

# HIGH ACCURACY PRESSURE TRANSDUCERS



## PX409 Series

PX409-100GV,  
shown actual size.

- ✓ 0.08% BSL Includes Linearity Hysteresis and Repeatability
- ✓ Broad Temperature Compensation Range -29 to 85°C (-20 to 185°F)
- ✓ 5-Point NIST Traceable Calibration Included
- ✓ Outputs:
  - mV/V
  - 0 to 5 V or 0 to 10 V
  - 4 to 20 mA
- ✓ 10 in-H<sub>2</sub>O to 5000 psi Ranges

**RUGGEDIZED DESIGN**  
For Aerospace,  
Automotive, Test and  
Industrial Applications

PX419-015GV,  
shown actual size.

PX429-030GV,  
shown actual size.

**Differential  
Pressure Models**

**Most Popular  
Models in Stock for  
Fast Delivery**



# SOLID STATE PIEZORESISTIVE DESIGN WITH HIGH TEMP. PERFORMANCE FOR INDUSTRY, AUTOMOTIVE, TEST, AND AEROSPACE APPLICATIONS

**mV/V, 0 to 5 Vdc, 0 to 10 Vdc, 4 to 20 mA Outputs**  
**Low Pressure: 10 inH<sub>2</sub>O and**  
**Standard Ranges: 5 to 5000 psi**  
**Metric Ranges: 25 mbar to 345 bars**  
**Gage or Absolute Pressure**

## PX409 Series



- ✓ High Accuracy  $\pm 0.08\%$  BSL Includes Linearity, Hysteresis, and Repeatability
- ✓ Broad Temperature Compensated Range  $-29$  to  $85^{\circ}\text{C}$  ( $-20$  to  $185^{\circ}\text{F}$ )
- ✓ Premium Temperature Performance Span:  $\pm 0.5\%$  Over Compensated Range
- ✓ 5-Point NIST Traceable Calibration Included
- ✓ Digital Dynamic Thermal Compensation Across Temperature and Pressure Range
- ✓ Low Pressure Ranges from 10 inH<sub>2</sub>O
- ✓ All Stainless Steel Wetted Parts
- ✓ Fast Response Time
- ✓ Solid State Reliability and Stability
- ✓ Gage and Absolute Pressures
- ✓ 300% Proof Pressure Minimum

Piezoresistive pressure transducers have a proven record in high performance commercial and aerospace applications for over 25 years. The piezoresistive process uses strain gages molecularly embedded into a highly stable silicon wafer. The silicon wafer is diced into individual die which each contain a full strain gage bridge. The die is mounted in a sealed chamber protected from the environment by glass to metal seals and a stainless steel diaphragm.

A small volume of silicone oil transfers the pressure from the diaphragm to the strain bridge. The construction provides a very rugged transducer with exceptional accuracy, stability and thermal effects. A unique design ruggedizes the transducers by providing secondary fluid containment in the event of a diaphragm rupture.

At our state-of-the-art facilities, automated test equipment performs pressure and temperature cycling on 100% of the PX409 transducers. The transducers are then calibrated using extremely high accuracy equipment and a 5-point NIST traceable calibration certificate that is included with each transducer. To obtain their high accuracy and stability, the PX409 Series use state-of-the-art digital mapping of the temperature, pressure and output performance of the silicon sensor in conjunction with a custom ASIC to provide dynamic thermal compensation across the

All models shown actual size.

PX409-050GV, features cable termination.

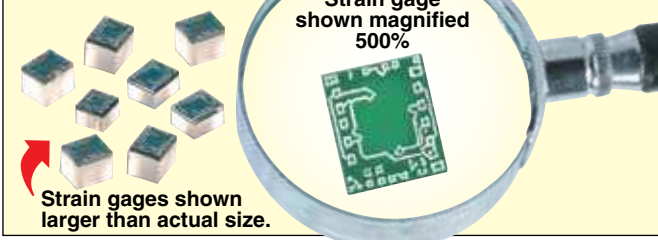
**0.08% Accuracy**

PX419-100GI, features mini-DIN termination.

PX429-015GI, features twist-lock termination.

### PX409 SERIES SILICON WAFER TECHNOLOGY

PX409 Series uses a highly stable silicon wafer which is micro-machined to precision tolerances and then has strain gages molecularly embedded into it.



temperature and pressure parameters. The inherent stability of the piezoresistive core provides excellent long term stability, repeatability and very low thermal effects at the price of much lower performance transducers. Standard features of the PX409 Series also include protective features built into the electronics and the pressure element. Reverse polarity, EMC, and power supply fluctuation protection are standard on all models. Intrinsically Safe and CSA ratings are optional.

