



The CT-Bolt® M22 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		M22x2,5
Rebar cross-sectional area	At	370 mm ²
Thread cross-sectional area	Ar	303 mm ²
Yield strength	R _{p0,2}	640 N/mm ²
Ultimate strength	Rm	800 N/mm ²
Ultimate load strain	Agt	17 %
Core diameter - bar		22 mm
Weight CT-M20 3 m		12,5 kg
Borehole diameter		ø45-52 mm
Borehole length		200 mm more than bolth length

CT-Bolt® M22 - K640 Vanadium			
Hot dip galvanized art.no.	CombiCoat® art.no.	Length mm	Value 100 bolts (kg)
1422150	1422150C	1500	568
1422200*	1422200C	2000	739
1422240*	1422240C	2400	876
1422300*	1422300C	3000	1068
1422400*	1422400C	4000	1424
1422500*	1422500C	5000	1767
1422600*	1422600C	6000	2109
1422800	1422800C	8000	2789

*Stock articles

Minimum load capacity (without safety factor):

Point anchored: M22 Yielding load: 194 kN
Fully grouted: D22 Yielding load: 237 kN

Ultimate load: 242 kN
Ultimate load: 296 kN

Technical information:

Material: K640 Vanadium.

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.
M22 for \varnothing 45-48 mm	70 kg	1622045U
M22 for \varnothing 46-55 mm w/spring	66 kg	1622051U
M22 for \varnothing 45-50 mm	69 kg	1622052U
M22 for \varnothing 67-70 mm	155 kg	1622064U