SMART PRESSURE TRANSMITTER HIGH STABILITY, LOW DRIFT

PX751 Series 5 inH₂0 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 Data Base Includes Configuration, Calibration, and Materials
- 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
- Temperature Output





PX751C SMART TRANSMITTER

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 guickly 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. Analog Output Trim—adjusts the analog output to match the plant standard or the control loop.

PX751C (Shown Installed with 3-Valve Manifold)



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:



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 k Ω (V_{OUT} + 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 kPá) 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) "T" Style Gage and Absolute Models (TA/TG):

Range 1: 0 to 750 psia (0 to 5.2 MPa) Range 2: 0 to 1500 psia (0 to 10.3 MPa) Range 3: 0 to 1600 psia (0 to 11.0 MPa) Range 4: 0 to 6000 psia (0 to 41.4 MPa) **Range 5:** 0 to 15000 psia (0 to 103.4 MPa)

Static Pressure Limits

Differential Pressure Models Only: Operates within specification between static line pressure of 0.5 psia and 3626 psig; 2000 psig for range 1 (ranges 2 and 3 for high-accuracy models)

Burst Pressure Limits:

All Except Type T: 10,000 psig (69 MPa)

Type T: Ranges 1 to 4: 11,000 psi (75.8 MPa) Range 5: 26,000 psig (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); with integral meter, -20 to 80°C (-4 to 175°F) Storage: -46 to 110°C (-50 to 230°F); with integral meter, -40 to 85°C (-40 to 185°F)

Process Temperature Limits

Differential. Gage and Absolute:

2	
Silicone Fill Sensor ¹ with	ו
Coplanar Flange	-40 to 250°F ²
Side Flange	-40 to 300°F ²
Level Flange	
Horizontal Mount	-40 to 250°F ²
Vertical Mount	-40 to 300°F ²
Inert Fill Sensor Option ¹	0 to 185°F ^{3, 4}
High-Temperature Mode	ls:
Fill Material Temp	erature Range
D.C. Silicone 2001	-40 to 375°F
Inert	-50 to 350°F
Neobee M-20 ¹	0 to 375°F

Type "T"	Gage and Abso	olute:
Silicone	Fill Sensor ¹	-40 to 250°F ²
Inert Fill	Sensor	-22 to 250°F ²
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, \$2035, shown smaller than actual size.

All Models

Response Time: Dead Time (T): 45 ms nominal Time Constant (T.): 55 ms

Update Rate: 20 times/s minimum

Vibration Effect: < ±0.1% of URL per gram when tested from 15 to 2000 Hz in any axis relative to pipe-mounted process connection

Power Supply Effect:

<0.005% of calibrated span per volt RFI Effects: ±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):

14-18 NPT on 21/8" centers; 12-14 NPT on 2, 21/4, or 21/4" centers Level Models:

High-Pressure Side: 2, 3 or 4", Class 150, 300 or 600 flange 50, 80 or 100 mm: PN40 or 1%6 flange

High Gage or Absolute Pressure: 14-18, 12-14 female, G12 A DIN 16288 male (available in stainless steel for ranges 1 to 4) or autoclave type F-250-C (pressure relieved %-18 gland thread; ¼ OD high pressure tube 60° cone;

available in stainless steel for range 5 only) Wetted Parts:

Flanges: Plated carbon steel standard; stainless steel, Hastelloy C or Monel optional

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 (0.06:1 ratio for Type H).

- ²104°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.

COMMERCIAL GRADE—TYPE "C" HIGH PRECISION—TYPE "P" DIFFERENTIAL, GAGE, AND ABSOLUTE PRESSURES

Specifications

Differential and Gage CD/CG Models Accuracy: $\pm 0.075\%$ of span $\pm 0.100\%$ of span for differential range 1. For rangedowns greater than 10:1 of URL (15:1 for differential range 1), accuracy = $\pm \begin{bmatrix} 0.025 + 0.005 \\ Span \end{bmatrix}\%$ of span

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

Spans 1:1 to 10:1:

Spans 10:1 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: $\pm (0.1\% \text{ URL} + 0.25\% \text{ span})$

Static Pressure Effect

(DP Model Only):

Zero Error: ±0.1% 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:

