

# 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**

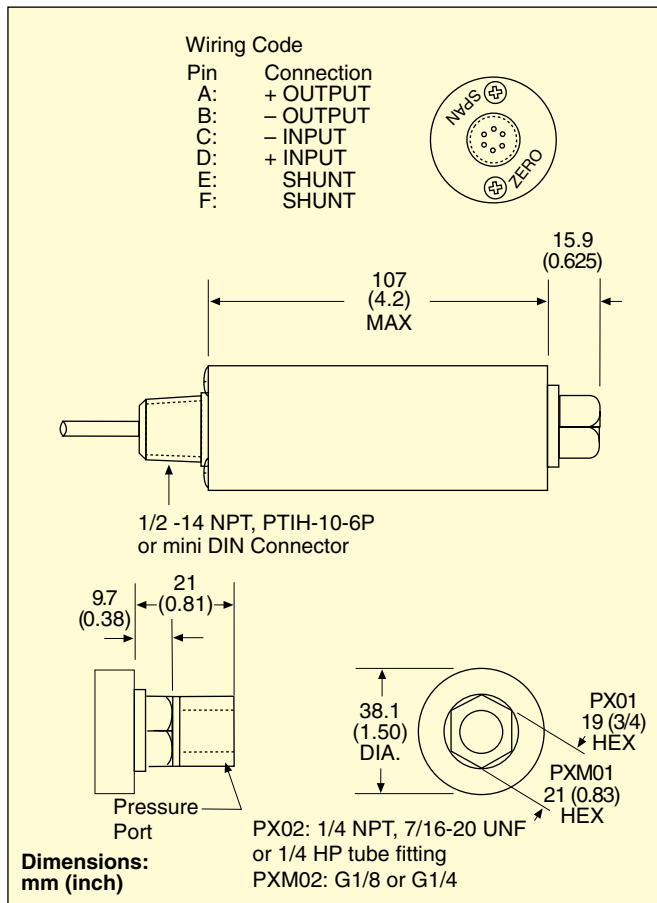
- ✓ Internal Shunt Resistor for Easy System Checks
- ✓ All Stainless Steel Construction
- ✓ Available in Gage, Absolute, Sealed Gage, psi, and Metric Ranges
- ✓ Cable, Connector Models or Mini DIN
- ✓ Optional Pressure Ports to Fit Most Industrial Applications

**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)

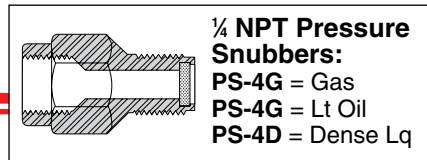
OMEGA's PX02/PXM02 are high-accuracy, amplified voltage output, industrial pressure transducers. All stainless steel construction and a hermetically sealed case make the PX02/PXM02 suitable for harsh industrial environments. They are a true high-accuracy industrial device.

### 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			002	S,G,A	<b>5T</b> = 0 to 5 Vdc output	<b>OL</b> = Overload stops
<b>C</b> = 1/4-18 NPT-M			005	S,G,A	<b>5Z</b> = Isolated 0 to 5 Vdc	+ <b>additional cost</b>
<b>D</b> = 1/4-18 NPT-F			010	S,G,A	<b>10T</b> = 0 to 10 Vdc output	(when available)
<b>J</b> = 7/16-20 UNF-M			015	S,G,A		<b>OX</b> = Cleaned for oxygen use
<b>K</b> = 7/16-20 UNF-F			020	S,G,A		+ <b>additional cost</b>
Models ≥10,000 psi			025	S,G,A		plus 2 weeks
<b>S</b> = 1/4 HP tube fitting			050	S,G,A		<b>( )ft</b> = Optional cable length in feet
	<b>0</b> = 3 m (10') cable (std)		075	S,G,A		+ <b>add cost/ft</b>
	+ <b>add cost/ft</b> over 3 m (10')		100	S,G,A		over 10 feet
	<b>1</b> = PTIH-10-6P connector		150	S,G,A		
	(or equal)		200	S,G,A		
	Mating connector		250	S,G,A		
	(sold separately), order		300	S,G,A		
	<b>PT06F10-6S</b>		500	S,G,A		
	<b>6</b> = mini DIN connector*		750	S,G,A		
	* no shunt cal		1K	S,G,A		
			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		

**For additional options including extended compensated temperatures, visit us online.**

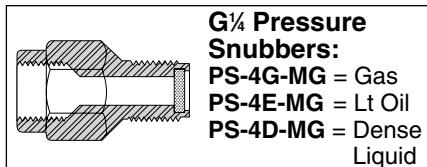
**Mating Connector PT06F10-6S**

† 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> = G 1/8 B Male			0.16	S,G,A	<b>5T</b> = 0 to 5 Vdc	<b>OX</b> = Cleaned for oxygen service
<b>MB</b> = G 1/8 B Female			0.4	S,G,A	<b>5Z</b> = Isolated 0 to 5 Vdc	<b>OL</b> = Overload stops
<b>MC</b> = G 1/8 B Male			1.0	S,G,A	<b>10T</b> = 0 to 10 Vdc output	<b>( )m</b> = Optional cable length in meters
<b>MD</b> = G 1/8 B Female			1.6	S,G,A		+ <b>add cost/m</b>
			2.5	S,G,A		over 3 m
			4.0	S,G,A		
	<b>0</b> = 3 m (10') cable (std)		6.0	S,G,A		
	+ <b>add cost/m</b> over 3 m (10')		10	S,G,A		
	<b>1</b> = PTIH-10-6P connector		16	S,G,A		
	(or equal)		25	S,G,A		
	Mating connector		40	S,G,A		
	(sold separately), order		60	S,G,A		
	<b>PT06F10-6S</b>		100	S,G,A		
	<b>6</b> = mini DIN connector*		160	S,G,A		
	*no shunt cal		250	S,G,A		
			400	S,G,A		

**For additional options including extended compensated temperatures, visit us online.**

**Ordering Examples:** **PXM02MB0-010BARS5T**, 10 bar sealed gage pressure transducer with G 1/8 B female connection and 3 m (10') cable termination.

**PXM02MD1-010BARAV**, 10 bar absolute pressure transducer with G 1/8 B 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  $\frac{1}{16}$ -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**