



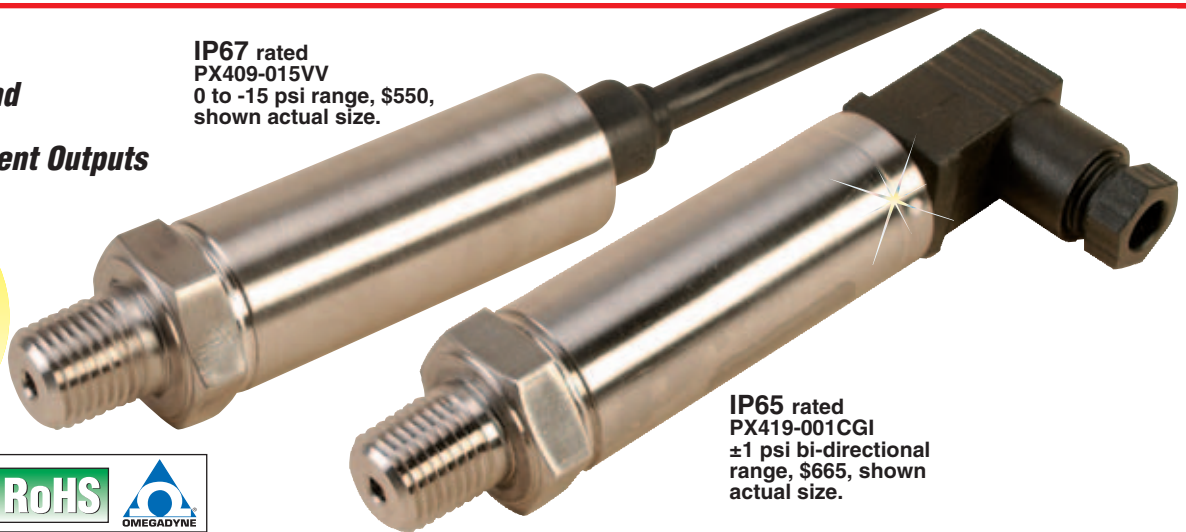
HIGH ACCURACY TRANSDUCERS WITH VACUUM AND COMPOUND PRESSURE RANGES

PX409 Series Vacuum and Compound Pressure Ranges mV/V, Voltage or Current Outputs

Starts at
\$550



IP67 rated
PX409-015VV
0 to -15 psi range, \$550,
shown actual size.



IP65 rated
PX419-001CGI
±1 psi bi-directional
range, \$665, shown
actual size.

- ✓ **High Accuracy**
±0.08% BSL Includes
Linearity, Hysteresis,
and Repeatability
- ✓ **Broad Temperature
Compensated Range**
-29 to 85°C (-20 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**
- ✓ **400% Proof Pressure
Minimum**

OMEGA's PX409 Series high accuracy transducers are available in bi-directional gage pressure range and uni-directional vacuum range (negative gage pressure) models. Both series have all stainless steel wetted parts and welded construction and premium temperature compensation which makes them suitable for use in tough industrial environments.

Compound range transducers are available in 5 ranges which measure positive and negative gage pressure and give a corresponding bi-directional outputs of ±10 mV/V, ±5 Vdc and 4 to 20 mA with ambient

set at 12 mA. Ranges are available from ±10 inH₂O to ±15 psi.

Vacuum models measure negative gage pressure with increasing output for increasing negative pressure. Ranges are from -10 inH₂O to -15 psi with uni-directional outputs of 10 mV/V, 0 to 5 Vdc and 4 to 20 mA (ambient set at 4 mA).

SPECIFICATIONS

Output:

Millivolt: 0 to 10 mV/V for vacuum, ±10 mV/V for compound

Amplified Voltage: 0 to 5 Vdc for vacuum, ±5 Vdc for compound

Current Loop: 4 to 20 mA
(12 mA at 0 psig on compound ranges)

Power Requirements:

Millivolt: 5 to 10 Vdc (2 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 max

Zero Balance: ±0.5% FS typical
1% max (1% typical, 2% max
for ranges 1 psi and below)

Span Setting: ±0.5% FS typical 1% max
(1% typical, 2% max for ranges 1 psi and
below) 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: -17 to 85°C
(0 to 185°F)

Thermal Effects Zero (@ 0 psig Over Compensated Range):

Ranges >5 psi: ±0.5% span

Ranges ≤5 psi: ±1.0% span

Thermal Effects Span (Over Compensated Range):

Ranges >5 psi: ±0.5% span

Ranges ≤5 psi: ±1.0% span

Long Term Stability (1-Year):

±0.1% FS typical

Shock: 50 g, 11 ms half sine shock
(under test)

Vibration: ±20 g (under test)

Response Time: <1 ms

Bandwidth: DC to 1 kHz typical

Proof Pressure (positive direction):

10 inH₂O: 10 times full scale

1 psi: 6 times full scale

2.5 psi and Higher: 4 times full scale
(Negative direction 4 times or
1 atmosphere whichever is greater)

Burst Pressure:

10 inH₂O to 5 psi: 1000 psi

15 and Higher: 3000 psi

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 and PX429: IP65

Wetted Parts: 316 SS

Pressure Port: 1/4-18 NPT male

Calibration: Comes with 5 point
calibration certificate (positive
readings only for compound ranges)

Weight: 115 to 200 g (4 to 7 oz)
depending upon configuration



PX429-001VV
0 to -1 psi range, \$600,
shown actual size.

