

HIGH-ACCURACY MILLIVOLT OUTPUT PRESSURE TRANSDUCER

7/16-20 OR 1/4 NPT CONNECTIONS

PX02 Series

mV/V Output

0-10 to 0-30,000 psi

0-700 mbar to 0-2000 bar

1 bar = 14.5 psi

1 kg/cm² = 14.22 psi

1 atmosphere = 14.7 psi = 29.93

inHg = 760.2 mmHg = 1.014 bar

Starts at
\$475



- ✓ FM Approved Intrinsicly Safe
- ✓ FM Hazardous Location Approval Optional
- ✓ High Operating Temperature: 163°C (325°F)
- ✓ All Stainless Steel Construction
- ✓ Shunt Calibration for Fast System Setup
- ✓ Hermetically Sealed for Harsh Environments (Not Gage Units)

OMEGA's PX02 is a high-accuracy, 30-millivolt output industrial pressure transducer. The all stainless steel construction and hermetically sealed case make it suitable for harsh environments. An FM Approved Intrinsicly Safe rating is standard, and hazardous location ratings are optional. The PX02 has a high operating range, a broad compensated range, and excellent temperature compensation that gives stable readings in harsh applications. It is available in gage, sealed, or absolute models as well as psi or metric ranges, with either connector or cable terminations.



PX02K1-100GV, 7/16-20 connection, \$475, shown smaller than actual size.



PX02C1-100GV, 1/4 NPT connection, \$495, shown smaller than actual size.

SPECIFICATIONS

mV/V OUTPUT

Excitation: 10 Vdc (15 Vdc max)

Output: 3 mV/V ±0.25%

Input Resistance: 350 ±10 Ω

Output Resistance: 350 ±10 Ω

Linearity: ±0.15% FS

Hysteresis: ±0.1% FS

Repeatability: ±0.1% FS

Zero Balance: 1.0% FS

Agency Approvals:

Standard: FM Intrinsicly Safe

IS/I.II.III/1/CDEFG

Optional: FM Hazardous Location

S/I/1/ABCD

Shunt Calibration: Value specified on calibration sheet

Sensing Element: 4-active-arm bridge, using thick-film strain gages in a hermetically sealed chamber

Operating Temp Range:

-73 to 163°C (-100 to 325°F)

Compensated Temp Range:

16 to 71°C (60 to 160°F)

Thermal Effects:

Span: 0.003% rdg/°F

Zero: 0.003% FS/°F

Proof Pressure: 150% of rated pressure

Burst Pressure: 300% of rated pressure

Wetted Parts: 17-4 PH SS

Pressure Port: Ranges <10,000 psi; style "K" 7/16-20 UNF female; style "C" 1/4 NPT male; ranges ≥ 10,000 psi; style "S" 7/16-18, 1/4" HP tube

Also Available: 1/4-18 NPT female or 7/16-20 UNF male

Electrical Connection:

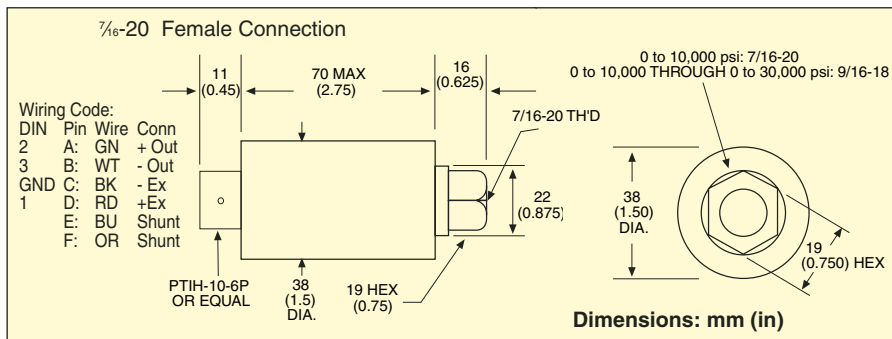
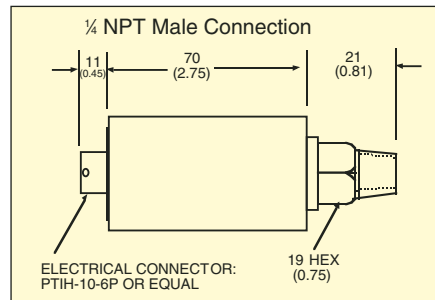
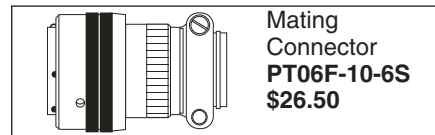
Style "1": PTIH-10-6P or equal