The most popular ranges and configurations are stocked for immediate delivery. All others typically have a very short lead-time.

# HIGH ACCURACY PRESSURE TRANSDUCERS

PIEZORESISTIVE DESIGN WITH HIGH TEMPERATURE PERFORMANCE



**EXCEPTIONAL PERFORMANCE**  
**0.08% STATIC ACCURACY**

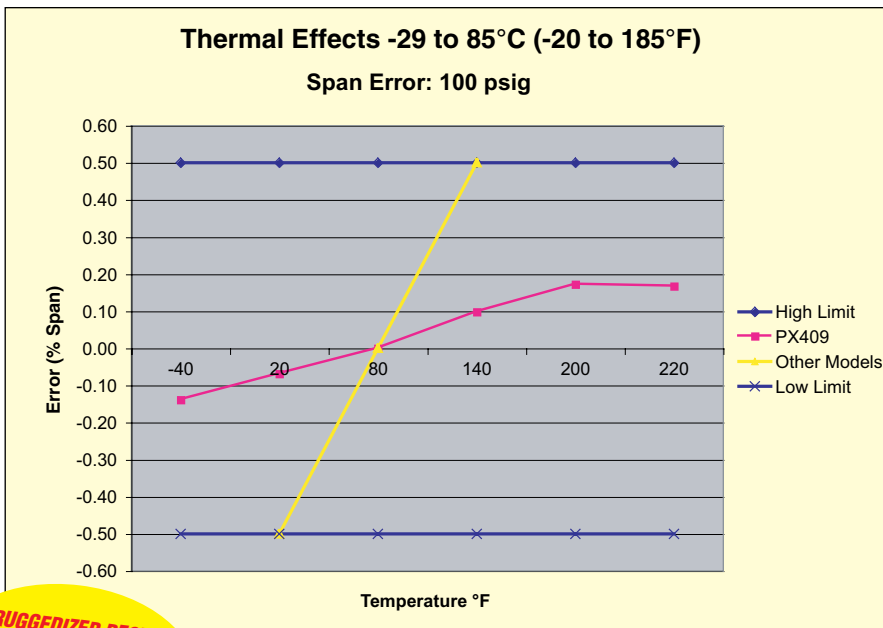
**Micro-Machined Silicon**

**5-Point NIST Traceable Calibration Certificate**



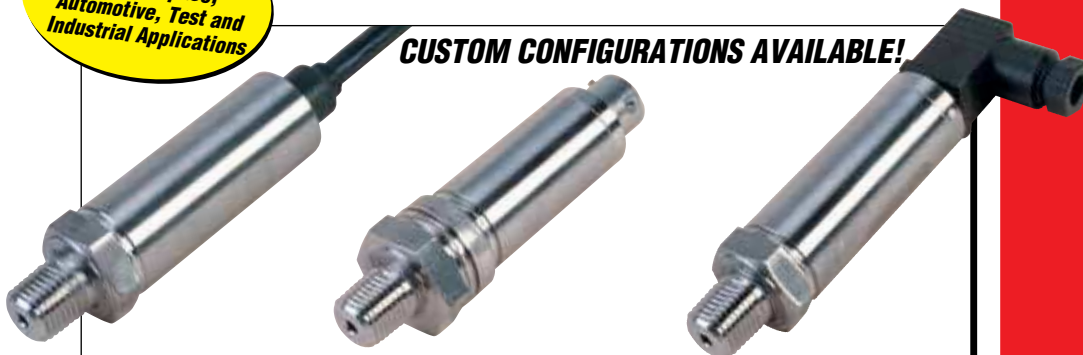
## Common Specifications Gage and Absolute Pressure

**Approvals:** RoHS compliant  
**Minimum Isolation Between Case and Output Terminations:** 100M  $\Omega$  @ 50 Vdc  
**Pressure Cycles:** 1 million, minimum  
**Long Term Stability (1-Year):**  $\pm 0.1\%$  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  
**Bandwidth:** DC to 1 kHz typical  
**Response Time:** <1 ms  
**CE Compliant:**  
**Emissions:** IEC550022 Class B  
**Electrostatic Discharge Immunity:** IEC61000-4-2



**RUGGEDIZED DESIGN**  
For Aerospace, Automotive, Test and Industrial Applications

**CUSTOM CONFIGURATIONS AVAILABLE!**



Designed to be quickly customized to meet your exacting specifications, often with fast delivery. Custom variables are available including custom fittings, accuracies, ranges, calibrations, pressure units, thermal specifications, vibration, operating temperature and compensated range. Contact NewportUS Pressure Engineering for more details.

