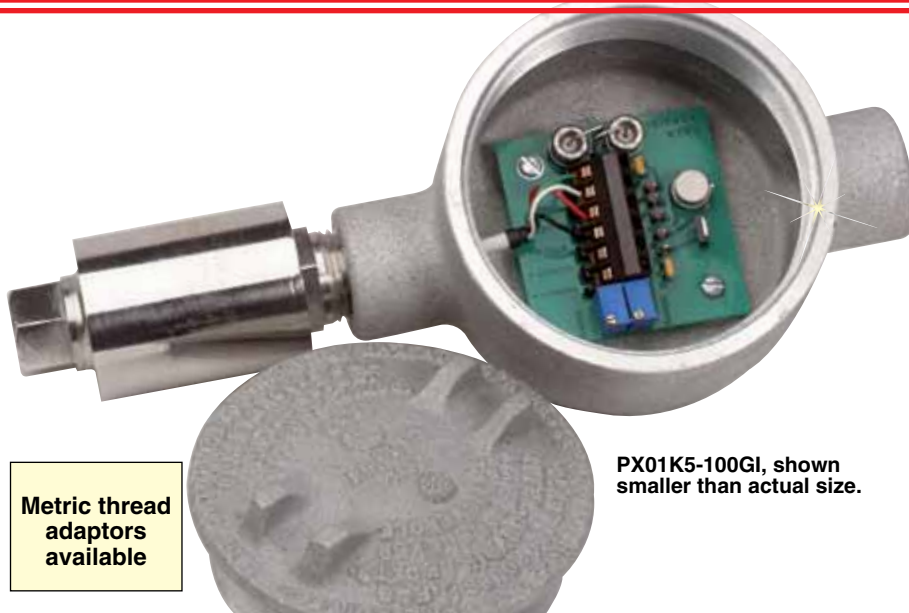


# VERY-HIGH-ACCURACY PRESSURE TRANSMITTER WITH LIGHTNING-PROTECTED AMPLIFIER HOUSING

**4 to 20 mA Output**  
**0-2 to 0-30,000 psi**  
**0-140 mbar to 0-2 kbar**

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

## PX01 Series



Metric thread adaptors available

PX01K5-100GI, shown smaller than actual size.

- ✓ Very High Accuracy
- ✓ 5-Point NIST-Traceable Calibration Provided
- ✓ All Stainless Steel Construction
- ✓ Double Diaphragm Design for Harsh Environments
- ✓ Available in Gage, Absolute, Sealed Gage, psi, and Metric Ranges
- ✓ Optional Pressure Ports to Fit Most Industrial Applications

OMEGA's PX01 Series transducers are very high-accuracy industrial pressure transmitters. The all stainless steel construction and hermetically sealed case make them suitable for harsh environments. They are true high-accuracy devices, with a "double diaphragm" design for high reliability in industrial areas. 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 in applications with fluctuating temperatures. The PX01 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.

To Order			
Models with 4 to 20 mA Output / 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	PX01K5-010AI	DP41-E, DP25B-E, DP24-E
0 to 15 psi	0 to 1.0 bar	PX01K5-015AI	DP41-E, DP25B-E, DP24-E
0 to 20 psi	0 to 1.4 bar	PX01K5-020AI	DP41-E, DP25B-E, DP24-E
0 to 25 psi	0 to 1.7 bar	PX01K5-025AI	DP41-E, DP25B-E, DP24-E
0 to 50 psi	0 to 3.4 bar	PX01K5-050AI	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	PX01K5-002GI	DP41-E, DP25B-E, DP24-E
0 to 5 psi	0 to 0.34 bar	PX01K5-005GI	DP41-E, DP25B-E, DP24-E
0 to 10 psi	0 to 0.69 bar	PX01K5-010GI	DP41-E, DP25B-E, DP24-E
0 to 15 psi	0 to 1.0 bar	PX01K5-015GI	DP41-E, DP25B-E, DP24-E
0 to 50 psi	0 to 3.4 bar	PX01K5-050GI	DP41-E, DP25B-E, DP24-E
0 to 75 psi	0 to 5.2 bar	PX01K5-075GI	DP41-E, DP25B-E, DP24-E
0 to 100 psi	0 to 6.9 bar	PX01K5-100GI	DP41-E, DP25B-E, DP24-E
0 to 200 psi	0 to 13.8 bar	PX01K5-200GI	DP41-E, DP25B-E, DP24-E
0 to 300 psi	0 to 20.7 bar	PX01K5-300GI	DP41-E, DP25B-E, DP24-E
0 to 500 psi	0 to 34.5 bar	PX01K5-500GI	DP41-E, DP25B-E, DP24-E
0 to 1000 psi	0 to 68.9 bar	PX01K5-1KGI	DP41-E, DP25B-E, DP24-E
0 to 1500 psi	0 to 103 bar	PX01K5-1.5KGI	DP41-E, DP25B-E, DP24-E
0 to 2000 psi	0 to 138 bar	PX01K5-2KGI	DP41-E, DP25B-E, DP24-E
0 to 3500 psi	0 to 241 bar	PX01K5-3.5KGI	DP41-E, DP25B-E, DP24-E
0 to 5000 psi	0 to 345 bar	PX01K5-5KGI	DP41-E, DP25B-E, DP24-E
0 to 7500 psi	0 to 517 bar	PX01K5-7.5KGI	DP41-E, DP25B-E, DP24-E
0 to 10,000** psi	0 to 689 bar	PX01S5-10KGI	DP41-E, DP25B-E, DP24-E
0 to 20,000** psi	0 to 1379 bar	PX01S5-20KGI	DP41-E, DP25B-E*, DP24-E*
0 to 30,000** psi	0 to 2068 bar	PX01S5-30KGI	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", additional cost for ≤50 psia.  
For sealed gage pressure, replace "G" in model number with "S" (no charge unless indicated).  
**Ordering Examples:** PX01K5-500GI, 500 psi gage model with 4 to 20 mA output, 1/16-20 UNF female pressure fitting and lightning-protected, amplifier box.  
PX01K5-050AI, 50 psi absolute pressure transmitter with 4 to 20 mA output, 1/16-20 UNF female pressure fitting, amplifier box connection. PX01K5-100SI, 100 psi sealed gage pressure transmitter with 4 to 20 mA output, 1/16-20 female pressure fitting, amplifier box connection.

