

# Piezometer PLM

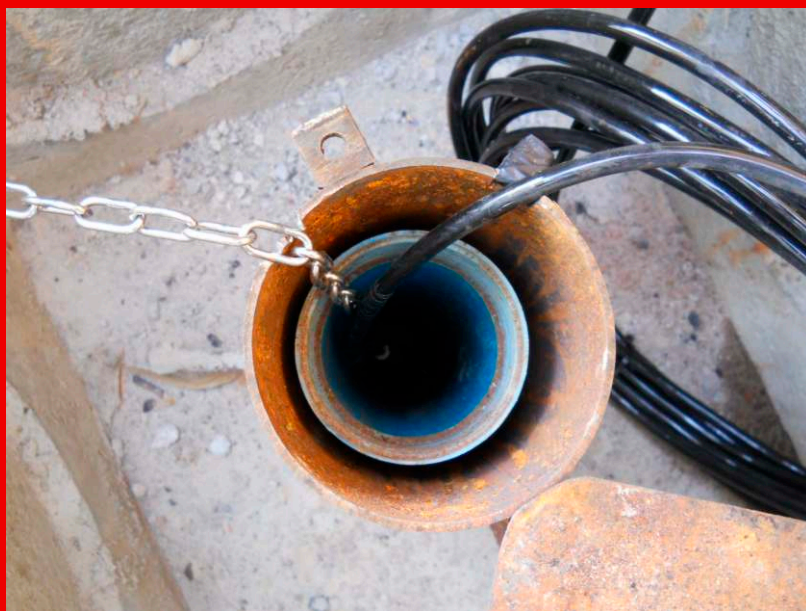
The piezometer (or pressure hydrometer) performs the same functions of the ultrasonic or radar hydrometer, but employing a different technology that makes it particularly suited for specific applications.

Usually the piezometer is used to monitor the level of underground water flows, connected to hydro geological risks like landslides and landslips.

## TECNOLOGY AND FUNCTIONING

The sensor, fully electronic, detects the level of the liquid body in which is immersed, measuring the differential pressure. This is done by subtracting the air column's pressure to the total pressure, thus obtaining the exact measurement of the fluid pressure. At the solicitation derived from the fluid pressure, the sensor responds with an electric signal which is decoded and translated in a depth measurement by the acquisition unit.

Working underwater, the sensor is subject to a number of usury factors, for this reason, the sensor is made of AISI 316L stainless steel. Its



chemical and mechanical characteristics allow it to resist long-term immersion in both fresh and salt water, even at high temperatures. All these characteristics currently make it the best material for applications in environments with corrosive characteristics.

## TECHNICAL SPECIFICATIONS

- Measurement range: 0 ÷ 3m, 0 ÷ 10m, 0 ÷ 20m, 0 ÷ 40m (depending on the type of sensor used)
- Compensated temperature range: 0 ÷ +50°C (other temperature ranges are possible as an option)
- Electric output: 4 ÷ 20 mA
- Power: 8 ÷ 32 VDC
- Maximum distance from the acquisition unit: 300 m
- Long-term stability: typ.  $\pm 0,05$  %FS
- Accuracy @ RT (20 ÷ 25 °C)  $\leq \pm 0,05$  %FS
- Ambient temperature range: -20 ÷ 85°C
- Protection: IP68
- Cable length: standard 5 m (different lengths shall be specified at the order)



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