coating thickness (average) 70 $\mu$ m

Material thickness  $\geq 1,5$  mm to  $< 3$  mm = min. zinc coating thickness (average) 55 $\mu$ m

Material thickness  $< 1,5$  mm = min. zinc coating thickness (average) 45 $\mu$ m

- Using the drum method

Material thickness  $\geq 3$  mm = min. zinc coating thickness (average) 55 $\mu$ m

Material thickness  $< 3$  mm = min. zinc coating thickness (average) 45 $\mu$ m

### CO

Polyester powder coating CO (coated)

Polyester coats will be used in moderate environments where the aesthetic aspect and sustainability must go hand in hand. The distinctive property of a polyester coating is its resistance to discoloration due to sunlight.

If used in a harsher environment, it is strongly recommended to apply an epoxy coating; this is less porous and therefore more resistant to chemicals. The disadvantage of an epoxy coating, however, is the rapid discoloration. If you want the best of both worlds, use an epoxy primer with a polyester top coat.

Just as with all the treatment techniques mentioned above, a thorough pre-treatment is crucial here too.

Depending on the base material, one will, in this case, degrease, rinse, pickle, rinse again, apply a conversion coat (e.g. chrome), rinse again, rinse with demi-water and/or dry.

### Field of application according to resistance against corrosion:

Corrosion class	Atmospheric corrosion	Indoor environment	Outdoor environment	Surface treatments
<b>C1</b>	$< 0,1\mu\text{m}$	Heated buildings with neutral atmospheres: offices, shops, schools, hotels.		<b>Electro-galvanised (EG)</b> <b>EN ISO 2081</b>
<b>C2</b>	0,1 - 0,7 $\mu\text{m}$	Unheated buildings where condensation may occur: sports halls, warehouses, shops.	Rural areas. Atmosphere with low impurities.	<b>Pre-galvanised (PG)</b> <b>EN 10327 – EN 10143</b>
<b>C3</b>	0,7 - 2 $\mu\text{m}$	Production facilities with high moisture levels and some air impurities due to industrial processes: production plants.	City and industrial atmosphere, some impurities, coastal areas with low salt loads.	<b>Dipped-galvanised (DG)</b> <b>EN ISO 1461</b>
<b>C4</b>	2 - 4 $\mu\text{m}$	Production facilities with high moisture levels and high air impurities due to industrial processes: swimming pools, Chemical industry.	Industrial areas and coastal areas with low salt load.	<b>Dipped-galvanised (DG)</b> <b>EN ISO 1461</b> <b>Polyester coating ( CO)</b> <b>EN ISO 12944</b>
<b>C5-I</b>	4 - 8 $\mu\text{m}$	Polyester coating ( CO)	Industrial areas with high moisture level and aggressive atmosphere.	<b>Duplex (DU) (Dipped galvanised + Polyester coating)</b>
<b>C5-M</b>	4 - 8 $\mu\text{m}$	EN ISO 12944	Coastal or offshore areas with salt load.	<b>Duplex (DU) (Dipped galvanised + Polyester coating)</b>