D300F

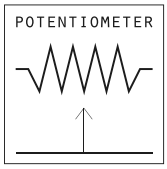
_ WIRE DEFORMETERS

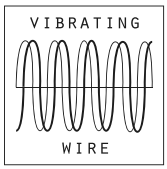
EXTENSOMETERS
& JOINTMETERS

SISGEO®

D300F_EN_04_03/2024

WIRE DEFORMETERS





Wire deformometers are designed to monitor changes in the distance between two anchor points. Typical applications include monitoring cracks or displacements in civil structures.

Electrical wire deformeters are analog devices with vibrating wire transducer. A stainless steel wire connects the transducer to the opposing anchor.

APPLICATIONS

- Monitoring rock movement in rockfalls or topple landslides
- Automatic monitoring of structural joint
- Monitoring convergence or deformation of ancient walls in historical buildings

FEATURES

- Suitable for long term monitoring

CE *Meets the essential requirements of the EMC Directive 2014/30/EU*

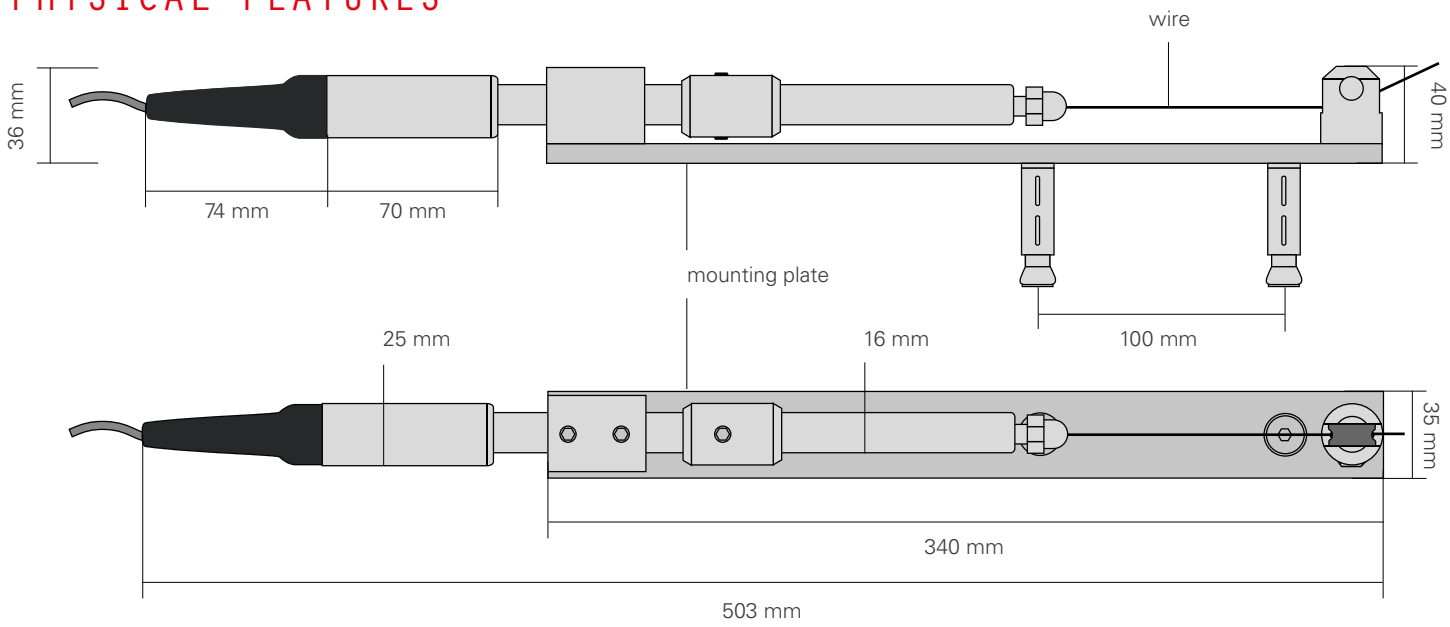
ELECTRICAL DEFORMETERS

The mounting plate holds the transducer at one end and a pulley at the other end. A stainless steel wire connects the transducer to the opposing anchor. The pulley allows the transducer and anchor to be mounted on different planes, even perpendicular surfaces, up to 10 m apart. A spring in the transducer housing keep the steel wire in tension. To obtain better accuracy, we strongly recommed to perform a site-calibration procedure as suggested in the user manual.

PRODUCT CODES	D313F025VW	D313F050VW
Measuring range	25 mm (1")	50 mm (2")
Measurement principle	vibrating wire transducer with thermistor	
Gauge accuracy: Pol. MPE(1)	< ±0.50% FS	< ±0.30% FS
Signal output	frequency (VW), ohm (T)	
Power supply	-	
Gauge sensitivity (2)	see calibration report	
Operating temperature range	- 20°C +80°C	
Gauge material and IP Class	stainless steel, IP68 up to 100 kPa (tested in a static condition, upper value on request)	
Wire characteristics	stainless steel, Ø 1 mm, linear termal expansion 12.5 x 10^{-6} / °C /m	
Signal cable	0WE104K00ZH	
Max. distance to datalogger (3)	1000 m (for more information see FAQ#77)	

(1) MPE is the Maximum Permitted Error on the measuring range (FSR). In the Calibration Report, issued for the gauge only without wire, the accuracies are calculated using both linear regression and polynomial correction (≤ Pol. MPE) (2) Sensitivity is a specific paramenter different for every gauge. The sensitivity is calculated during gauge calibration test and inserted into the calibration report.
(3) Refer to FAQ section of Sisgeo website: www.sisgeo.com/assistance/faq.html

PHYSICAL FEATURES



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ACCESSORIES AND SPARE PARTS

OWE102KE0ZH
2-WIRE SIGNAL CABLE

2 wire 20 AWG electrical cable with internal Kevlar stress member and LSZH jacket. External diameter 7.7 mm, operating temperature from -30° up to + 80°C.

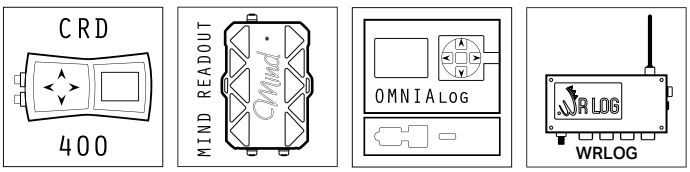
OWE104K00ZH
4-WIRE SIGNAL CABLE

Electrical cable with 2 pairs of 22 AWG wire, with LSZH jacket. External diameter 7.4 mm, operating temperature from -30° up to + 80°C.

EXAMPLES OF APPLICATION

Electrical deformeter installed on a rock fall

READABLE BY



For further information refer to their own datasheets

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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***