

All Stainless Steel Transducer/Transmitter Multimedia Compatibility High-Performance Silicon Technology Imperial Model



0-1 to 0-10,000 psi
0-0.07 to 0-690 bar
100 mV, 0 to 5 V,
and 4 to 20 mA Outputs

PX309 Series



- ✓ 1, 2 & 5 psi Low Pressure Ranges!
- ✓ All Stainless Steel Construction
- ✓ Gage, Absolute, Compound Gage or Vacuum Pressure
- ✓ Rugged Solid State Design
- ✓ High Stability, Low Drift
- ✓ 0.25% Static Accuracy
- ✓ IP65 Protection Class

We provide a complete range of services—from product inception, through design and prototypes, to manufacturing and testing. Our application engineers work closely with our customers to **customize, design** or create entirely **new products**. Call us—whether you're an OEM, manufacturer, or end user.



**LARGE
INVENTORY
Fast Shipment!**



All models shown smaller than actual size.

Rugged, General Purpose Transducer

Common Specifications for 100 mV, 0 to 5 Vdc, and 4 to 20 mA Outputs



- ✓ 1, 2 & 5 psi Low Pressure Ranges!
- ✓ All Stainless Steel Construction
- ✓ Gage or Absolute Pressure
- ✓ Rugged Solid State Design
- ✓ High Stability, Low Drift
- ✓ 0.25% Static Accuracy
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OMEGA's PX309 Series models below 100 psi use a high-accuracy silicon sensor protected by an oil-filled stainless steel diaphragm. Units 100 psi and above use silicon strain gages molecularly bonded to the stainless steel diaphragm.

Common Specifications

Ranges: -15 to 50 psig, 0 to 1000 psia, 100 to 10,000 psig

Accuracy (Combined Linearity, Hysteresis and Repeatability): ±0.25% BSL, max

Minimum Resistance Between Transducer Body and Any Wire: 1M Ω @ 25 Vdc

Calibration: In vertical direction with fitting down

Pressure Cycles: 10 million, minimum

Pressure Overload: -15 to 50 psig and 0 to 1000 psia: 3 times rated pressure or 20 psi whichever is greater, 100 to 10,000 psig: 2 times rated pressure

Burst Pressure: -15 to 50 psig and 0 to 1000 psia: 4 times rated pressure or 25 psi whichever is greater, 100 to 10,000 psig: 5 times rated pressure

Long Term Stability (1 Year): ±0.25% of FS, typical

Operating Temperature: -40 to 85°C (-40 to 185°F)

Pressure Port: ¼-18 MNPT

Pressure Port Material: -15 to 50 psig and 0 to 1000 psia: 316 SS, 100 to 10,000 psig: 17-4 PH SS

Bandwidth: DC to 1 kHz (typical)

CE: Compliant

Shock: 50 g, 11 ms half-sine

Vibration: ±20 g

Response Time: <1 millisecond

Weight:

PX309: 154 g (5.4 oz),

PX319/329/359: 100 g (3.5 oz)

IP Rating: IP65

RoHS: Compliant

Order a snubber to protect your pressure transducer!



PS-4G, shown actual size.
Snubbers protect sensors from fluid hammers/spikes.

| mV Output Wiring | | | |
|------------------|-------|------------------|------------|
| Wiring | Cable | M12 and mini DIN | Twist-Lock |
| Excitation (+) | Red | Pin 1 | Pin A |
| Output (+) | White | Pin 3 | Pin C |
| Output (-) | Green | Pin 4 | Pin D |
| Excitation (-) | Black | Pin 2 | Pin B |
| Spare | — | — | Pin E |
| Vent | — | — | Pin F |

| 5 Vdc Output Wiring | | | |
|---------------------|-------|------------------|------------|
| Wiring | Cable | M12 and mini DIN | Twist-Lock |
| Excitation (+) | Red | Pin 1 | Pin A |
| Excitation (-) | Black | Pin 2 | Pin B |
| Output (+) | White | Pin 3 | Pin C |
| N/C† | — | Pin 4 | Pin D |
| Spare | — | — | Pin E |
| Vent | — | — | Pin F |

| mA Output Wiring | | | |
|------------------|-------|------------------|------------|
| Wiring | Cable | M12 and mini DIN | Twist-Lock |
| Supply (+) | Red | Pin 1 | Pin A |
| Supply (-) | Black | Pin 2 | Pin B |
| N/C† | — | Pin 3 | Pin C |
| N/C† | — | Pin 4 | Pin D |
| Spare | — | — | Pin E |
| Vent | — | — | Pin F |

† N/C: Do not connect any wires to this pin.

Dimensions: mm (inch)
ø = diameter

