

HARD ROCK MINING

R24 SECURA DB

YIELDING BOLT FOR DYNAMIC CONDITIONS



R24 SECURA DB

DESCRIPTION

Minova R24 Secura DB consists of Smooth Solid bar with paddle on one end. The bolt end is equipped with Nova R thread and an integrated dome torque nut. The bolt is encapsulated completely with Lokset® Resin and securely anchored by the unique paddle profile. Custom alloy steel enables the smooth section of the bar between the anchor point and face plate capable of deforming thereby absorbing large amounts of energy in dynamic grounds. The paddle profile also assists in resin film shredding and provides consistent and efficient mixing of resin capsule components.

Available in various lengths either black or hot dip galvanised.

APPLICATION AND USES

Minova Secura DB is highly effective ground support element in underground installations and tunnels, subjected to large deformations in rock mass such as rock burst and squeezing rock.

ADVANTAGES OF R24 SECURA DB

- Design includes a unique paddle system to improve resin mixing providing higher bond strength in large diameter boreholes
- Proven historical performance and extensive quality-controlled manufacture
- Permanent primary support
- Consistent pin nut torque drive system
- High strength 'Nova' thread (R thread) profile including a modified rope thread with large root and small crest areas.
- Proven resin mixing performance
- Maintains support capacity while squeezing ground movement is taking place
- Allows for full encapsulation to be maintained
- Can be used in the most common 35mm resin bolt hole size
- Installed using the same installation procedures as regular resin bolting.

TECHNICAL DATA

Properties	R24 SECURA DB
Bolt diameter ² (mm)	22
cross-sectional area ² (mm ²)	380
Paddle Diameter ² (mm)	25-29
Yield Strength ² (MPa)	491
Tensile Strength ² (MPa)	665
Typical Tensile Force ² (MT)	25
Elongation ² %	22
Breakout Pin Torque Nm	120-170
Displacement Capacity ² mm	200-250
Recommended bore hole size mm	31-36
Dynamic Performance	>30kJ

² Typical

SUPPORTING PRODUCTS

Plates

Minova supplies a comprehensive range of plates for use with the R24 Secura DB.

Plates most typically used with Secura DB are:

Item code	Description	Image
NT0004752	PLATE CRN 38X200X200X5MM 8L LOOP BK	
NT0004812	PLATE CRN 38X200X200X5MM 8L LOOP GL	

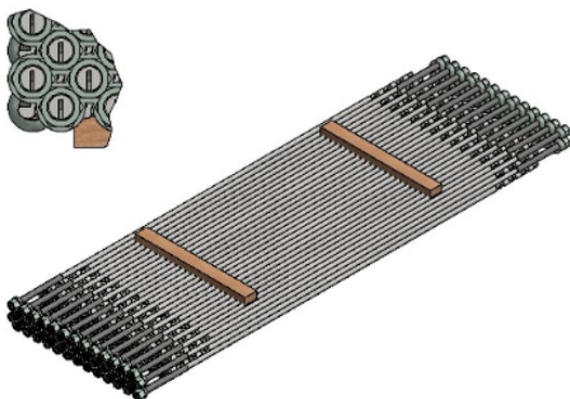
Drivers

Item code	Description	Image
NF0000243	DRIVER SKT T38X800 HEX 36AF	

PACKAGING

R24 Secura DB are packaged in bundles of 100 in a staggered configuration.

Item code	Description
NT0005052	BOLT SECURA DB R24X2400 BK
NT0005119	BOLT SECURA DB R24X2400 GL
NT0005053	BOLT SECURA DB R24X3000 BK
NT0005120	BOLT SECURA DB R24X3000 GL



Packaging configuration

Lokset® Resin Capsules

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.



Figure 1: Lokset Resin Capsule

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.

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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MKT-APAC-TDS-R24-SECURA DB-SEP 2024 EN

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