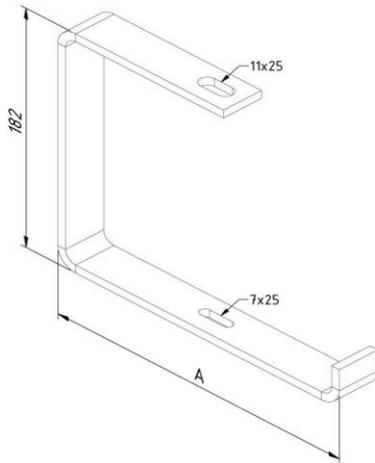


# Technical specifications

## CB190 (C-Bracket)



Finishing: Duplex		Product	Number	Height (mm)	Width (mm)	Length (mm)	Dim A (mm)	Fmax (kN)	Unit	Packaging (unit)
		CB190-075-DU	12533	190	75	0	115	0,6	ST	10
		CB190-100-DU	12534	190	100	0	140	0,45	ST	10
		CB190-150-DU	12535	190	150	0	190	0,45	ST	10
		CB190-200-DU	12536	190	200	0	240	0,4	ST	10
		CB190-300-DU	12537	190	300	0	340	0,4	ST	10
		CB190-400-DU	12538	190	400	0	440	0,4	ST	10

Finishing: Dipped galvanized		Product	Number	Height (mm)	Width (mm)	Length (mm)	Dim A (mm)	Fmax (kN)	Unit	Packaging (unit)
		CB190-075-DG	12527	190	75	0	100	0,45	ST	10
		CB190-100-DG	12528	190	100	0	125	0,45	ST	10
		CB190-150-DG	12529	190	150	0	175	0,45	ST	10
		CB190-200-DG	12530	190	200	0	225	0,45	ST	10
		CB190-300-DG	12531	190	300	0	330	0,45	ST	10
		CB190-400-DG	12532	190	400	0	430	0,45	ST	10

### Mounting instructions:

-

### Load capacity:

Standard: IEC61537

Max. load: 0,6 kN

Load diagram: -

### Information:

Coupler: -

Equipotential bonding: IEC61537

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

### DU

#### Duplex coats DU

For applications where a very high corrosion resistance is required, such as the petrochemical industry or maritime applications, we advise our customers to use a duplex coating. A duplex coating is composed of a hot-dip galvanizing, followed by a powder coating (in two coats or one). Research has showed that galvanized parts with an (epoxy) powder coating, afford corrosion resistance that is up to 2.5 times higher than the sum of the wear life of both systems separately.

For example: the wear life of hot-dip galvanizing is 10 years while that of an epoxy coating is 5 years. So, in combination, this gives a wear life of up to 37 years. Usually, the added cost of a duplex coating is easily outweighed by the cost price of regularly recurring maintenance every few years. ( see underneath 'hot-dip galvanizing').

### 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

#### 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> EN ISO 2081
<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> EN 10327 - EN 10143
<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> EN ISO 1461
<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> EN ISO 1461 <b>Polyster coating ( CO)</b> EN ISO 12944
<b>C5-I</b>	4 - 8 $\mu\text{m}$	Polyster coating ( CO)	Industrial areas with high moisture level and aggressive atmosphere.	<b>Duplex (DU) (Dipped galvanised + Polyster 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 + Polyster coating)</b>