SMART PRESSURE TRANSMITTER
HIGH STABILITY, LOW DRIFT

PX751 Series

25 inH₂O to 6000 psi

- 2-Way Communications, Remote Troubleshooting, Reranging, Reconfiguring, Access to Difficult-to-Reach or Hazardous Areas
- Improved Performance, Increased Accuracy, Greater Stability and Noise Resistance
- Diagnostic Capabilities, Continuous On-Line Self-Check, Selectable Failure Alarm, Loop Test
- Transmitter Includes Configuration, Calibration and Materials Data
- Greater Performance, Wider Rangeability (100:1), Transmitter Security, Selectable Linear/Square Root Output, Multi-Drop
- High Stability and Low Drift Ensure Accurate Measurements for Years
- Fast, Dynamic Response
- Tighter Control and Reduced Maintenance Costs
- Pressure and Temperature Output
**LCD Meter Options**
The LCD meter can be digitally customized by the user to meet process needs. The meter can be configured to display engineering units, percent of range, or custom user scale, or to alternate between any 2 of these.

**Power Supply**
The DC power supply should provide power with less than 2% ripple. The transmitter requires a minimum of 250 Ω of loop resistance to communicate with a Hart™ based communicator. With 250 Ω drop, the transmitter will require a minimum of 16 Vdc to output 20 mA.

**Diagnostics and Service**
The diagnostic and service functions listed here are primarily for use after the transmitter is installed in the field.

The **Transmitter Test** feature helps verify that the transmitter is operating properly, and can be performed either on the bench or in the field. The transmitter test command initiates an extensive diagnostics routine that can quickly identify potential electronics problems. If the transmitter detects a problem, messages to indicate the source of the problem are displayed on the communicator screen.

The **Loop Test** feature is designed to verify proper loop wiring and transmitter output, and should only be performed after the user installs the transmitter. This function tests the output of the transmitter, the integrity of the loop, and the operations of any recorders or similar devices installed in the loop.

**Calibration**
Calibrating a smart transmitter is different from calibrating an analog transmitter. The smart transmitter requires 3 steps:

- **Rerange**—sets the 4 and 20 mA points to the desired pressures.
- **Sensor Trim**—adjusts the position of the factory characterization curve to optimize the transmitter performance over a specified pressure range or to adjust for mounting effects.

**Advanced Functions**
**Cloning**: Quickly copies the same configuration to multiple units. The cloning process involves configuring a transmitter, saving the configuration data, then sending a copy of the data to a separate transmitter. **Multidrop**: Communication between the host and the transmitter takes place digitally with the analog output of the transmitter deactivated. With Hart™ smart protocol, up to 15 units can be connected on a single pair of twisted wires or over leased phone lines. **Burst Mode**: Provides faster digital communications to control system by eliminating the time required for the control system to request data from the transmitter. Burst mode applies only to the transmission of dynamic data (pressure and temperature).

**Low-Power Option**
User-selectable 3-wire 1 to 5 Vdc or 0.8 to 3.2 Vdc outputs are available with the low-power option. The digital signal is superimposed on the voltage signal, available to any host conforming to Hart™ protocol. Low-power units operate on 6 to 12 Vdc with no load.
**PX751C Smart Transmitter Specifications and Reference Data**

**SPECIFICATIONS**

**Service:**
Liquid, gas and vapor applications

**Zero and Span Adjustment:**
Zero and span values can be set anywhere within the range limits stated in tables. Span values must be greater than or equal to the minimum span stated in the range limits tables.

**4 to 20 mA Models**

**Output:**
2-wire 4 to 20 mA output, user selectable for linear or square root; digital process variable superimposed on 4 to 20 mA signal, available to any host that conforms to the Hart™ protocol.

**Power Supply:**
External power supply required. Standard transmitter operates on 10.5 to 55 Vdc with no load. A minimum of 250 Ω of loop resistance is required to communicate with a Hart™ based communicator. With 250 Ω drop, the transmitter will require a minimum of 16 Vdc to output 20 mA.

**Load Limitations:**

<table>
<thead>
<tr>
<th>Load (Ω)</th>
<th>Voltage (Vdc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>42.41</td>
</tr>
<tr>
<td>500</td>
<td></td>
</tr>
<tr>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>1500</td>
<td></td>
</tr>
<tr>
<td>1935</td>
<td></td>
</tr>
</tbody>
</table>

Communications require a minimum loop resistance of 250 Ω.

