



HIGH ACCURACY TRANSDUCERS

MICRO-MACHINED SILICON

FOR BAROMETRIC PRESSURE MEASUREMENT

PX409 Series

Barometric Pressure Absolute Pressure

0 to 5 Vdc Output

0 to 32, 16 to 32 or 26 to 32 inHg

0 to 1100, 550 to 1100, 880 to 1100 hPa

Starts at
\$625



Standard

- ✓ High Accuracy
±0.08% BSL Includes
Linearity, Hysteresis,
and Repeatability
- ✓ Broad Temperature
Compensated Range
-18 to 85°C (0 to 185°F)
- ✓ Premium Temperature
Performance
Span: ±0.5% Over
Compensated Range
- ✓ 5-Point NIST Traceable
Calibration Included
- ✓ All Stainless Steel
Wetted Parts
- ✓ Fast Response Time
- ✓ Solid State Reliability
and Stability
- ✓ 300% Proof Pressure
Minimum

Metric threads available,
see omega.com/config

Cable style.

IP67 rated
PX409-32BV,
\$625, shown
actual size.

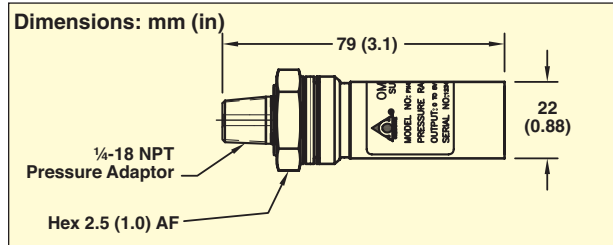
Twist-lock
style.

**M12 Connector
also Available
See To Order
Chart**

IP65 rated
PX429-26BI,
\$690, shown
actual size.

IP65 rated
PX419-16B5V,
\$690, shown
actual size.

mini DIN
style.



OMEGA's PX409 series electronic barometers are high-accuracy barometers available in three ranges: 16 to 32 inHg, 26 to 32 inHg, or 0 to 32 inHg (absolute pressure) for laboratory or industrial test applications. Models with integral cables (PX409) are IP67 while

connector styles (PX419 and PX429) are IP65 rated. They feature all stainless steel construction, which makes them ideal for harsh industrial environments. Their high operating temperature, broad compensated range, and excellent temperature compensation allow

stable readings in applications with fluctuating temperatures commonly found where barometric pressure must be monitored. Models are available with millivolt, voltage or current outputs.

HIGH ACCURACY, MICRO-MACHINED SILICON TRANSDUCERS



SPECIFICATIONS

Output:

Millivolt: 10 mV/V (100 mV @ 10 Vdc)
Amplified Voltage: 0 to 5 Vdc
Current Loop: 4 to 20 mA

Power Requirements:

Millivolt: 5 to 10 Vdc (5 mA @ 10 Vdc)
Amplified Voltage: 10 to 30 Vdc @ 10 mA
Current Loop: 9 to 30 Vdc [max loop res = (Vs-9) x 50]; [9 to 20 Vdc above 105°C (229°F)]

Accuracy (Combined Linearity, Hysteresis and Repeatability):

±0.08% BSL

Zero Balance: ±0.5% FS typical, 1% max

Span Setting: ±0.5% FS typical, 1% max; calibrated in vertical direction with fitting down

Operating Temperature Range:

-45 to 121°C (-49 to 250°F) [-45 to 115°C (-49 to 240°F) for voltage or current outputs]

Compensated Temperature:

Ranges > 5 psi: -29 to 85°C (-20 to 185°F)
Ranges ≤ 5 psi: -18 to 85°C (0 to 185°F)

Thermal Effects Span (Over Compensated Range):

Ranges > 5 psi: ±0.5% span
Ranges ≤ 5 psi: ±1% span

Long Term Stability (1-Year):

±0.1% FS typical

Shock: 50 g, 11 ms half sine, vertical and horizontal axis

Vibration: 5-2000-5 Hz, 30 minute cycle, Curve L, Mil-Spec 810 figure 514-2-2, vertical and horizontal axis

Response Time: <1 ms

Bandwidth: DC to 1 kHz typical

Proof Pressure: 400% of span

Burst Pressure: 6000 psia

Electrical Termination:

