

# WIRE CRACKMETER

EXTENSOMETERS & JOINTMETERS









# WIRE CRACKMETER

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.

Meets the essential requirements of the EMC Directive 2004/108/EC

#### 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

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## 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 (1)
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	0WE104K00ZH
Max. cable length to logger (2)	1000 m (for more information see <u>FAO#77</u> )

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

(2) refer to FAQ section of Sisgeo website: www.sisgeo.com/faq

## PHYSICAL FEATURES



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### ACCESSORIES AND SPARE PARTS

#### WIRE EXTENSION KIT OD241W30EXT

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

#### OWE104KOOZH 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.

#### OEPDPOO4WOO OVERVOLTAGE PROTECTION JB

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



Wire crackmeter installed in a manhole with over voltage protection box



### READABLE BY



Refer to separate datasheets for further information.

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#### TECHNICAL ASSISTANCE

SISGEO offers customers e-mail and phone assistance to ensure proper use of instruments and readout and to maximize performance of the system.

For more information, email us: assistance@sisgeo.com