

# HIGH-ACCURACY PRESSURE TRANSMITTER WITH LIGHTNING-PROTECTED AMPLIFIER HOUSING

**4 to 20 mA Output**  
**0-2 to 0-30,000 psi**  
**0-150 mbar to 0-2000 bar**

1 bar = 14.5 psi  
1 kg/cm<sup>2</sup> = 14.22 psi  
1 atmosphere = 14.7 psi = 29.93 inHg = 760.2 mmHg = 1.014 bar

## PX02 SERIES



PX02K5-050GI, shown smaller than actual size.



CURRENT OUTPUT  
PRESSURE TRANSDUCERS

**B**

- ✓ High-Accuracy, NIST-Traceable Calibration
- ✓ FM Intrinsically Safe, Standard
- ✓ All Stainless Steel Construction
- ✓ Hermetically Sealed Design for Harsh Environments
- ✓ Available in Gage, Absolute, Sealed Gage, psi, and Metric Ranges
- ✓ Optional Pressure Ports to Fit Most Industrial Applications

OMEGA's PX02 Series comprises high-accuracy industrial pressure transmitters. All stainless steel construction and a sealed case make the PX02 suitable for harsh environments. FM Intrinsically Safe approvals are standard. A broad temperature-compensated range of 16 to 71°C (60 to 160°F) and a high operating range to 121°C (250°F) provide stability in applications with fluctuating temperatures.

The PX02 is available in gage, absolute, or sealed models, as well as in psi or metric ranges.

### To Order

Models with 1/16"-20 UNF Connection/Amplifier Housing

RANGE		MODEL NO.	COMPATIBLE METERS†
<b>ABSOLUTE PRESSURE (All Ranges Available in Absolute Pressure)</b>			
0 to 10 psi	0 to 0.69 bar	<b>PX02K5-010AI</b>	DP41-E, DP25B-E, DP24-E
0 to 15 psi	0 to 1.0 bar	<b>PX02K5-015AI</b>	DP41-E, DP25B-E, DP24-E
0 to 20 psi	0 to 1.4 bar	<b>PX02K5-020AI</b>	DP41-E, DP25B-E, DP24-E
0 to 25 psi	0 to 1.7 bar	<b>PX02K5-025AI</b>	DP41-E, DP25B-E, DP24-E
0 to 50 psi	0 to 3.4 bar	<b>PX02K5-050AI</b>	DP41-E, DP25B-E, DP24-E
<b>GAGE PRESSURE (All Ranges Also Available in Sealed Gage Pressure)</b>			
0 to 2 psi	0 to 0.14 bar	<b>PX02K5-002GI</b>	DP41-E, DP25B-E, DP24-E
0 to 5 psi	0 to 0.34 bar	<b>PX02K5-005GI</b>	DP41-E, DP25B-E, DP24-E
0 to 10 psi	0 to 0.69 bar	<b>PX02K5-010GI</b>	DP41-E, DP25B-E, DP24-E
0 to 15 psi	0 to 1.0 bar	<b>PX02K5-015GI</b>	DP41-E, DP25B-E, DP24-E
0 to 50 psi	0 to 3.4 bar	<b>PX02K5-050GI</b>	DP41-E, DP25B-E, DP24-E
0 to 75 psi	0 to 5.2 bar	<b>PX02K5-075GI</b>	DP41-E, DP25B-E, DP24-E
0 to 100 psi	0 to 6.9 bar	<b>PX02K5-100GI</b>	DP41-E, DP25B-E, DP24-E
0 to 200 psi	0 to 13.8 bar	<b>PX02K5-200GI</b>	DP41-E, DP25B-E, DP24-E
0 to 300 psi	0 to 20.7 bar	<b>PX02K5-300GI</b>	DP41-E, DP25B-E, DP24-E
0 to 500 psi	0 to 34.5 bar	<b>PX02K5-500GI</b>	DP41-E, DP25B-E, DP24-E
0 to 1000 psi	0 to 68.9 bar	<b>PX02K5-1KGI</b>	DP41-E, DP25B-E, DP24-E
0 to 1500 psi	0 to 103 bar	<b>PX02K5-1.5KGI</b>	DP41-E, DP25B-E, DP24-E
0 to 2000 psi	0 to 138 bar	<b>PX02K5-2KGI</b>	DP41-E, DP25B-E, DP24-E
0 to 3500 psi	0 to 241 bar	<b>PX02K5-3.5KGI</b>	DP41-E, DP25B-E, DP24-E
0 to 5000 psi	0 to 345 bar	<b>PX02K5-5KGI</b>	DP41-E, DP25B-E, DP24-E
0 to 7500 psi	0 to 517 bar	<b>PX02K5-7.5KGI</b>	DP41-E, DP25B-E, DP24-E
0 to 10,000** psi	0 to 689 bar	<b>PX02S5-10KGI</b>	DP41-E, DP25B-E, DP24-E
0 to 20,000** psi	0 to 1379 bar	<b>PX02S5-20KGI</b>	DP41-E, DP25B-E*, DP24-E*
0 to 30,000** psi	0 to 2068 bar	<b>PX02S5-30KGI</b>	DP41-E, DP25B-E*, DP24-E*

Comes complete with 5-point NIST traceable calibration.

Metric ranges available – consult Engineering.

\* 4-digit meter, counts in increments of 10. \*\* 1/4 HP tube fitting. † Visit us online for compatible meters.

For absolute pressure, replace "G" in model number with "A", add cost ≤100 psi. For sealed gage pressure, replace "G" in model number with "S" (no charge unless indicated).

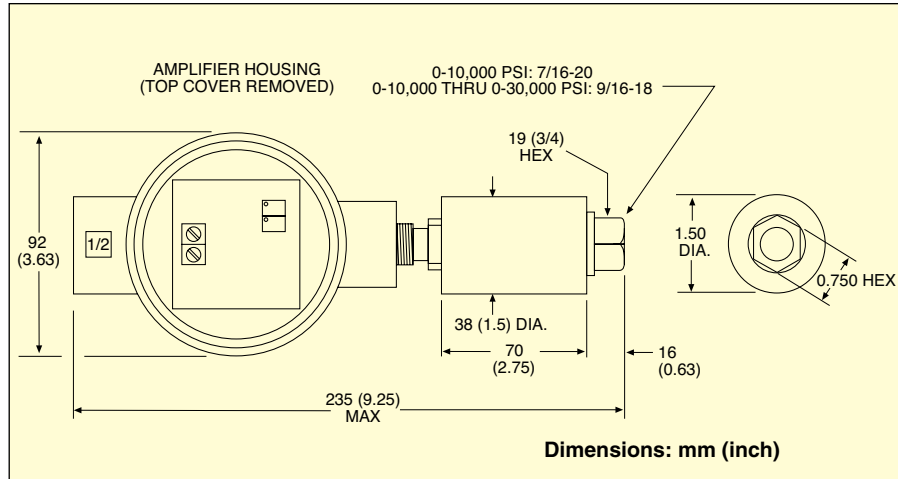
Ordering Examples: **PX02K5-1KGI**, 1000 psi gage transducer with 4 to 20 mA output, amplifier housing connections and 1/16"-20 UNF female pressure connection.

**PX02K5-015AI**, 15 psi absolute transducer with 4 to 20 mA output, amplifier housing connections and 1/16"-20 UNF female pressure connection.