±0.25% URL/1000 psi (6.9 MPa) Span Error*:

±0.2% rdg/1000 psi (6.9 MPa) Range 1:

±0.4% rdg/1000 psi (6.9 MPa) *Ranges 4 and 5 must be field calibrated

Total Performance**:

±0.25% 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: $\pm 0.25\%$ of URL for 5 years for $\pm 28^{\circ}$ C (50°F) temperature changes, up to 1000 psi (6.9 MPa) line pressure Range 1: $\pm 0.2\%$ 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:

Types C and P: 6.0 lb (2.7 kg)

High-Precision "P" Models Accuracy: ±0.05% of span Ambient Temperature Effect

per 10°C (50°F): ±(0.006% URL + 0.03% span) **Static Pressure Effect:**

Zero Error: ±0.04% of URL/1000 psi (6.9 MPa) can be calibrated out at line pressure

Span Error:

±0.1% rdg/1000 psi (6.9 MPa) **Stability:** ±0.25% of URL for 5 years for ±28°C (50°F) temperature changes, up to 1000 psi (6.9 MPa) line pressure

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

Total Performance**:

±0.14% of span for ±28°C (50°F) temperature changes, up to 1000 psi (6.9 MPa) line pressure, from 1:1 to 10:1 rangedown

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

RANGES: PX751CA ABSOLUTE PRESSURE MODELS

		RANGE AND SE	
RANGE	MINIMUM	UPPER	LOWER
	SPAN	(URL)	(LRL)
0	0.167 psia	5 psia	0 psia
	(8.7 mmHgA)	(26 mmHgA)	(0 mmHgA)
1	0.3 psia	30 psia	0 psia
	(2.07 kPa)	(206.8 kPa)	(0 kPa)
2	1.5 psia	150 psia	0 psia
	(10.34 kPa)	(1034.2 kPa)	(0 kPa)
3	8 psia	800 psia	0 psia
	(55.16 kPa)	(5515.8 kPa)	(0 kPa)
4	40 psia	4000 psia	0 psia
	(275.8 kPa)	(27580 kPa)	(0 kPa)

PX751C coplanar design, \$1855, shown smaller than actual size.

COME

B

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

R		M SPAN HIGH-	UPPER (URL)	RANGE AND SENSOR LIMITS LOWER (LRL)					
NGE	DIFFERENTIAL	ACCURACY	ALL	DIFFERENTIAL	GAGE	LEVEL	LEVEL	HIGH-TEMP	HIGH-TEMP
	TYPE C&P	TYPE H	MODELS	CD/PD/HD	CG/PG/HG	DIFFERENTIAL	GAGE	HD	HG
1	0.5 inH₂O (0.12 kPa)	N/A	25 inH₂O (6.22 kPa)	-25 inH₂O (-6.22 kPa)	N/A	N/A	N/A	N/A	N/A
2	2.5 inH₂O	2.5 inH₂O	250 inH₂O	-250 inH₂O	-250 inH₂O	-250 inH₂O	-250 inH₂O	-250 inH₂O	-250 inH₂O
	(0.62 kPa)	(0.62 kPa)	(62.2 kPa)	(-62.2 kPa)	(-62.2 kPa)	(-62.2 kPa)	(-62.2 kPa)	(-62.2 kPa)	(-62.2 kPa)
3	10 inH₂O	100 inH₂O	1000 inH₂O	-1000 inH₂O	0.5 psia	-1000 inH₂O	0.5 psia	-1000 inH₂O	0.5 psia
	(2.48 kPa)	(24.8 kPa)	(248 kPa)	(-248 kPa)	(3.5 kPa abs)	(-248 kPa)	(3.5 kPa abs)	(-248 kPa)	(3.5 kPa abs)
4	3 psi	30 psi	300 psi	-300 psi	0.5 psia	-300 psi	0.5 psia	-300 psi	0.5 psia
	(20.7 kPa)	(207 kPa)	(2070 kPa)	(-2070 kPa)	(3.5 kPa abs)	(-2070 kPa)	(3.5 kPa abs)	(-2070 kPa)	(3.5 kPa abs)
5	20 psi (138 kPa)	200 psi (1380 kPa)	2000 psi (13800 kPa)	-2000 psi (-13800 kPa)	0.5 psia (3.5 kPa abs)	N/A	N/A	-2000 psi (-13800 kPa)	0.5 psia (3.5 kPa abs)

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



PX751P high-precision, stainless steel coplanar flange differential and gage pressure, \$2055, shown smaller than actual size.

