D232

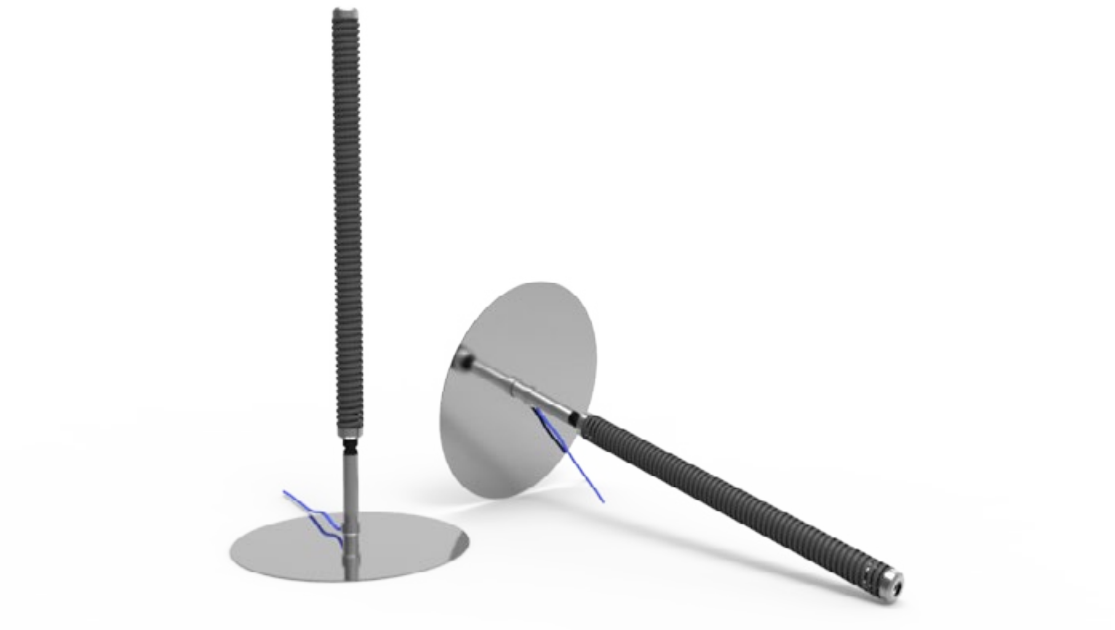
EMBANKMENT

EXTENSOMETER

EXTENSOMETERS
& DEFORMETERS

SISGEO®

D232_EN_08_09/2017



VIBRATING WIRE

EMBANKMENT EXTENSOMETERS

Embankment extensometers are used to measure soil strains in large earth structures.

Embankment extensometers are usually incorporated in filling materials, chained together by means of extension rods.

The measuring unit is a telescopic section equipped with displacement transducer. The system consists of several measuring units connected by extension rods to the anchor plates.

APPLICATIONS

- Lateral strains beneath earth and rock fill dams or embankments
- Foundation movements and control of natural and cut slopes, quarry and mining excavations

FEATURES

- Vibrating wire technology provides long-term stability
- Displacement sensors are available in 50, 100, and 150 mm ranges.
- Armoured jacket prevents damage to signal cables.

CE *Meet the essential requirements of the EMC Directive 2014/30/UE*

D232_EN_08_09/2017

TECHNICAL SPECIFICATIONS

	EXTENSION RODS	ANTIFRICTION SLEEVE
PRODUCT CODES	0D2320BM000	0D111PV5500
Length	1, 2 or 3 m (~ 3, 6 or 9')	continuous
Dimensions	Ø 27 mm (¾")	Ø 55 mm (2.2") nominal
Material	galvanised steel	corrugate pvc

	ANCHOR PLATES	
PRODUCT CODES	0D232AN5000	0D232AN5500
Dimension	Ø 500 mm (20")	square, 500 x 500 mm
Material	galvanised steel	galvanised steel

