MINOVA

FRICTION BOLT

IMMEDIATE ANCHORAGE ROCK SUPPORT

DESCRIPTION

Minova's Friction Bolt improves rock stability, strata control, and safety. The Friction Bolt provides increased anchorage as lateral strata movement occurs.

The Friction Bolt is primarily used in hard-rock mining operations and installed with rotary percussion equipment.

Minova's Friction Bolts are available in multiple sizes: 33-, 35-, 39-, 46-, and 47-mm diameter.

INSTALLATION PROCEDURES

1. Drill hole at proper diameter and depth. Drill hole diameter is suggested in the table below and determined by on-site testing. Hole depth should be minimum 1" longer than bolt length.
2. Install bearing plate on bolt and insert the tapered end of the Friction Bolt into the drill hole. A driving tool is fitted into the rock drill's chuck. Place Friction Bolt and bearing plate onto the installation tool.
3. Using percussion and thrust, fully drive the Friction Bolt into the drill hole until the bearing plate is tight against the rock surface.

APPLICATION AND USES

Minova's Friction Bolt is manufactured from high-strength steel and in accordance with ASTM F432 Specifications, where applicable.

For increased protection against corrosion, the Friction Bolt can be hot-dipped galvanized.

Standard lengths range from 0.5 m to 3 m (1.5 ft to 10 ft)

TECHNICAL PROPERTIES

SIZE	TYP. DRILL HOLE DIAM.	MIN. BOLT STRENGTH (lbs)	TYP. BOLT STRENGTH (lbs)
33 mm	1-3/16" to 1-1/4" (30 to 32 mm)	16,000	21,000
35 mm	1-5/16" to 1-3/8" (33 to 34 mm)	16,000	22,000
39 mm	1-3/8" to 1-1/2" (36 to 38 mm)	20,000	24,000
46 mm	1-11/16" to 1-3/4" (43 to 45 mm)	30,000	33,500
47 mm	1-3/4" (44 to 45 mm)	30,000	33,500

Specific drill hole diameters determined by onsite installation and anchorage testing, and strata control performance.

MANUFACTURER

Minova Canada Inc
An ISO 9001:2015
Quality Management Certified Company
Certificate No. FM 686583

Original Registration Date: 1995-02-15
Latest Revision Date: 2025-02-06

CUSTOMER SERVICE

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