To Order (Specify Model Number) MODEL NO. PRICE URL COMPATIBLE METERS ABSOLUTE PRESSURE 92751CA-1 \$2105 30 psia DP41-E, DP25B-E, DP24-E PX751CA-2 2105 150 psia DP41-E, DP25B-E, DP24-E PX751CA-3 2105 800 psia DP41-E, DP25B-E, DP24-E PX751CA-4 2105 4000 psia DP41-E, DP25B-E, DP24-E PX751CA-4 2105 4000 psia DP41-E, DP25B-E, DP24-E PX751CG-2 \$1698 250 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-3 1698 1000 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-4 1698 300 psig DP41-E, DP25B-E, DP24-E PX751CG-5 1698 2000 psig DP41-E, DP25B-E, DP24-E PX751CG-5 1698 2000 psig DP41-E, DP25B-E, DP24-E	COMMERCIAL	GRADE-T		ABLE FOR FAST DELIVERY!
MODEL NO. PRICE URL COMPATIBLE METERS ABSOLUTE PRESSURE	To Order (S	Specify Mo	del Number)	
ABSOLUTE PRESSURE PX751CA-1 \$2105 30 psia DP41-E, DP25B-E, DP24-E PX751CA-2 2105 150 psia DP41-E, DP25B-E, DP24-E PX751CA-3 2105 800 psia DP41-E, DP25B-E, DP24-E PX751CA-4 2105 4000 psia DP41-E, DP25B-E, DP24-E PX751CA-4 2105 4000 psia DP41-E, DP25B-E, DP24-E PX751CG-2 \$1698 250 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-3 1698 1000 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-4 1698 300 psig DP41-E, DP25B-E, DP24-E PX751CG-5 1698 2000 psig DP41-E, DP25B-E, DP24-E DIFFERENTIAL PRESSURE 2000 psig DP41-E, DP25B-E, DP24-E	MODEL NO.	PRICE	URL	COMPATIBLE METERS
PX751CA-1 \$2105 30 psia DP41-E, DP25B-E, DP24-E PX751CA-2 2105 150 psia DP41-E, DP25B-E, DP24-E PX751CA-3 2105 800 psia DP41-E, DP25B-E, DP24-E PX751CA-4 2105 4000 psia DP41-E, DP25B-E, DP24-E PX751CA-4 2105 4000 psia DP41-E, DP25B-E, DP24-E PX751CG-2 \$1698 250 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-3 1698 1000 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-4 1698 300 psig DP41-E, DP25B-E, DP24-E PX751CG-5 1698 2000 psig DP41-E, DP25B-E, DP24-E DIFFERENTIAL PRESSURE 2000 psig DP41-E, DP25B-E, DP24-E	ABSOLUTE PF	RESSURE		
PX751CA-2 2105 150 psia DP41-E, DP25B-E, DP24-E PX751CA-3 2105 800 psia DP41-E, DP25B-E, DP24-E PX751CA-4 2105 4000 psia DP41-E, DP25B-E, DP24-E GAGE PRESSURE U U DP41-E, DP25B-E, DP24-E PX751CG-2 \$1698 250 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-3 1698 1000 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-4 1698 300 psig DP41-E, DP25B-E, DP24-E PX751CG-5 1698 2000 psig DP41-E, DP25B-E, DP24-E DIFFERENTIAL PRESSURE 2000 psig DP41-E, DP25B-E, DP24-E	PX751CA-1	\$2105	30 psia	DP41-E, DP25B-E, DP24-E
