

## 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 <sup>1)</sup>
Pressure Range	1-100 bar <sup>2)</sup>
Operating Temperature Range	-20°C to +60°C
Pressure resolution	0.1% FS <sup>3)</sup>
Pressure accuracy	<1% FS <sup>3)</sup>
Pressure precision	<0.5% FS <sup>3)</sup>
Pressure sensitivity (1bar range)	4pm/1mbar
Operating Humidity Range	0 – 95% Relative Humidity
Burst Pressure	up to 150% FS <sup>3)</sup>
Measurement rate	up to 100 measurements/second <sup>2)</sup>
Occupied bandwidth	~12nm
Ingress Protection rating	IP 674)

<sup>1)</sup> Absolute pressure sensor available upon request

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

<sup>3)</sup> FS: full-scale range

<sup>4)</sup> IP68 ingress protection is available upon request

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### Physical properties

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

<sup>1)</sup> Other housing materials are available on request

<sup>2)</sup> Cable length is extendable on request

<sup>3)</sup> 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](mailto:sales@sylex.sk)**

\* Specifications are subject to change without notice