

EXTENSOMETER



Model EDS-70V Electrical Borehole Extensometer System

The system is similar to EDS-63U/D excepting that the EDS-70V head assembly incorporates vibrating wire displacement sensors (model EDE-VXX, range 50, 100 or 150 mm). The electrical output can be transmitted over long distances through multicore cable. The readings can be taken with a portable readout unit/datalogger or through a remote automatic data acquisition system. This system is also available for use with mechanical readout devices.

SPECIFICATIONS

Type	Vibrating wire/potentiometric
No. of points	2 to 6
Extension rod	Stainless steel or fibre glass
Anchor	Groutable or packer
Sensor range	50, 100, 150 mm

Refer to EDE-VXX vibrating wire displacement sensor or EDE-PXX potentiometric displacement sensor for sensor specifications.



Model EDS-71V Electrical Borehole Extensometer System

EDS-71V is single point borehole extensometer. The system is similar to EDS70V. This model is suitable for 50 mm borehole.

SPECIFICATIONS

Type	Vibrating wire/potentiometric
No. of points	Single point (50 mm borehole)
Extension rod	Stainless steel or fibre glass
Anchor	Groutable or packer

Refer to EDE-VXX for vw displacement sensor and EDE-PXX for potentiometric displacement sensor



Mechanical Borehole Extensometer System

Model EDS-63U/D

EDS-63U/D borehole extensometer mechanically measures deformation of rock mass and adjacent surrounding soil. It is available in 2-3 points suitable for a 76 mm borehole and 4-6 points suitable for a 102 mm borehole. The system comprises of anchors (groutable or packer),

extension rods (stainless steel or fiber glass) in protective covering and a head assembly. A digital caliper/micrometer depth gage with a resolution of 0.01 mm is used to take readings.

Model EDS-64U/D

EDS-64U/D is a single point borehole extensometer; the system is similar to EDS-63U/D. The borehole extensometer is suitable for 50 mm borehole.

SPECIFICATIONS

Type	Mechanical
No. of points	2-3 points; 76 mm borehole (EDS-63U/D) 4-6 points; 102 mm borehole (EDS-63U/D) Single point; 50 mm borehole (EDS-64U/D)
Extension rod	Stainless steel or fibre glass
Anchor	Groutable or packer



Model EDS-91 Magnetic Extensometer System

EDS-91 magnetic extensometer system measures settlement or heave in foundations, embankments, fills, excavations, etc. The system comprises of access tube, magnet assemblies and a portable magnetic probe with reed switch. The probe is inserted inside the access tube installed with magnet assemblies at various depths, to detect the change in position of the magnet assemblies due to vertical soil movement. Magnet assemblies suitable for inclinometer casing are also available. A similar system for monitoring horizontal displacement in embankments is available with a pull cable reel and dead end pulley assembly.

Magnet assemblies:

- Datum magnet: for reference
- Spider magnet with 6 leaves: for boreholes
- Spider magnet with 3 leaves: for boreholes; can also be pushed in by a rod.
- Plate magnet: for fills & embankments.



SPECIFICATIONS

Range (m)	30, 50, 100, 150, 200, 300
Resolution	1 mm
Probe dimension	22 mm Ø , 150 mm long
Access tube	PVC, 25.5 mm i.d., 32.5 mm o.d., 3 m long, fitted at both ends, with telescopic couplings having dimensions 35 mm i.d., 41.5 mm o.d., length 1 m, 2 m, 3 m
Range (ft)	50, 100, 150, 300, 500
Resolution	0.1" standard



Model EDS-92 Soil Extensometer

EDS-92 soil extensometer is designed for monitoring of soil and rock movement in embankments and dams. The system consists of a specially mounted EDE-VXX vibrating wire displacement sensor installed inside telescopic protective tubing fixed between two anchor beams with connecting rods. Change in relative position between the anchor beams represents the deformation taking place, and is measured by the displacement transducer.

SPECIFICATIONS

Refer to EDE-VXX vibrating wire displacement sensor for sensor specifications