

**TECHNICAL FEATURES OF THE ELECTRICAL PRESSURE TRANSDUCER**

- ✓ Type of sensor: piezoelectric;
- ✓ Measuring range: 6-10-20 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.;
- ✓ Termal 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 THE VIBRATING WIRE PRESSURE TRANSDUCERS**

- ✓ Type of sensor: vibrating wire;
- ✓ Measuring range: 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.



The pressure cell consists of 2 rectangular or square steel plates welded along the perimeter and internally separated by a small cavity filled with special de-aired. The oil is connected to an electrical transducer that converts each change of pressure acting on the cell into a change of electrical/frequency signal.

The device comes with the transducer directly connected to the cell's plate via a valve and a rilsan tube that provide re-pressurization through a special pump.

Re-pressurization is needed when the plate is no longer in contact with the surface whose pressure read out is needed.

The cell is used to check radial and tangential pressure in tunnel linings, to monitor the pressure in foundations, dams and overpasses.

It can also be used to measure pressure exerted in underground works or the pressure existing between a retaining structure and a rock.



rectangular pressure cell for drilling sites

**CE** product compliant with European directives

DIMENSIONS		
plate mm	shape	material
150x250	rectangular	stainless steel
150x150	quasquare	stainless steel
50X200	rectangular	stainless steel