

## 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 <sub>s</sub> Thread	Yield ReH	Tensile Rm	Elongation A5
R27x12	382 N/mm <sup>2</sup>	Min. 660 N/mm <sup>2</sup>	Min. 830 N/mm <sup>2</sup>	≥ 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](http://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](http://www.pretec.no).