

BOREHOLE ROD EXTENSOMETERS

Description

The extensometers with fiberglass rods are used to control the displacement between one or more points located along the shaft of a hole and the reference head installed at the extremity of the hole.

The tool is formed by an anchor cemented in the bottom hole, placed in direct contact with a pole in fiberglass enclosed in a nylon cover, so that it is free to slide forward and transmit the movement between the anchor and the surface head. In case of multiple strain gauge, the anchoring points are distributed at different depths along the hole.

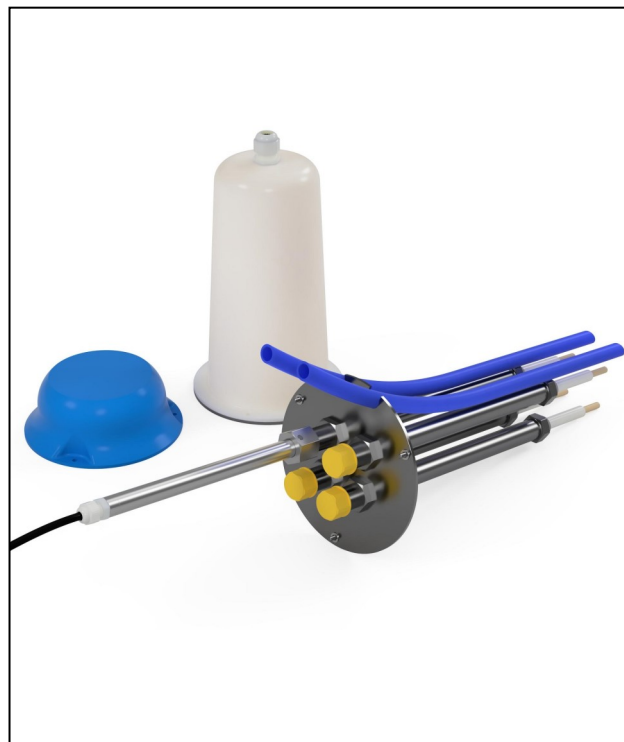
High reliability for measurement is granted by the use of a fiberglass rod (a material that has a very low coefficient of thermal expansion) and the minimization of the friction between the rod and the ground thanks to the protective nylon sheath.

The measurements are usually made manually with a depth gauge or automatically by installing a displacement transducer connected to a data acquisition system.

They are used for subsidence problems, foundation failures, convergence measurements during the digging, landslides, wall deformations, bulkheads and pilings, control on deep movements of clusters and rocky walls. Furtherly they are used everytime high precision surveying is needed, even at great distances.

Applications

- Settlement monitoring of foundations
- Deep excavations
- Deformations of bulkheads, palified
- Rock displacements
- Monitoring of tunnels and dams



Features

- Reliable and robust
- Easy to install
- Supplied pre-assembled and rolled in reel
- Prepared for both manual and electric transducer readings
- Extremely accurate measurements (even in the order of 1/100 mm)

Technical specifications

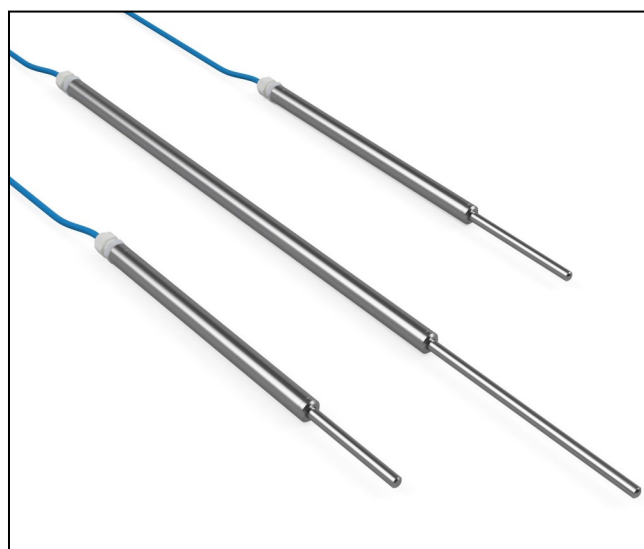
	Fiberglass rods	Stainless steel rods
Version	with fiberglass rods	with stainless steel rods
Diameter	7 mm	8 mm
Rod junctions	continuous	threaded couplings (M/F)
Protective antifriction sleeve	nylon Ø 12 mm	PVC pipe 1/2" (length 3 m)
Head	stainless steel from 1 to 6 points	stainless steel from 1 to 6 points
Diameter of head	160 mm	160 mm
Superior anchors	stainless steel	stainless steel
Inferior anchors	galvanized rebars L=500 mm	galvanized rebars L=500 mm

Accessories and spare parts

- Protective caps
- Displacement transducer for automatic readings
- Digital depth gauge for manual readings

Please specify

CODE	PRODUCT DESCRIPTION
EST-101	Head 1 point
EST-102	Head 2 points
EST-103	Head 3 points
EST-104	Head 4 points
EST-105	Head 5 points
EST-106	Head 6 points
EST-207	Fiberglass rod
EST-615	Stainless steel rods (length 1,5 m)
EST-715	Invar steel rods (length 1,5 m)
EST-401	Protective cap (for manual readings)
EST-405	Protective cap (for sensors FS 50 mm)



For further information:

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