

EARTH PRESSURE CELLS

VIBRATING

Earth pressure cells are designed to monitor total pressure in earthfill dams, embankments, and at the interface between structures and soil.

Pressure applied to the surface of the pressure cell is transmitted hydraulically to a pressure transducer which can be read with a portable readout or a data logger.

APPLICATIONS

- Embankments
- Retaining walls
- Diaphragm walls

FEATURES

- High-tech transducer offers reliability, fast response, and long-term stability.
- High accuracy and resolution
- Stainless steel construction, hermetically sealed
- One-side sensitive pad
- Output signal suitable for long distance transmission

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





TRANSDUCERS SPECIFICATIONS

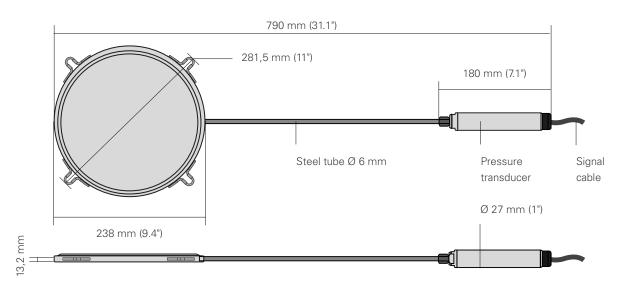
L143 MODEL

Description	VW pressure transducer	
Full scales (FS)	0-350 kPa up to 0-10.0 MPa 0-50 psi up to 0-1450 psi	
Sensitivity	0.03% FS	
Temperature sensor	built-in thermistor	
Overload	100% FS	
Pol. MPE (1)	< ±0.25% FS (< ±0.1% FS on request)	
Electrical supply	-	
Typical frequency range (2)	2250 - 3000 Hz	
Output signal	frequency	
Operating temperature range	-20°C +80°C	
Transducer size	OD 27mm, 180mm long OD 1", 7.1" long	
Material / weight	stainless steel / 0.6 kg	
Cables	0WE104K00ZH LSZH cable 0WE104X20ZH LSZH armoured cable	
Max cable length to logger (3)	1000 m (for more information see <u>FAO#77</u>)	

(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 (\leq Lin. MPE) and polynomial correction (\leq Pol. MPE) (2) The expressed frequency may vary $\pm -10\%$ (3) Refer to FAQ section of Sisgeo website: www.sisgeo.com/faq

PRESSURE PAD

Material	Stainless steel
Total weight	4.5 Kg (9.9 lbs)
Hydraulic line	6 mm OD (0.25" OD), stainless steel tube



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ACCESSORIES AND SPARE PARTS

2-WIRE SIGNAL CABLE OWE102KE0ZH

Two conductor, LSZH cable (20 AWG) with Kevlar stress member for 4-20mA pressure cells. Cables are factory fitted to the electrical transducer during manufacture.

4-WIRES ARMOURED SIGNAL CABLE OWE104X20ZH

Four conductor, LSZH cable (22 AWG) armoured with stainless steel wire. Cables are factory fitted to the electrical transducer during manufacture.

SWITCH TERMINAL JB OEPC0000500

Available in different sizes to connect up to 6,12,18 or 24 instruments. Equipped with up to four 6-position rotary switches and connector for readout.

INSTALLATION PROCEDURES

In many cases, the soil to be investigated is not uniform: for a good installation of total pressure cells is important to prepare a hand-compacted sand bed for the pressure cells about 50 to 100 mm thick. Then, after placing the cell, cover it with thicker, 100 to 200 mm layer of hand-compacted sand



READABLE BY









For further information refer to their

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The manufacturer reserves the right to make changes to the product or to its parts without prior notice, also on the basis of contingent situations not related to the technical characteristics alone, such as, for example, material or components shortages.

For the specific accuracy performance of each product, please refer to the Calibration Report issued for each instrument.

The datasheet is issued in English and other languages. In order to avoid discrepancies and disagreement on the interpretation of the meanings, Sisgeo Srl declares that English Language prevails.

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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