

# 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



Standard

On Request



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).

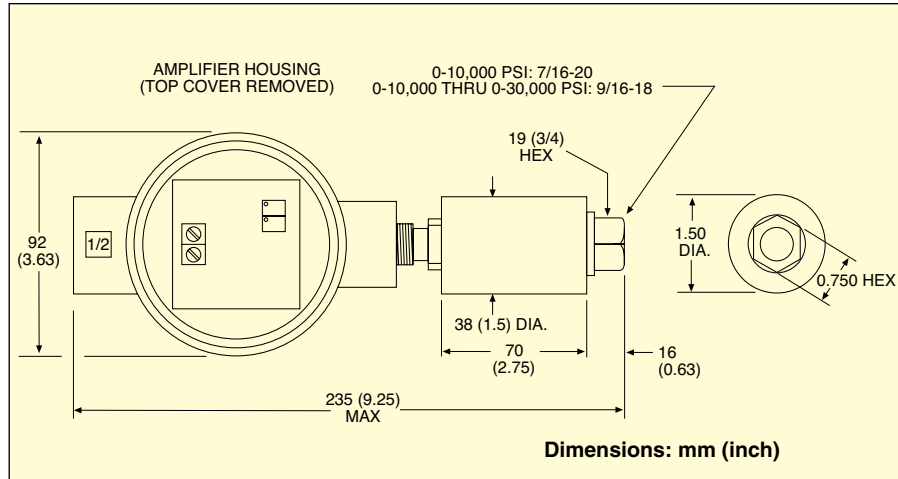
Ordering Examples: **PX02K5-1KGI**, 1000 psi gage transducer with 4 to 20 mA output, amplifier housing connections and 1/16"-20 UNF female pressure connection.

**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		
	<b>5</b> = Lightning-protected amplifier box (no charge) (4 to 20 mA models only)		250	S,G,A		
			300	S,G,A		
			500	S,G,A		
			750	S,G,A		
			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		

\* 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.