1 For CSA approval, power supply must not exceed 42.2 V.

**Low Power Models**

**Output:**
3-wire 1 to 5 Vdc or 0.8 to 3.2 Vdc user selectable. Also user selectable for linear or square root output configuration. Digital process variable superimposed on 4 to 20 mA signal, available to any host that conforms to the Hart™ protocol.

**Power Consumption:**
3 mA, 18 to 36 mW

**Minimum Load Impedance:**
100 kΩ (Vout + wiring)

**Indication:**
Optional 2-line, 5-digit LCD meter

**Overpressure Limits:**
Transmitters withstand the following limits without damage

**Gage/Differential Models (CA/CD):**

- **Range 1:**
  - 0 to 2000 psig (0 to 13.8 MPa)
- **Ranges 2 to 5:**
  - 0 to 3626 psig (0 to 25 MPa)

**Absolute Models (CA):**

- **Range 0:**
  - 0 to 60 psia (0 to 413.7 kPa)
- **Range 1:**
  - 0 to 120 psia (0 to 827.4 kPa)
- **Range 2:**
  - 0 to 300 psia (0 to 2070 kPa)
- **Range 3:**
  - 0 to 1600 psia (0 to 11030 kPa)
- **Range 4:**
  - 0 to 6000 psia (0 to 41370 kPa)

**High-Process Temperature Models (HP/HG):**

- **All Ranges, 0 to 3626 psig**
  - (0 to 25 MPa)

**Type T:**

- **Ranges 1 to 4:**
  - 11,000 psi (75.8 MPa)
- **Range 5:**
  - 26,000 psi (179 MPa)

**Failure Mode Alarm:**
User selectable to drive output either high or low when gross transmitter failure is detected

**Temperature Limits:**

- Ambient: -40 to 85°C (-40 to 185°F)
- Storage: -46 to 110°C (-50 to 230°F)
- with integral meter, -40 to 85°C (-40 to 185°F)

**Process Temperature Limits:**

- **Silicone Filled Sensor with Coplanar Flange:**
  - -40 to 250°F²
- **Side Flange:**
  - -40 to 300°F²
- **Level Flange:**
  - -40 to 250°F²
- **Vertical Mount:**
  - -40 to 300°F²
- **Inert Fill Sensor Option:**
  - 0 to 185°F³

**High-Temperature Models:**

- **D.C. Silicone 200º:**
  - -40 to 375°F
- **Inert Fill Sensor:**
  - -50 to 350°F
- **Neobee M-201:**
  - 0 to 375°F

**Type “T” Gage and Absolute:**

- **Silicone Filled Sensor:**
  - -40 to 250°F²
- **Inert Fill Sensor:**
  - -22 to 250°F

**Humidity:**
0 to 100% RH

**Turn-On Time:**
Performance within specifications less than 2.0 seconds after power is applied

**Volume Displacement:**
<0.08 cm³ (0.005 in³)

**Damping:**
User selectable from 0 to 36 seconds for one time constant. This software damping is in addition to sensor module response time.

**PX751H high-process temperature traditional flange differential and pressure gage, shown smaller than actual size.**

**All Models**

- **Response Time:**
  - Dead Time (Td): 45 ms nominal
  - Time Constant (Tc): 55 ms
  - Update Rate: 20 times/s minimum

**Vibration Effect:**
< ±0.1% of span from 20 to 1000 MHz, and field strength up to 30 V/m

**Transient Protection (Optional):**
Meets IEEE standard 587, Category B meets IEEE standard 473, surge withstand capability 2.5 kV crest, 1 MHz waveform

**Process Connections (All Except Level, High-Pressure Gage and Absolute Models):**

- ½-18 NPT on 2⅞, or 2¾” centers
- 1½-18, 1/2-14 female, G1/2 A DIN 16288

**Wetted Parts:**

- **Flanges:**
  - Plated carbon steel standard; stainless steel, Hastelloy C or Monel optional (available on PX751C only)
- **Wetted O-Rings:**
  - Glass-filled TFE

**Housing:**
Low-copper aluminum with polyurethane paint

**Cover O-Rings:**
Buna-N

**Note:**
Calibrations at 20°C (68°F) per ANSI Z210.1

1 Process temperatures above 185°F (85°C) require derating the ambient limits by a 1.5:1 ratio (0.061 ratio for Type H).

2 104°C (220°F) limit in vacuum service; 71°C (130°F) for pressures below 0.5 psia.