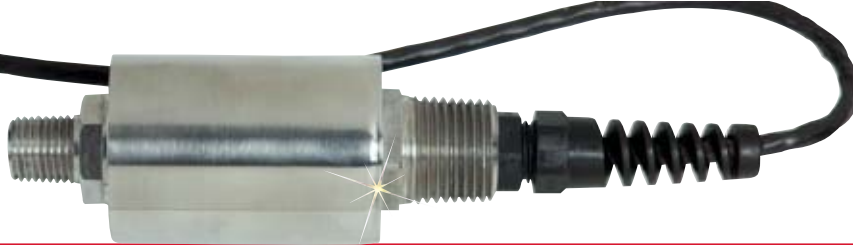
Style "0": 3 m (10') cable

Mating Connector:

PT06F-10-6S (not included)

Weight: 255 g (9 oz)





PX02C0-100GV, ¼ NPT male connection, \$495, shown smaller than actual size.

CUSTOM CONFIGURATIONS

SERIES PX02	PRESSURE PORT [1]	ELECTRICAL CONNECTION [2]	RANGE (psi) [3]	UNITS [4]	OUTPUT [5]	OPTIONS [6]
Models < 10,000 psi			002*	S,G,A	V = mV/V output	OL = Overload stops where available +\$65
C = ¼-18 NPT-M +\$20			005*	S,G,A		OX = Oxygen cleaning +\$75 plus 2 weeks
D = ¼-18 NPT-F, no charge			010	S,G,A	5T = 0 to 5 Vdc output +\$155 all ranges	FM = FM hazardous location +\$150
J = ⅞-20 UNF-M +\$20			015	S,G,A	5Z = Isolated 0 to 5 Vdc +\$190	
K = ⅞-20 UNF-F, no charge			020	S,G,A	10T= 0 to 10 Vdc output +\$155 all ranges	
Models ≥10,000 psi			025	S,G,A	I = 4 to 20 mA output +\$175 all ranges	
S = ¼ HP tube fitting no charge			050	S,G,A		
			075	S,G,A		
			100	S,G,A		
	0 = 3 m (10') cable (std)		150	S,G,A		
	1 = PTIH-10-6P connector (or equal, no charge). Mating connector (not included), order PT06F-10-6S \$26.50		200	S,G,A		
			250	S,G,A		
			300	S,G,A		
			500	S,G,A		
			750	S,G,A		
			1K	S,G,A		
	5 = 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 with amplified output.
Metric ranges available – see Metric Section.

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

See page B-12 for additional options, including extended temperature ranges.

Ordering Examples: PX02C1-100GI, 100 psi gage pressure transducer with ¼-18 NPT male fitting, PTIH-10-6P connector and 4 to 20 mA output, \$475 + 20 + 175 = \$670. PT06F-10-6S, mating connector (not included), \$26.50. PX02K0-1KS5Z, 1000 psi sealed gage pressure transducer with ⅞-20 UNF female fitting, 3 m (10') cable, and isolated 0 to 5 Vdc output, \$475 + 190 = \$665. PX02J1-015A5T, 15 psi absolute pressure transducer with ⅞-20 UNF male fitting, PTIH-10-6P connector and 0 to 5 Vdc output, \$540 + 20 + 155 + 50 = \$765. PT06F-10-6S, mating connector (not included), \$26.50.

