

FRICTION BOLT

FB33

33MM

Product Code Guide	Bolt Type		Diameter		Length			Drive Nut & Accessories					Coating	Packaging					
	F	B	3	3	1	5	0						G	W	A				

A more comprehensive product code matrix is provided at the start of this section.

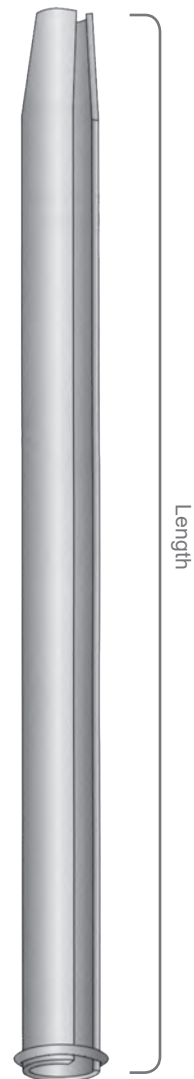
Physical Properties	Minimum		Typical	
Yield Strength	415MPa	75kN	510MPa	90kN
Tensile Strength	510MPa	90kN	610MPa	105kN
Friction Bolt Diameter	33mm		Mass per Metre	1.53kg
Hole Diameter Range	30mm min./32mm max.		Cross Sectional Area	175mm ²

KEY FEATURES

- ▶ The DSI 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 Friction Bolt is suitable for installation with hand held rock drills (stoppers/drifters).
- ▶ 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 galvanizing.




INSTALLATION GUIDE LINES

- ▶ 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.



PRODUCT ACCESSORIES EXAMPLES

DSI manufactures a comprehensive range of plates specifically designed for this range of Bolts. For the full range see Surface Support section or visit the product catalogue on our website.

Product Group	Starplates	Dome plates	Butterflies	Pull Ring
Product Imagery				
Product Code Prefix	STP	D	BUTT	PRING

STANDARD LENGTHS & PACKAGING

- ▶ Standard bolt lengths include 450mm long and from 600mm to 2400mm in 300mm increments.
- ▶ Non-standard lengths are available on application.
- ▶ Friction Bolts are supplied in standard packs of 150 bolts (39mm & 47mm) and 300 bolts (33mm).

NOTES

- ▶ Only DSI rock bolt components should be used to enable the optimum performance of the bolt system to be obtained.
- ▶ DSI Underground is Quality Assured to ISO 9001:2008, Registration No.QMS 41328.