3 71°C (160°F) limit in vacuum service.

4 Not available on model PX751CA.
SPECIFICATIONS
Differential and Gage CD/CG Models

Accuracy:

\[ \pm 0.075\% \text{ of span} \pm 0.100\% \text{ of span for differential range 1. For rangedowns greater than 10:1 of URL (15:1 for differential range 1), accuracy} \]

\[ = \pm \left( \frac{0.025 + 0.005 \times \text{URL}}{\text{Span}} \right) \% \text{ of span} \]

Ambient Temperature Effect per 10°C (50°F):

- Spans 1:1 to 10:1: \[\pm(0.0125\% \text{ URL} + 0.0625\% \text{ span})\]
- Spans 10:1 to 100:1: \[\pm(0.025\% \text{ URL} + 0.125\% \text{ span})\]
- Range 1: \[\pm0.1\% \text{ URL} + 0.25\% \text{ span}\]

Static Pressure Effect (DP Model Only):

- Zero Error: \[\pm0.1\% \text{ of URL/1000 psi (6.9 MPa) for line pressures from 0 to 2000 psi (0 to 13.7 kPa)—can be calibrated out at line pressure; ±0.2% of URL/1000 psi (6.9 MPa) for line pressure above 2000 psi (13.7 MPa)\]
- Range 1: \[\pm0.25\% \text{ URL/1000 psi (6.9 MPa)}\]

Span Error*: \[\pm0.2\% \text{ rdg/1000 psi (6.9 MPa)}\]

Range 1: \[\pm0.4\% \text{ rdg/1000 psi (6.9 MPa)}\]

*Ranges 4 and 5 must be field calibrated

Total Performance**: \[\pm0.25\% \text{ of span for ±28°C (50°F) temperature changes, up to 1000 psi (6.9 MPa) line pressure, from 1:1 to 5:1 rangedown} \]

** Total performance is based on the combined errors of reference accuracy, ambient temperature effect, and span line pressure effect.

Stability: \[\pm0.25\% \text{ of URL for 5 years for ±28°C (50°F) temperature changes, up to 1000 psi (6.9 MPa) line pressure} \]

Range 1: \[\pm0.2\% \text{ URL for 1 year} \]

Mounting Position Effect:

Zero shifts up to 2.5 inH₂O (0.62 kPa), which can be calibrated out; no span effect

Weight:

Type C: 6.0 lb (2.7 kg)

RANGES: PX751CA
ABSOLUTE PRESSURE MODELS

<table>
<thead>
<tr>
<th>RANGE</th>
<th>MINIMUM SPAN</th>
<th>RANGE AND SENSOR LIMITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UPPER (URL)</td>
<td>LOWER (URL)</td>
</tr>
<tr>
<td>0</td>
<td>0.167 psia (8.7 mmHgA)</td>
<td>5 psia (26 mmHgA)</td>
</tr>
<tr>
<td>1</td>
<td>0.3 psia (2.07 kPa)</td>
<td>30 psia (206.8 kPa)</td>
</tr>
<tr>
<td>2</td>
<td>1.5 psia (10.34 kPa)</td>
<td>150 psia (1034.2 kPa)</td>
</tr>
<tr>
<td>3</td>
<td>8 psia (55.16 kPa)</td>
<td>800 psia (5515.8 kPa)</td>
</tr>
<tr>
<td>4</td>
<td>40 psia (275.8 kPa)</td>
<td>4000 psia (27580 kPa)</td>
</tr>
</tbody>
</table>

** Total performance is based on the combined errors of reference accuracy, ambient temperature effect, and span line pressure effect.

