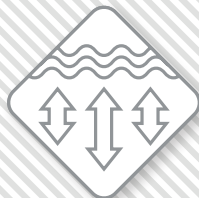




LEA\_EN\_PZL4001001

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# Pressure gauge with Bourdon Manometer

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[www.pizzi-instruments.it](http://www.pizzi-instruments.it)  
Instruments and Systems for Geotechnical and Structu-

LEA\_EN\_PZL4001001

## Pressure gauge with Bourdon Manometer



### Description

Pressure gauges with Bourdon Manometer are usually used to measure uplift pressures in concrete and RCC (Roller-Compacted Concrete) dams and also in earthfill dams.

Each system is composed by:

- **Measuring instrument (Bourdon Manometer)**
- **A three-way tap**
- **A connecting element for the piezometric tube**

The system allows measurement of pressure, discharge of pore pressures.

The system allows passage of a cable for automatic monitoring with piezometric sensor (vibrating wire piezometer or electric piezometer).

### Applications

Typical applications are:

- **Concrete and RCC dams**
- **Embankment dams**

## Features and benefits

The measuring instrument is composed by a spring manometer, Bourdon Type in class 1%.

On request, pressures gauges with a different degree of accuracy (0,5% or 0,25%) are available.

The connecting element for the piezometric tube is normally supplied with a threading of 2" GAS.

**The measuring ranges normalized by the pressure gauges are :**

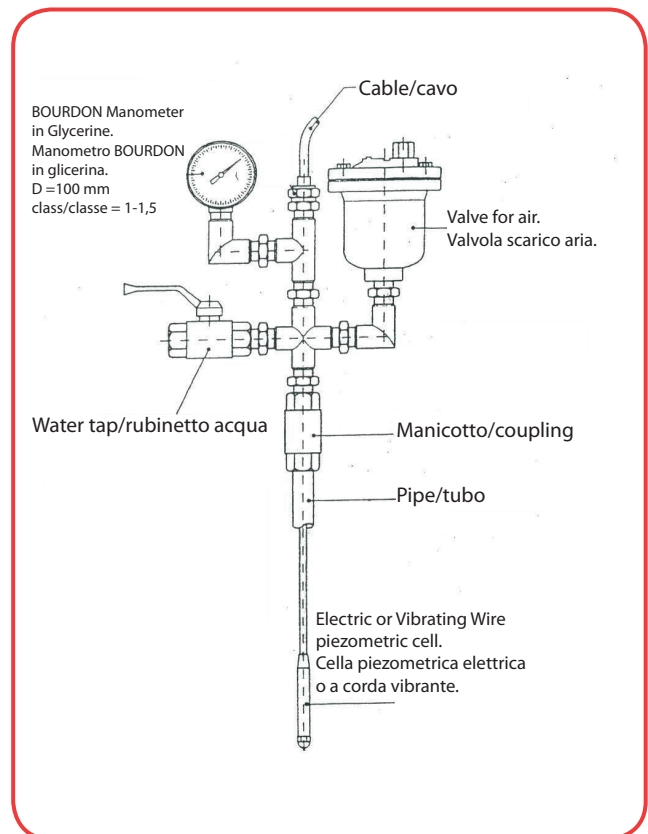
**bar; 0-2,5 bar; 0-4 bar; 0-6 bar; 0-10 bar.**

This instrument is often provided with an automatic sensor (vibrating wire, piezo-electric or other) for automatic measurement; the group enables pressure discharge thanks to a spillway present on the block and adjusted by manual gate valve. Also available is a group with Bourdon and control valve for the release of air.

## Measuring principle

The measuring principle of the Bourdon Manometer is extremely simple; pressure acts inside a spiral spring, composed by a tube with an ellipsoidal section, whose stretching is proportional to the pressure itself.

The pressure to be measured acts on a spiral spring inside a flattened tube and the distension is proportional to the pressure itself. The spiral rotates and linked to a gauge provides the desired measurement.



## Technical specifications

Body	Stainless steel
Filling	Air or glycerin
Measuring ranges	0 – 1 bar; 0 – 2,5 bar; 0 – 4 bar; 0 – 6 bar; 0 – 10 bar
Precision	1% standard; upon request: 0,5% f.s. and 0,25% f.s.

## Technical assistance

If you have any requests or questions about our instruments or if you have special needs that require different solutions from the standard, please contact us. Our team will provide all the necessary information and will be very happy to work with you to study, develop and customize instruments and solutions suitable for your specific needs.

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The product information may be subject to variations at any time.  
Please carefully check the release and contact Pizzi Instruments for further details.

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