



LOAD CELL PRE

APPLICATION

The load cell PRE is an electrical transducer for the measurement of forces. It is mainly used to monitor anchor forces, in conventional and in prestressed structures (of any type). A load cell can also be used in other applications such as for anchor load testing, as well as lifting and load distribution on large containers.

For manual measurement the user-friendly readout unit Indipoc is used to display the load directly in kN. Due to its standard signal remote measurement is easily possible. A permanent load should not be more than 80% of the load cell nominal capacity (FS). For a short period the load cell may be loaded up to 110% of its nominal load without zero point shifting. The more rigid the supports (below and above of the load cell) the better the precision.

DESCRIPTION

The load cell PRE is designed for the use on construction sites. Basically it is maintenance free, splashproof, temperature compensated and of robust mechanical design.

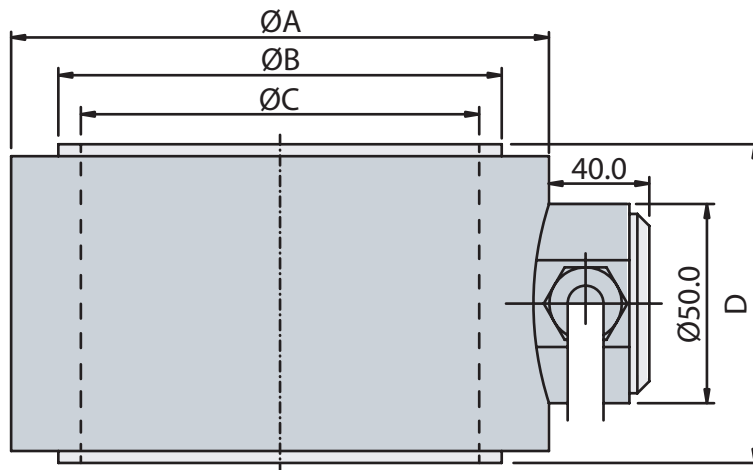
Strain gauges are applied in a temperature compensated arrangement directly on a thermally treated



Load cells PRE

steel cylinder. When a load is applied, a change in resistance on the strain gauges results due to the deformation of the steel cylinder. The electrical signal is adjusted in order for the actual load to be read directly in kN on the readout unit. Even eccentric loads can be monitored precisely due to the strain gauges arrangement.

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TECHNICAL DATA

Type	PRE 1000/78/80	PRE 1000/100/80	PRE 1500/125/80
Nominal capacity (FS)	0 - 1000kN	0 - 1000kN	0 - 1500kN
Outside diameter (A)	115mm	135mm	160mm
Bearing ring outside diameter (B)	92mm	111mm	139mm
Bearing ring inside diameter* (C)	78mm	100mm	125mm
Overall height (D)	80mm		
Measuring system	Strain gauges		
Precision	1% FS		
Temperature error	0.01%/°C		
Resolution	1kN		
Signal	3.3mV/V		
Operating temperature	-30°C to +60°C		
Cable	TS-PUR / TAP47		

Type	PRE 2000/160/80	PRE 3000/190/80	PRE 10000/0/120
Nominal capacity (FS)	0 - 2000kN	0 - 3000kN	0 - 10000kN
Outside diameter (A)	200mm	235mm	189mm
Bearing ring outside diameter (B)	179mm	212mm	153mm
Bearing ring inside diameter* (C)	160mm	190mm	without hole
Overall height (D)	80mm		120mm
Measuring system	Strain gauges		
Precision	1% FS		
Temperature error	0.01%/°C		
Resolution	1kN	10kN	
Signal	2.12mV/V		3.3mV/V
Operating temperature	-30°C to +60°C		
Cable	TS-PUR / TAP47		

* Center hole diameter