

## Expansion Shell

### DESCRIPTION



The mechanical anchor is manufactured from 15.2 mm compact strand, with a 300 Kn minimum ultimate tensile strength. The specially machined expansion shell when used in the competent ground, will support the ultimate tensile strength of the strand.

The mechanical anchor was designed for areas where roof support needs to be immediate (normally grouted cable bolts do not reach capacity until the grout has completely cured). The mechanical anchor can be tensioned immediately and grouted at a later stage.

### KEY FEATURES

- › Two types of mechanical anchors have been developed to suit either a 48 mm or 64 mm hole
  - 1) 15.2 mm compact plain strand mechanical anchor
  - 2) 15.2 mm compact ball-bearing mechanical anchor
- › The bond between plain strand and the grout is not sufficient to transfer the full potential of the bolt, as a result Garock developed the Garock B-B mechanical anchor. The B-B bolt is fully bulbed with nuts inserted into the bulbs, thus allowing the bolt to be fully tensioned without the bulb collapsing
- › After grouting the bolt becomes a fully bonded mechanical cable bolt with full load transfer capabilities

### PACKAGING

- › Supplied in any required lengths
- › Supplied coiled in bundles of 50
- › Other packaging requirements are available on request
- › Colour coded for ease of identification

### TECHNICAL PERFORMANCE DATA

Cable Bolt – Expansion Shell		
Properties / Description	Minimal	Typical
Yield Force	212 kn	285 kn
Tensile Strength	300 kn	310 kn
Mass Per Metre	-	1.176 kg

Expansion shell is zinc passivated to prevent corrosion.  
Relevant standards: AS/NZS 4672. 1+2:2007