

P-05 Pressure sensor

Basic characteristic

High-accuracy pressure gauge based on Fiber Bragg Grating (FBG) technology allowing for passive (electrical power-free) remote monitoring of relative or absolute pressure changes, for both liquid and gaseous environments.



Benefits

- ▲ 2-fiber port configuration allowing for chain formation with a variety of FBG-based sensors on a single fiber line
- ▲ Extremely small drift (<0.5%FS/year)
- ▲ Very high accuracy and stability
- ▲ Customizable for different pressure ranges
- ▲ Ruggedized housing suitable for harsh environments

Applications

- ▲ Industrial process control
- ▲ Machine monitoring
- ▲ (Hazardous) tank monitoring
- ▲ Geotechnical applications
- ▲ Marine & offshore applications

Performance properties

Measured parameter	Relative or Absolute Pressure ¹⁾
Pressure Range	1-100 bar ²⁾
Operating Temperature Range	-20°C to +60°C
Pressure resolution	0.1% FS ³⁾
Pressure accuracy	<1% FS ³⁾
Pressure precision	<0.5% FS ³⁾
Pressure sensitivity (1bar range)	4pm/1mbar
Operating Humidity Range	0 – 95% Relative Humidity
Burst Pressure	up to 150% FS ³⁾
Measurement rate	up to 100 measurements/second ²⁾
Ingress Protection rating	IP 67 ⁴⁾

¹⁾ Absolute pressure sensor available upon request

²⁾ Standard configuration includes pressure ranges: 1, 4, 7, 10, 15, 20, 50 and 100 bar. Other ranges are possible upon request.

³⁾ FS: full-scale range

⁴⁾ IP68 ingress protection is available upon request

P-05 Pressure sensor

Physical properties

Housing material ¹⁾	Stainless steel SS304
Dimensions without cable	Ø30 x 121mm
Weight (without cable)	400g
Cable type	3mm Dyneema reinforced cable
Cable length ²⁾	1mtr
Cable Bend Radius (dynamic)	40mm
Cable Bend Radius (static)	30mm
Connector type ³⁾	FC/APC
Pressure inlet thread	G1/8

¹⁾ Other housing materials are available on request

²⁾ Cable length is extendable on request

³⁾ Other connector types available on request

Packaging

Cardboard box with dimensions: 370x290x45mm

Quality statement

The sensor is compliant with IEC 61757:2018

All sensors are 100% tested and calibrated at SYLEX

The sensor is manufactured according to ISO 9001:2008 and ISO 14001:2004

Design note

- ▲ For immersible sensor (liquid level monitoring), see the LLS-01 sensor.

Optional accessories

- ▲ **WCP-01 Watertight connector protection** – used for FC/APC connector protection during the installation against dust and water – IP67 rated.
- ▲ **LCP-03 Longer cable pigtails** – used to extend the cable lengths from 1mtr up to 20mtr.

For more information contact our sales team at sales@sylex.sk

* Specifications are subject to change without notice