

# D39 MDX Bolt



The D39 Mechanical Dynamic Extra (MDX Bolt) has unparalleled “extra expansion” for extremely effective anchorage using the unique wedge design that is able to expand up to 47 mm, when drilled with 35-38 mm drill bits. The D39 MDX Bolt is particularly suitable for seismic rock conditions and is the new benchmark in seismic ground support stability.

The Sandvik D39 MDX Bolt has been developed to provide strata support in a wide variety of rock conditions (weak and competent), and in particular seismic rock conditions. This development is a progression on the successful MD Bolt being used in Australian mines since 2010.

While the MDX Bolt maintains the key features of the MD Bolt, regarding the ease of installation (single pass with no grout), its performance in both the seismic and very weak rock conditions has been significantly improved.

## Features

- A universal bolt suitable for broken, very weak, strong and seismic rock conditions
- A very quick and simple “one-pass” installation
- No resins or grout required
- Installed with standard bolting equipment and tools
- Yielding design capable of absorbing high dynamic loads
- High tensile and shear strength
- Fully galvanized for corrosion protection
- The stopper safety device eliminates bar ejection
- The bottom of the tube is sealed to prevent atmospheric corrosion
- Low profile head, no protrusion below the nut
- Accessories can be screwed directly onto the installed bolts
- Bolt installation quality apparent to operator
- These bolts are available in a range of lengths from 1.8 m, 2.1 m, 2.4 m and 3.0 m

## Component properties

Bar diameter	Ø20 mm
Bar elongation (5d)	22 %
Bar rolled thread	M22x2.5 LH
Tube thickness	2.3 mm
Drill bit size	Ø35-38 mm
Bolt diameter	47 mm
Bolt length	1.8 m, 2.1 m, 2.4 m and 3.0 m

## Bolt technical specifications

Property	Minimum	Typical
Ultimate tensile strength	205 kN	225 kN
Yield strength	155 kN	180 kN
Shear strength (calculated)	207 kN	227 kN
Dynamic capacity	24 kJ	28 kJ
Dynamic displacement	108 mm	129 mm
	<b>Maximum</b>	
Wedge expansion	47 mm	

Part number	Description (39 mm)	Weight
BXG3918	1.8 m long MDX Bolt galvanized	8.4 kg
BXB3918	1.8 m long MDX Bolt black	8.1 kg
BXG3921	2.1 m long MDX Bolt galvanized	9.9 kg
BXB3921	2.1 m long MDX Bolt black	9.6 kg
BXG3924	2.4 m long MDX Bolt galvanized	11.1 kg
BXB3924	2.4 m long MDX Bolt black	10.8 kg
BXG3930	3.0 m long MDX Bolt galvanized	14.1 kg
BXB3930	3.0 m long MDX Bolt black	13.8 kg