# LIGHTNING-PROTECTED AMPLIFIER HOUSING

## SPECIFICATIONS

**Excitation:** 12 to 40 Vdc  
**Output:** 4 to 20 mA ±10% adj  
**Zero Balance:** 4 mA +10% -2% adj  
**Agency Approvals:** FM Intrinsically Safe IS/I.II.III/1/CDEFG standard  
**Linearity:** ±0.15% FS  
**Hysteresis:** ±0.1% FS  
**Repeatability:** ±0.05% FS  
**Sensing Element:** 4-active-arm bridge, using thick-film strain gages in a hermetically sealed chamber  
**Operating Temp Range:** -46 to 121°C (-50 to 250°F)  
**Compensated Temp Range:** 16 to 71°C (60 to 160°F)  
**Thermal Effects:**  
**Span:** 0.005% of rdg/°F  
**Zero:** 0.005% of FS/°F  
**Proof Pressure:** 150% of rated pressure  
**Burst Pressure:** 300% of rated pressure  
**Wetted Parts:** 17-4 PH SS



**Pressure Port:** Ranges <10000 psi: 7/16-20 UNF female, 1/4-18 NPT M/F or 7/16-20 UNF-2A male. ≥10K psi: 9/16-18, 1/4" HP tube.  
**Electrical Connection:** Lightning-protected, explosion-proof amplifier box

## CUSTOM CONFIGURATIONS

PX02 SERIES	PRESSURE PORT [ 1 ]	ELECTRICAL CONNECTION [ 2 ]	RANGE (psi) [ 3 ]	UNITS [ 4 ]	OUTPUT [ 5 ]	OPTIONS [ 6 ]
	Models <10,000 psi		002*	S,G,A	<b>PX02</b> 50 to 7500 psi less than 50 psi over 7500 psi Add additional <b>cost</b> for absolute pressure ranges <b>I</b> = 4 to 20 mA output	<b>OL</b> = Overload stops + <b>cost</b> <b>OX</b> = Cleaned for oxygen use + <b>cost</b> plus 2 weeks
<b>C</b>	1/4-18 NPT-M + <b>cost</b>		005*	S,G,A		
<b>D</b>	1/4-18 NPT-F, no charge		010	S,G,A		
<b>J</b>	7/16-20 UNF-M + <b>cost</b>		015	S,G,A		
<b>K</b>	7/16-20 UNF-F, no charge		020	S,G,A		
	Models ≥10,000 psi		025	S,G,A		
<b>S</b>	1/4 HP tube fitting no charge		050	S,G,A		
			075	S,G,A		
			100	S,G,A		
	<b>0</b> = 3 m (10') cable (std) + <b>cost</b> /3 m (ft) over 3 m (10')		150	S,G,A		
	<b>1</b> = PTIH-10-6P connector (or equal, no charge). Mating connector (sold separately), order <b>PT06F10-6S</b>		200	S,G,A		
			250	S,G,A		
			300	S,G,A		
			500	S,G,A		
			750	S,G,A		
			1K	S,G,A		
	<b>5</b> = Lightning-protected amplifier box (no charge) (4 to 20 mA models only)		1.5K	S,G,A		
			2K	S,G,A		
			3K	S,G,A		
			3.5K	S,G,A		
			5K	S,G,A		
			7.5K	S,G,A		
			10K†	S,G,A		
			20K†	S,G,A		
			30K†	S,G,A		

\* 2 and 5 psi ranges available only on amplified output.  
 † Supplied with 1/4 HP tube fitting.

Metric ranges available—PXM02 Series

**To order a custom configuration:**  
 1. Select a pressure port  
 2. Select electrical connection  
 3. Select a pressure range  
 4. Select pressure units  
 5. Select output  
 6. Select options and agency approvals

Visit us online for additional options, including extended temperature ranges.

**Ordering Examples:** PX02C5-100GI, 100 psi gage pressure transducer with 1/4-18 NPT male fitting, lightning protected amplifier box and 4 to 20 mA output.

PX02K5-1KSI, 1000 psi sealed gage pressure transducer, with 7/16-20 UNF female fitting, lightning protected amplifier box and 4 to 20 mA output.

PX02J5-015AI, 15 psi absolute pressure transducer with, 7/16-20 UNF male fitting, lightning protected amplifier box and 4 to 20 mA output.

PX02K5-025GI, 25 psi gage pressure transducer with 7/16-20 UNF female fitting, lightning protected amplifier box, 4 to 20 mA output.

# HIGH-ACCURACY AMPLIFIED VOLTAGE OUTPUT PRESSURE TRANSDUCER

## STANDARD AND METRIC MODELS

**0 to 5 Vdc Output**  
**0-2 to 0-30,000 psi-Standard Models**  
**0-150 mbar to 0-400 bar-Metric Models**

### PX02/PXM02 Series



PX02K1-100G5T shown smaller than actual size.



VOLTAGE OUTPUT PRESSURE TRANSDUCERS  
**B**

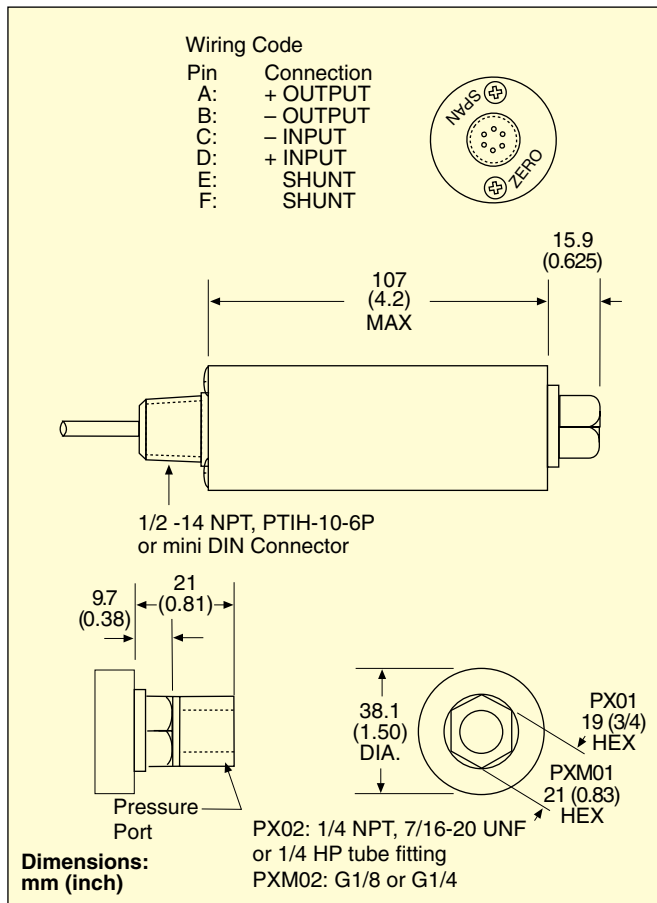
- ✓ Internal Shunt Resistor for Easy System Checks
- ✓ All Stainless Steel Construction
- ✓ Available in Gage, Absolute, Sealed Gage, psi, and Metric Ranges
- ✓ Cable, Connector Models or Mini DIN
- ✓ Optional Pressure Ports to Fit Most Industrial Applications

**Proof Pressure:** 150% of rated pressure  
**Burst Pressure:** 300% of rated pressure  
**Wetted Parts:** 17-4 PH stainless steel  
**Pressure Port:** See custom configurations  
**Electrical Connection:** See custom configurations  
**Mating Connector:** (Style 1) PT06F10-6S (sold separately)  
**Weight:** 388 g (13.7 oz)

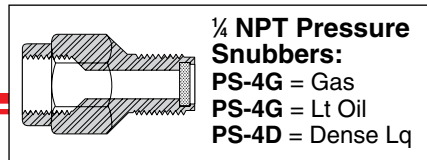
OMEGA's PX02/PXM02 are high-accuracy, amplified voltage output, industrial pressure transducers. All stainless steel construction and a hermetically sealed case make the PX02/PXM02 suitable for harsh industrial environments. They are a true high-accuracy industrial device.