RANGES: PX751CD, CG, PD, PG, HD, HG, AND LEVEL MODELS

<table>
<thead>
<tr>
<th>RANGE</th>
<th>GAGE AND DIFFERENTIAL TYPE C</th>
<th>HIGH ACCURACY TYPE H</th>
<th>ALL MODELS</th>
<th>DIFFERENTIAL CD/HD</th>
<th>GAGE CG/HG</th>
<th>LEVEL DIFFERENTIAL</th>
<th>LEVEL GAGE</th>
<th>HIGH-TEMP HD</th>
<th>HIGH-TEMP HG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.5 inH₂O (0.12 kPa)</td>
<td>N/A</td>
<td>25 inH₂O (6.22 kPa)</td>
<td>-25 inH₂O (-6.22 kPa)</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>2.5 inH₂O (0.62 kPa)</td>
<td>2.5 inH₂O (0.62 kPa)</td>
<td>250 inH₂O (6.22 kPa)</td>
<td>-250 inH₂O (-62.2 kPa)</td>
<td>-250 inH₂O (-62.2 kPa)</td>
<td>-250 inH₂O (-62.2 kPa)</td>
<td>-250 inH₂O (-62.2 kPa)</td>
<td>-250 inH₂O (-62.2 kPa)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>10 inH₂O (2.48 kPa)</td>
<td>100 inH₂O (24.8 kPa)</td>
<td>1000 inH₂O (248 kPa)</td>
<td>-1000 inH₂O (-248 kPa)</td>
<td>0.5 psia (3.5 kPa abs)</td>
<td>-1000 inH₂O (-248 kPa)</td>
<td>0.5 psia (3.5 kPa abs)</td>
<td>-1000 inH₂O (-248 kPa)</td>
<td>0.5 psia (3.5 kPa abs)</td>
</tr>
<tr>
<td>4</td>
<td>3 psi (20.7 kPa)</td>
<td>30 psi (207 kPa)</td>
<td>300 psi (2070 kPa)</td>
<td>-300 psi (-2070 kPa)</td>
<td>0.5 psia (3.5 kPa abs)</td>
<td>-300 psi (-2070 kPa)</td>
<td>0.5 psia (3.5 kPa abs)</td>
<td>-300 psi (-2070 kPa)</td>
<td>0.5 psia (3.5 kPa abs)</td>
</tr>
<tr>
<td>5</td>
<td>20 psi (138 kPa)</td>
<td>200 psi (1380 kPa)</td>
<td>2000 psi (13800 kPa)</td>
<td>-2000 psi (-13800 kPa)</td>
<td>0.5 psia (3.5 kPa abs)</td>
<td>N/A</td>
<td>N/A</td>
<td>-2000 psi (-13800 kPa)</td>
<td>0.5 psia (3.5 kPa abs)</td>
</tr>
</tbody>
</table>
COMMERCIAL GRADE—TYPE “C”
HIGH-PRECISION GRADE—TYPE “P”
ORDERING GUIDE

Vacuum to 2000 psi

- Coplanar Flange
- Plated Carbon Steel Flange
- Stainless Steel Diaphragm
- 0.075% Accuracy
- 0.25% Long-Term (5-Year) Stability
- 5-Year Calibration Cycle

COMMERCIAL GRADE—TYPE “C”

<table>
<thead>
<tr>
<th>To Order</th>
<th>MODEL NO.</th>
<th>URL</th>
<th>COMPATIBLE METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSOLUTE PRESSURE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PX751CA-1</td>
<td>30 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
</tr>
<tr>
<td>PX751CA-2</td>
<td>150 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
</tr>
<tr>
<td>PX751CA-3</td>
<td>800 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
</tr>
<tr>
<td>PX751CA-4</td>
<td>4000 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
</tr>
<tr>
<td>GAGE PRESSURE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PX751CG-2</td>
<td>250 inH₂O</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
</tr>
<tr>
<td>PX751CG-3</td>
<td>1000 inH₂O</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
</tr>
<tr>
<td>PX751CG-4</td>
<td>300 psig</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
</tr>
<tr>
<td>PX751CG-5</td>
<td>2000 psig</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
</tr>
<tr>
<td>DIFFERENTIAL PRESSURE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PX751CD-1</td>
<td>25 inH₂O</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
</tr>
<tr>
<td>PX751CD-2</td>
<td>250 inH₂O</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
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<tr>
<td>PX751CD-3</td>
<td>1000 inH₂O</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
</tr>
<tr>
<td>PX751CD-4</td>
<td>300 psid</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
</tr>
<tr>
<td>PX751CD-5</td>
<td>2000 psid</td>
<td>DP41-E, DP25B-E, DP24-E</td>
<td></td>
</tr>
</tbody>
</table>

Standard features include plated carbon steel flange, stainless steel diaphragm, 4 to 20 mA output with digital signal based on Hart™ protocol, glass-filled TFE O-ring and silicone fill fluid.

Note: Standard configurations do not include calibration certificate. Contact factory prior to ordering if certificate is required.

Ordering Examples: PX751CD-1-B4, smart differential pressure sensor with coplanar flange and range of -2.5 to 25 inH₂O, 2" pipe mounting bracket.
PX751CG-2-B4, smart gage pressure sensor with coplanar flange and range of -25 to 250 inH₂O, 2" pipe mounting bracket.