# LIGHTNING-PROTECTED AMPLIFIER HOUSING



CURRENT OUTPUT  
PRESSURE TRANSDUCERS  
**B**

## SPECIFICATIONS

### 4 to 20 mA

**Excitation:** 12 to 40 Vdc

**Output:** 4 to 20 mA  
±10% adj

**Zero Balance:** +4 mA  
+10% -2% adj

**Linearity:** ±0.05% FS

**Hysteresis:** ±0.05% FS

**Repeatability:** ±0.05% FS

### Sensing Element:

4-active-arm bridge, using thick-film strain gages in a hermetically sealed "double diaphragm" chamber (except gage units)

**Operating Temp Range:**  
-46 to 121°C (-50 to 250°F)

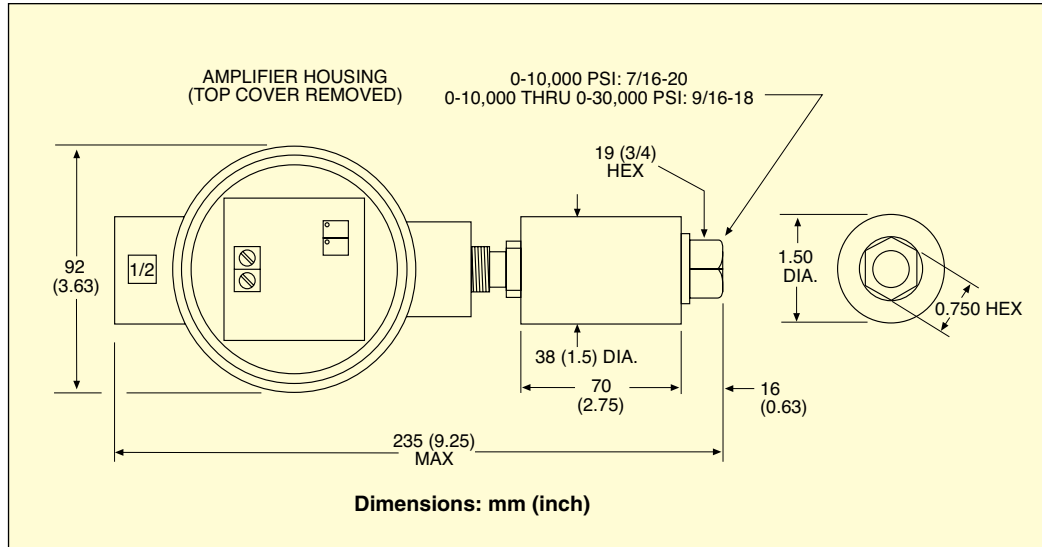
### Compensated Temp

**Range:**  
16 to 71°C (60 to 160°F)

### Thermal Effects:

**Span:** 0.003% FS/°F

**Zero:** 0.003% FS/°F



**Proof Pressure:**  
150% of rated pressure

**Burst Pressure:**  
300% of rated pressure

**Wetted Parts:** 17-4 PH stainless steel

**Pressure Port:** Ranges <10,000 psi:  
7/16-20 UNF female, or 1/4-18 NPT M/F  
ranges ≥10,000 psi = 9/16-18, 1/4" HP tube

**Electrical Connection:** Lightning-protected, explosion-proof amplifier housing

## CUSTOM CONFIGURATIONS

PX01 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	OL = Overload stops  OX = Cleaned for oxygen use plus 2 weeks
C = 1/4-18 NPT-M			005*	A,G,S		
D = 1/4-18 NPT-F			010	A,G,S		
J = 7/16-20 UNF-M			015	A,G,S		
K = 7/16-20 UNF-F			020	A,G,S		
Models ≥10,000 psi			025	A,G,S		
S = 1/4 HP tube fitting			050	A,G,S		
			075	A,G,S		
			100	A,G,S		
			150	A,G,S		
			200	A,G,S		
			250	A,G,S		
			300	A,G,S		
			500	A,G,S		
			750	A,G,S		
			1K	A,G,S		
			1.5K	A,G,S		
			2K	A,G,S		
			3K	A,G,S		
			3.5K	A,G,S		
			5K	A,G,S		
			7.5K	A,G,S		
			10K†	A,G,S		
			20K†	A,G,S		
			30K†	A,G,S		

0 = 3 m (10') cable (std)  
1 = PTIH-10-6P connector (or equal)  
Mating connector (sold separately), order **PT06F10-6S**.  
5 = Lightning-protected amplifier box (4 to 20 mA models only)

**For additional options including extended temperature ranges, visit us online**

\* 2 and 5 psi ranges available only on amplified output.  
† Supplied with 1/4 HP tube fitting.  
Metric ranges available – PXM01 Series, visit us online

**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 Examples:** PX01C1-100GI, 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).

PX01J1-015AI, 15 psi absolute pressure transducer with 7/16-20 UNF male fitting, PTIH-10-6P, connector and a 4 to 20 mA Vdc output. PT06F10-6S, mating connector (sold separately).