

Wire Extensometer



Applications

Wire Extensometer is suited for the measurement of large displacements between two anchor points located up to 30 m apart.

They are used for monitoring:

- Movements associated with landslides in soil
- Monitoring the movement in unstable fractures in rock masses.
- Slopes in landslide

Technical features

Wire surface is constituted by a stainless steel box containing a rotary potentiometer sensor and an adjustable tensioner . The steel cable has a 2 meters mechanical range. All the parts are mounted on a steel plate. The other reference point is anchored to the end of the cable completes the instrument. The steel cable is tensioned with the tensioning device to reduce the catenary effect of the cable.

The maximum distance between the two anchor points can be up to 20/30 meters.

The instrument is protected by a stainless steel cover.

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Technical specifications

Code	O00FIL00240
Mechanical Range	2000 mm
Electrical Range	240 mm/turn o 2000 mm
Type of sensor	Rotary potentiometer or multi-turn (10 laps)
Maximum distance measurement	20 m (recommended) - 30 m (maximum)
Resolution	0.03 mm
Accuracy	± 1 mm in function of thermal effects on the steel cable
Repeatability	± 0.03 mm
Signal output	mV/Volt - 4-20 mA (on request)
Wire tension	Settable up to 8 kg
Power supply	10÷30 Vdc or 2V
Material protection	Stainless steel
Housing size	400x250x160 mm
Wire material	Stainless steel or steel coated with PVC
Wire diameter	From 2 to 6 mm
Operating temperature	- 20°C to +100°C

Accessories



4-20 mA transmitter
(Code O00CRK00420)
housed in a junction box.



Datalogger D800
(Code OD800C008)
Complete with warning system.

Details



Wire extensometer installation in landslide