### SPECIFICATIONS

**Excitation:** 24 to 32 Vdc  
**Output:** 0 to 5 Vdc  $\pm 10\%$  adjustable  
**Linearity:**  $\pm 0.15\%$  FSO  
**Hysteresis:**  $\pm 0.1\%$  FSO  
**Repeatability:**  $\pm 0.05\%$  FSO  
**Zero Balance:** 0 V  $\pm 10\%$  adj  
**Sensing Element:** 4-active-arm bridge, using thick-film strain gages in a hermetically sealed chamber (except gage units)  
**Shunt Calibration Value:** Specified on calibration sheet  
**Operating Temp Range:** -46 to 121°C (-50 to 250°F)  
**Compensated Temp Range:** 16 to 71°C (60 to 160°F)  
**Thermal Effects:**  
**Span:** 0.003% of rdg/°F  
**Zero:** 0.003% of FSO/°F

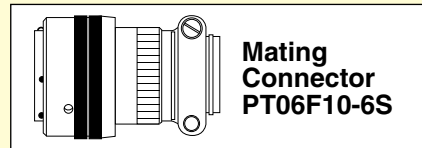


# HIGH-ACCURACY ALL STAINLESS STEEL TRANSDUCER



## STANDARD CUSTOM CONFIGURATIONS

PX02 SERIES	PRESSURE PORT [ 1 ]	ELECTRICAL CONNECTION [ 2 ]	RANGE (psi) [ 3 ]	UNITS [ 4 ]	OUTPUT [ 5 ]	OPTIONS [ 6 ]
Models <10,000 psi <b>C</b> = 1/4-18 NPT-M <b>D</b> = 1/4-18 NPT-F <b>J</b> = 7/16-20 UNF-M <b>K</b> = 7/16-20 UNF-F Models ≥10,000 psi <b>S</b> = 1/4 HP tube fitting			002 005 010 015 020 025 050 075 100 150 200 250 300 500 750 1K 1.5K 2K 3K 3.5K 5K 7.5K 10K† 20K† 30K†	S,G,A S,G,A	<b>5T</b> = 0 to 5 Vdc output <b>5Z</b> = Isolated 0 to 5 Vdc <b>10T</b> = 0 to 10 Vdc output	<b>OL</b> = Overload stops + <b>additional cost</b> (when available) <b>OX</b> = Cleaned for oxygen use + <b>additional cost</b> plus 2 weeks ( <b>)ft</b> = Optional cable length in feet + <b>add cost/ft</b> over 10 feet
	<b>0</b> = 3 m (10') cable (std) + <b>add cost/ft</b> over 3 m (10')					
	<b>1</b> = PTIH-10-6P connector (or equal) Mating connector (sold separately), order <b>PT06F10-6S</b>					
	<b>6</b> = mini DIN connector* * no shunt cal					
<b>For additional options including extended compensated temperatures, visit us online.</b>						

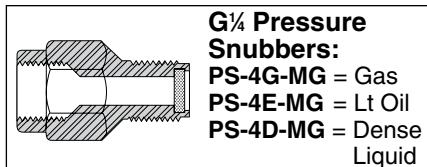


† Supplied with 1/4 HP tube fitting.

**Ordering Examples:** **PX02C1-100G5T**, 100 psi gage pressure transducer with 1/4-18 NPT male fitting, PTIH-10-6P, connector, and 0 to 5V output. **PT06F10-6S**, mating connector (sold separately). **PX02K0-1KS5Z**, 1000 psi sealed gage pressure transducer with 7/16-20 UNF female fitting, 3 m (10') cable and isolated 0 to 5 Vdc output. **PX02J1-015A5T**, 15 psi absolute pressure transducer with 7/16-20 UNF male fitting, PTIH-10-6P, connector and 0 to 5 Vdc output. **PT06F10-6S** mating connector (sold separately).

### To order a custom configuration:

1. Select a pressure port
2. Select electrical connection
3. Select a pressure range
4. Select pressure units
5. Select output
6. Select options



## METRIC CUSTOM CONFIGURATIONS

PXM02 SERIES	PRESSURE PORT [ 1 ]	ELECTRICAL CONNECTION [ 2 ]	RANGE (BAR) [ 3 ]	UNITS [ 4 ]	OUTPUT [ 5 ]	OPTIONS [ 6 ]
<b>MA</b> = G1/8 Male <b>MB</b> = G1/8 Female <b>MC</b> = G1/4 Male <b>MD</b> = G1/4 Female			0.16 0.4 1.0 1.6 2.5 4.0 6.0 10 16 25 40 60 100 160 250 400	S,G,A S,G,A S,G,A S,G,A S,G,A S,G,A S,G,A S,G,A S,G,A S,G,A S,G,A S,G,A S,G,A S,G,A S,G,A	<b>5T</b> = 0 to 5 Vdc <b>5Z</b> = Isolated 0 to 5 Vdc <b>10T</b> = 0 to 10 Vdc output	<b>OX</b> = Cleaned for oxygen service <b>OL</b> = Overload stops ( <b>)m</b> = Optional cable length in meters + <b>add cost/m</b> over 3 m
	<b>0</b> = 3 m (10') cable (std) + <b>add cost/m</b> over 3 m (10')					
	<b>1</b> = PTIH-10-6P connector (or equal) Mating connector (sold separately), order <b>PT06F10-6S</b>					
	<b>6</b> = mini DIN connector* *no shunt cal					
<b>For additional options including extended compensated temperatures, visit us online.</b>						

**Ordering Examples:** **PXM02MB0-010BARS5T**, 10 bar sealed gage pressure transducer with G1/8 female connection and 3 m (10') cable termination.

**PXM02MD1-010BARAV**, 10 bar absolute pressure transducer with G1/8 female connection and twist-lock 6 pin connector. **PT06F10-6S**, mating connector (sold separately).

## STANDARD MODELS

### To Order

RANGE	$\frac{1}{16}$ -20 UNF MODEL NO.	$\frac{1}{4}$ NPT MODEL NO.	COMPATIBLE METERS†	
<b>ABSOLUTE PRESSURE (All Ranges Available in Absolute Pressure)</b>				
0 to 10 psi	0 to 0.69 bar	PX02K1-010A5T	PX02C1-010A5T	DP41-E, DP25B-E
0 to 15 psi	0 to 1.0 bar	PX02K1-015A5T	PX02C1-015A5T	DP41-E, DP25B-E
0 to 20 psi	0 to 1.4 bar	PX02K1-020A5T	PX02C1-020A5T	DP41-E, DP25B-E
0 to 25 psi	0 to 1.72 bar	PX02K1-025A5T	PX02C1-025A5T	DP41-E, DP25B-E
0 to 50 psi	0 to 3.4 bar	PX02K1-050A5T	PX02C1-050A5T	DP41-E, DP25B-E
<b>GAGE PRESSURE (All Ranges Also Available in Sealed Gage Pressure)</b>				
0 to 2 psi	0 to 0.14 bar	PX02K1-002G5T	PX02C1-002G5T	DP41-E, DP25B-E
0 to 5 psi	0 to 0.34 bar	PX02K1-005G5T	PX02C1-005G5T	DP41-E, DP25B-E
0 to 10 psi	0 to 0.69 bar	PX02K1-010G5T	PX02C1-010G5T	DP41-E, DP25B-E
0 to 15 psi	0 to 1.0 bar	PX02K1-015G5T	PX02C1-015G5T	DP41-E, DP25B-E
0 to 50 psi	0 to 3.4 bar	PX02K1-050G5T	PX02C1-050G5T	DP41-E, DP25B-E
0 to 75 psi	0 to 5.2 bar	PX02K1-075G5T	PX02C1-075G5T	DP41-E, DP25B-E
0 to 100 psi	0 to 6.9 bar	PX02K1-100G5T	PX02C1-100G5T	DP41-E, DP25B-E
0 to 200 psi	0 to 13.8 bar	PX02K1-200G5T	PX02C1-200G5T	DP41-E, DP25B-E
0 to 300 psi	0 to 20.7 bar	PX02K1-300G5T	PX02C1-300G5T	DP41-E, DP25B-E
0 to 500 psi	0 to 34.5 bar	PX02K1-500G5T	PX02C1-500G5T	DP41-E, DP25B-E
0 to 1000 psi	0 to 68.9 bar	PX02K1-1KG5T	PX02C1-1KG5T	DP41-E, DP25B-E
0 to 1500 psi	0 to 103 bar	PX02K1-1.5KG5T	PX02C1-1.5KG5T	DP41-E, DP25B-E
0 to 2000 psi	0 to 138 bar	PX02K1-2KG5T	PX02C1-2KG5T	DP41-E, DP25B-E
0 to 3500 psi	0 to 241 bar	PX02K1-3.5KG5T	PX02C1-3.5KG5T	DP41-E, DP25B-E
0 to 5000 psi	0 to 345 bar	PX02K1-5KG5T	PX02C1-5KG5T	DP41-E, DP25B-E
0 to 7500 psi	0 to 517 bar	PX02K1-7.5KG5T	PX02C1-7.5KG5T	DP41-E, DP25B-E
0 to 10,000 psi**	0 to 689 bar	PX02S1-10KG5T**	PX02S1-10KG5T**	DP41-E, DP25B-E*
0 to 20,000 psi**	0 to 1379 bar	PX02S1-20KG5T**	PX02S1-20KG5T**	DP41-E, DP25B-E*
0 to 30,000 psi**	0 to 2068 bar	PX02S1-30KG5T**	PX02S1-30KG5T**	DP41-E, DP25B-E*