PX751CA-3 2105 800 psia DP41-E, DP25B-E, DP24-E PX751CA-4 2105 4000 psia DP41-E, DP25B-E, DP24-E GAGE PRESSURE PX751CG-2 \$1698 250 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-3 1698 1000 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-4 1698 300 psig DP41-E, DP25B-E, DP24-E PX751CG-5 1698 2000 psig DP41-E, DP25B-E, DP24-E DIFFERENTIAL PRESSURE Low psig DP41-E, DP25B-E, DP24-E	PX751CA-2	2105	150 psia	DP41-E, DP25B-E, DP24-E
PX751CA-4 2105 4000 psia DP41-E, DP25B-E, DP24-E GAGE PRESSURE PX751CG-2 \$1698 250 inH20 DP41-E, DP25B-E, DP24-E PX751CG-3 1698 1000 inH20 DP41-E, DP25B-E, DP24-E PX751CG-4 1698 300 psig DP41-E, DP25B-E, DP24-E PX751CG-5 1698 2000 psig DP41-E, DP25B-E, DP24-E DIFFERENTIAL PRESSURE Lesson DP41-E, DP25B-E, DP24-E	PX751CA-3	2105	800 psia	DP41-E, DP25B-E, DP24-E
GAGE PRESSURE PX751CG-2 \$1698 250 inH2O DP41-E, DP25B-E, DP24-E PX751CG-3 1698 1000 inH2O DP41-E, DP25B-E, DP24-E PX751CG-4 1698 300 psig DP41-E, DP25B-E, DP24-E PX751CG-5 1698 2000 psig DP41-E, DP25B-E, DP24-E DIFFERENTIAL PRESSURE PRESSURE PRESSURE	PX751CA-4	2105	4000 psia	DP41-E, DP25B-E, DP24-E
PX751CG-2 \$1698 250 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-3 1698 1000 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-4 1698 300 psig DP41-E, DP25B-E, DP24-E PX751CG-5 1698 2000 psig DP41-E, DP25B-E, DP24-E DIFFERENTIAL PRESSURE E E	GAGE PRESS	URE		
PX751CG-3 1698 1000 inH ₂ O DP41-E, DP25B-E, DP24-E PX751CG-4 1698 300 psig DP41-E, DP25B-E, DP24-E PX751CG-5 1698 2000 psig DP41-E, DP25B-E, DP24-E DIFFERENTIAL PRESSURE DP41-E, DP25B-E, DP24-E	PX751CG-2	\$1698	250 inH ₂ O	DP41-E, DP25B-E, DP24-E
PX751CG-4 1698 300 psig DP41-E, DP25B-E, DP24-E PX751CG-5 1698 2000 psig DP41-E, DP25B-E, DP24-E DIFFERENTIAL PRESSURE PRESSURE PRESSURE	PX751CG-3	1698	1000 inH ₂ O	DP41-E, DP25B-E, DP24-E
PX751CG-516982000 psigDP41-E, DP25B-E, DP24-EDIFFERENTIAL PRESSURE	PX751CG-4	1698	300 psig	DP41-E, DP25B-E, DP24-E
DIFFERENTIAL PRESSURE	PX751CG-5	1698	2000 psig	DP41-E, DP25B-E, DP24-E
	DIFFERENTIA	L PRESSURE		
PX751CD-1 \$2125 25 inH ₂ O DP41-E, DP25B-E, DP24-E	PX751CD-1	\$2125	25 inH₂O	DP41-E, DP25B-E, DP24-E
PX751CD-2 1855 250 inH ₂ O DP41-E, DP25B-E, DP24-E	PX751CD-2	1855	250 inH ₂ O	DP41-E, DP25B-E, DP24-E
PX751CD-3 1855 1000 inH ₂ O DP41-E, DP25B-E, DP24-E	PX751CD-3	1855	1000 inH ₂ O	DP41-E, DP25B-E, DP24-E
PX751CD-4 2045 300 psid DP41-E, DP25B-E, DP24-E	PX751CD-4	2045	300 psid	DP41-E, DP25B-E, DP24-E
PX751CD-5 2105 2000 psid DP41-E, DP25B-E, DP24-E	PX751CD-5	2105	2000 psid	DP41-E, DP25B-E, DP24-E

