

Resin Roof Bolt

Product specification: Bar diameters 16 mm / 18mm / 20mm / 25mm

Category: Solid bolts / Mining bolts

Introduction

Resin roof bolts are used in combination with our Fasloc resin to provide excellent roof support in underground mines. The resin provides superior anchorage whilst the bolt provides the necessary tension. Resin roof bolts can be configured to suite requirements.

Key features

- Rolled thread strength nominally equals the strength of the bar.
- All anchor bolts are designed to be used with resins.
- Couplers available to create longer lengths.
- Forged head replacement bolts available. Details on request.
- Corrosion protection can be provided by hot dip galvanizing or alternative coatings. Details on request.
- The resin roof bolt is available in either spin-to-stall (shear pin nut) or reverse spin (nibbed) configuration.

Main advantages

- Roof and rock bolts are manufactured from a special hot rolled deformed bar featuring a rib pattern that actively assists with mixing the chemical anchors during installation.
- Bolt rib pattern design has modified physical characteristics to maximize load transfer from the rock to the bolt, with higher transverse ribs together with lower profile longitudinal ribs.



Technical specifications

Bar diameter	16 mm	18 mm	20 mm	22 mm	25 mm
Yield load	100 kN	127 kN	157 kN	182 kN	245 kN
Minimum yield strength	500 MPa	500 MPa	500 MPa	600 MPa HS	500 MPa
Typical ultimate load	140 kN	178 kN	220 kN	233 kN	343 kN
Typical ultimate tensile strength	700 MPa	700 MPa	700 MPa	700 MPa	700 MPa
Calculated shear load ¹⁾	84 kN	106 kN	132 kN	139 kN	206 kN
Minimum elongation ²⁾	14 %	14 %	14 %	14 %	14 %
Density	1.6330 kg/m	2.539 kg/m	2.539 kg/m	2.98 kg/m	3.750 kg/m
Cross sectional area	201 mm ²	245 mm ²	314 mm ²	380 mm ²	490 mm ²

1) Calculated at 60 % of the ultimate tensile load.
2) 5.56√A

Other options	Options are available to suite requirements. Please contact local sales department to enquire.
Installation/applications	Installation procedures, works instructions and general installation guidelines are available on request.
Packaging	Bolts are generally packaged in bundles and strapped. Please contact local representatives for detailed packaging sizes and instructions related to the specific product option required.
Product range and accessories	Resin roof bolts are typically supplied with diameters 16mm; 18mm; 20mm and 25mm. Standard roof bolt sizes start from 600mm and cover a variety of lengths. Accessories include a host of bearing plates (ribbed, domed etc.) Load indicators are also available as a visual method to ensure the roof bolt has been tensioned correctly.
Safety procedures	Relevant safety documents and procedures related to the product are available on request.
Legal disclaimer	All dimensions, weights, quantities, and specifications are those applicable at the time of this publication and may be amended from time to time. Please contact your local representative for final confirmation of any key specifications.