



Robust ceramic pressure transducer for water level measurement

- **Application**
Surface water, Groundwater
- **Measurement technology**
Vented pressure cell
- **Parameters measured**
Water level, Pressure, Temperature
- **Product Highlights**
Water level and temperature measurement - for use with external data logger
- **Measurement range**
0 ... 4, 10, 20, 40, and 100 m
- **Accuracy**
 $\pm 0.05\%$ FS
- **Internal data logger**
No
- **Interface**
SDI-12, RS-485 (using SDI-12), or 4 ... 20 mA

The OTT PLS measures water level, depth to water, or pressure by means of an integrated controller and ceramic pressure-measuring cell. Design features such as multiple

Technical Data

OTT PLS - Pressure Level Sensor

communication outputs (SDI-12 or 4 ... 20 mA), stainless steel housing, and a rugged cable make this sensor ideal for monitoring water level in a variety of applications.

Water level measurement	
Measurement range	0 ... 4 m, 10 m, 20 m, 40 m, 100 m

Accuracy	
SDI-12	±0.05 % FS (linearity and hysteresis)
4 ... 20 mA	±0.1 % FS (linearity and hysteresis) 10 ppm/°C at 20 °C
Resolution (SDI-12)	0.001 m; 0.1 cm; 0.01 ft; 0.1 mbar; 0.001 psi
Temperature compensated working range	-5 °C ... +45 °C (ice-free)

Temperature measurement	
Resolution	0.1 °C / 0.1 °F
Accuracy	±0.5 °C / ±0.9 °F

Electrical data	
Available interfaces (use as required)	4 ... 20 mA, SDI-12, RS485 (via SDI-12 protocol)
Supply voltage	+9.6 ... +28 V DC, typically 12/24 V DC

Power consumption (SDI-12)	
Sleep	<600 µA
Active	<3.6 mA

Pressure sensor	
	(capacitive pressure sensor) ceramic, temperature compensated, overload safe for up to 5 times the measuring range without permanent mechanical damage

Temperature sensor	
	NTC

Dimensions	
Weight	195 mm x 22 mm approx. 0.3 kg

Environmental conditions	
Operating temperature	[-25 ... +70 °C
Storage temperature	[-40 ... +85 °C

Materials	
Housing	stainless steel 1.4539 (904L) resistant to sea water
Seals	Viton
Cable jacket	PUR
Protection type	IP68
Mechanical Strength	meets the mechanical shock tests of IEC 68-2-32

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EMC limits

CE conformity; EN 61000-4-2/3/4/5/6 and EN 61000-6-3 Class B are adhered to

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