Comes complete with 5-point NIST-traceable calibration.

† Visit us online for compatible meters.

\* 4-digit meter, counts in increments of 10. \*\*  $\frac{1}{4}$  HP tube fitting pressure port.

To order absolute pressure, replace "G" in model number with "A" and add **cost** to price.

To order sealed gage units, replace "G" in model number with "S" (no extra charge).

**Ordering Examples:** PX02K1-1KG5T, 1000 psi gage transducer with 0 to 5 V output, twist-lock 6 pin connector and  $\frac{7}{16}$ -20 UNF female pressure connection. PT06F10-6S, mating connector (sold separately).

PX02C0-010G5T, 10 psi gage transducer with 0 to 5 V output, 3 m (10') cable and  $\frac{1}{4}$  NPT male pressure connection.

## METRIC MODELS

Models with G $\frac{1}{4}$ Female Pressure Connection, Cable or Connector and 5 V Output			
RANGE		MODEL NO.	COMPATIBLE METERS†
<b>GAGE PRESSURE</b>			
0 to 0.16 bar	0 to 2.3 psi	PXM02MD0-160BARG5T	DP41-S, DP25B-S
0 to 0.4 bar	0 to 5.8 psi	PXM02MD0-400BARG5T	DP41-S, DP25B-S
0 to 1 bar	0 to 15 psi	PXM02MD0-001BARG5T	DP41-S, DP25B-S
0 to 1.60 bar	0 to 23 psi	PXM02MD0-1.60BARG5T	DP41-S, DP25B-S
0 to 2.50 bar	0 to 58 psi	PXM02MD0-2.50BARG5T	DP41-S, DP25B-S
0 to 4 bar	0 to 87 psi	PXM02MD0-004BARG5T	DP41-S, DP25B-S
0 to 6 bar	0 to 145 psi	PXM02MD0-006BARG5T	DP41-S, DP25B-S
0 to 10 bar	0 to 232 psi	PXM02MD0-010BARG5T	DP41-S, DP25B-S
0 to 16 bar	0 to 363 psi	PXM02MD0-016BARG5T	DP41-S, DP25B-S
0 to 25 bar	0 to 580 psi	PXM02MD0-025BARG5T	DP41-S, DP25B-S
0 to 40 bar	0 to 870 psi	PXM02MD0-040BARG5T	DP41-S, DP25B-S
0 to 60 bar	0 to 1450 psi	PXM02MD0-060BARG5T	DP41-S, DP25B-S
0 to 100 bar	0 to 2321 psi	PXM02MD0-100BARG5T	DP41-S, DP25B-S
0 to 160 bar	0 to 3626 psi	PXM02MD0-160BARG5T	DP41-S, DP25B-S
0 to 250 bar	0 to 5802 psi	PXM02MD0-250BARG5T	DP41-S, DP25B-S
0 to 400 bar	0 to 8702 psi	PXM02MD0-400BARG5T	DP41-S, DP25B-S

Comes complete with 5-point NIST-traceable calibration. † Visit us online for compatible meters.

To order absolute pressure models, replace "G" in model number with "A" and add **cost** to price.

To order sealed gage models, replace "G" in model number with "S" (no extra charge).

To order female thread, see custom configurations below.

**Ordering Examples:** PXM02MD6-004BARG5T, 4 bar gage transducer with 0 to 5 V output, mini DIN connector and G $\frac{1}{4}$  female pressure connection. Mating connector included.

PXM02MD0-001BARA5T, 1 bar absolute transducer with 0 to 5 V output, 3 m (10') cable and G $\frac{1}{4}$  female pressure connection.



**METRIC**  
PXM02MC6-010BARG5T  
shown actual size.



VOLTAGE OUTPUT  
PRESSURE TRANSDUCERS

**B**

# HIGH-ACCURACY ELECTRONIC BAROMETER

## STANDARD AND METRIC MODELS

**0 to 5 Vdc or 4 to 20 mA Output**  
**3 Ranges Available**  
**16 to 32 inHg – 542 to 1084 hPa**  
**26 to 32 inHg – 880 to 1084 hPa**  
**28 to 32 inHg – 948 to 1084 hPa**

### PX02/PXM02 Series



Standard

- ✓ High Accuracy
- ✓ Broad Compensated Temperature Range  
-18 to 66°C (0 to 150°F)
- ✓ All Stainless Steel Construction
- ✓ Hermetically Sealed for Harsh Environments
- ✓ Cable or Connector Models
- ✓ Mounting Bracket Option
- ✓ Optional Pressure Ports to Fit Most Industrial Applications

OMEGA's PX02 electronic barometer is a high-accuracy electronic barometer available in three ranges: 16 to 32 inHg, 26 to 32 inHg, or 28 to 32 inHg (absolute pressure) for laboratory or industrial test applications.

### SPECIFICATIONS

**0 to 5 V Model**  
**Input, Recommended:** 24 to 32 Vdc  
**Input, Maximum:** 32 Vdc  
**Output, FS:** 0 to 5 Vdc  
**Linearity:** ±0.15% FS  
**Hysteresis:** ±0.1% FS  
**Repeatability:** ±0.05% FS  
**Zero Balance:** 0 ±10% FS, adjustable  
**Thermal Effects:**  
**Span:** 0.005% rdg/°F (0.009%/°C)  
**Zero:** 0.005% FS/°F (0.009%/°C)

**4 to 20 mA Model**  
**Input, Recommended:** 10 to 40 Vdc

**STANDARD**  
 PX02K1-26A5T  
 shown smaller  
 than actual size.



Twist-lock style.



Cable style.

