

### MODEL 4700 - MAGNETIC EXTENSOMETER

#### APPLICATIONS

The measurement of soil and rock movements including: -

- Settlement, heave and lateral movements in foundations and embankments
- Subsidence
- Movement of natural and cut slopes, quarry and mining excavations
- Displacement of retaining walls, bridge piers and abutments
- Relaxation of rock around tunnels

#### FEATURES

- Reliable, accurate, simple to install and read
- No limits to the number of points that can be installed in one borehole, with little extra cost
- Can be extended simply
- One probe required for multiple installations
- Very economical
- Australian manufactured with local backup

#### OPERATING PRINCIPLES

Ring magnets sliding on a central access tube and within a collapsible outer tube are fixed in the ground at locations where movement is to be monitored. These magnets may be installed in a borehole, or placed subsequently during the construction of earth works. Location of the targets is accomplished by passing a reed switch probe through the access tube. When the probe enters the magnetic field generated by the target, an audible signal is emitted at ground level. Measurements made with a magnetic readout probe may then be related to any convenient datum. The targets are designed to move independently of the access tube and within the protection of the outer collapsible tube.



**Typical Magnetic Extensometer Assembly (Left)  
and 9200 Readout Probe (Right)**

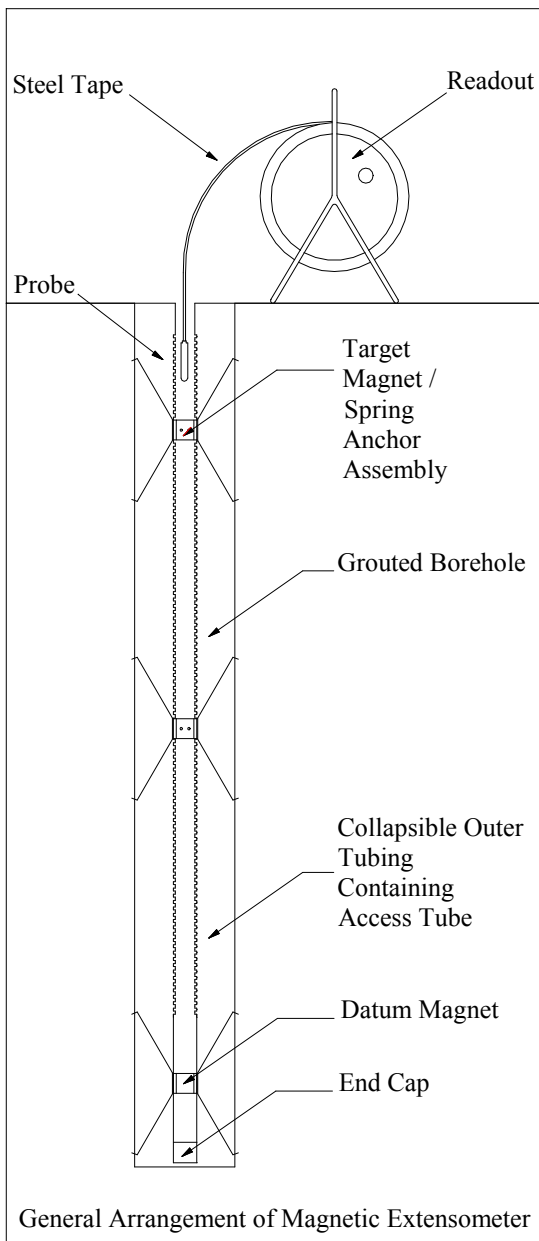
# Magnetic Extensometer

## SPECIFICATION

## MAGNETIC EXTENSOMETER

Model 4700

<b>Magnet</b>	6 x Rare Earth Magnets in PVC Ring
<b>Protective Tube</b>	50mm ID, Collapsible, Wire Reinforced PVC Tubing, Extends to 3 times its compressed length.
<b>Access Tubing</b>	25mm Dia PVC Conduit
<b>Readout Unit</b>	Reel Mounted Probe c/w Steel Tape Measure in mm



## MAGNETIC EXTENSOMETER READOUT PROBE Model 9200

This item of equipment is available in the following lengths:

Model No.	Description
9200-01	10 metre (c/w push rods)
9200-02	30 metre (Flat Tape System)
9200-03	50 metre (Flat Tape System)
9200-04	100 metre (Flat Tape System)

The readout is manufactured in Australia from quality components and is generally available off the shelf from our Melbourne factory.

The typical dimensions are as follows:

<b>Reel</b>	300mm L x 260mm W x 360mm H
<b>Tape</b>	1.5mm Thick x 10mm Wide
<b>Probe</b>	12.5mm Dia x 200mm Long

## ORDERING INFORMATION

When ordering, please also specify

- Model Number
- Anchor Quantity
- Borehole Length
- Borehole Diameter
- Number of Installations
- Readout Requirements
- Any Custom Requirements