



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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OTT Hydromet GmbH, Germany



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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