OPTIONS FOR ALL MODELS AND INTEGRAL 2-, 3-, or 5-VALVE MANIFOLDS

<table>
<thead>
<tr>
<th>SUFFIX</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>-M</td>
<td>Low power 1 to 5 Vdc (not avail. w/haz location cert)</td>
</tr>
<tr>
<td>-SS</td>
<td>All stainless steel flanges for Type “C”</td>
</tr>
<tr>
<td>-IN</td>
<td>Inert fill fluid (N/A on CA models)</td>
</tr>
<tr>
<td>-B4</td>
<td>2&quot; pipe mounting bracket for coplanar flange</td>
</tr>
<tr>
<td>-B6</td>
<td>2&quot; pipe mounting bracket for H-style transmitters</td>
</tr>
<tr>
<td>-M5</td>
<td>5½ digit LCD meter</td>
</tr>
</tbody>
</table>
**HIGH PROCESS TEMPERATURE—TYPE “H”**

**DIFFERENTIAL AND GAGE Pressures**

**ALL STAINLESS STEEL FLANGES**

Vacuum to 2000 psi

- Stainless Steel Side Flanges Standard
- Process Temperatures to 191°C (375°F) with No Isolating Elements
- 4 to 20 mA and Digital Communications
- 0.075% Accuracy
- 100:1 Rangedown
- Long-Term Stability
- D.C. 200 Silicone Fill Fluid

**SPECIFICATIONS**

“H”—High-Process Temperature Accuracy:

\[
\text{Accuracy} = \pm \left[ 0.025 + 0.005 \left( \frac{\text{URL}}{\text{Span}} \right) \right] \% \text{ of span}
\]

Ambient Temperature Effect per 10°C (50°F):

\[
\pm (0.025 + 0.125 \% \text{ URL} + 0.35 \text{ inH}_{2}O) \text{ for spans below 30:1 rangedown; } \pm (0.035 + 0.125 \% \text{ URL} + 0.35 \text{ inH}_{2}O)
\]

Static Pressure Effect:

- **Zero Error:** ±0.1% of URL/1000 psi (6.9 MPa) for line pressures from 0 to 2000 psi (0 to 13.7 MPa)—can be calibrated out at line pressure;
- ±0.2% of URL/1000 psi (6.9 MPa) for line pressures above 2000 psi (13.7 MPa)

Span Error*:

±0.2% of rdg/1000 psi (6.9 MPa)

* Ranges 4 and 5 must be field calibrated.

Stability:

- Ranges 2 and 3:
  ±0.1% of URL for 12 months
- Ranges 4 and 5:
  ±0.2% of URL for 12 months

Mounting Position Effect:

Zero shifts up to 5 inH_{2}O (1.27 kPa), which can be calibrated out; no span effect

**Weight:** 6.2 kg (13.6 lb)

---

**To Order**

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>RANGE (psi)</th>
<th>COMPATIBLE METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GAGE PRESSURE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PX751HG-2</td>
<td>250 inH_{2}O</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751HG-3</td>
<td>1000 inH_{2}O</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751HG-4</td>
<td>300 psig</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751HG-5</td>
<td>2000 psig</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td><strong>DIFFERENTIAL PRESSURE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PX751HD-2</td>
<td>250 inH_{2}O</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751HD-3</td>
<td>1000 inH_{2}O</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751HD-4</td>
<td>300 psid</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751HD-5</td>
<td>2000 psid</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
</tbody>
</table>

Standard features include stainless steel side flanges, stainless steel diaphragm, 4 to 20 mA output with digital signal based on Hart™ protocol, glass-filled TFE O-ring and D.C. 200 silicone fill fluid

**Ordering Examples:**
- PX751HD-2-B6, smart high-process temperature differential pressure sensor with stainless steel side flanges, D.C. 200 silicone fill and ranging of 2.5 to 250 inH_{2}O and 2" pipe mounting bracket.
- PX751HG-4-B6, smart high-process temperature gage pressure sensor with stainless steel side flange, D.C. 200 silicone fill fluid, 2" pipe mounting bracket and range of 3 to 300 psi.

