

TECHNICAL FEATURES OF ELECTRICAL PRESSURE TRANSDUCER

- ✓ Type of sensor: piezoelectric;
- ✓ Measuring range: 100-200-350-700 kPa, 1-2 MPa;
- ✓ Output signal: 4-20 mA;
- ✓ Pressure overload: 2x F.S.;
- ✓ Power supply: 8-28 VDC;
- ✓ Accuracy: +/- 0.1% F.S.;
- ✓ Non-linearity: +/- 0.1% F.S.;
- ✓ Thermal drift: 0.04% F.S./°C
- ✓ Long term stability: 0.1% F.S./year;
- ✓ Operating temperature: from -40 to 125 °C;
- ✓ Protection level: IP 68.

TECHNICAL FEATURES OF VIBRATING WIRE PRESSURE TRANSDUCER

- ✓ Type of sensor: vibrating wire;
- ✓ Measuring range: 345, 518, 1034 kPa, 2.1 - 3.4 - 5.2 MPa;
- ✓ Output signal: Hz;
- ✓ Range of operation: from 2200 to 3500 Hz;
- ✓ Pressure overload: 2x F.S.;
- ✓ Power supply: 8-28 VDC;
- ✓ Accuracy: +/- 0.1% F.S.;
- ✓ Non-linearity: <0.5% F.S.;
- ✓ Thermal drift: 0.05% F.S./°C
- ✓ Operating temperature: from -20 to 80 °C;
- ✓ Protection level: IP 68;
- ✓ Thermistor: NTC 3kΩ.



Earth pressure cells are used to monitor the total pressure between the structure and the soil.

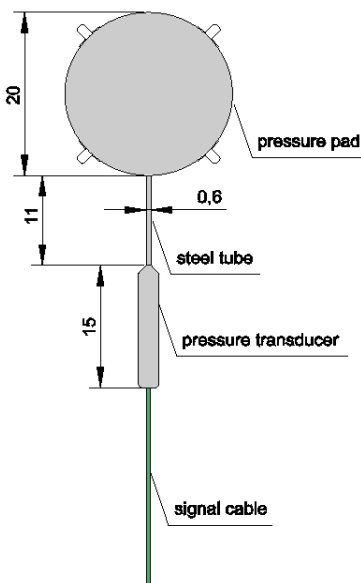
They are installed at the base of embankments or earth-filled dams, below tanks or bridges.

The pressure cell is made up of 2 round steel plates welded along the perimeter and separated internally by an annular space filled with special de-aired oil. The oil is connected through a stainless steel tube to an electrical transducer that

converts each change of pressure acting on the cell into a change of electrical/frequency signal.

Each change of pressure acting on the cell causes a change in the transducer electrical signal, which is captured by data reading units.

The pressure transducer can be either electrical with 4-20 mA output signal or vibrating wire with frequency output.



CE product compliant with

| CELL PLATE SPECIFICATIONS | |
|---------------------------|--------------------------|
| Plate dimension | 200 mm diameter |
| Thickness | 7 mm |
| Material | AISI 304 stainless steel |
| Hydraulic tube length | 110 mm |
| Hydraulic tube diameter | 6 mm |