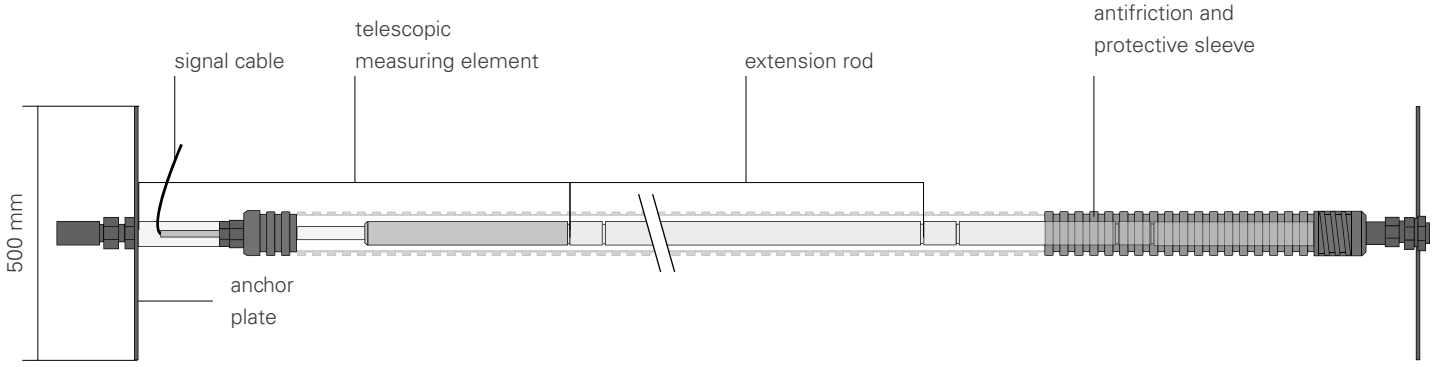
	TELESCOPIC MEASURING ELEMENT		
PRODUCT CODES	0D232T050VW	0D232T100VW	0D232T150VW
Measurement principle	vibrating wire with built-in thermistor		
Range	50 mm (2")	100 mm (4")	150 mm (6")
Accuracy Pol. MPE[1]	< ±0.30% FS	< ±0.30% FS	< ±0.30% FS
Output signal	frequency (VW), resistance (thermistor)		
Sensitivity [2]	see calibration report		
Typical frequency range [3]	2250 - 3000 Hz		
Operating temperature	-20°C +80°C		
Length	1000 mm ±25 mm	1000 mm ±50 mm	1000 mm ±75 mm
Material and IP class	stainless steel, IP68 up to 1.0 MPa		
Signal cable	0WE104X20ZH		
Max cable length to logger [4]	1000 m (for more information see FAQ#77)		

(1) MPE is the Maximum Permitted Error on the measuring range (FSR). In the Calibration Report, the accuracies of the gauge 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) The expressed frequency range could has a ±10% variation (4) refer to FAQ section of Sisgeo website: www.sisgeo.com/assistance/faq.html

PHYSICAL FEATURES



D232_EN_08_09/2017

ACCESSORIES AND SPARE PARTS

ARMOURED SIGNAL CABLE OWE104X0200

22 AWG, 4-wire signal cable with LSZH jacket, reinforced with galvanised steel braid. External diameter 7.8 mm. Temperature rated -30° to +80 °C.

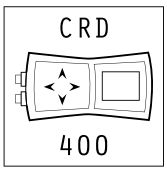
ELECTRIC JUNCTION BOX OEPD0000000

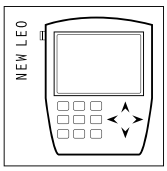
Junction box to connect up to 10 cable inputs to one multicore cable output for connection to a remote data acquisition system.

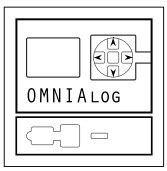
SWITCH BOX OEPC0000000

Various sizes to accommodate up to 24 transducers.

READABLE BY







Refer to separate datasheets for further information

SISGEO S.R.L.
VIA F. SERPERO 4/F1
20060 MASATE (MI) ITALY
PHONE +39 02 95764130
FAX +39 02 95762011
INFO@SISGEO.COM

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***