

HIGH-ACCURACY MILLIVOLT OUTPUT PRESSURE TRANSDUCER

STANDARD AND METRIC MODELS

mV/V Output

**0-10 to 0-30,000 psi-
Standard Models**

**0-700 mbar to 0-400 bar-
Metric Models**

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

Available
in Cable or
Connector
Styles



STANDARD
PX02K1-100GV, 1/16-20 UNF
connection, shown
actual size.

METRIC
PX01MC1-006BARGV, G1/4,
shown actual size.

PX02/PXM02 Series



Standard

- ✓ High Operating Temp: 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/PXM02 is a high-accuracy, 30-millivolt output industrial pressure transducers. The all stainless steel construction and hermetically sealed case make them suitable for harsh environments. The PX02/PXM02 have a high operating range, a broad compensated range, and excellent temperature compensation that gives stable readings in harsh applications. They are available in gage, sealed, or absolute models as well as psi or metric ranges, with either connector or cable terminations.

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

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

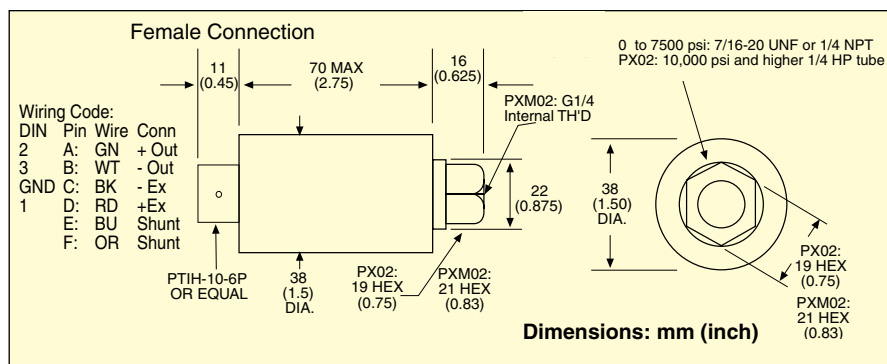
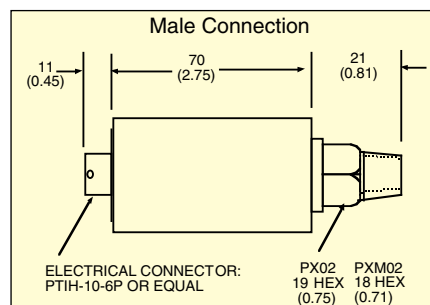
Wetted Parts: 17-4 PH SS

Pressure Port: See custom configurations chart

Electrical Connection: See custom configurations chart

Mating Connector (Style 1): PT06F10-6S (sold separately)

Weight: 255 g (9 oz)



STANDARD MODELS

To Order

RANGE		1/16"-20 UNF MODEL	1/4" NPT MODEL	COMPATIBLE METERS
Connector Style – Absolute Pressure (All Ranges Available in Absolute Pressure)				
0 to 15 psi	0 to 1.0 bar	PX02K1-015AV	PX02C1-015AV	DP41-S, DP25B-S
0 to 20 psi	0 to 1.4 bar	PX02K1-020AV	PX02C1-020AV	DP41-S, DP25B-S
0 to 25 psi	0 to 1.7 bar	PX02K1-025AV	PX02C1-025AV	DP41-S, DP25B-S
0 to 50 psi	0 to 3.4 bar	PX02K1-050AV	PX02C1-050AV	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	PX02C1-010GV	DP41-S, DP25B-S
0 to 15 psi	0 to 1.0 bar	PX02K1-015GV	PX02C1-015GV	DP41-S, DP25B-S
0 to 50 psi	0 to 3.4 bar	PX02K1-050GV	PX02C1-050GV	DP41-S, DP25B-S
0 to 75 psi	0 to 5.2 bar	PX02K1-075GV	PX02C1-075GV	DP41-S, DP25B-S
0 to 100 psi	0 to 6.9 bar	PX02K1-100GV	PX02C1-100GV	DP41-S, DP25B-S
0 to 200 psi	0 to 13.8 bar	PX02K1-200GV	PX02C1-200GV	DP41-S, DP25B-S
0 to 300 psi	0 to 20.7 bar	PX02K1-300GV	PX02C1-300GV	DP41-S, DP25B-S
0 to 500 psi	0 to 34.5 bar	PX02K1-500GV	PX02C1-500GV	DP41-S, DP25B-S
0 to 1000 psi	0 to 68.9 bar	PX02K1-1KGV	PX02C1-1KGV	DP41-S, DP25B-S
0 to 1500 psi	0 to 103 bar	PX02K1-1.5KGV	PX02C1-1.5KGV	DP41-S, DP25B-S
0 to 2000 psi	0 to 138 bar	PX02K1-2KGV	PX02C1-2KGV	DP41-S, DP25B-S
0 to 3500 psi	0 to 241 bar	PX02K1-3.5KGV	PX02C1-3.5KGV	DP41-S, DP25B-S
0 to 5000 psi	0 to 345 bar	PX02K1-5KGV	PX02C1-5KGV	DP41-S, DP25B-S
0 to 7500 psi	0 to 517 bar	PX02K1-7.5KGV	PX02C1-7.5KGV	DP41-S, DP25B-S
0 to 10,000** psi	0 to 689 bar	PX02S1-10KGV**	PX02S1-10KGV**	DP41-S, DP25B-S*
0 to 20,000** psi	0 to 1379 bar	PX02S1-20KGV**	PX02S1-20KGV**	DP41-S, DP25B-S*
0 to 30,000** psi	0 to 2068 bar	PX02S1-30KGV**	PX02S1-30KGV**	DP41-S, DP25B-S*

