

Mechanical Anchor Bolt

Product specification: Standard bar 14.5 mm / 16 mm
Category: Solid bolts / Mining bolts

Introduction

The mechanical anchor bolt is typically used when there is an additional support needed on the rock face. The anchor is commonly used in conjunction with wired mesh and other support sheeting to secure into place. No grout or resin is needed for installation.

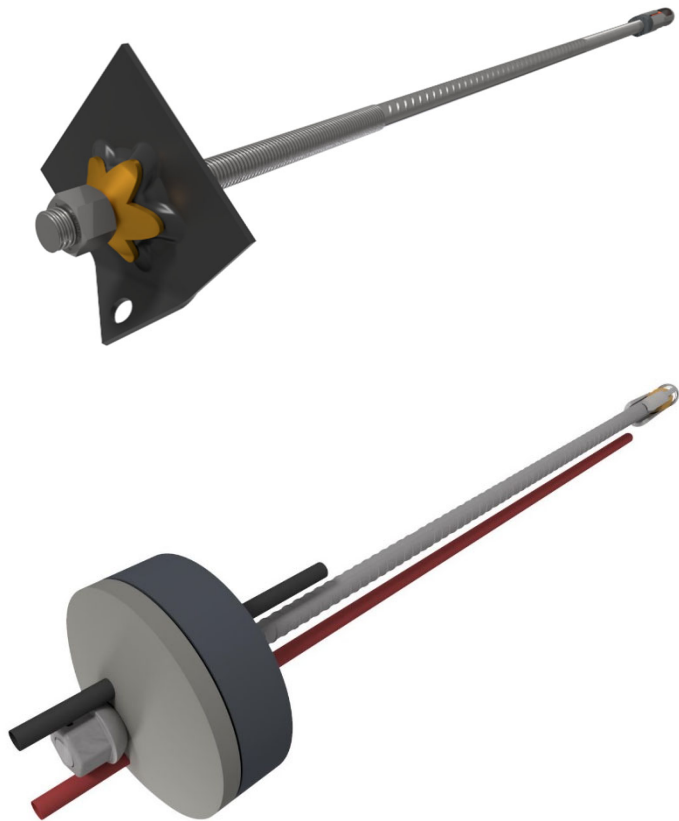
Standard equipment can be used in making the anchor installation user friendly. Grouting is possible with the addition of grout feed and breath pipes.

Key features

- Standard hex nuts for installation.
- Washer as required.
- Expansion unit for appropriate drill size.
- Standard bar sizes are 14.5 mm and 16 mm but are available for larger diameter bars upon request.
- 3-leaf shell.
- 32, 35 expansion shells available, dependent on the bar diameter.

Main advantages

- With the use of the expansion shell, the mechanical anchor is easy to install.
- The expansion unit, once installed, locks into place assuring no movement occurs on the anchor.



Technical specifications

Bar diameter	Smooth 14.5 mm	D 16 mm	D 18
Typical yield strength	450 MPa	500 MPa	500 MPa
Typical ultimate tensile strength	590 MPa	700 MPa	700 MPa
Typical ultimate tensile load	97.3 kN	140 kN	178 kN
Calculated shear strength ¹⁾	58 kN	84 kN	124 kN
Cross sectional area	165 mm ²	200 mm ²	254 mm ²
Thread	DIN405 - Rd16	DIN405 - Rd18	DIN405 - Rd20
Typical elongation ²⁾	19%	20%	20%

1) Shear values calculated at 60% of the U.T.S.

2) Elongation at 5.65 √A

Expansion shell	Minimum hole size	Maximum hole size
32	32.5 mm	36.5 mm
35	35.5 mm	41 mm
38	38.5 mm	44 mm
43	43.5 mm	49 mm

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.