**METRIC**  
 PXM02MD0-541mBARA5T-MB  
 with optional mounting bracket,  
 shown smaller than actual size.

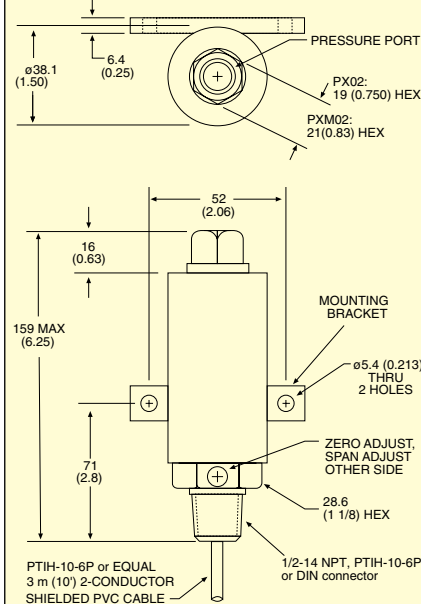
Available with  
 Optional Mounting  
 Bracket

**Input, Maximum:** 40 Vdc  
**Output, FS:** 4 to 20 mA  
**Accuracy:** 0.25% FS, linearity, hysteresis and repeatability combined  
**Zero Balance:** 4 mA +10% -2% FS adj  
**Thermal Effects:**  
**Span:** 0.005% rdg/°F (0.009%/°C)  
**Zero:** 0.005% FS/°F (0.009%/°C)

### COMMON SPECIFICATIONS

**Operating Temp Range:** -47 to 121°C (-50 to 250°F)  
**Compensated Temp Range:** -18 to 66°C (0 to 150°F)  
**Proof Pressure:** 150% of rated pressure  
**Burst Pressure:** 300% of rated pressure  
**Wetted Parts:** 17-4 PH stainless steel  
**Pressure Port:** See Custom Configurations  
**Electrical Connection:** PTIH-10-6P or equal; 3 m (10') cable: DIN connector  
**Mating Connector (Style 1):** PT06F10-6S (sold separately)  
**Weight:** 425 g (15 oz)

PX02/PXM02 Barometer with Mounting Bracket

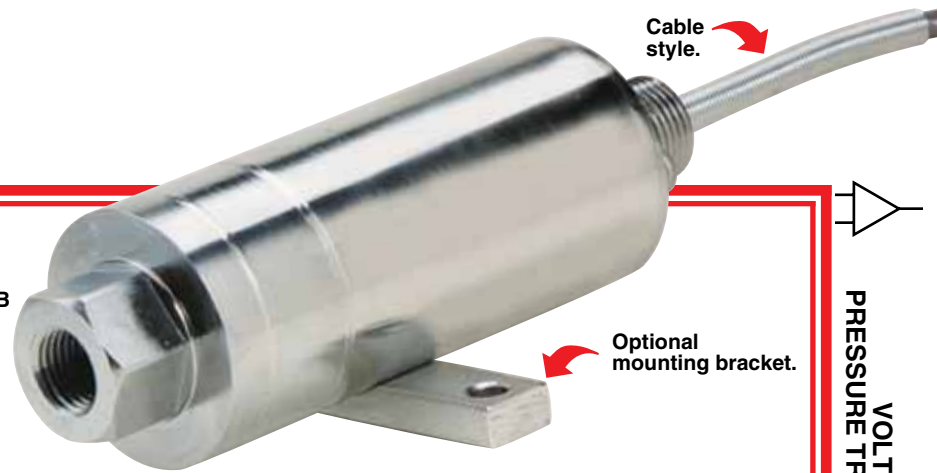


Dimensions: mm (inch)  
 $\phi$  = diameter

### WIRING

DIN	Voltage	DIN	Current
2	A +Sig Green	1	A +Red
3	B -Sig White	2	B -Black
GND	C -Exc Black		
1	D +Exc Red		
	E Shunt		
	F Shunt		

# ELECTRONIC BAROMETER



PXM02MD0-541mBARA5T-MB cable style, with optional mounting bracket, shown actual size.

## STANDARD CUSTOM CONFIGURATIONS

SERIES PX02 Barometer	PRESSURE PORT [ 1 ]	ELECTRICAL CONNECTION [ 2 ]	RANGE (inHg) [ 3 ]	UNITS [ 4 ]	OUTPUT [ 5 ]	OPTIONS [ 6 ]
C = 1/4-18 NPT-M D = 1/4-18 NPT-F J = 7/16-20 UNF-M K = 7/16-20 UNF-F			16 to 32 inHg 26 to 32 inHg 28 to 32 inHg	A A A	5T = 0 to 5 Vdc output I = 4 to 20 mA output	OX = Cleaned for oxygen service OL = Overload stops ( )M = Optional cable length in meters -MB = Mounting bracket + additional cost
<p>0 = 3 m (10') cable (std) + add cost/ft over 3 m (10')</p> <p>1 = PTIH-10-6P connector (or equal) Mating connector (sold separately), order <b>PT06F10-6S</b>.</p> <p>5 = Lightning-protected amplifier box (4 to 20 mA models only)</p> <p>6 = mini DIN connector</p>						
<p><b>To order a custom configuration:</b></p> <ol style="list-style-type: none"> <li>1. Select a pressure port</li> <li>2. Select electrical connection</li> <li>3. Select a pressure range</li> <li>4. Select pressure units</li> <li>5. Select output</li> <li>6. Select options</li> </ol>						

**Ordering Examples:** PX02K1-26AI-MB, 26 to 32 inHg calibrated electronic barometer with 7/16-20 UNF internal connection, 4 to 20 mA output, twist connector and optional mounting bracket. PT06F10-6S, mating connector (sold separately).

PX02 K1-28A5T-MB, 28 to 32 inHg calibrated electronic barometer with 7/16-20 UNF internal connection, 0 to 5 Vdc output and twist connector. PT06F10-6S, mating connector (sold separately).

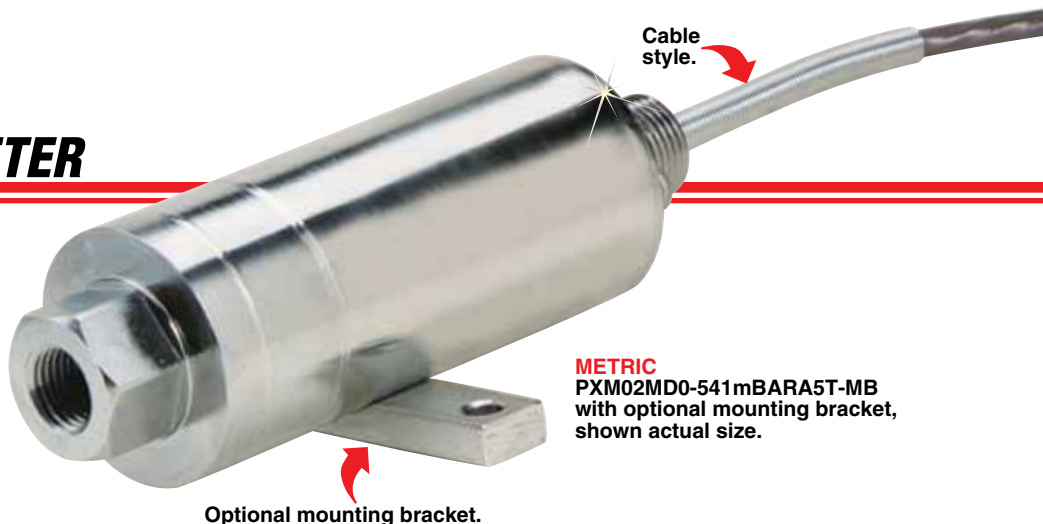
## METRIC CUSTOM CONFIGURATIONS

SERIES PXM02 Barometer	PRESSURE PORT [ 1 ]	ELECTRICAL CONNECTION [ 2 ]	RANGE (hPa) [ 3 ]	UNITS [ 4 ]	OUTPUT [ 5 ]	OPTIONS [ 6 ]
MA = G1/8 Male MB = G1/8 Female MC = G1/4 Male MD = G1/4 Female			542 to 1084 hPa 880 to 1084 hPa 948 to 1084 hPa	A A A	5T = 0 to 5 Vdc output I = 4 to 20 mA output	OX = Cleaned for oxygen service OL = Overload stops ( )m = optional cable length in meters -MB = Mounting bracket + additional cost
<p>0 = 3 m (10') cable (std) + add cost/m over 3 m (10')</p> <p>1 = PTIH-10-6P connector (or equal) Mating connector (sold separately), order <b>PT06F10-6S</b></p> <p>5 = Lightning-protected amplifier box (4 to 20 mA models only)</p> <p>6 = mini DIN connector</p>						
<p><b>To order a custom configuration:</b></p> <ol style="list-style-type: none"> <li>1. Select a pressure port</li> <li>2. Select electrical connection</li> <li>3. Select a pressure range</li> <li>4. Select pressure units</li> <li>5. Select output</li> <li>6. Select options</li> </ol>						

**Ordering Examples:** PXM02MD1-880MBARAI-MB, 880 to 1084 hPa calibrated electronic barometer with G1/4 female pressure port, 4 to 20 mA output, twist-lock connector and optional mounting bracket. PT06F10-6S, mating connector (sold separately).

