

Jumbolt™ Product Data



Solutions from Materials Technology





Jumbolt™



Jumbolts have been specifically designed to provide a single pass fully resin grouted rockbolt, for mechanised installation into 43 mm to 45 mm diameter boreholes. The Jumbolt is constructed from high strength 38 mm tubular steel. Deforms are rolled into the tube in order to assist in resin mixing, bond strength and load transfer. The Jumbolt is crimped at the top end to ensure excellent resin mixing and film shredding and has a specially designed drive ring collar end to enable spinning of the bolt during installation through the resin capsule and holding the plate in place against the rock surface.

The resin capsule can be inserted into the borehole with the Jumbolt in a single process, utilising an integrated plastic insertion tube that is supplied already fitted to the bolt. The integrated plastic tube contains perforations which allow the resin to penetrate ensuring that load transfer is maintained. The plastic tube also includes a collar which retains the tube at the collar and prevents the tube from travelling to the back of the hole.

Alternatively the Jumbolt can be supplied without the integrated plastic tube and the Quick-Chem insertion system can be utilised to insert the resin capsule to the back of the hole. Details of the patented Quick-Chem insertion system are available on the Lokset® Resin Capsule product data sheet. Jumbolts can be supplied in a range of lengths and are available in black steel or hot dip galvanised.

For meshing applications, a standard 34 mm diameter Strata Bolt can be inserted into the Jumbolt for overlap bolting.

Jumbolts were first introduced into the Australasian mining and tunnelling industry in 2000. Jumbolts can be installed using any style of Jumbo and specific drivers are available to suit any requirements.

Advantages:

- Proven historical performance
- Extensive quality controlled manufacture
- Permanent single pass bolting
- Multiple lengths available
- Standard drill consumables utilised
- Proven resin mixing performance
- Can be post grouted if required

Technical Data

Mechanical Properties	Minimum	Typical
Outside Diameter (mm)	37.7	38
Cross Sectional Area – Bar (mm ²)	324	350
Yield Strength (MPa)	350	460
Yield Force (MT)	11.6	16.4
Tensile Strength (MPa)	450	520
Tensile Force (MT)	14.2	18.5
Elongation* 5.65 √S ₀ (%)	20	–

*Elongation defined as proportion of gauge length of 5.65 √S₀

Testing Standards

	Standard
ERW Steel Tube	AS 1450
Galvanising	AS 4680

The following codes are the typical Jumbolts available. Other length Jumbolts are available on request.

Codes, Dimensions and Weights

Item Code	Description	Unit Weight	Pack Size
JB204002	Jumbolt 38 x 2400 Black Plastic Sleeve 41 x 1000	7.0 kg	150
JB204102	Jumbolt 38 x 2400 Galvanised Plastic Sleeve 41 x 1000	7.1 kg	150
JB204202	Jumbolt 38 x 2400 Black No Sleeve	7.0 kg	150
JB204302	Jumbolt 38 x 2400 Galvanised No Sleeve	7.1 kg	150

Plates

Minova manufactures a comprehensive range of specially designed plates for use with rock bolts and cable bolts. Extensive product data is available on Minova's full range of plates from Minova's product catalogue and web site, www.minova.com.au
Plates most typically used with Jumbolts are:

Dome Plate 47	• 150 x 150 x 4 mm
Combi Plate 47	• 280 x 300 x 1.8 mm • 150 x 150 x 4 mm
Crown Plate 42	• 150 x 150 x 5 mm





Product Service Support

Minova provides a full service support package to customers, including underground pull testing, operator awareness training, underground audits and stock control assistance. Each service package is developed to suit the individual customers requirements.

All aspects of Minova's product service support service is provided by experienced trained and qualified personnel.

Additional Information

For additional information relating to any aspect of this product specification data, including product performance, quality, testing, specification, range, availability etc. please contact your nearest Minova office, or email: technicalsupport@minovaint.com

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