

**SENSOR TECHNICAL FEATURES**

- ✓ Type of sensor: piezoelectric;
- ✓ Standard range: 1, 2, 4 m (10, 20, 40 kPa);
- ✓ Output signal: 4-20 mA 2 wires;
- ✓ Pressure overload: 1.5 x F.S.;
- ✓ Electric supply: 8-28 V DC;
- ✓ Accuracy: +/- 0.15% F.S.;
- ✓ Total thermal error: 0.03% F.S/°C;
- ✓ Long-term stability: 0.2% F.S./year;
- ✓ Operating temperature: from -20 to +80 °C;
- ✓ Protection level: IP 67.

**SYSTEM TECHNICAL FEATURES**

- ✓ Total accuracy: +/- 2/3 mm (depends on: length / differential sunlight exposure / placement of tubing, pressure variations over time);
- ✓ Protection level: IP 67;
- ✓ Number of sensors per reservoir: from 1 up to 9/10 sensors (according to the length of the tubing).



The wall-mounted hydraulic settlement gauge is widely used to monitor structures subject to differential settlement or heave.

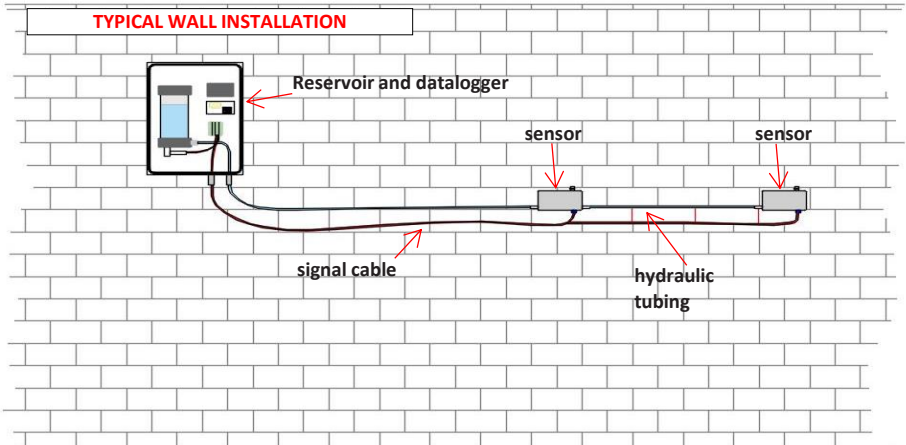
The main components of this system are: a reservoir (single or multiple), tubing filled with liquid and piezoelectric transducers set on the wall being monitored.

The reservoir is installed in a stable position and it is connected to each piezoelectric sensor through hydraulic tubing. Every change in level between the reservoir and one or more sensors set on the wall prone to settlement or

heave is measured by the sensors as a pressure change. The transducers' pressure change triggers a variation of the electrical signal, which is captured by specific measuring units.

For greater accuracy, the system also records changes in barometric pressure and air temperature over time.

**TYPICAL WALL INSTALLATION**



Pressure sensor on anchoring plate

**CE** product compliant with European directives

**SYSTEM DIMENSIONS**

sensor plate dimension and material	205X105X1.5 mm, stainless steel
sensor box dimension and material	175X75X60 mm, anodized aluminium
tubing dimension and material	external diameter 6mm, polyethylene
reservoir dimension and material	700x500x250 mm, anodized aluminium

We reserve the right to carry out modifications to our products and their specifications