

Instrument Datasheet

# Wire Crackmeters

## DESCRIPTION

The Wire Crackmeter, also known as a wire extensometer, is designed to monitor the changes in the distance between two anchor points located up to 30 m apart.

The Wire Crackmeter consists of a transducer, an opposing anchor, and a wire that runs between the transducer and the opposing anchor.

The transducer is housed in a stainless steel enclosure and supplied with a mounting plate. The opposing anchor is an eyebolt expansion bolt. The wire is stainless steel and supplied with clip.

## APPLICATIONS

- ✓ Monitoring large displacements associated with landslides
- ✓ Monitoring rockfalls and topple landslides
- ✓ Monitoring surface faults associated with settlements or horizontal displacements

## FEATURES

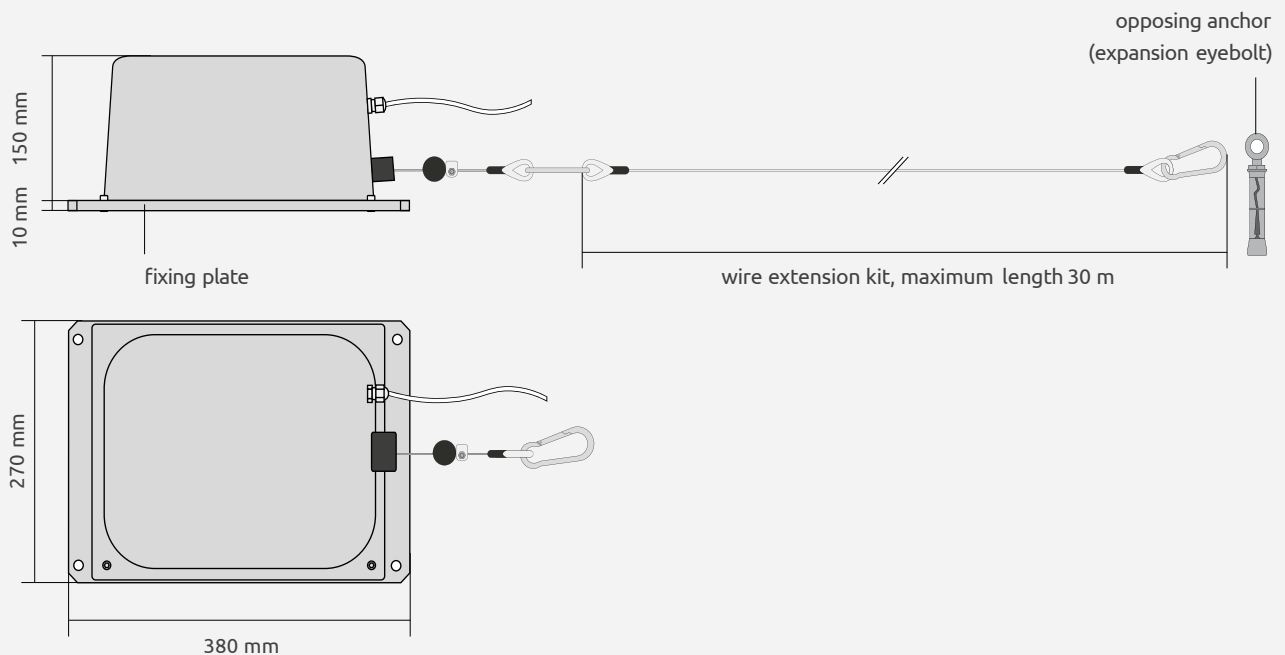
- ✓ Large measurement range, up to 2000 mm (6.5')
- ✓ Rugged enclosure designed for harsh conditions
- ✓ Wire can be extended to span a distance of 30m

## TECHNICAL SPECIFICATIONS

PRODUCT CODE	0D241A20000
Technology	rotative potentiometer and thermistor
Mechanical range	2000 mm (6.5")
Electrical range	240 mm (9.5") per complete rotation <sup>(1)</sup>
Sensitivity	0.03 mm
Accuracy	± 1 mm (depends mainly on the thermal effect on the steel wire)
Repeatability	± 0.03 mm
Signal output	4-20 mA (current loop) for displacement, resistance for thermistor
Power supply	12-24 V DC
Wire	stainless steel, Ø 2 mm
Maximum wire tension	8 kg
Maximum wire length	up to 30 m with wire extension kit (distance between transducer and anchor target)
Operating temperature	-20°C +60°C
Housing size and protection	380 x 270 x 160 mm (15 x 11 x 6.5"), IP65
Anchors	No. 4 SL M 8 expansion bolts (Ø 14 mm) for transducer housing No.1 SL M 8 expansion eyebolt (Ø 14 mm) for opposing anchor
Material	stainless steel
Signal cable	OWE104K00ZH
Max. cable length to logger	1000 m

(1) A full rotation of potentiometer is about 240mm of displacement. Reading resets to zero after each rotation.

## PHYSICAL FEATURES



## ACCESSORIES AND SPARE PARTS

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### WIRE EXTENSION KIT 0D241W30EXT

Wire extension kit include 30 m steel wire (Ø 2 mm), 2 stainless steel redances, 2 copper clamps and snap hook.

### 0WE104K00ZH 4-WIRE SIGNAL CABLE

Electrical cable with 2 pairs of 22 AWG wire and LSZH jacket. External diameter 7.4 mm. Rated for -30° to + 80°C.

### 0EPDP004W00 OVER VOLTAGE PROTECTION JB

IP65 plastic junction box with tripolar over voltage protections for instruments up to 4 wires. Over voltage protection must be connected to earth ground.

Wire crackmeter installed in a manhole with over voltage protection box



## LANDSLIDE APPLICATION

