



The CT-Bolt® M20 is specifically designed for long life and corrosive environments such as submarine tunnels. The plastic pipe enclosing the bolt provides a complete seal against corrosion. The bolt is type-approved by the Norwegian Public Roads Administration.

It is initially point anchored with expansion shell and later cast into cement mortar. The mortar is pumped through the hole in the hemispherical dome and up the inside of the plastic tube and back on the outside until the mortar comes out around the plate.

Anchoring with expansion sleeve provides an immediate work safety and becomes permanent when fully embedded. The bolt is supplied with rolled threads at both ends. The CT bolt is supplied complete and consists of rebar steel bolt, hemispherical dome and plastic tube.

Minimum Value/Type	Sym-bol	Value
Thread dimension		M20x2,5
Rebar cross-sectional area	At	314 mm ²
Thread cross-sectional area	Ar	245 mm ²
Yield strength	R _{p0,2}	500 N/mm ²
Ultimate strength	Rm	600 N/mm ²
Ultimate load strain	Agt	8 %
Core diameter - bar		20 mm
Weight CT-M20 3 m		10,9 kg
Borehole diameter		ø45-52 mm
Borehole length		200 mm more than bolth length

CT-Bolt® M20 - B500NC			
Hot dip galvanized art.no.	CombiCoat® art.no.	Length mm	Value 100 bolts (kg)
1420150	1420150C	1500	471
1420200*	1420200C	2000	610
1420240*	1420240C	2400	721
1420300*	1420300C	3000	875
1420400*	1420400C	4000	1166
1420500*	1420500C	5000	1441
1420600*	1420600C	6000	1722
1420800	1420800C	8000	2274

*Stock articles

Minimum load capacity (without safety factor):

Point anchored: M20 Yielding load: 123 kN
Fully grouted: D20 Yielding load: 157 kN

Ultimate load: 147 kN
Ultimate load: 188 kN

Technical information:

Material: B500NC acc. NS 3576-3:2012.

Corrosion protection: Galvanized acc. NS-EN 1461 and CombiCoated acc. NS-EN13438.

Plates



Dimension	Weight 100 plates	Art.no.
150x150x5mm	93 kg	1509150C
200x170x5mm	117 kg	1508200C

Expansion shells



Dimension/Borehole	Weight 100 shells	Art.no.
M20 for \varnothing 45-48 mm	68 kg	1620045U
M20 for \varnothing 46-55 mm w/spring	69 kg	1620051U
M20 for \varnothing 45-50 mm	69 kg	1620052U