PXM02MCO-948A5T-MB, 948 to 1084 hPa calibrated electronic barometer with G1/4 male pressure port, 0 to 5 Vdc output and 3 m (10') cable.

# ELECTRONIC BAROMETER



**METRIC**  
PXM02MD0-541mBARA5T-MB  
with optional mounting bracket,  
shown actual size.

## STANDARD MODELS

<b>To Order</b>				
<b>MODELS WITH 1/16-20 UNF INTERNAL CONNECTION AND TWIST-LOCK CONNECTOR</b>				
<b>RANGE</b>			<b>BAROMETER MODEL NO.</b>	<b>COMPATIBLE METERS*</b>
<b>inHg</b>	<b>hPa</b>	<b>mmHg</b>		
<b>0 TO 5 V OUTPUT</b>				
16 to 32	542 to 1084	406 to 813	<b>PX02K1-16A5T</b>	DP41-E, DP25B-E, DP24-E
26 to 32	880 to 1084	660 to 813	<b>PX02K1-26A5T</b>	DP41-E, DP25B-E, DP24-E
28 to 32	948 to 1084	711 to 813	<b>PX02K1-28A5T</b>	DP41-E, DP25B-E, DP24-E
<b>4 TO 20 mA OUTPUT</b>				
16 to 32	542 to 1084	406 to 813	<b>PX02K1-16AI</b>	DP41-E, DP25B-E, DP24-E
26 to 32	880 to 1084	660 to 813	<b>PX02K1-26AI</b>	DP41-E, DP25B-E, DP24-E
28 to 32	948 to 1084	711 to 813	<b>PX02K1-28AI</b>	DP41-E, DP25B-E, DP24-E

Comes complete with 5-point NIST-traceable calibration.

\* Visit [omega.com](http://omega.com) for compatible meters.

**Ordering Examples:** **PX02K1-26AI**, 26 to 32 inHg calibrated electronic barometer with 1/16-20 UNF internal connection, 4 to 20 mA output, PTIH-10-6P connector. **PT06F10-6S**, mating connector (sold separately).

**PX02K1-28A5T-MB**, 28 to 32 inHg calibrated electronic barometer with 1/16-20 UNF internal connection, 0 to 5 Vdc output, PTIH-10-6P connector and optional mounting bracket. **PT06F10-6S**, mating connector (sold separately).

## METRIC MODELS

<b>MODELS WITH G 1/4 INTERNAL CONNECTION WITH CABLE OR CONNECTOR AND 5 V OUTPUT</b>				
<b>RANGE</b>		<b>BAROMETER MODEL NO.</b>	<b>COMPATIBLE METERS*</b>	
<b>hPa</b>	<b>mmHg</b>			
<b>0 TO 5 V OUTPUT</b>				
541-1084	406-813	<b>PXM02MD0-541mBARA5T</b>	DP41-E, DP25B-E, DP24-E	
880-1084	660-813	<b>PXM02MD0-880mBARA5T</b>	DP41-E, DP25B-E, DP24-E	
948-1084	711-813	<b>PXM02MD0-948mBARA5T</b>	DP41-E, DP25B-E, DP24-E	
<b>4 TO 20 mA OUTPUT</b>				
541-1084	406-813	<b>PXM02MD0-541mBARAI</b>	DP41-E, DP25B-E, DP24-E	
880-1084	660-813	<b>PXM02MD0-880mBARAI</b>	DP41-E, DP25B-E, DP24-E	
948-1084	711-813	<b>PXM02MD0-948mBARAI</b>	DP41-E, DP25B-E, DP24-E	

Comes complete with 5-point NIST-traceable calibration.

\* Visit [omega.com](http://omega.com) for compatible meters.

To order different process connections, see custom configurations below.

**Ordering Examples:** **PXM02MD0-541mBARAI-MB**, 541 to 1084 hPa calibrated electronic barometer with G1/4 internal thread, 4 to 20 mA output, 3 m (10') cable and the optional mounting bracket.

**PXM02MD6-880mBARA5T-MB**, 880 to 1084 hPa calibrated electronic barometer with G1/4 internal connection, 0 to 5 Vdc output, mini-DIN connector and the optional mounting bracket. **PT06F10-6S**, mating connector (sold separately).

## OPTION

<b>ORDER SUFFIX</b>	<b>DESCRIPTION</b>
<b>-MB</b>	Mounting Bracket



# HIGH-ACCURACY CURRENT OUTPUT TRANSDUCER

## STANDARD AND METRIC MODELS

**1/16"-20 or 1/4" NPT Connections**  
**4 to 20 mA Output**  
**0-2 to 0-30,000 psi-Standard Models**  
**0-150 mbar to 0-400 bar-Metric Models**

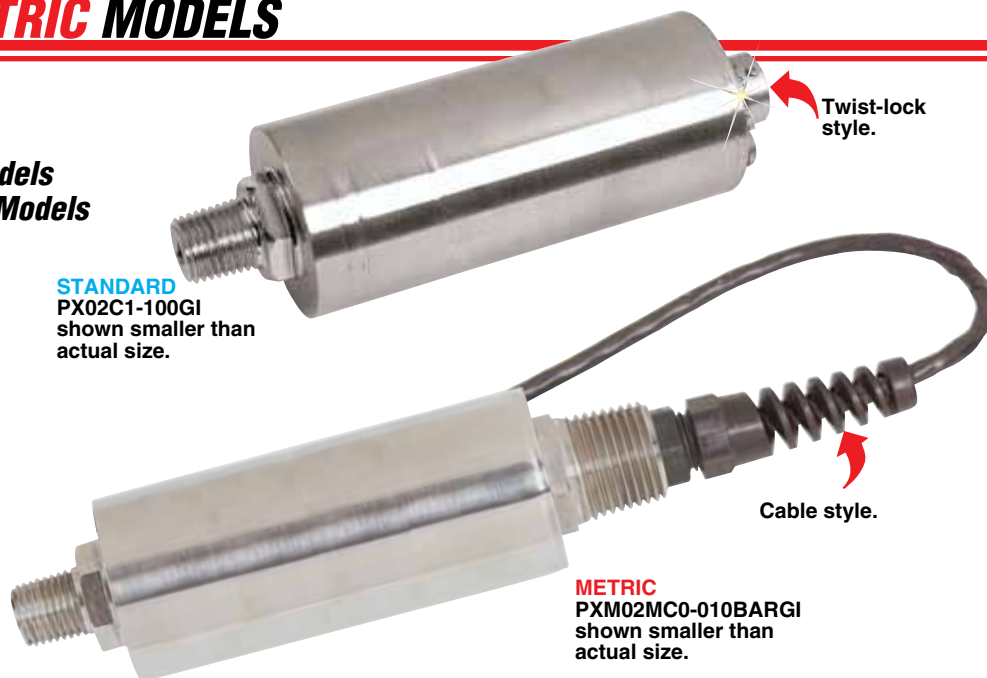
### PX02/PXM02 Series



- ✓ High Accuracy
- ✓ 5-Point Calibration Provided
- ✓ All Stainless Steel Construction
- ✓ Hermetically Sealed Design for Harsh Environments
- ✓ Available in Gage, Absolute, Sealed Gage, psi, and Metric Ranges
- ✓ Cable or Connector Models
- ✓ Optional Pressure Ports to Fit Most Industrial Applications

OMEGA's PX02/PXM02 are high-accuracy industrial pressure transmitters. All stainless steel construction and a sealed case make the PX02/PXM02 suitable for harsh industrial environments. It is a true high-accuracy industrial device. A broad temperature-compensated range of 16 to 71°C (60 to 160°F) and a high operating range to 121°C (250°F) make these transducers very stable for applications with fluctuating temperatures.