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)						
RANGE	⅞-20 MODEL	PRICE	¼ NPT MODEL	PRICE	COMPATIBLE METERS†	
Connector Style – Absolute Pressure (All Ranges Available in Absolute Pressure)						
0 to 15 psi	0 to 1.0 bar	PX02K1-015AV	\$590	PX02C1-015AV	\$610	DP41-S, DP25B-S
0 to 20 psi	0 to 1.4 bar	PX02K1-020AV	590	PX02C1-020AV	610	DP41-S, DP25B-S
0 to 25 psi	0 to 1.7 bar	PX02K1-025AV	590	PX02C1-025AV	610	DP41-S, DP25B-S
0 to 50 psi	0 to 3.4 bar	PX02K1-050AV	525	PX02C1-050AV	545	DP41-S, DP25B-S
Connector Style – Gage Pressure (All Ranges Also Available in Sealed Gage Pressure)						
0 to 10 psi	0 to 0.69 bar	PX02K1-010GV	\$540	PX02C1-010GV	\$560	DP41-S, DP25B-S
0 to 15 psi	0 to 1.0 bar	PX02K1-015GV	540	PX02C1-015GV	560	DP41-S, DP25B-S
0 to 50 psi	0 to 3.4 bar	PX02K1-050GV	475	PX02C1-050GV	495	DP41-S, DP25B-S
0 to 75 psi	0 to 5.2 bar	PX02K1-075GV	475	PX02C1-075GV	495	DP41-S, DP25B-S
0 to 100 psi	0 to 6.9 bar	PX02K1-100GV	475	PX02C1-100GV	495	DP41-S, DP25B-S
0 to 200 psi	0 to 13.8 bar	PX02K1-200GV	475	PX02C1-200GV	495	DP41-S, DP25B-S
0 to 300 psi	0 to 20.7 bar	PX02K1-300GV	475	PX02C1-300GV	495	DP41-S, DP25B-S
0 to 500 psi	0 to 34.5 bar	PX02K1-500GV	475	PX02C1-500GV	495	DP41-S, DP25B-S
0 to 1000 psi	0 to 68.9 bar	PX02K1-1KGV	475	PX02C1-1KGV	495	DP41-S, DP25B-S
0 to 1500 psi	0 to 103 bar	PX02K1-1.5KGV	475	PX02C1-1.5KGV	495	DP41-S, DP25B-S
0 to 2000 psi	0 to 138 bar	PX02K1-2KGV	475	PX02C1-2KGV	495	DP41-S, DP25B-S
0 to 3500 psi	0 to 241 bar	PX02K1-3.5KGV	475	PX02C1-3.5KGV	495	DP41-S, DP25B-S
0 to 5000 psi	0 to 345 bar	PX02K1-5KGV	475	PX02C1-5KGV	495	DP41-S, DP25B-S
0 to 7500 psi	0 to 517 bar	PX02K1-7.5KGV	475	PX02C1-7.5KGV	495	DP41-S, DP25B-S
0 to 10,000** psi	0 to 689 bar	PX02S1-10KGV	540	not available		DP41-S, DP25B-S*
0 to 20,000** psi	0 to 1379 bar	PX02S1-20KGV	540	not available		DP41-S, DP25B-S*
0 to 30,000** psi	0 to 2068 bar	PX02S1-30KGV	540	not available		DP41-S, DP25B-S*

Comes with 5-point calibration. Metric ranges available – see Metric Section. * 4-digit meter. ** ¼ HP tube fitting. † See section D for compatible meters. To order absolute pressure, replace “G” in model number with “A”, add \$50. To order sealed gage pressure, replace “G” in model number with “S” (no extra charge).

Ordering Examples: PX02K1-500SV, 500 psi sealed gage pressure transducer with mV/V output, ⅞-20 female fitting and PTIH-10-6P connector, \$475. PT06F-10-6S, mating connector (not included), \$26.50. PX02C0-100AV, 100 psi absolute pressure transducer with mV/V output, ¼ NPT male fitting and 3 m (10') cable, \$545.

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