

COAL MINING

LOW PROFILE COAL BOLT

LOW PROFILE BOLT LOW HEAD HEIGHTS

DESCRIPTION

Low Profile Coal bolt consists of unique low-profile nut providing effective tensioning with no bolt protrusions through the nut. Low profile Coal bolt assists in reducing equipment damages in low head height areas due to bolt protrusions. Coal bolts are manufactured with a rolled M24 x 3.0 mm pitch right hand thread and a ribbed surface profile for high load transfer and easy resin application. Supplied complete with an anti-friction washer, dome washer and hexagonal 36 mm drive nut.

X steel grade provides greater potential performance in conditions subject to stress corrosion cracking.

Multiple lengths, diameters, pin configurations are available.

APPLICATION AND USES

Coal Bolts have been developed for use in point anchored or fully encapsulated roof and rib bolting applications. Primary use in coal mining operations. Recommended for use in 27 – 29 mm diameter holes. For >30mm diameter holes it is recommended to use Minova Secura bolt range.

ADVANTAGES

- Low profile nut has no bolt protrusions post tensioning.
- Eliminates damage to equipment from projecting bolts.
- Proven historical performance.
- Point anchored or fully encapsulated roof & rib bolting applications
- Extensive quality-controlled manufacturing



TECHNICAL DATA

Mechanical Properties


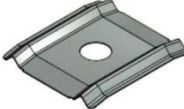
Typical Properties	M24 X Grade
Nominal Rib Height Diameter (mm)	24
Nominal Cross- Sectional Area of the Bar (mm ²)	370
Yield Stress (Strength MPa)	650
¹ Yield Force Diameter (MT)	24.6
Tensile Stress (Strength MPa)	890
² Tensile Force Typical (MT)	33.7
Elongation (%) 5D	19
Mass per meter – Bar (kg/m)	3

¹Yield Force and ²Tensile Force values are calculated on the nominal cross-sectional area of the bar, as provide by the steel supplier

Plates

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

Plates most typically used with Coal bolts are:

Plate Name	Dimensions (mm)	
Crown Plate	150 x 150 x 5	
Strata Plate	280x300x1.8	

Lokset® Resin Capsule

The Lokset system consists of an easily handled cartridge filled with a reinforced polyester resin in one compartment and a catalysed mastic filler in the other, separated by a physical barrier. The rotation of the bolt during installation ruptures the capsule, shreds the skin and mixes the two components causing a chemical reaction and transforming the resin mastic into a solid anchor.

The mixed resin fills the annulus around the bolt. Standard “point” anchorage will be firmly interlocked with the substrate and bolt within minutes. The setting time of the resin components can be controlled. A combination of fast and slow setting cartridges makes it possible to simultaneously anchor, grout and tension the rock bolt.

Refer to the technical data sheet at www.minovaglobal.com/apac



PACKAGING AND TRANSPORTATION

Packaged in bundles of 50 with the option to plastic wrap and strap washer, nuts and threads. Bundles of 60 are also available where required. Individual bolt lengths are visually identifiable by a coloured dome washer on each bolt

APPROVALS AND CERTIFICATES

Product Standards

	M24 X Grade	M24 S Grade
Steel Bar	HSAC840 Equivalent	AS/NZS 3679.1-300
Galvanizing	AS4680	AS4680
Bar Straightness	AS 1442-1991	AS 1442-1991

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.minovalglobal.com/apac

MANUFACTURER

Minova Australia Pty Ltd

An ISO 9001:2015 Quality Management Certificated Company



FS 603747

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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[Injection Chemicals](#)
[Sprayed Cements](#)
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