Pressure Sensor - EPT2105

- Long life and proven performance
- Light weight plastic design
- Low cost pressure measuring

The EPT2105 is based on the proven design of the EPT2100 and optimised for applications with low cost requirements.

The silicon measuring cells used within this design coupled with the high level output circuitry, assures excellent accuracy and long term stability within a light weight design.

The monolithic sensing element is compatible with many medias, including oil and compressed air and is suitable for applications with measuring ranges of 10 and 12 bar.

**Specification**

<table>
<thead>
<tr>
<th>Performance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accuracy @ RT</strong></td>
<td>% of the range</td>
</tr>
<tr>
<td>Span</td>
<td>4.0 V</td>
</tr>
<tr>
<td>Output at FS</td>
<td>4.5 V</td>
</tr>
<tr>
<td>Zero output</td>
<td>0.5 V</td>
</tr>
<tr>
<td>Response time</td>
<td>10 msec. (Measured from initial value to output at 90%)</td>
</tr>
<tr>
<td>Stability/year</td>
<td>% of the range &lt; ± 0.1%</td>
</tr>
<tr>
<td>Pressure range</td>
<td>10 bar, 12 bar</td>
</tr>
<tr>
<td>Overrange pressure</td>
<td>20 bar</td>
</tr>
<tr>
<td>Burst pressure</td>
<td>30 bar</td>
</tr>
<tr>
<td>Pressure cycles</td>
<td>&gt; 10 million</td>
</tr>
</tbody>
</table>

**Electronics**

- **Excitation**: 5 VDC for 0.5 – 4.5 V ratiometric output
- **Current consumption**: 7.5 mA min, 10 mA max.
- **Load resistor**: 2.5 kΩ
- **Load capacitor**: 25 nF
- **Output resistance**: 10 Ω
- **Output source current**: 2.0 mA
- **Output sink current**: 2.0 mA
- **Output ratiometricity**: ± 1.1 %
- **Isolation resistance to case**: 100 MΩ
- **Short circuit protection**: Yes
- **Reverse voltage protection**: Yes

**Mechanics**

- **Housing**: PA 6.6 30% GF
- **Wetted parts**: O-Ring is NBR 70 shore, Aluminum, silicon, silicone-glue
- **Pressure port**: M18x1.5
- **Electrical connection**: Packard connector
- **Weight**: > 50 g
- **Mounting force max.**: 8 Nm

**Environment**

- **Temperature range**: -40° to 125°C
- **Shock**: 1000 G, 11 msec., 1/2 Sine
- **Vibration**: 16 G peak, 20 to 2000 Hz
- **Sealing**: IP 66

**Ordering Information**

- Product code: 10 bar version - EPT2105-M18-01000-B-5-C
- 12 bar version - EPT2105-M18-01200-B-5-C

**Dimensions and wiring**