Comes complete with 5-point NIST-traceable calibration. * 4-digit meter. ** 1/4 HP tube fitting.

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

Ordering Examples: PX02K1-500GV, 500 psi gage pressure transducer with mV/V output, 1/16"-20 female fitting and PTIH-10-6P connector. PT06F10-6S, mating connector (sold separately).

PX02C0-100AV, 100 psi absolute pressure transducer with mV/V output, 1/4" NPT male fitting and 3 m (10') cable.



METRIC
PXM02MC6-010BARGV, mini DIN style, shown actual size.

METRIC MODELS

Models with G 1/4 Female Pressure Connection, Cable or Connector and mV/V Output				
RANGE		MODEL NO.	COMPATIBLE METERS	
GAGE PRESSURE				
0 to 1 bar	0 to 15 psi	PXM02MD[*]-001BARGV	DP41-S, DP25B-S	
0 to 1.60 bar	0 to 23 psi	PXM02MD[*]-1.60BARGV	DP41-S, DP25B-S	
0 to 2.50 bar	0 to 36 psi	PXM02MD[*]-2.50BARGV	DP41-S, DP25B-S	
0 to 4 bar	0 to 58 psi	PXM02MD[*]-004BARGV	DP41-S, DP25B-S	
0 to 6 bar	0 to 87 psi	PXM02MD[*]-006BARGV	DP41-S, DP25B-S	
0 to 10 bar	0 to 145 psi	PXM02MD[*]-010BARGV	DP41-S, DP25B-S	
0 to 16 bar	0 to 232 psi	PXM02MD[*]-016BARGV	DP41-S, DP25B-S	
0 to 25 bar	0 to 363 psi	PXM02MD[*]-025BARGV	DP41-S, DP25B-S	
0 to 40 bar	0 to 580 psi	PXM02MD[*]-040BARGV	DP41-S, DP25B-S	
0 to 60 bar	0 to 870 psi	PXM02MD[*]-060BARGV	DP41-S, DP25B-S	
0 to 100 bar	0 to 1450 psi	PXM02MD[*]-100BARGV	DP41-S, DP25B-S	
0 to 160 bar	0 to 2321 psi	PXM02MD[*]-160BARGV	DP41-S, DP25B-S	
0 to 250 bar	0 to 3626 psi	PXM02MD[*]-250BARGV	DP41-S, DP25B-S	
0 to 400 bar	0 to 5802 psi	PXM02MD[*]-400BARGV	DP41-S, DP25B-S	

Comes complete with 5-point NIST-traceable calibration.

[*] = Insert "0" for cable "1" for twist-lock connector "6" for micro DIN connector.

