



bar

OPP-C/OPP-CT

Description

The OPP-C pressure sensor is **compatible with any of the WLPI series signal conditioners**. This compact and very robust probe can be customized to specific customer requirements. The fiber optic extension cable can be a maximum length of 3 kilometers.

The OPP-C, MEMS-based fiber-optic pressure sensor, is perfectly tailored to meet the challenges of pressure monitoring Applications **in submerged and/or harsh environments**.

The OPP-C sensor delivers **long term accuracy, durability and high fidelity pressure measurements** with a pressure operating range of **up to 70 bar**.

It's the perfect piezometer: Completely sealed, with a stainless steel body and diaphragm, the OPP-C is designed to work in adverse conditions of temperature, pressure, and toxic or corrosive atmospheres. It can be grouted in place if needed. With the inherent advantages of fiber optic, it is **not subject to interference** from electromagnetic interference, vibrations and lightning that may be present in the sensing environment.

Key features

- Maintenance free
- No drift over time, reliable results during years
- Intrinsically safe
- Robust design
- Can be located 3 km from the readout unit
- Immune to EMI, lightning
- Embedded Temperature sensor
- Long term reliability



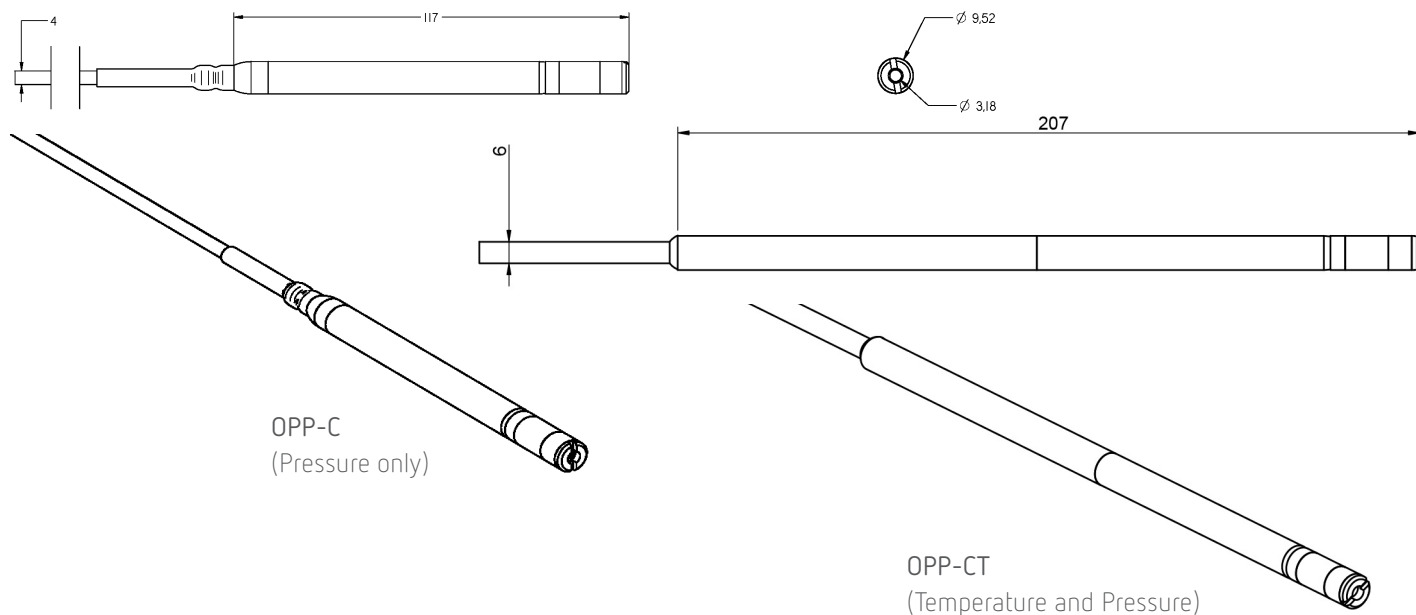
Reliable - Robust - Easy to install

Applications

- Geotechnical applications
- In-situ pressure monitoring for food processing
- Harsh subsurface monitoring equipment
- Hydrostatic pressure measurements with corrosive chemicals
- Groundwater elevation surveillance in wells and streams
- Pressure monitoring in pumping stations
- Hazardous and nuclear environments
- Offshore platform and refineries

Fiber Optic Pressure Sensor OPP-C

MEMS based fiber optic pressure sensor and piezometer for the harshest environments



OPP-C
(Pressure only)

OPP-CT
(Temperature and Pressure)

Specifications (Pressure)

Measurement range	25 PSI (172 kPa)	50 PSI (345 kPa)	100 PSI (690 kPa)	500 PSI (3500 kPa)	1000 PSI (7000 kPa)
Precision (Excluding thermal effect)	± 0.5% F.S.	± 0.2% F.S.	± 0.2% F.S.	± 0.2% F.S.	± 0.2% F.S.
Resolution	< 0.02% F.S. (Range dependant)				
Thermal coefficient of zero	< 0.03% F.S. / °C				
Proof pressure	200% F.S.				
Temperature operating range	-20°C to +85°C (other temperatures available upon request)				
EMI/RFI lightning	Complete immunity				
Housing	Stainless steel (117mm x 9.5mm)				
Mass	0.06 Kg				
Cable lenght	Up to 3 km (Sampling rate dependent, consult factory for more details)				
Optical connector	SCA (Standard), SC (Standard), other connector available on request				
Cable sheathing	From ruggedized flexible outdoor cable to robust stainless steel cable				
Signal conditioner compatibility	Use with any of the WLPI series signal conditioners				

Specifications (Temperature) for OPP-CT only

Resolution	0.1°C
Accuracy	± 1.0°C @ ±3.3 sigma limit (99.9% confidence level)