The PX02 is available in gage, absolute, or sealed models, as well as in psi or metric ranges. NPT and 1/16"-20 O-ring seal fittings are available for industrial and hydraulic applications.



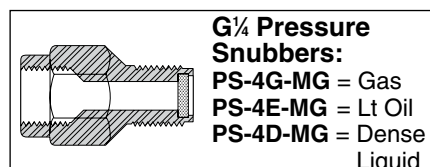
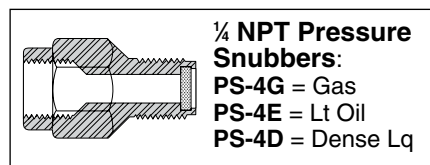
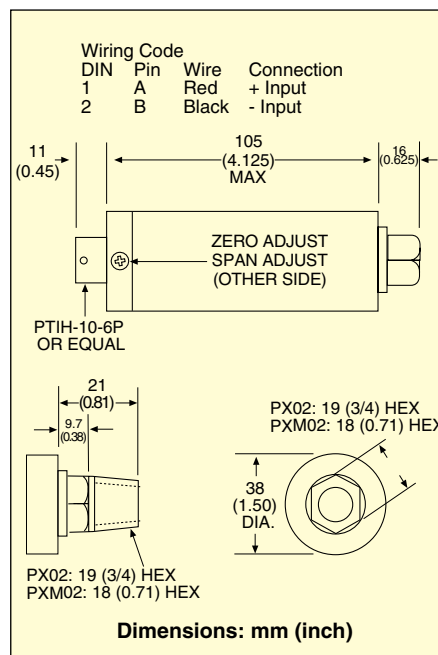
**STANDARD**  
**PX02C1-100GI**  
 shown smaller than actual size.

**METRIC**  
**PXM02MC0-010BARGI**  
 shown smaller than actual size.

### SPECIFICATIONS

**4 to 20 mA Output**  
**Excitation:** 10 to 40 Vdc  
**Output:** 4 to 20 mA ±10% adj  
**Zero Balance:** 4 mA +10% -2% adj  
**Linearity:** ±0.15% FSO  
**Hysteresis:** ±0.1% FSO  
**Repeatability:** ±0.05% FSO  
**Sensing Element:** 4-active-arm bridge, using thick-film strain gages in a hermetically sealed chamber (except gage units)  
**Operating Temp Range:** -46 to 121°C (-50 to 250°F)  
**Compensated Temp Range:** 16 to 71°C (60 to 160°F)  
**Thermal Effects:**  
**Span:** 0.009% FSO/°C  
**Zero:** 0.009% FSO/°C

**Proof Pressure:** 150% of rated pressure  
**Burst Pressure:** 300% of rated pressure  
**Wetted Parts:** 17-4 PH stainless steel  
**Pressure Port:** See custom configurations table on next page  
**Electrical Connection:** See custom configurations table on next page  
**Mating Connector:** PT06F10-6S (sold separately)  
**Weight:** 388 g (13.7 oz)



# HIGH-ACCURACY ALL STAINLESS STEEL TRANSDUCER



CURRENT OUTPUT  
PRESSURE TRANSDUCERS  
**B**

## STANDARD CUSTOM CONFIGURATIONS

PX02 SERIES	PRESSURE PORT [ 1 ]	ELECTRICAL CONNECTION [ 2 ]	RANGE (psi) [ 3 ]	UNITS [ 4 ]	OUTPUT [ 5 ]	OPTIONS [ 6 ]
Models < 10,000 psi			002*	A, G, S	I = 4 to 20 mA output	<b>OL</b> = Overload stops + <b>additional cost</b> when available <b>OX</b> = Cleaned for oxygen service + <b>additional cost</b> plus 2 weeks <b>( )ft</b> = Optional cable length in feet
<b>C</b> = 1/4-18 NPT-M			005*	A, G, S		
<b>D</b> = 1/4-18 NPT-F			010	A, G, S		
<b>J</b> = 7/16-20 UNF-M			015	A, G, S		
<b>K</b> = 7/16-20 UNF-F			020	A, G, S		
Models ≥ 10,000 psi			025	A, G, S		
<b>S</b> = 1/4 HP tube fitting			050	A, G, S		
			075	A, G, S		
			100	A, G, S		
			150	A, G, S		
<b>0</b> = 3 m (10') cable (std)			200	A, G, S		
			250	A, G, S		
			300	A, G, S		
<b>1</b> = PTIH-10-6P connector (or equal)			500	A, G, S		
			750	A, G, S		
			1K	A, G, S		
			1.5K	A, G, S		
<b>5</b> = Lightning-protected amplifier box (4 to 20 mA models only)			2K	A, G, S		
			3K	A, G, S		
			3.5K	A, G, S		
			5K	A, G, S		
<b>6</b> = mini DIN connector (no shunt cal)			7.5K	A, G, S		
			10K†	A, G, S		
			20K†	A, G, S		
			30K†	A, G, S		

**For additional options, including extended temperature ranges, see omega.com**

*\* 2 and 5 psi ranges available only on amplified output.  
† Supplied with 1/4 HP tube fitting.*

**To order a custom configuration:**

1. Select a pressure port
2. Select electrical connection
3. Select a pressure range
4. Select pressure units
5. Select output
6. Select options

**Ordering Example:** PX02C1-100GI, 100 psi gage pressure transducer with 1/4-18 NPT male fitting, PTIH-10-6P, connector, and 4 to 20 mA output, PT06F10-6S, mating connector (sold separately).

## METRIC CUSTOM CONFIGURATIONS

PXM02 SERIES	PRESSURE PORT [ 1 ]	ELECTRICAL CONNECTION [ 2 ]	RANGE (BAR) [ 3 ]	UNITS [ 4 ]	OUTPUT [ 5 ]	OPTIONS [ 6 ]
<b>MA</b> = G3/8 Male			0.16	A, G, S	I = 4 to 20 mA	<b>OX</b> = Cleaned for oxygen service <b>OL</b> = Overload stops <b>( )m</b> = Optional cable length in meters
<b>MB</b> = G3/8 Female			0.4	A, G, S		
<b>MC</b> = G1/2 Male			1.0	A, G, S		
<b>MD</b> = G1/2 Female			1.6	A, G, S		
			2.5	A, G, S		
			4.0	A, G, S		
			6.0	A, G, S		
<b>0</b> = 3 m (10') cable (std)			10	A, G, S		
			16	A, G, S		
			25	A, G, S		
<b>1</b> = PTIH-10-6P connector (or equal)			40	A, G, S		
			60	A, G, S		
<b>6</b> = mini DIN connector (no shunt cal)			100	A, G, S		
			160	A, G, S		
			250	A, G, S		
			400	A, G, S		

**For additional options, including extended compensated temperatures, see omega.com**

**To order a custom configuration:**

1. Select a pressure port
2. Select electrical connection
3. Select a pressure range
4. Select pressure units – absolute, gage or sealed gage
5. Select output
6. Select options

**Ordering Examples:** PXM02MB0-010BARS, 10 bar sealed gage pressure transducer with G3/8 female connection and 3 m (10') cable termination.

