

Pc-Bolt R27/12 Combination Bolt/Rock Support

Combination bolt designed for immediate and permanent rock support



Pc-Bolt R27/12 combination bolt for rock support. The bolt is used with an expansion shell for immediate work safety support. The bolt is subsequently grouted for permanent anchoring.

Stock program:

R27x1500* R27x4000*
R27x2400* R27x5000*
R27x3000* R27x6000

* Supplied with the expansion shell fitted

Technical information:

Material: 8.8 acc. Compliant with ISO 898-1
Material tube diameter 25,5 x 12 mm
Thread length: R27 over entire length (the threads are cold rolled)
Weight: 3,12 kg/m

Specifications:

Reference drawing PTC-219 series

Characteristic values:

Dimension:	Tension area A_s Thread	Yield ReH	Tensile Rm	Elongation A5
R27x12	382 N/mm ²	Min. 660 N/mm ²	Min. 830 N/mm ²	≥ 12 %

Minimum load capacity:

Point anchored: Yield: 246kN Failure: 270kN

Fully grouted: Yield: 246kN Failure: 270kN

Recommended torque on hexagonal nut against half ball: 200-300 Nm. This normally generates 40-60 kN of bolt tension.

Recommended torque on Dome nut against spherical plate: 200-400 Nm. This normally generates 20-40 kN of bolt tension.

Corrosion protection/Pc-Coat

Hot-dip galvanization is carried out in compliance with NS-EN-ISO 1461 and epoxy powder coating in compliance with NS-EN 13438. With regard to coating thickness and further information, please see Document Q/PTC-T19A – Specification for Pc-Coat – SVV/JBV. Please also refer to the Pc-Coat Product Data Sheet and accompanying FDV documentation.

Grouting: Typical water/cement-ratio is 0,3-0,4. For more detailed information, please see own brochure "Grout recommendations" on www.pretec.no.

Recommended drilling:

Drill diameter: 45-48mm

Drill depth: Bolt length + 150mm

Accessories:

Spherical bearing plate with holes for evacuation of air and expansion shell R27x45/45-48 zinc plated.

Dome nut R27 with integrated half ball, and joint sleeve for extension of bolt is available.

Pc-Packer to be used in the event water ingress to the borehole. See own product data sheet on www.pretec.no.