**EM Field Immunity:** IEC61000-4-3  
**EFT Immunity:** IEC61000-4-4  
**Surge Immunity:** IEC61000-4-5  
**Conducted RF:** IEC61000-4-6  
**Rate Power Frequency Magnetic Field:** IEC61000-4-8  
**Electrical Termination:**  
**PX409:** Integral 2 m (6') cable  
**PX409C:** Integral 2 m (6') cable with 1/2 NPT conduit fitting  
**PX419:** mini-DIN  
**PX429:** Twist lock  
**Environmental Protection:**  
**PX409:** IP67  
**PX409C:** IP67  
**PX419:** IP65  
**PX429:** IP65  
**Overpressure Gage Pressure:**  
**10 inH<sub>2</sub>O:** 10 times span

**1 psi:** 6 times span  
**2.5 psi to 3500 psi:** 4 times span  
**5000 psi:** 15,000 psi max  
**Overpressure Absolute Pressure:**  
**5 psia:** 6 times span  
**2.5 psia to 3500 psia:** 4 times span  
**5000 psia:** 15000 psi maximum  
**Secondary Containment Gage/Diff/Vac/Compound:**  
**10 inH<sub>2</sub>O to 5 psi:** To 1000 psi  
**15 to 1000 psi:** To 3000 psi  
**1500 to 5000 psi:** To 15,000 psi  
**Absolute/Barometric:**  
**5 to 1000 psi:** To 6000 psia  
**1500 to 5000 psi:** To 15,000 psia  
**Wetted Parts:** 316 SS  
**Pressure Port:** 1/4-18 NPT male  
**Weight:** 115 to 200 gm (4 to 7 oz) depending upon configuration





# mV/V OUTPUT HIGH PERFORMANCE PRESSURE TRANSDUCERS

PIEZORESISTIVE DESIGN WITH HIGH TEMPERATURE PERFORMANCE

**100 mV Output**  
**0-10 in-H<sub>2</sub>O to 0-5000 psi**  
**25 mb to 345 bar**

PX409-100GV,  
shown actual size.



PX419-015GV,  
shown actual size.

## PX409 Series



PX429-015GV,  
shown  
actual size.

### mV/V Specifications

**Output:** mV/V, 100 mV @ 10 Vdc

(Ratiometric 5 to 10 Vdc)

**Supply Voltage:** 10 Vdc

(5 mA @ 10 Vdc)

**Input/Output Resistance:** 5000 Ω  
±20% typical

**Accuracy (Combined Linearity,  
Hysteresis and Repeatability):**  
±0.08% BSL maximum

**Zero Balance:** ±0.5% FS typical  
1% max (1% typical, 2% maximum  
for 2.5 psi and below)

**Span Setting:** ±0.5% FS typical 1%  
maximum (1% typical, 2% maximum for  
2.5 psi and below) Calibrated in vertical  
direction with fitting down