PXM02MD1-010BARAI, 10 bar absolute pressure transducer with G3/8 female connection and twist-lock connector. PT06F10-6S, mating connector (sold separately).

# HIGH-ACCURACY CURRENT OUTPUT TRANSDUCER STANDARD AND METRIC MODELS

## STANDARD MODELS

To Order				
RANGE		1/16"-20 UNF MODEL NO.	1/4" NPT MODEL NO.	COMPATIBLE METERS†
<b>ABSOLUTE PRESSURE (All Ranges Available in Absolute Pressure)</b>				
0 to 10 psi	0 to 0.69 bar	PX02K[*]-010AI	PX02C[*]-010AI	DP41-E, DP25B-E
0 to 15 psi	0 to 1.0 bar	PX02K[*]-015AI	PX02C[*]-015AI	DP41-E, DP25B-E
0 to 20 psi	0 to 1.4 bar	PX02K[*]-020AI	PX02C[*]-020AI	DP41-E, DP25B-E
0 to 25 psi	0 to 1.7 bar	PX02K[*]-025AI	PX02C[*]-025AI	DP41-E, DP25B-E
0 to 50 psi	0 to 3.4 bar	PX02K[*]-050AI	PX02C[*]-050AI	DP41-E, DP25B-E
<b>GAGE PRESSURE (All Ranges Also Available in Sealed Gage Pressure)</b>				
0 to 2 psi	0 to 0.14 bar	PX02K[*]-002GI	PX02C[*]-002GI	DP41-E, DP25B-E
0 to 5 psi	0 to 0.34 bar	PX02K[*]-005GI	PX02C[*]-005GI	DP41-E, DP25B-E
0 to 10 psi	0 to 0.69 bar	PX02K[*]-010GI	PX02C[*]-010GI	DP41-E, DP25B-E
0 to 15 psi	0 to 1.0 bar	PX02K[*]-015GI	PX02C[*]-015GI	DP41-E, DP25B-E
0 to 50 psi	0 to 3.4 bar	PX02K[*]-050GI	PX02C[*]-050GI	DP41-E, DP25B-E
0 to 75 psi	0 to 5.2 bar	PX02K[*]-075GI	PX02C[*]-075GI	DP41-E, DP25B-E
0 to 100 psi	0 to 6.9 bar	PX02K[*]-100GI	PX02C[*]-100GI	DP41-E, DP25B-E
0 to 200 psi	0 to 13.8 bar	PX02K[*]-200GI	PX02C[*]-200GI	DP41-E, DP25B-E
0 to 300 psi	0 to 20.7 bar	PX02K[*]-300GI	PX02C[*]-300GI	DP41-E, DP25B-E
0 to 500 psi	0 to 34.5 bar	PX02K[*]-500GI	PX02C[*]-500GI	DP41-E, DP25B-E
0 to 1000 psi	0 to 68.9 bar	PX02K[*]-1KGI	PX02C[*]-1KGI	DP41-E, DP25B-E
0 to 1500 psi	0 to 103 bar	PX02K[*]-1.5KGI	PX02C[*]-1.5KGI	DP41-E, DP25B-E
0 to 2000 psi	0 to 138 bar	PX02K[*]-2KGI	PX02C[*]-2KGI	DP41-E, DP25B-E
0 to 3500 psi	0 to 241 bar	PX02K[*]-3.5KGI	PX02C[*]-3.5KGI	DP41-E, DP25B-E
0 to 5000 psi	0 to 345 bar	PX02K[*]-5KGI	PX02C[*]-5KGI	DP41-E, DP25B-E
0 to 7500 psi	0 to 517 bar	PX02K[*]-7.5KGI	PX02C[*]-7.5KGI	DP41-E, DP25B-E
0 to 10,000 psi**	0 to 689 bar	PX02S[*]-10KGI	PX02S[*]-10KGI	DP41-E, DP25B-E*
0 to 20,000 psi**	0 to 1379 bar	PX02S[*]-20KGI	PX02S[*]-20KGI	DP41-E, DP25B-E*
0 to 30,000 psi**	0 to 2068 bar	PX02S[*]-30KGI	PX02S[*]-30KGI	DP41-E, DP25B-E*

[\*] = Insert "0" for 3 m (10') cable, "1" for twist-lock connector, or "6" for mini DIN connector.

**Ordering Examples:** PX02K1-1KGI, 1000 psi gage transducer with 4 to 20 mA output, twist lock connector and 1/16"-20 female pressure connection. PT06F10-6S, mating connector (sold separately), PX02C0-010GI, 10 psi gage transducer with 4 to 20 mA output, 3 m (10') cable and 1/4" NPT male pressure connection.

## ACCESSORY

MODEL NO.	DESCRIPTION
PT06F10-6S	Mating connector for PX02/PXM02 transducers with PTIH-10-6P electrical connection

Comes complete with 5-point calibration.  
\* 4-digit meter, counts in increments of 10.  
\*\* 1/4" HP tube fitting.

† See [omega.com](http://omega.com) for compatible meters.

[\*] = Insert "0" for 3 m (10') cable, "1" for twist-lock connector, or "6" for mini DIN connector.

To order absolute pressure models, replace "G" in model number with "A" and add **cost**. To order sealed gage models, replace "G" in model number with "S" (no extra charge).

**Ordering Examples:** PXM02MD6-4BARGI, 4 bar gage transmitter with 4 to 20 mA output, mini-DIN connector and G 1/4" female pressure connection. Mating connector included. PXM02MC0-010BARAI, 10 bar absolute transmitter with 4 to 20 mA output, 3 m (10') cable with 1/2" NPT conduit fitting and and G 1/4" male pressure connection.

## METRIC MODELS

Models with G 1/4" Female Pressure Connection, Cable or Connector and 4 to 20 mA Output				
RANGE		MODEL NO.		COMPATIBLE METERS†
<b>GAGE PRESSURE</b>				
0 to 0.16 bar	0 to 2.32 psi	PXM02MD[*]-160mBARGI		DP41-E, DP25B-E
0 to 0.4 bar	0 to 5.8 psi	PXM02MD[*]-400mBARGI		DP41-E, DP25B-E
0 to 1 bar	0 to 15 psi	PXM02MD[*]-001BARGI		DP41-E, DP25B-E
0 to 1.60 bar	0 to 23 psi	PXM02MD[*]-1.60BARGI		DP41-E, DP25B-E
0 to 2.50 bar	0 to 36 psi	PXM02MD[*]-2.50BARGI		DP41-E, DP25B-E
0 to 4 bar	0 to 58 psi	PXM02MD[*]-004BARGI		DP41-E, DP25B-E
0 to 6 bar	0 to 87 psi	PXM02MD[*]-006BARGI		DP41-E, DP25B-E
0 to 10 bar	0 to 145 psi	PXM02MD[*]-010BARGI		DP41-E, DP25B-E
0 to 16 bar	0 to 232 psi	PXM02MD[*]-016BARGI		DP41-E, DP25B-E
0 to 25 bar	0 to 363 psi	PXM02MD[*]-025BARGI		DP41-E, DP25B-E
0 to 40 bar	0 to 580 psi	PXM02MD[*]-040BARGI		DP41-E, DP25B-E
0 to 60 bar	0 to 870 psi	PXM02MD[*]-060BARGI		DP41-E, DP25B-E
0 to 100 bar	0 to 1450 psi	PXM02MD[*]-100BARGI		DP41-E, DP25B-E
0 to 160 bar	0 to 2321 psi	PXM02MD[*]-160BARGI		DP41-E, DP25B-E
0 to 250 bar	0 to 3626 psi	PXM02MD[*]-250BARGI		DP41-E, DP25B-E
0 to 400 bar	0 to 5802 psi	PXM02MD[*]-400BARGI		DP41-E, DP25B-E