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

COMPOUND RANGES (BI-DIRECTIONAL OUTPUTS)

RANGE		2 m (6') CABLE TERMINATION	PRICE	MINI-DIN TERMINATION	PRICE	TWIST-LOCK TERMINATION	PRICE
psi	Mbar						
±10 mV/V Output							
±10 inH ₂ O	±25	PX409-10WCGV	\$665	PX419-10WCGV	\$665	PX429-10WCGV	\$665
±1	±69	PX409-001CGV	665	PX419-001CGV	665	PX429-001CGV	665
±2.5	±172	PX409-2.5CGV	665	PX419-2.5CGV	665	PX429-2.5CGV	665
±5	±345	PX409-005CGV	665	PX419-005CGV	665	PX429-005CGV	665
±15	±1034	PX409-015CGV	615	PX419-015CGV	615	PX429-015CGV	615

±5 Vdc Output

±10 inH ₂ O	±25	PX409-10WCG5V	\$665	PX419-10WCG5V	\$665	PX429-10WCG5V	\$665
±1	±69	PX409-001CG5V	665	PX419-001CG5V	665	PX429-001CG5V	665
±2.5	±172	PX409-2.5CG5V	665	PX419-2.5CG5V	665	PX429-2.5CG5V	665
±5	±345	PX409-005CG5V	665	PX419-005CG5V	665	PX429-005CG5V	665
±15	±1034	PX409-015CG5V	615	PX419-015CG5V	615	PX429-015CG5V	615

4 to 20 mA Output (0 psig = 12 mA)

±10 inH ₂ O	±25	PX409-10WCGI	\$665	PX419-10WCGI	\$665	PX429-10WCGI	\$665
±1	±69	PX409-001CGI	665	PX419-001CGI	665	PX429-001CGI	665
±2.5	±172	PX409-2.5CGI	665	PX419-2.5CGI	665	PX429-2.5CGI	665
±5	±345	PX409-005CGI	665	PX419-005CGI	665	PX429-005CGI	665
±15	±1034	PX409-015CGI	615	PX419-015CGI	615	PX429-015CGI	615

VACUUM RANGES (BELOW AMBIENT)

RANGE		2 m (6') CABLE TERMINATION	PRICE	MINI-DIN TERMINATION	PRICE	TWIST-LOCK TERMINATION	PRICE
psi	Mbar						
0 to 10 mV Output							
0 to -10 inH ₂ O	0 to -25	PX409-10WVV	\$600	PX419-10WVV	\$600	PX429-10WVV	\$600
0 to -1	0 to -69	PX409-001VV	600	PX419-001VV	600	PX429-001VV	600
0 to -2.5	0 to -172	PX409-2.5VV	600	PX419-2.5VV	600	PX429-2.5VV	600
0 to -5	0 to -172	PX409-005VV	550	PX419-005VV	550	PX429-005VV	550
0 to -15	0 to -1034	PX409-015VV	550	PX419-015VV	550	PX429-015VV	550

0 to 5 Vdc Output

0 to -10 inH ₂ O	0 to -25	PX409-10WV5V	\$600	PX419-10WV5V	\$600	PX429-10WV5V	\$600
0 to -1	0 to -69	PX409-001V5V	600	PX419-001V5V	600	PX429-001V5V	600
0 to -2.5	0 to -172	PX409-2.5V5V	600	PX419-2.5V5V	600	PX429-2.5V5V	600
0 to -5	0 to -345	PX409-005V5V	550	PX419-005V5V	550	PX429-005V5V	550
0 to -15	0 to -1034	PX409-015V5V	550	PX419-015V5V	550	PX429-015V5V	550

4 to 20 mA Output

0 to -10 inH ₂ O	0 to -25	PX409-10WVI	\$600	PX419-10WVI	\$600	PX429-10WVI	\$600
0 to -1	0 to -69	PX409-001VI	600	PX419-001VI	600	PX429-001VI	600
0 to -2.5	0 to -172	PX409-2.5VI	600	PX419-2.5VI	600	PX429-2.5VI	600
0 to -5	0 to -172	PX409-005VI	550	PX419-005VI	550	PX429-005VI	550
0 to -15	0 to -1034	PX409-015VI	550	PX419-015VI	550	PX429-015VI	550

Comes complete with 5 point calibration certificate (positive readings only for compound ranges).

Note: To order with 10V output, change "5V" to "10V" in model number, no additional charge.

Ordering Examples: PX409-001CG5V, ±5V output, ±1 psi gauge pressure range, 2 m (6') cable termination, \$665.

PX429-015VI, 4 to 20 mA output, 0 to -15 psi vacuum, twist-lock termination, PT06F10-6S, mating twist-lock connector (sold separately), \$550 + 26.50 = \$576.50.



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