**Operating Temperature Range:**  
-45 to 121°C (-49 to 250°F)

**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  
(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

**To Order Visit [newportUS.com/px409\\_series](http://newportUS.com/px409_series) for Pricing and Details**

| RANGE                                      |        | 2 m (6') CABLE<br>TERMINATION | MINI-DIN<br>TERMINATION | TWIST-LOCK<br>TERMINATION |
|--|--------|-------------------------------|-------------------------|---------------------------|
| psi  | bar    |                               |                         |                           |
| <b>mV/V OUTPUT, GAGE PRESSURE RANGES</b>   |        |                               |                         |                           |
| 10 in-H <sub>2</sub> O                     | 25 mb  | PX409-10WGV                   | PX419-10WGV             | PX429-10WGV               |
| 1  | 69 mb  | PX409-001GV                   | PX419-001GV             | PX429-001GV               |
| 2.5  | 172 mb | PX409-2.5GV                   | PX419-2.5GV             | PX429-2.5GV               |
| 5  | 345 mb | PX409-005GV                   | PX419-005GV             | PX429-005GV               |
| 15   | 1.0    | PX409-015GV                   | PX419-015GV             | PX429-015GV               |
| 30   | 2.1    | PX409-030GV                   | PX419-030GV             | PX429-030GV               |
| 50   | 3.4    | PX409-050GV                   | PX419-050GV             | PX429-050GV               |
| 100  | 6.9    | PX409-100GV                   | PX419-100GV             | PX429-100GV               |
| 150  | 10.3   | PX409-150GV                   | PX419-150GV             | PX429-150GV               |
| 250  | 17.2   | PX409-250GV                   | PX419-250GV             | PX429-250GV               |
| 500  | 34.5   | PX409-500GV                   | PX419-500GV             | PX429-500GV               |
| 750  | 51.7   | PX409-750GV                   | PX419-750GV             | PX429-750GV               |
| 1000                                       | 69     | PX409-1.0KGV                  | PX419-1.0KGV            | PX429-1.0KGV              |
| 1500                                       | 103    | PX409-1.5KGV                  | PX419-1.5KGV            | PX429-1.5KGV              |
| 2500                                       | 172    | PX409-2.5KGV                  | PX419-2.5KGV            | PX429-2.5KGV              |
| 3500                                       | 241    | PX409-3.5KGV                  | PX419-3.5KGV            | PX429-3.5KGV              |
| 5000                                       | 345    | PX409-5.0KGV                  | PX419-5.0KGV            | PX429-5.0KGV              |
| <b>mV OUTPUT, ABSOLUTE PRESSURE RANGES</b> |        |                               |                         |                           |
| 5  | 345 mb | PX409-005AV                   | PX419-005AV             | PX429-005AV               |
| 15   | 1.0    | PX409-015AV                   | PX419-015AV             | PX429-015AV               |
| 30   | 2.1    | PX409-030AV                   | PX419-030AV             | PX429-030AV               |
| 50   | 3.4    | PX409-050AV                   | PX419-050AV             | PX429-050AV               |
| 100  | 6.9    | PX409-100AV                   | PX419-100AV             | PX429-100AV               |
| 150  | 10.3   | PX409-150AV                   | PX419-150AV             | PX429-150AV               |
| 250  | 17.2   | PX409-250AV                   | PX419-250AV             | PX429-250AV               |
| 500  | 34.5   | PX409-500AV                   | PX419-500AV             | PX429-500AV               |
| 750  | 51.7   | PX409-750AV                   | PX419-750AV             | PX429-750AV               |
| 1000                                       | 69     | PX409-1.0KAV                  | PX419-1.0KAV            | PX429-1.0KAV              |

**Ordering Examples:** PX409-1.0KGV, mV output, 1000 psi gage pressure range, 2 m (6') cable termination. PX429-015AV, mV output, 15 psi absolute pressure, twist lock termination, PT06F10-6S, mating twist lock connector (sold separately), and DP25B-S, 4-digit meter, system with meter.  
(See page B-25h for information on meters).

# 0 TO 5 Vdc OUTPUT HIGH PERFORMANCE PRESSURE TRANSDUCERS PIEZORESISTIVE DESIGN WITH HIGH TEMPERATURE PERFORMANCE



**0 to 5 Vdc Output  
0-10 in-H<sub>2</sub>O to 0-5000 psi  
25 mb to 0-345 bar**

PX409-100G5V,  
shown actual size.



PX419-100G5V,  
shown actual size.

## PX409 Series



PX429-015G5V,  
shown actual size.

### Amplified Voltage Output Specifications

#### Output:

**0 to 5 Vdc Supply Voltage:**  
10 to 30 Vdc @ 10 mA

**0 to 10 Vdc Supply Voltage:**  
15 to 30 Vdc @ 10 mA

**Accuracy (Combined Linearity, Hysteresis and Repeatability):** ±0.08% BSL maximum

**Zero Balance:** ±0.5% FS typical 1% maximum (1% typical, 2% maximum for 2.5 psi and below)

**Span Setting:** ±0.5% FS typical 1% maximum (1% typical, 2% maximum for 2.5 psi and below). Calibrated in vertical direction with fitting down