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. Ordering Examples: PX751CD-1-B4, smart differential pressure sensor with coplanar flange and range of -2.5 to 25 inH₂O, 2" pipe mounting bracket, \$2125 + 50 = \$2175. PX751CG-2-B4, smart gage pressure sensor with coplanar flange and range of -25 to 250 inH₂O, 2" pipe mounting bracket, \$1698 + 50 = \$1748.

COMMERCIAL GRADE—TYPE P AVAILABLE FOR FAST DELIVERY!

To Order (Specify Model Number)

MODEL NO.	PRICE	RANGE (psi)	COMPATIBLE METERS	
GAGE PRESSU	RE			
PX751PG-2	\$2055	250 inH₂O	DP41-E, DP25B-E, DP24-E	
PX751PG-3	2055	1000 inH₂O	DP41-E, DP25B-E, DP24-E	
PX751PG-4	2055	300	DP41-E, DP25B-E, DP24-E	
PX751PG-5	2055	2000	DP41-E, DP25B-E, DP24-E	
DIFFERENTIAL PRESSURE				
PX751PD-2	\$2220	250 inH₂O	DP41-E, DP25B-E, DP24-E	
PX751PD-3	2220	1000 inH₀O	DP41-E, DP25B-E, DP24-E	

Standard features include stainless steel coplanar 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. **Ordering Examples: PX751PG-3-B4**, smart gage pressure sensor with coplanar flange and pressure sensor with coplanar flange a

range of 10 to 1000 inH₂O and 2" pipe mounting bracket, \$2055 + 50 = **\$2105**. **2.) PX751PD-3-B4**, smart differential pressure sensor with coplanar flange and range of 10 to 1000 inH₂O and 2" pipe mounting bracket, \$2220 + 50 = **\$2270**.

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

SUFFIX	PRICE	DESCRIPTION
-M	\$100	Low power 1 to 5 Vdc (not avail. w/haz location cert)
-SS	115	All stainless steel flanges for Type "C"
-IN	128	Inert fill fluid (N/A on CA models)
-B4	50	2" pipe mounting bracket for coplanar flange
-B6	65	2" pipe mounting bracket for H-style transmitters
-M5	250	5½ digit LCD meter

HIGH PROCESS TEMPERATURE—TYPE "H" **DIFFERENTIAL AND GAGE PRESSURES** ALL STAINLESS STEEL FLANGES

Mar



CE

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: ±0.075% of span; for rangedowns greater than 10:1 of URL, accuracy =

 $\pm \left[\begin{array}{c} 0.025 + 0.005 \\ (\begin{array}{c} \text{URL} \\ \text{Span} \end{array}) \right] \% \text{ of span}$

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

 \pm (0.025% URL + 0.125% span + 0.35 inH₂O); for spans below 30:1 rangedown, ±(0.035% URL + 0.125% span + 0.35 inH₂O)

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 inH₂O (1.27 kPa), which can be calibrated out; no span effect

Weight: 6.2 kg (13.6 lb)

PX751H, high-process temperature flange, \$2280, shown with standard stainless steel side flanges, smaller than actual size.

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To Order (Specify Model Number)				
MODEL NO.	PRICE	RANGE (psi)	COMPATIBLE METER	
GAGE PRESSU	RE			
PX751HG-2	\$2280	250 inH₂O	DP41-E, DP25B-E, DP24-E	
PX751HG-3	2280	1000 inH₂O	DP41-E, DP25B-E, DP24-E	
PX751HG-4	2280	300 psi	DP41-E, DP25B-E, DP24-E	
PX751HG-5	2280	2000 psi	DP41-E, DP25B-E, DP24-E	
DIFFERENTIAL	PRESSUR	E		
PX751HD-2	\$2390	250 inH₂O	DP41-E, DP25B-E, DP24-E	
PX751HD-3	2390	1000 inH₂O	DP41-E, DP25B-E, DP24-E	
PX751HD-4	2195	300 psi	DP41-E, DP25B-E, DP24-E	
PX751HD-5	2640	2000 psi	DP41-E, DP25B-E, DP24-E	

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,O and

2" pipe mounting bracket, \$2390 + 65 = **\$2455**. **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, \$2280 + 65 = **\$2345**.

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

SUFFIX	PRICE	DESCRIPTION
-M	\$100	Low power 1 to 5 Vdc (not avail. w/haz location cert)
-SS	115	All stainless steel flanges for Type "C"
-IN	128	Inert fill fluid (N/A on CA models)
-B4	50	2" pipe mounting bracket for coplanar flange
-B6	65	2" pipe mounting bracket for H-style transmitters
-M5	250	5½ digit LCD meter

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