

STRAIN CELLS

TENSMEG™ TENSION MEASURING GAUGE FOR 7-WIRE STRANDS

APPLICATION:

- Load and strain measurement in rock and soil anchors (stressing and bond zones)
- Load and strain measurement in cable bolts used for rock support (tunnels, underground excavations, underground and open pit mine chambers)
- Load and strain measurement in prestressed and post-tension concrete.

The TENSMEG Tension Measuring Gauge is a spiral strain gauge consisting of a Teflon-sheathed resistance wire extending between two hard rubber end anchors. It is available in different lengths: 18, 30 or 48 cm (standard) and it is manufactured to suit several strand diameters including the more popular diameters of 12.7 mm and 15.2 mm. Because of its construction, in which the Teflon-sheathed resistance wire is precisely inserted in the spiral grooves of the 7-wire strand, the gauge has excellent linear response, accuracy, long term stability and water resistance. In addition, its specifications are unaffected when it is surrounded by cement grout or embedded in concrete. The gauge can be read by most strain gauge readouts or data loggers having a sensitivity of one micro-volt.

FEATURES:

- Only instrumentation available for stranded type cables
- Rugged construction unaffected by any type of shocks
- Resistance wire protected by Teflon sheath and further protected by being inserted into spiral grooves of cable
- Unaffected by cable bending
- Temperature compensated for steel cables
- Can be surrounded by cement grout or embedded in concrete
- Excellent water resistance
- Small diameter of gauge barely exceeding diameter of cable
- Available in different lengths
- Suitable for dynamic monitoring