**Operating Temperature Range:**  
-45 to 115°C (-49 to 240°F)

#### 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

**(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

To Order Visit [newportUS.com/px409\\_series](http://newportUS.com/px409_series) for Pricing and Details

| RANGE  |        | 2 m (6') CABLE TERMINATION | MINI-DIN TERMINATION | TWIST-LOCK TERMINATION |
|--|--------|----------------------------|----------------------|------------------------|
| psi  | bar    |                            |                      |                        |
| <b>0 to 5 Vdc OUTPUT, GAGE PRESSURE RANGES</b>     |        |                            |                      |                        |
| 10 in-H <sub>2</sub> O                             | 25 mb  | PX409-10WG5V               | PX419-10WG5V         | PX429-10WG5V           |
| 1  | 69 mb  | PX409-001G5V               | PX419-001G5V         | PX429-001G5V           |
| 2.5  | 172 mb | PX409-2.5G5V               | PX419-2.5G5V         | PX429-2.5G5V           |
| 5  | 345 mb | PX409-005G5V               | PX419-005G5V         | PX429-005G5V           |
| 15   | 1.0    | PX409-015G5V               | PX419-015G5V         | PX429-015G5V           |
| 30   | 2.1    | PX409-030G5V               | PX419-030G5V         | PX429-030G5V           |
| 50   | 3.4    | PX409-050G5V               | PX419-050G5V         | PX429-050G5V           |
| 100  | 6.9    | PX409-100G5V               | PX419-100G5V         | PX429-100G5V           |
| 150  | 10.3   | PX409-150G5V               | PX419-150G5V         | PX429-150G5V           |
| 250  | 17.2   | PX409-250G5V               | PX419-250G5V         | PX429-250G5V           |
| 500  | 34.5   | PX409-500G5V               | PX419-500G5V         | PX429-500G5V           |
| 750  | 51.7   | PX409-750G5V               | PX419-750G5V         | PX429-750G5V           |
| 1000   | 69     | PX409-1.0KG5V              | PX419-1.0KG5V        | PX429-1.0KG5V          |
| 1500   | 103    | PX409-1.5KG5V              | PX419-1.5KG5V        | PX429-1.5KG5V          |
| 2500   | 172    | PX409-2.5KG5V              | PX419-2.5KG5V        | PX429-2.5KG5V          |
| 3500   | 241    | PX409-3.5KG5V              | PX419-3.5KG5V        | PX429-3.5KG5V          |
| 5000   | 345    | PX409-5.0KG5V              | PX419-5.0KG5V        | PX429-5.0KG5V          |
| <b>0 to 5 Vdc OUTPUT, ABSOLUTE PRESSURE RANGES</b> |        |                            |                      |                        |
| 5  | 345 mb | PX409-005A5V               | PX419-005A5V         | PX429-005A5V           |
| 15   | 1.0    | PX409-015A5V               | PX419-015A5V         | PX429-015A5V           |
| 30   | 2.1    | PX409-030A5V               | PX419-030A5V         | PX429-030A5V           |
| 50   | 3.4    | PX409-050A5V               | PX419-050A5V         | PX429-050A5V           |
| 100  | 6.9    | PX409-100A5V               | PX419-100A5V         | PX429-100A5V           |
| 150  | 10.3   | PX409-150A5V               | PX419-150A5V         | PX429-150A5V           |
| 250  | 17.2   | PX409-250A5V               | PX419-250A5V         | PX429-250A5V           |
| 500  | 34.5   | PX409-500A5V               | PX419-500A5V         | PX429-500A5V           |
| 750  | 51.7   | PX409-750A5V               | PX419-750A5V         | PX429-750A5V           |
| 1000   | 69     | PX409-1.0KA5V              | PX419-1.0KA5V        | PX429-1.0KA5V          |

**Note:** To order with 0 to 10 Vdc output, change "5V" to "10V" no extra charge.

**Ordering Examples:** PX409-1.0KG5V, 5 V output, 1000 psi gage pressure range, 2 m (6') cable termination. PX429-015A5V, 5 V output, 15 psi absolute pressure, twist lock termination, PT06F10-6S, mating twist lock connector (sold separately), and DP25B-E, 4-digit meter, system with meter.  
(See page B-25h for information on meters).



# 4 TO 20 mA OUTPUT HIGH PERFORMANCE PRESSURE TRANSMITTERS

PIEZORESISTIVE DESIGN WITH HIGH TEMPERATURE PERFORMANCE

**4 to 20 mA Output**  
**0-10 in-H<sub>2</sub>O to 0-5000 psi**  
**25 mb to 0-345 bar**

## PX409 Series



PX409-100GI,  
shown actual size.

PX419-100GI,  
shown actual size.



PX429-015GI,  
shown actual  
size.

