Intrinsically Safe Hydrostatic Level Transmitters

HT-PSX2 Series

- High accuracy & reliability
- Ranges 1mH20 to 600m H20g
- 2 wire 4-20mA signal output
- Fully submersible IP68 rated
- Temperature -40°C + 85°C
- Compact and rugged design

The HT-PSX2 is an ATEX approved Intrinsically Safe hydrostatic level sensor that provides output proportional to pressure of the vertical liquid head directly above the point of measurement. Packaged in a slim IP68 sealed capsule for indefinite/long term submersion into hazardous area storage tanks/vessels.

Discover more at www.hydrotechnik.co.uk
Intrinsically Safe
Hydrostatic Level Transmitters

HT-PSX2 Series

TECHNICAL SPECIFICATIONS

Standard pressure ranges & signal outputs

<table>
<thead>
<tr>
<th>Measuring range *(bar)</th>
<th>1</th>
<th>1.6</th>
<th>2</th>
<th>2.5</th>
<th>4</th>
<th>6</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overload pressure</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>10</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Burst pressure</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>15</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Measuring range (bar)</td>
<td>16</td>
<td>20</td>
<td>25</td>
<td>40</td>
<td>60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overload pressure</td>
<td>40</td>
<td>40</td>
<td>100</td>
<td>100</td>
<td>200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burst pressure</td>
<td>60</td>
<td>60</td>
<td>150</td>
<td>150</td>
<td>300</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Gauge ranges shown vacuum and absolute ranges & 1 bar = 10 mH2O approximately

<table>
<thead>
<tr>
<th>Electrical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output signal</td>
</tr>
<tr>
<td>Supply voltage</td>
</tr>
</tbody>
</table>

- Media temperature
  - Zone 0: -20°C to +60°C / Zone 1: -40°C to +100°C
- Compensated range
  - Zone 0: -20°C to +60°C / Zone 1: -20°C to +85°C
- Ambient temperature
  - Zone 0: -20°C to +60°C / Zone 1: -40°C to +85°C

Performance
- Accuracy: Non-linearity, hysteresis and non-repeatability at room temperature according to IEC 61298-2 (or BSFL/Best Fit Straight Line)
  - <0.5% FS range (<0.25% BFSL)
  - <1% for ranges (<0.5% BFSL for ranges less than 0.5 bar)
- Temperature effects: Zero/Span typical thermal coefficients <0.15% FS range/10°C
- Total Error Band: 1% FS from room temperature to -20°C or +60°C (Zone 0) / from room temperature to -40°C to +85°C (Zone 1)
- Long term stability: <0.1% FS range/year
- Response time: <1 mS (from 10% to 90% FS range)
- Vibration resistance: 20g (according to IEC 68-2-6 and IEC 68-2-36)
- Shock resistance: 1000g (according to IEC to 68-2-32)
- Intrinsically safe approvals: (ATEX)
  - Zone 0: II 1G Ex ia IIB T4 (Tamb -40°C to + 60°C)
  - Zone 1: II 2G Ex ia IIC T4 (Tamb -40°C to + 85°C)

Options
1. Improved accuracy:
   - 1 bar to 25 bar ranges <0.25% FS (<0.15% BFSL)
   - Ranges below 1bar: <0.5% FS (<0.25% BFSL)
2. Additional cable (per metre - specific length)
3. Stainless Steel nose cone (instead of plastic)

Related products
Hydrotechnik manufactures a wide range of sensors, test and measurement equipment. Contact us for further information or visit www.hydrotechnik.co.uk
Continuing development can necessitate specification changes without notice

Discover more at www.hydrotechnik.co.uk
## HT-PSX2 Series
### ORDER CODES

<table>
<thead>
<tr>
<th>Series</th>
<th>Output Signal</th>
<th>Pressure Range</th>
<th>Unit</th>
<th>Pressure Type</th>
<th>0</th>
<th>HEX</th>
<th>Electr. Connection</th>
<th>Extras</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSX2</td>
<td>10.0</td>
<td>0010000</td>
<td>IWS</td>
<td>(g)</td>
<td>S</td>
<td>-</td>
<td>CP10**</td>
<td>-</td>
</tr>
</tbody>
</table>

- **4…20 mA / 2 wires 10.0**

**Relative Pressure (g)**
- Plastic: P
- Stainless Steel: S

**Pressure Range**
- **0...1**: 00001000
- **0...1.6**: 00001600
- **0...2**: 00002000
- **0...2.5**: 00002500
- **0...4**: 00004000
- **0...6**: 00006000
- **Others**: BBB

**Unit**
- **bar**: BAR
- **kPa**: KPA
- **MPa**: MPA
- **PSI**: PSI
- **kg/cm2**: KGC
- **m WC**: MWS
- **in WC**: IWS
- **Others**: CCC

**Total Error**
- **0.25%**: F25
- **Others**: FXX

**Zone 0**: Z00

**Cable Gland Plastic 1.0”**: CP1

E.g. CP10 - cable length 10 metres