

Submersible level sensor



Description

Submersible pressure transmitters are frequently used for level measurement. Thanks to the pressure measurement, the level can be determined.

The sensor consists of a piezometric transducer housed in a rugged enclosure of stainless steel. The electrical connection guarantees a protection grade IP68, which allows the sensor to be totally submersed with a pressure up to 700m of water column.

A vent tube is sealed directly to the sensing element which allows the automatic barometric pressure compensation.

The sensor can be used to monitor changes of level in tanks, canals, rivers, streams, drains, wells and aquifers.

The installation of the sensor is extremely simple in the presence of appropriate piezometric wells. For the installation in water courses it is necessary to provide a "tube housing" in order to ensure correct measurements and to prevent the sensor from damages.

The transducer requires external power supply and can be connected to an external display-datalogger system.

OPTION

The sensor can be coupled to a data logger (or the probe head) which is very similar sensor body. This part contains the battery, the acquisition module and the connector for the connection to the PC.



Submersible level sensor



Submersible level sensor — example of installation with stopping pipe



Technical specifications may be varied without prior notice

Technical specifications

Working principle	Piezometric measurement of differential pressure
Measuring range	0 ... 10 m of water column (other ranges on request)
Overpressure	3 x F.S.
Accuracy	Better than 0,2% F.S. (other accuracies on request)
Temperature compensation	0 +70 °C
Electrical output	4 ... 20mA (on two wires) 0 ... 10V (on three wires)
Power supply	9 ... 33 VDC (protected against polarity inversions)
Power consumption	Max. 20mA
Electrical discharge protection	According to EN 61000-4-5 (opt.)
Dimensions	Ø 24mm
Height	108mm
Weight	< 0,2 Kg (without cable)

Ordering codes

Submersible level sensor - output: 4...20mA	PCTSL024
Submersible level sensor - output: 0...10V	PCTSL032
Cable for submersible level sensor with vent tube. Cable sheath in PUR	PCTSL308
Lightning protection option	PCTSL320
Anti-humidity filter	PCTSL319
Submersible level and temperature sensor with outputs: 4-20mA	PCTSL036
Submersible level sensor with 4...20mA output with ATEX intrinsic safety	PCTSL314

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