### 4 to 20 mA Specifications

**Output:** 4 to 20 mA

**Supply Voltage:** 9 to 30 Vdc  
maximum loop res  $\Omega = (V_s - 9) \times 50$   
[9 to 20 Vdc above 105°C (229°F)]

**Accuracy (Combined Linearity,  
Hysteresis and Repeatability):**  $\pm 0.08\%$   
BSL maximum

**Zero Balance:**  $\pm 0.5\%$  FS typical  
1% maximum (1% typical, 2% maximum  
for 2.5 psi and below)

**Span Setting:**  $\pm 0.5\%$  FS typical 1%  
maximum (1% typical, 2% max for 2.5 psi  
and below). Calibrated in vertical direction  
with fitting down

**Operating Temperature Range:**  
-45 to 115°C (-49 to 240°F)

**Compensated Temperature:**

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

**Ranges  $\leq 5$  psi:** -17 to 85°C (0 to 185°F)

**Thermal Effects Zero  
(Over Compensated Range):**

**Ranges >5 psi:**  $\pm 0.5\%$  span

**Ranges  $\leq 5$  psi:**  $\pm 1.0\%$  span

**Thermal Effects Span  
(Over Compensated Range):**

**Ranges >5 psi:**  $\pm 0.5\%$  span

**Ranges  $\leq 5$  psi:**  $\pm 1.0\%$  span

**To Order Visit [newportUS.com/px409\\_series](http://newportUS.com/px409_series) for Pricing and Details**

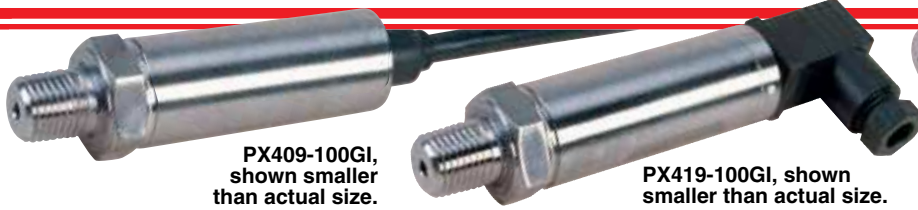
| RANGE  |        | 2 m (6') CABLE<br>TERMINATION | MINI-DIN<br>TERMINATION | TWIST-LOCK<br>TERMINATION |
|--|--------|-------------------------------|-------------------------|---------------------------|
| psi  | bar    |                               |                         |                           |
| <b>4 to 20 mA OUTPUT, GAGE PRESSURE RANGES</b> |        |                               |                         |                           |
| 10 in-H <sub>2</sub> O                         | 25 mb  | PX409-10WGI                   | PX419-10WGI             | PX429-10WGI               |
| 1  | 69 mb  | PX409-001GI                   | PX419-001GI             | PX429-001GI               |
| 2.5  | 172 mb | PX409-2.5GI                   | PX419-2.5GI             | PX429-2.5GI               |
| 5  | 345 mb | PX409-005GI                   | PX419-005GI             | PX429-005GI               |
| 15   | 1.0    | PX409-015GI                   | PX419-015GI             | PX429-015GI               |
| 30   | 2.1    | PX409-030GI                   | PX419-030GI             | PX429-030GI               |
| 50   | 3.4    | PX409-050GI                   | PX419-050GI             | PX429-050GI               |
| 100  | 6.9    | PX409-100GI                   | PX419-100GI             | PX429-100GI               |
| 150  | 10.3   | PX409-150GI                   | PX419-150GI             | PX429-150GI               |
| 250  | 17.2   | PX409-250GI                   | PX419-250GI             | PX429-250GI               |
| 500  | 34.5   | PX409-500GI                   | PX419-500GI             | PX429-500GI               |
| 750  | 51.7   | PX409-750GI                   | PX419-750GI             | PX429-750GI               |
| 1000   | 69     | PX409-1.0KGI                  | PX419-1.0KGI            | PX429-1.0KGI              |
| 1500   | 103    | PX409-1.5KGI                  | PX419-1.5KGI            | PX429-1.5KGI              |
| 2500   | 172    | PX409-2.5KGI                  | PX419-2.5KGI            | PX429-2.5KGI              |
| 3500   | 241    | PX409-3.5KGI                  | PX419-3.5KGI            | PX429-3.5KGI              |
| 5000   | 345    | PX409-5.0KGI                  | PX419-5.0KGI            | PX429-5.0KGI              |
| <b>4 to 20 mA ABSOLUTE PRESSURE RANGES</b>     |        |                               |                         |                           |
| 5  | 345 mb | PX409-005AI                   | PX419-005AI             | PX429-005AI               |
| 15   | 1.0    | PX409-015AI                   | PX419-015AI             | PX429-015AI               |
| 30   | 2.1    | PX409-030AI                   | PX419-030AI             | PX429-030AI               |
| 50   | 3.4    | PX409-050AI                   | PX419-050AI             | PX429-050AI               |
| 100  | 6.9    | PX409-100AI                   | PX419-100AI             | PX429-100AI               |
| 150  | 10.3   | PX409-150AI                   | PX419-150AI             | PX429-150AI               |
| 250  | 17.2   | PX409-250AI                   | PX419-250AI             | PX429-250AI               |
| 500  | 34.5   | PX409-500AI                   | PX419-500AI             | PX429-500AI               |
| 750  | 51.7   | PX409-750AI                   | PX419-750AI             | PX429-750AI               |
| 1000   | 69     | PX409-1.0KAI                  | PX419-1.0KAI            | PX429-1.0KAI              |