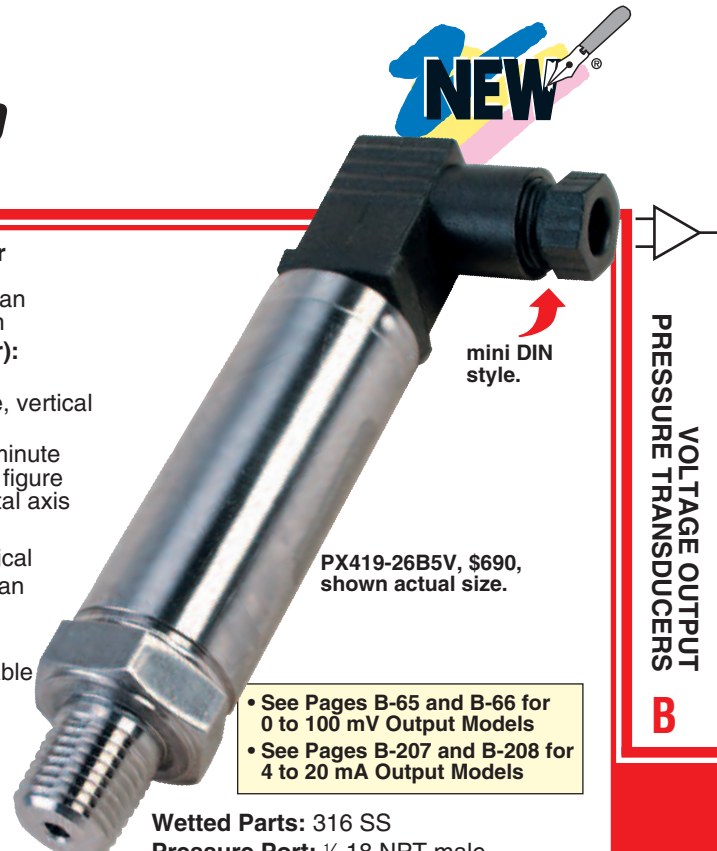
PX409: Integral 2 m (6') cable
PX419: mini DIN
PX429: Twist lock

Mating Connectors:

PX419: CX5302 (included)
PX429: PT06F10-6S (sold separately)

Environmental Protection:

PX409: IP67
PX419: IP65
PX429: IP65
PX459: IP65



PX419-26B5V, \$690, shown actual size.

- See Pages B-65 and B-66 for 0 to 100 mV Output Models
- See Pages B-207 and B-208 for 4 to 20 mA Output Models

Wetted Parts: 316 SS
Pressure Port: ¼-18 NPT male
Weight: 115 to 200 g (4 to 7 oz) depending upon configuration

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

RANGE		2 m (6') CABLE TERMINATION MODEL NO.	MINI DIN TERMINATION MODEL NO.	TWIST-LOCK TERMINATION MODEL NO.	M12 CONN TERMINATION MODEL NO.	PRICE
inHg	mbar*					
0 to 100 mV (@ 10 Vdc) OUTPUT						
0 to 32	0 to 1084	PX409-32BV	PX419-32BV	PX429-32BV	PX459-32BV	\$625
16 to 32	542 to 1084	PX409-16BV	PX419-16BV	PX429-16BV	PX459-16BV	625
26 to 32	880 to 1084	PX409-26BV	PX419-26BV	PX429-26BV	PX459-26BV	625
0 to 5 Vdc OUTPUT**						
0 to 32	0 to 1084	PX409-32B5V	PX419-32B5V	PX429-32B5V	PX459-32B5V	\$690
16 to 32	542 to 1084	PX409-16B5V	PX419-16B5V	PX429-16B5V	PX459-16B5V	690
26 to 32	880 to 1084	PX409-26B5V	PX419-26B5V	PX429-26B5V	PX459-26B5V	690
4 to 20 mA OUTPUT						
0 to 32	0 to 1084	PX409-32BI	PX419-32BI	PX429-32BI	PX459-32BI	\$690
16 to 32	542 to 1084	PX409-16BI	PX419-16BI	PX429-16BI	PX459-16BI	690
26 to 32	880 to 1084	PX409-26BI	PX419-26BI	PX429-26BI	PX459-26BI	690

ACCESSORIES

MODEL NO.	PRICE	DESCRIPTION
PT06F10-6S	\$26.50	Mating connector for PX429 series, sold separately
CX5302	15.00	Spare mating connector for PX419 series; one included with each unit
M12C-PVC-4-S-F-5	15.50	PVC cable, straight 4-pin M12 female connector one end, flying leads one end, 5 m (16.4') long, fits PX459
M12C-PVC-4-R-F-5	15.50	PVC cable, right angled 4-pin M12 female connector one end, flying leads one end, 5 m (16.4') long, fits PX459

Comes complete with 5-pt NIST traceable calibration.

* To order cable version with ½ NPT conduit fitting, specify model PX409C no extra charge.

** To order with 0 to 10 Vdc output change "5V" to "10V" in model number, no extra charge.

Metric ranges available, 0 to 1100 hPa, 550 to 1100 hPa, and 880 to 1100 hPa.

To order metric ranges in hPa (mbar), change the "B" to "HB" in the model number. Metric threads also available, visit omega.com/pxconfig

Ordering Examples: PX409-16HBI, cable termination, 550 to 1100 hPa calibrated range, 4 to 20 mA output, \$690.

PX419-26B5V, mini DIN termination, 26 to 32 inHg calibrated range, 0 to 5 Vdc output, \$690.



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