

# 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
- ✓ IP 65 Protection Class

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

