FBG Standard Pressure Sensor

The FBG Standard Pressure Sensor is designed to measure fluid pressure or levels.

There is double FBG inside the stainless steel housing. One FBG is used to measure the pressure. Simultaneously, as temperature compensation, another FBG is used to monitor the temperature. The sensor can be equipped with a special kit of thread which can connect with different interfaces.

### Key Features
- Long-term reliability
- High accuracy and resolution
- Wide measuring range
- Rugged stainless steel construction
- Measurements of pressure and temperature simultaneously
- RoHS compliant

### Applications
Fiber Sensor

### Performance Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Values</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Wavelength</td>
<td>nm</td>
<td>1510–1590</td>
<td></td>
</tr>
<tr>
<td>Pressure Measurement Range</td>
<td>MPa</td>
<td>1-10</td>
<td>Customized</td>
</tr>
<tr>
<td>Pressure Accuracy</td>
<td>%</td>
<td>0.5%</td>
<td></td>
</tr>
<tr>
<td>Temperature Resolution</td>
<td>°C</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Temperature Accuracy</td>
<td>°C</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Temperature Range</td>
<td>°C</td>
<td>-20–80</td>
<td></td>
</tr>
<tr>
<td>Housing Material</td>
<td></td>
<td>SS316 or Alloy</td>
<td></td>
</tr>
<tr>
<td>Connector</td>
<td></td>
<td>FC/APC</td>
<td>Customized</td>
</tr>
<tr>
<td>Dimension</td>
<td>mm</td>
<td>26*135</td>
<td>Customized</td>
</tr>
</tbody>
</table>

For more Info

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DK Photonics reserves the right to change any specifications without prior notice.

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Optical Passive Components

FBG Based Sensor

FBG Standard Pressure Sensor

Temperature Characteristic

AT Temp. Calibration

\[ y = 0.01056 x + 1539.01588 \]
\[ R^2 = 0.99974 \]

Pressure Characteristic

AP Temp. Calibration

\[ y = 0.04796 x + 1551.88869 \]
\[ R^2 = 0.99907 \]

AP Pressure Calibration

\[ y = -0.47524 x + 1552.00233 \]
\[ R^2 = 0.99843 \]

Ordering Information For Custom Parts

If you need to customize other specifications, please provide detailed description for your requirement.

Web-site: http://www.dkphotonics.com/  Email: sales@dkphotonics.com