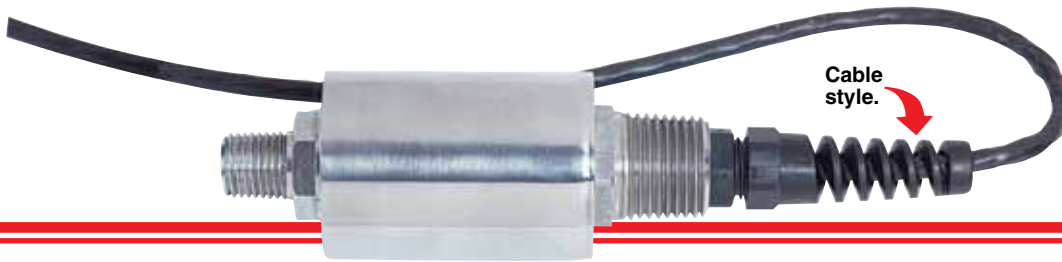
To order absolute pressure models, replace "G" in model number with "A" and add to price.

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

To order female threads, see Custom Configurations on next page.

Ordering Examples: PXM02MD6-060BARSV, 60 bar sealed gage pressure transducer with mV/V output, G 1/4 female fitting and micro DIN connector. Mating connector included.

PXM02MC0-010BARAV, 10 bar absolute pressure transducer with mV/V output, G 1/4 male fitting and 3 m (10') cable.



PX02C0-100GV, 1/4 NPT male, shown smaller than actual size.

STANDARD CUSTOM CONFIGURATIONS

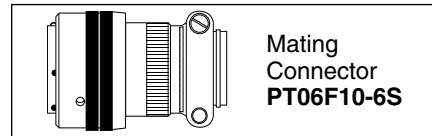
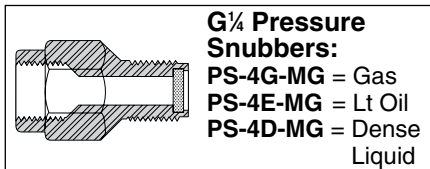
PX02 SERIES	PRESSURE PORT [1]	ELECTRICAL CONNECTION [2]	RANGE (psi) [3]	UNITS [4]	OUTPUT [5]	OPTIONS [6]
Models < 10,000 psi			—	A, G, S	V = mV/V output	OL = Overload stops where available OX = Oxygen cleaning plus 2 weeks
C = 1/4-18 NPT-M			—	A, G, S		
D = 1/4-18 NPT-F			010	A, G, S		
J = 7/16-20 UNF-M			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		
	0 = 3 m (10') cable (std)		150	A, G, S		
	1 = PTIH-10-6P connector		200	A, G, S		
	Mating connector (sold separately), order PT06F10-6S		250	A, G, S		
			300	A, G, S		
			500	A, G, S		
	6 = mini DIN connector no shunt cal		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		

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

Visit omega.com for additional options, including extended temperature ranges.

Ordering Examples: PX02C1-100GV, 100 psi gage pressure transducer with 1/4-18 NPT male fitting, PTIH-10-6P connector and 3 mV/V output. PT06F10-6S, mating connector (sold separately).
 PX02K0-1KSV, 1000 psi sealed gage pressure transducer with 7/16-20 UNF female fitting, 3 m (10') cable, and isolated 3 mV/V output.
 PX02J1-015AV, 15 psi absolute pressure transducer with 7/16-20 UNF male fitting, PTIH-10-6P connector and 3 mV/V 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]
MA = G 1/8 B Male			1.0	A, G, S	V = mV/V	OX = Cleaned for oxygen service OL = Overload stops ()m = Optional cable length in meters
MB = G 1/8 B Female			1.6	A, G, S		
MC = G 1/4 B Male			2.5	A, G, S		
MD = G 1/4 B Female			4.0	A, G, S		
			6.0	A, G, S		
			10	A, G, S		
			16	A, G, S		
	0 = 3 m (10') cable (std)		25	A, G, S		
	1 = PTIH-10-6P connector		40	A, G, S		
	6 = mini DIN connector no shunt cal		60	A, G, S		
			100	A, G, S		
			160	A, G, S		
			250	A, G, S		
			400	A, G, S		

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

Visit omega.com for additional options, including extended compensated temperatures.

Ordering Examples: PXM02MB0-010BARSV, 10 bar sealed gage pressure transducer with G 1/8 B female connection, 3 m (10') cable termination and 3 mV/V output.
 PXM02MD1-010BARAV, 10 bar absolute pressure transducer with G 1/8 B female connection, twist-lock connector and 3 mV/V output. PT06F10-6S, mating connector (sold separately).



MILLIVOLT OUTPUT PRESSURE TRANSDUCERS B