



The CT-Bolt® M33 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		M33x2,5
Rebar cross-sectional area	At	804 mm ²
Thread cross-sectional area	Ar	694 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		33 mm
Weight CT-M20 3 m		23,15 kg
Borehole diameter		ø45-52 mm
Borehole length		200 mm more than bolth length

CT-Bolt® M33 - B500NC			
Hot dip galvanized art.no.	CombiCoat® art.no.	Length mm	Value 100 bolts (kg)
1433150	1433150C	1500	1262
1433200*	1433200C	2000	1629
1433240*	1433240C	2400	1885
1433300*	1433300C	3000	2315
1433400*	1433400C	4000	3032
1433500*	1433500C	5000	3749
1433600*	1433600C	6000	4481
1433800	1433800C	8000	5913
1433120**	1433120C**	12000	9175

*Stock articles

** Split length

Minimum load capacity (without safety factor):

Point anchored: M33 Yielding load: 347 kN

Ultimate load: 416 kN

Fully grouted: D32 Yielding load: 416 kN

Ultimate load: 482 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.
210x210x10mm	338 kg	1510200C

Expansion shells



Dimension/Borehole	Weight 100 shells	Art.no.
M33 for ø64-70 mm	145 kg	1633064U