

MODEL 4015

The Geotechnical Systems Australia Pty Ltd [Wire Extensometer](#) monitors the displacement between ground level and fixed anchor locations within a grouted borehole. It is capable of sustaining larger shears than the model 4000 Rod Extensometer.

APPLICATIONS

- Tunnelling
- Open Cut Mines
- Dam Construction
- Underground Mines
- Large Excavations
- Construction Control

FEATURES

- Low cost
- Robust
- Easy to install
- Complete instruments are supplied ready for installation
- One to six anchors to suit varying ground conditions
- Compact design, for ease of transport
- Transverse shear accommodation
- The head frame is easy to connect
- The head frame can be used on subsequent boreholes to reduce ongoing costs
- A wide selection of ranges is available from 150mm to 4000mm
- Three options for obtaining data including digital counter, hand held readout and data logger



OPERATION

The wire extensometer essentially consists of a maximum of six stainless steel wire ropes. One end of each wire is connected to a chrome plated steel anchor, the other is terminated onto a crimped connector. The assembly is sheathed in a poly tube between the anchors. The crimped connectors are in turn connected to the head frame, which contains a maximum of six spring-loaded pulleys. Either a digital counter or a ten-turn potentiometer monitors the movement of these pulleys. The digital counter is read visually and recorded by hand. The potentiometer can be read by a handheld readout or connected directly to a data logger. The handheld readout and datalogger options can be used on a series of locations and the head frames can be reused on later installations.

Wire Extensometer

SPECIFICATION	WIRE EXTENSOMETER	Model 4015
Model Number		4015
Nominal Borehole Diameter		75 mm
Maximum Borehole Length		150 m
Anchor Length		50 mm
Anchor Diameter		40 mm
Head Assembly Length		300 mm
Head Assembly Width		300 mm
Head Assembly Depth		150 mm
Maximum Number of Sensors		6
Sensor Ranges		0-150 mm, 0-1 m, 0-2 m, 0-3 m, 0-4 m
Resolution		0.1 – 4 mm
Measurement Options		Digital Counter, Handheld Readout, Data Logger

INSTALLATION

The downhole component is supplied fully assembled in a 1 m diameter coil. At the installation site the assembly is uncoiled, fitted with a grout tube and placed into the borehole. When the assembly is at the correct depth, grout is pumped into the grout tube until the borehole is full. The headframe is then installed above the assembly and initial readings taken. An installation manual is available upon request.

ORDERING INFORMATION

When ordering, please also specify

- Model Number and Quantity
- Number of Anchors
- Anchor Locations
- Sensor Range
- Measurement Option
- Any Custom Requirements

