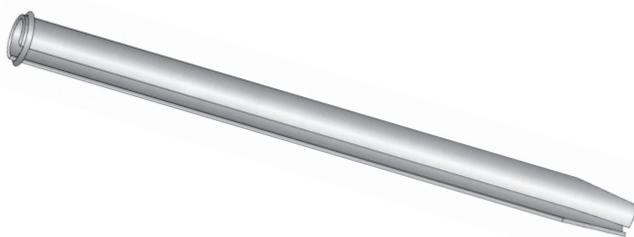


Friction Bolts

Features

- The Friction Bolt is manufactured from high strength steel tube which has a slot along its entire length. A ring, or collar, is welded on the outer end to hold a domed plate to the rock surface.
- The 33mm and 39mm Friction Bolt is suitable for installation with hand held rock drills (stoppers or drifters). The 46mm Friction Bolt is NOT suitable for installation with hand held rock drills.
- Friction bolts can be load tested by fitting a special ring to the bolt prior to its installation. Pull tests can then be conducted with a hollow ram hydraulic jack.
- Further corrosion protection can be provided by hot dip galvanising.



Installation Guidelines

- The hole length should be longer than the bolt, nominally 150mm, to allow for any rock fretting during installation.
- The friction bolt is inserted into the hole. The driving dolly is fitted into the rock drill's chuck and then the bolt (with accessories) is placed onto the dolly.
- Using full percussion and thrust the bolt is fully driven into the hole until the domed plate is firmly against the rock surface. Care should be taken to ensure the rock drill's feed/thrust is in the same orientation as the hole or the bolt may be bent during installation.

Technical Data			
Bolt Diameter, mm	33	39	46
Min. Yield Strength, MPa	420	420	420
Min. Ultimate Material Tensile Strength, MPa	490	490	490
Min. Ultimate Tensile Load, Tons	8	10	15
Shear Strength*, KN	56	70	105
Hole Diameter Range, mm	30 - 33	36 - 39	43 - 46
Density, kg/m	1.64	1.84	2.84
Wall Thickness, mm	2.3	2.3	3.2

*Calculated Shear Strength

All dimensions, weights, quantities and specifications are those applicable at the time of publication and may be amended from time to time.

Notes

- Minimum order quantities may apply to this product
- Only ROCBOLT South Africa components should be used to enable the full performance of the bolt system to be obtained.