

Product Code Guide	Bolt Type	Diameter	Length	Coating	Packaging
	FBF	39	090	G	WA

## Physical Properties

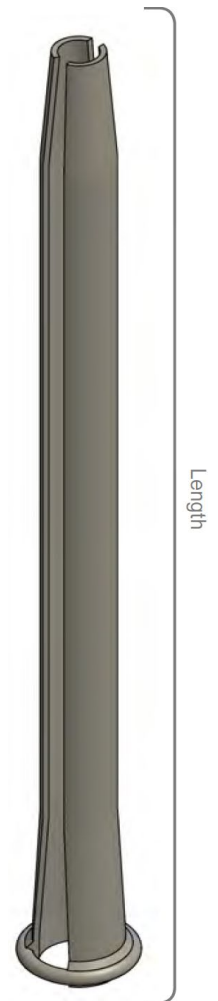
	Minimum	Typical
Yield Strength	415MPa	510MPa
Tensile Strength	510MPa	600MPa
Mass Per Metre	1.77kg	
Friction Bolt Diameter	Ø39mm	
Hole Diameter Range	Ø35mm min./38mm max.	
Cross Sectional Area	225mm <sup>2</sup>	

## Key Features

- The DSI Underground 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 Ø39mm Flared Friction Bolt is suitable for installation with a Ø47mm spanner and suits Ø47mm plates.
- 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.
- Can be used with Ø47mm FB for mesh pinning.

## 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 or larger friction bolt. 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.
- Over installation causes ring damage, compromising performance.



## Product Accessories Examples

- DSI Underground manufactures a comprehensive range of plates specifically designed for this range of Bolts.

Typically used accessories:

	Products			
Product Group	Dragon Fly	Dome Plates	Dome Plates	Pull Ring
Product Imagery				
Product Code Prefix	DF	FRP	TDD	PRING

## Standard Length & Packaging

- Standard bolt lengths include 450mm long and from 600mm to 3,000mm in 300mm increments.
- Non-standard lengths are available on application.
- Friction Bolts are supplied in standard packs of 150 bolts (Ø39mm & Ø47mm) and 300 bolts (Ø33mm).

## Notes

- Only DSI Underground rock bolt components should be used to enable the optimum performance of the bolt system to be obtained.
- DSI Underground Mining Products Division is Quality Assured to ISO 9001:2015

## Phone APP

- Want to know more; our full product range, knowledge centre, and other details are available via the App; available on iOS and Android devices by searching “DSI Underground”.



iOS



Android