

Hydraulic load cells

With pressure transducer



Applications

Hydraulic load cells are used to measure the load present between two metal structures or between concrete and steel.

Hydraulic load cells can be used in particular:

- Under a centring base
- Between two centring elements
- To measure the load on a strut
- To measure the load during acceptance tests on poles

Technical features

Hydraulic load cells are constituted by two circular plates made of stainless steel, welded along the entire circumference of the cell, and connected to a pressure transducer through a steel tube. The space between the two plates is filled with deaerated oil which ensures good thermal performance and good sensitivity even under low loads. When the cell undergoes a deformation, the oil pressure changes in proportion to the applied load.

The instrument is completely made of stainless steel. IP68 sealing makes this instrument extremely reliable. The load cell is also designed to compensate eccentric loads.

The ease of use and the low chance of an incorrect installation ensure safe and reliable results.

The cell must be installed with load orthogonal to the support plane. Load cells can be equipped with a distribution plate (optional) for a better distribution of the load.

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Geotechnical and structural
instrumentation & monitoring



Technical specifications

Code	OCENT001900	OCENT003000
		
Description	Hydraulic load cell 1900 Kn	Hydraulic load cell 3000 Kn
Capacity	1900 KN	3000 KN
External diameter	220 mm	270 mm
Diameter bearing surface	200 mm	246 mm
Thickness	38 mm	38 mm
Output	4-20 mA two wire	
No linearity	< 1% F.S.	
Thermistor	NTC3K integrated on request	
Temperature operating range	from -20°C to +50°C	
Material	Stainless steel	
Special hydraulic load cells with different range can be supplied on request.		

Accessories

Code	
OCABLE20200	2x2x0.35 Cable, pur, shielded 7 mm
OCENT0DP019	Distribution plate for cell 1900 Kn.
OCENT0DP030	Distribution plate for cell 3000 Kn.



Portable readout unit
(Code O0018000001)



Watertight connector
(Codee OCONST00000)

Installation



Installation of cell
between two elements of a rib



Installation of cell
on strut contrast

All product technical specifications are subject to change without notice.