**Ordering Examples:** PX409-1.0KGI, 4 to 20 mA output, 1000 psi gage pressure range, 2m (6') cable termination. PX429-015AI, 4 to 20 mA output, 15 psi absolute pressure, twist lock termination, PT06F10-6S, mating twist lock connector (sold separately), and DP25B-E, 4-digit meter, system with meter.  
(See B-25h for information on meters).



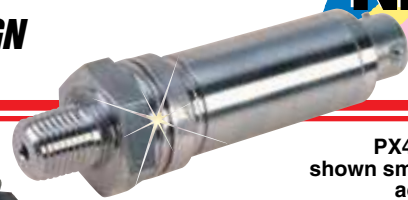
# HIGH ACCURACY PRESSURE TRANSDUCERS

## PIEZORESISTIVE DESIGN WITH HIGH TEMPERATURE PERFORMANCE



PX409-100GI, shown smaller than actual size.

PX419-100GI, shown smaller than actual size.

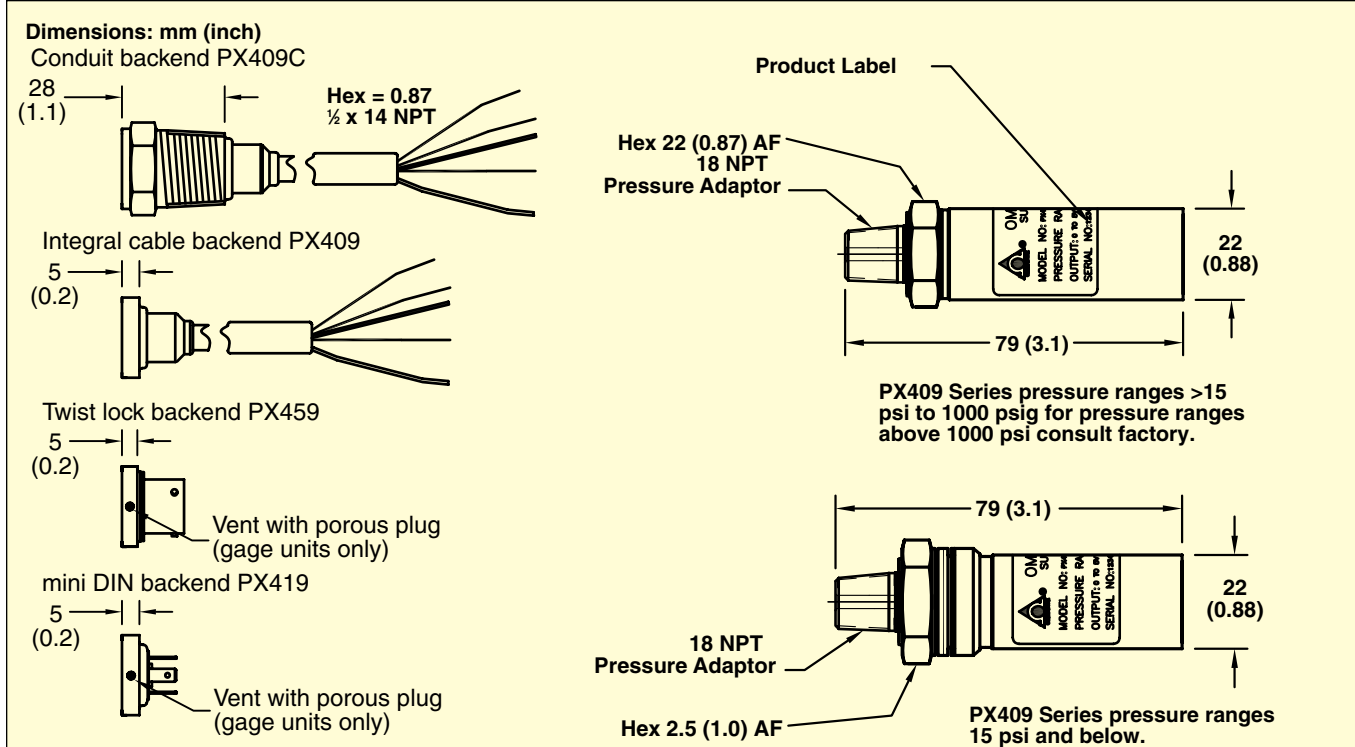


PX429-015GI, shown smaller than actual size.

| PX409 CABLE CONNECTION |       |          |          |
|------------------------|-------|----------|----------|
| COLOR                  | mV    | 5/10V    | mA       |
| Black                  | - EXC | Common   | - Supply |
| White                  | + SIG | + Output | NC       |
| Green                  | - SIG | NC       | NC       |
| Red                    | + EXC | + EXC    | + Supply |

| PX419 MINI-DIN PIN OUT |       |          |          |
|------------------------|-------|----------|----------|
| PIN                    | mV    | 5/10V    | mA       |
| 1                      | + EXC | + EXC    | + Supply |
| 2                      | - EXC | Common   | - Supply |
| 3                      | + SIG | + Output | NC       |
| 4                      | - SIG | NC       | NC       |

| PX429 TWIST LOCK PINOUT |       |          |          |
|-------------------------|-------|----------|----------|
| PIN                     | mV    | 5/10V    | mA       |
| A                       | + EXC | + EXC    | + Supply |
| B                       | - EXC | Common   | - Supply |
| C                       | + SIG | + Output | NC       |
| D                       | - SIG | NC       | NC       |
| E                       | NC    | NC       | NC       |
| F                       | NC    | NC       | NC       |



B

| METERS      |  |
|-------------|--|
| MODEL NO.   | DESCRIPTION  |
| DP41-S      | 6-digit high accuracy (0.005%) strain meter for use with mV/V output models  |
