PTX/PMP 1200 Series

Industrial Pressure Transmitters

- ±0.25% FS accuracy
- NACE compatible wetted parts
- Low-cost, rugged construction
- Class I, Div 1, Intrinsically safe certified
- Ranges from 2.5 to 10,000 psi
For over 25 years Druck has manufactured precision pressure sensors with a capability to meet critical applications in industrial, aerospace, and research environments.

The PTX/PMP 1200 Series is a complete range of pressure transmitters designed to optimize the relationship between price and performance while providing flexibility from a standard production device.

At the heart of the 1200 Series is an advanced, high stability pressure measurement element, micro-machined from single crystal silicon within Druck’s own Class 100 processing facility. The silicon element is mounted within a high integrity glass to metal seal and is fully isolated from the pressure media by a hastelloy isolation diaphragm, electron beam welded to the front of the glass to metal seal. Druck’s proprietary low oil volume isolation allows fast dynamic response plus minimal thermal error. The high output silicon allows for high overload capability.

Surface mount electronics condition the output from the silicon diaphragm, correct for thermally induced errors, and configure the output to the required 4-20 mA or 1-5 Vdc output. Advanced design features built into the electronic circuitry enable minimum sensor size with the utmost reliability. The electronics incorporate power supply regulation, reverse polarity, overvoltage and short circuit protection, coupled with EMC protection components. The fully encapsulated solid state design ensures integrity of product under high levels of shock and vibration, with an ingress protection rating of NEMA 4X, depending on electrical termination selected.

A fully tested pressure core is stocked in quantity, requiring only the addition of the electrical termination. Prior to shipping, the sensor is adjusted to meet the particular pressure range and units and terminated with the electrical connection.

Some configurations allow access to zero and span potentiometers for adjustments during set up and calibration. Others are fixed and cannot be adjusted.

A range of stainless steel pressure adapters are available to modify the standard 1/4”NPT female pressure port.

The PTX/PMP 1200 Series is ideally suited to meet the rigorous demands of the Industrial, Automotive, Aerospace and Oil & Gas markets. The PMP 1200 is designed for applications where batteries and/or solar powered systems require very low power consumption. The PTX/PMP 1240 is also being qualified for Class I, Div 1 Explosion-proof service.
Standard specification

**SPECIFICATION**

### Operating Pressure Ranges

<table>
<thead>
<tr>
<th>Pressure Ranges</th>
<th>Code</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 2.5, 5, 10 psi</td>
<td>PTX</td>
<td>1225</td>
</tr>
<tr>
<td>15, 20, 30, 50, 60, 100, 200, 300, 500, 600, 750 psig or psia</td>
<td>PTX</td>
<td>1240</td>
</tr>
<tr>
<td>0 to 1000, 1500, 2000, 3000, 5000, 7500, 10,000, 15,000 psi</td>
<td>PTX</td>
<td>1260</td>
</tr>
</tbody>
</table>

**Pressure Containment**

- 6x Full Scale for vented gauge
- 2500 psi for all absolute and sealed gauge ranges 2000 psi and below
- 20,000 psi for all absolute and sealed gauge ranges above 2000 psi

**Temperature Limits**

- Temperature Range: -40°F to +250°F
- Storage: -50°F to +185°F
- Compensated: -4°F to +180°F

**Electrical Connection**

- 1/2" NPT male conduit fitting
- 6 pin bayonet connection

**Safety Classifications**

- UL Inherently Safe for Class I, Div 1, Grps A, B, C and D, Class II, Grps E, F, G
- CE marked
- Inherently Safe (NACE compatible)

**Output**

- PTX 1200: 4-20mA (2-wire configuration)
- PMP 1200: 1-5 Vdc (less than 2mA)

**Voltage Spike Protection**

Units will withstand 600V spike test to EN 50142 without damage applied between excitations lines and case

**Zero and Span Offset**

- ±0.5% F.S.

**Long term Stability**

- ±0.2% F.S./annum

**Combined Non-linearity, Hysteresis and Repeatability**

- ±0.25% F.S. BSL maximum

**Zero and Span Accessability**

- Models 1210, 1225 and 1265 only
- Zero: ±5% FS
- Span: ±5% FS

**Temperature Effects**

- ±2% F.S., typically; ±3% F.S. Thermal Error
- Band Maximum over compensated temperature range. Errors increase pro rata below 5 psi

**Weight**

- 10 oz. Nominal

**Pressure Connection**

- 1/4" NPT female to 10,000 psi
- 3/8" Autoclave for 10,000 & 15,000 psi ranges

**Ingress Protection**

- Designed to meet Nema 4X when properly installed with conduit fitting connection

**Voltage Spike Protection**

Units will withstand 600V spike test to EN 50142 without damage applied between excitations lines and case

**Heat Treatment**

- Stainless Steel: 316L
- Protection: Hastelloy C276 (NACE compatible)
- Fluids: 316L Stainless Steel

**Pressure Media**

- Containment: Refer to manufacturer for higher containment

**Case Ground**

- Shield: F

**Wiring Details**

<table>
<thead>
<tr>
<th>Function</th>
<th>PTX/PMP 1225/1240</th>
<th>PTX/PMP 1260/1265</th>
<th>PTX/PMP 1210</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wire Color</td>
<td>Pin Letter</td>
<td>Pin Number</td>
<td></td>
</tr>
<tr>
<td>Supply +</td>
<td>Red</td>
<td>A</td>
<td>(1)</td>
</tr>
<tr>
<td>Supply -</td>
<td>Black</td>
<td>B</td>
<td>(2)</td>
</tr>
<tr>
<td>Output + (PMP versions only)</td>
<td>White</td>
<td>C</td>
<td>(3)</td>
</tr>
<tr>
<td>Case Ground</td>
<td>Shield</td>
<td>F</td>
<td>( )</td>
</tr>
</tbody>
</table>

**Druck**

Druck is an ISO 9001 registered company.
PTX/PMP 1200 Series

Industrial Pressure Transmitters

Installation Drawings - dimensions in inches

Druck manufactures a comprehensive range of pressure instrumentation to complement the PTX/PMP 1200 Series.

Portable pressure, temperature and electrical field calibrators allow for local calibration reducing plant down time while maintaining the quality requirements of ISO 9000. In addition, the Druck range of calibration equipment is completed by primary standard deadweight testers.

Associated Products

Druck 610 Field Portable Pressure Calibrator

DPI 145 Multi-Function Digital Meter

DPI 605 Precision Portable Pressure Calibrator

LP Series of Low Pressure Sensors

A full range of alternative cable and connector versions are available - refer to Druck for further information.

The LP Series provides full scale absolute ranges as low as 0.03 psia and differential ranges as low as ±0.04 inches H2O wet/wet differential pressure. For further information and product data sheets - refer to Druck.