**OPTIONS FOR ALL MODELS**

<table>
<thead>
<tr>
<th>SUFFIX</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>-M</td>
<td>Low power 1 to 5 Vdc (not avail. w/haz location cert)</td>
</tr>
<tr>
<td>-SS</td>
<td>All stainless steel flanges for Type “C”</td>
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<tr>
<td>-IN</td>
<td>Inert fill fluid (N/A on CA models)</td>
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<tr>
<td>-B4</td>
<td>2&quot; pipe mounting bracket for coplanar flange</td>
</tr>
<tr>
<td>-B6</td>
<td>2&quot; pipe mounting bracket for H-style transmitters</td>
</tr>
<tr>
<td>-M5</td>
<td>5½ digit LCD meter</td>
</tr>
</tbody>
</table>
SINGLE ISOLATOR—TYPE “T”
DIFFERENTIAL, GAGE, AND ABSOLUTE PRESSURES

Vacuum to 10,000 psi

PX751TG, TA Gage and Absolute Pressure

✔ Gage or Absolute Pressure
✔ 0.075% Accuracy
✔ All Stainless Steel Wetted Parts
✔ 0.25% Long-Term (5-Year) Stability

SPECIFICATIONS

“T” Style Gage and Absolute:
Accuracy: ±0.075% of span; for rangedowns greater than 10:1 of URL, accuracy = ±(0.075/ URL)% of span

For Absolute Range 0 With Turndown:
>5:1 of URL, accuracy = ±(0.025 + 0.01/ URL)% of span

Total Performance (Ranges 1 to 4 Only)**:
±0.25% of span for 28°C (±50°F) temperature changes, from 1:1 to 5:1 rangedown
** Total performance is based on the combined errors of reference accuracy, ambient temperature effect, and span line pressure effect.

Ambient Temperature Effect per 10°C (50°F):
Spans 1:1 to 5:1:
±(0.025% URL + 0.125% span)
Spans 10:1 to 100:1:
±(0.055% URL + 0.125% span)
Range 0: ±(0.01% URL + 0.25% span)
Range 5: ±(0.01% URL + 0.15% span)

For High-Gage and Absolute
Range 1, Spans 1:1 to 10:1:
±(0.025% URL + 0.125% span)
Stability—Low Absolute Model:
Ranges 1 to 5:
±0.1% of URL for 12 months
Ranges 0:
±0.2% of URL for 12 months

Stability—High-Gage and Absolute Models: ±0.25% of span for 5 years for 28°C (±50°F) temperature change

Mounting Position Effect: Zero shifts up to 0.62 kPa (0.09 psi), which can be calibrated out; no span effect

Weight: 1.4 kg (3.0 lb)

To Order

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>URL</th>
<th>COMPATIBLE METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PX751TA-1</td>
<td>30 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751TA-2</td>
<td>150 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751TA-3</td>
<td>800 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751TA-4</td>
<td>4000 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751TA-5</td>
<td>10,000 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
</tbody>
</table>

GAGE PRESSURE

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>URL</th>
<th>COMPATIBLE METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PX751TG-1</td>
<td>30 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751TG-2</td>
<td>150 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751TG-3</td>
<td>800 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751TG-4</td>
<td>4000 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
<tr>
<td>PX751TG-5</td>
<td>10,000 psia</td>
<td>DP41-E, DP25B-E, DP24-E</td>
</tr>
</tbody>
</table>

Standard features include SS diaphragm and ½ NPT process fitting, 4 to 20 mA output with digital signal based on Hart™ protocol, glass-filled TFE O-ring and silicone fill fluid.

Ordering Examples: PX751TA-1-B4, smart absolute pressure sensor with stainless steel input and range of 0.03 to 30 psia and 2” pipe mounting bracket.
PX751TG-2-B4, smart gage pressure sensor with stainless steel input and range of 1.5 to 150 psig and 2” pipe mounting bracket.

OPTIONS FOR ALL MODELS

<table>
<thead>
<tr>
<th>SUFFIX</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>-M</td>
<td>Low power 1 to 5 Vdc (not avail. w/haz location cert)</td>
</tr>
<tr>
<td>-SS</td>
<td>All stainless steel flanges for Type “C”</td>
</tr>
<tr>
<td>-IN</td>
<td>Inert fill fluid (N/A on CA models)</td>
</tr>
<tr>
<td>-B4</td>
<td>2” pipe mounting bracket for coplanar flange</td>
</tr>
<tr>
<td>-B6</td>
<td>2” pipe mounting bracket for H-style transmitters</td>
</tr>
<tr>
<td>-M5</td>
<td>5½ digit LCD meter</td>
</tr>
</tbody>
</table>