| DP41-E      | 6-digit high accuracy (0.005%) process meter for use with voltage and current output models  |
| DP41-B      | 6-digit high accuracy (0.005%) universal meter for use with voltage and current output models also accepts thermocouple and RTD inputs |
| DP25B-S     | 4-digit precision strain meter for use with mV/V output models   |
| DP25B-E     | 4-digit precision process meter for use with voltage and current output models   |
| ACCESSORIES |  |
| CX5302      | Extra mini-DIN connector for PX419 Series  |
| PT06F10-6S  | Mating twist lock connector for PX429 Series   |
| PS-4G       | Pressure snubber for air/gaseous media   |
| PS-4E       | Pressure snubber for water or light oils   |
| PS-4D       | Pressure snubber for dense liquids (motor oil)   |



# COMPATIBLE METER



## DP25B 4-Digit Precision Meter



**PATENTED**

DP25B, shown close to actual size.

- ✓ mV, V, mA, Strain Gage Inputs
- ✓ Full Process Unit Scaling
- ✓ Built-In Transducer Power

### Process and Strain Models

Because they accept a wide range of DC voltage and current inputs, the DP25-B-E strain meters can handle most process and strain applications. Features include easy front-panel scaling to virtually any engineering units, a remote tare

function for weighing applications, and a hardware lockout to prevent unauthorized changes in setup. In addition, the DP25B-E meters feature built-in excitation in

4 user-selectable voltages, which makes them compatible with most transducers and transmitters.

**To Order Visit [newportUS.com/px409\\_series](http://newportUS.com/px409_series) for Pricing and Details**

| MODEL NO. | DESCRIPTION                           |
|-----------|---------------------------------------|
| DP25B-E   | Voltage/current input with excitation |
| DP25B-S   | mV input in excitation                |

*Comes complete with operator's manual.*

**Ordering Examples:** DP25B-E, voltage/current input meter for use with 0 to 5 V, 0 to 10 V, 4 to 20 mA output PX409 Series transducers. DP25B-S, mV input meter for use with mV/V output PX409 Series transducers.