

HARD ROCK MINING

FRICTION BOLTS

IMMEDIATE FRICTIONAL SUPPORT



DESCRIPTION

Friction bolts are considered the simplest form of ground support. Bolts provide immediate frictional support at the face and can be installed with handheld or mechanised equipment. For additional load bearing capacity, the bolts can be post grouted with cement grouts.

Available in either black or hot dip galvanized steel and are manufactured in 34mm, 40mm and 47mm diameters and various lengths from 600 mm to 3000 mm.

APPLICATION AND USES

Primary use is strata reinforcement in underground mines. Used in the development and production headings for immediate support.

ADVANTAGES

- Increased contact surface providing higher pull-out loads.
- Immediate frictional support at the face.
- Install with hand-held or mechanised equipment.
- Bolts can be post-grouted with Minova anchoring grouts for extra load bearing capacity.
- Quick and easy installation.

TECHNICAL DATA

Mechanical Properties

Product Properties	STRATA BOLT 34	STRATA BOLT 40	STRATA BOLT 47
Bolt Diameter ² (mm)	34±0.5	40±0.5	47±0.5
Tensile Force ¹ (MT)	10.7	12	16.5
Yield Strength ² (MPa)	465	465	465
Tensile strength ² (MPa)	535	535	535
Taper Diameter ² (mm)	27± 3	32± 3	39± 3
Slot Width ² (mm)	11±2	14± 2	24.5±1
Elongation ² %	30	30	30
End Slot Width ² (mm)	0-5	0-5	0-5
Material Thickness ² (mm)	2.3	2.3	3.2
Bolt Length ² (mm)	L +/- 5mm	L +/- 5mm	L +/- 5mm

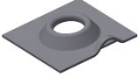

¹ Minimum Values, ² Typical Value

SUPPORTING PRODUCTS

Plates




Minova can supply a comprehensive range of plates for use with friction bolts.

Plates most typically used with friction bolts are:

Item Code	Description	Image
NF0000205	PLATE DOM 47X200X200X4MM GL	
NF0000208	PLATE DOM 47X150X150X4MM GL	
NF0000192	PLATE COM 280X300 150X47MM GL	
NF0000231	PLATE STR 280X400X1.9MM GL	

Pull Collar & Drivers

Minova can supply a range of drivers for use with hand-held or mechanised bolting equipment.

Item Code	Description	Image
NF0000171	DRIVER STR BOLT 47 T38	
NF0000198	DRIVER STR BOLT 47 HANDHELD	
NF0000222	PULL COLLAR 47 GL	

PACKAGING AND TRANSPORTATION

ITEM CODE	DESCRIPTION	PACK QTY
NT0004714	BOLT STR 47X2400MM GL	150
NF0000182	BOLT STR 47X2400MM BK	150
NT0004998	BOLT STR 47X900MM BK	150
NF0004898	BOLT STR 47X900MM GL	150
NF0001652	BOLT STR 47X3000MM GL	150
NF0001651	BOLT STR 47X1500MM GL	150
NT0005048	BOLT STR 47X1500MM BK	150

ANCHORING CEMENT GROUTS

Minova offers a comprehensive range of cement grouts for general and specific bolting applications. Visit www.minovaglobal.com/apac to learn which grout is right for your application.

APPROVALS AND CERTIFICATES

Comply with AS 1554.1
Comply with AS/NZS 4680

TECHNICAL SUPPORT

We provide technical advisory service by a team of specialists in the field. The service includes on site assistance and advice on evaluation trials and laboratory work. All technical data sheets can be found on www.minovalgobal.com.

MANUFACTURER

Minova Australia Pty Ltd

An ISO 9001:2015 Quality Management Certified Company



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ADDITIONAL INFORMATION

Minova Australia offers a comprehensive range of products, all of which have been developed after extensive research and testing on a global scale via our international network of operations. These products include:

- Resin anchor systems
- High yield grouts and foams
- Monolithic chock systems
- High performance cable bolt grouts
- Polyurethane resin systems
- Sprayable coatings for ventilation control
- Water-stop grouts
- Ventilation formwork systems including: Meshblock and Tecmesh
- Grout mixers and batchers both air and hydraulically operated
- Contract Installations
- Flexible membranes for strata support and waterproofing applications

CUSTOMER SERVICE

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