

HYGIENIC PROCESS TRANSDUCERS USING MICRO-MACHINED SILICON TECHNOLOGY 10 mV/V OUTPUT



PX409S Tri-Clamp Hygienic Series Gauge or Absolute Pressures 10 inH₂O to 600 psi (25 mbar to 41 bar) Gauge 5 psi to 600 psi (344 mb to 41 bar) Absolute 1½" or 2" Tri-Grip Fitting

Twist-lock
style.



PX429S15-005GV,
, shown
slightly smaller
actual size.

1½ or 2"
Tri-Clamp Fitting

mini DIN
style.



PX419S20-100AV,
, shown
slightly smaller
than actual size.



- ✓ High, 0.08%, Accuracy
- ✓ Solid State Sensor for Durability
- ✓ Excellent Long Term Stability
- ✓ Welded Stainless Steel Construction
- ✓ 316L SS Wetted Parts
- ✓ Shock and Vibration Rated
- ✓ High Overpressure Rating
- ✓ Ruggedised with Secondary Containment

The PX409S Series micro-machined silicon transducers with 1½ or 2" hygienic fittings are ideal for pressure or level CIP applications in food processing, beverage or bio/pharmaceutical applications as well as industrial applications that require a rugged, high accuracy transducer. The micro-machined silicon sensor provides a very stable transducer with exceptional high accuracy of 0.08% and a broad compensated range of -6.7 to 85°C (20 to 185°F). The modular construction allows for fast delivery of most configurations and fittings.

SPECIFICATIONS

Accuracy: 0.08% Best Straight Line (Linearity, Hysteresis and Repeatability combined)

Operating Temperature Range: -15 to 115°C (-5 to 240°F)

Compensated Temperature Range: -6.7 to 85°C (20 to 185°F)

Temperature Compensation: Zero and Span Combined
≥ 5psi: 1% over 55.6°C (100°F) range
≤ 2.5 psi: 2% over 55.6°C (100°F) range

Min Isolation Between Case and Output Terminations: 100 MΩ @ 50 Vdc

Pressure Cycles: 1 million, minimum
Long Term Stability (1-Year): ±0.1% FS typ.

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

Vibration: ±20 g (under test)

Bandwidth: DC to 1 kHz typical

Response Time: <1 ms

Fill Fluid: NEOBEE M5 Food grade

Designed to Meet or Exceed 3A Sanitary Specification 74-03

CE Compliant: Meets industrial emissions and immunity standard IEC61326

Environmental Protection: IP65 or IP67 depending upon electrical termination

Pressure Rating:

1½" and 2" Tri-Clamp fitting: 600 psi using suitable clamp

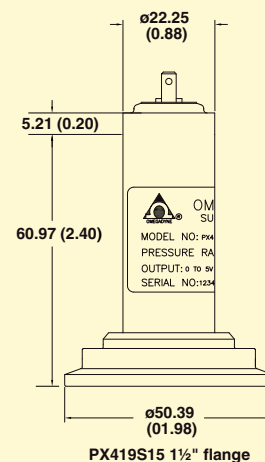
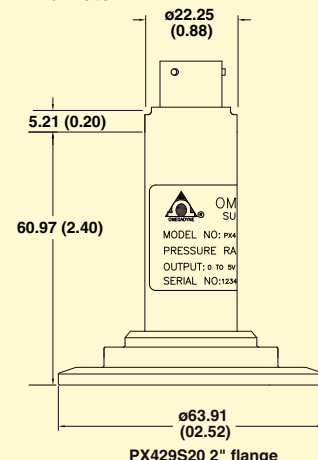
Over Pressure: 4 x rated pressure to maximum rated flange pressure

Secondary Containment: 6 x rated pressure to a maximum of 2000 psi (not in clamp)

Wetted Parts: 316L SS

Weight: 285 gm (10 oz)

Dimensions: mm (in)
Ø = Diameter



MILLIVOLT OUTPUT
PRESSURE TRANSDUCERS

B

SANITARY PRESSURE TRANSDUCERS

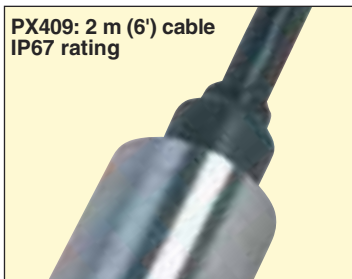
WITH 10 mV/V OUTPUT

SPECIFICATIONS

Output/ Supply: 10 mV/V;
 Ratiometric 5 to 10 Vdc
Accuracy: 0.08% BSL (linearity, hysteresis repeatability combined)
Zero Balance: $\pm 0.5\%$ FS typical
 1% max (For ranges ≤ 2.5 psi $\pm 1\%$ typ 2% max)
Span Setting: $\pm 0.5\%$ FS typical
 1% max (For ranges ≤ 2.5 psi $\pm 1\%$ typ 2% max) Calibrated in vertical position with fitting down

ELECTRICAL TERMINATIONS

PX409: 2 m (6') cable
 IP67 rating



PX409C: Conduit/cable
 IP67 rating



PX419: mini DIN
 IP67 rating, absolute
 IP65 rating, gauge



PX429: Twist-lock
 IP67 rating, absolute
 IP65 rating, gauge



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

RANGE		1½" TRI-GRIP™ FITTING	2" TRI-GRIP™ FITTING
psi	bar		
2 m (6') CABLE TERMINATION - 10 mV/V OUTPUT			
0 to 10 inH ₂ O	0 to 25 mb	PX409S15-10WGV	PX409S20-10WGV
0 to 1	0 to 69 mb	PX409S15-001GV	PX409S20-001GV
0 to 2.5	0 to 172 mb	PX409S15-2.5GV	PX409S20-2.5GV
0 to 5	0 to 345 mb	PX409S15-005[*]V	PX409S20-005[*]V
0 to 15	0 to 1	PX409S15-015[*]V	PX409S20-015[*]V
0 to 30	0 to 2.1	PX409S15-030[*]V	PX409S20-030[*]V
0 to 50	0 to 3.4	PX409S15-050[*]V	PX409S20-050[*]V
0 to 100	0 to 6.9	PX409S15-100[*]V	PX409S20-100[*]V
0 to 150	0 to 10.3	PX409S15-150[*]V	PX409S20-150[*]V
0 to 250	0 to 17.2	PX409S15-250[*]V	PX409S20-250[*]V
0 to 500	0 to 34.5	PX409S15-500[*]V	PX409S20-500[*]V
0 to 600	0 to 41.4	PX409S15-600[*]V	N/A
mini DIN TERMINATION - 10 mV/V OUTPUT			
0- to 10 inH ₂ O	0 to 25 mb	PX419S15-10WGV	PX419S20-10WGV
0 to 1	0 to 69 mb	PX419S15-001GV	PX419S20-001GV
0 to 2.5	0 to 172 mb	PX419S15-2.5GV	PX419S20-2.5GV
0 to 5	0 to 345 mb	PX419S15-005[*]V	PX419S20-005[*]V
0 to 15	0 to 1	PX419S15-015[*]V	PX419S20-015[*]V
0 to 30	0 to 2.1	PX419S15-030[*]V	PX419S20-030[*]V
0 to 50	0 to 3.4	PX419S15-050[*]V	PX419S20-050[*]V
0 to 100	0 to 6.9	PX419S15-100[*]V	PX419S20-100[*]V
0 to 150	0 to 10.3	PX419S15-150[*]V	PX419S20-150[*]V
0 to 250	0 to 17.2	PX419S15-250[*]V	PX419S20-250[*]V
0 to 500	0 to 34.5	PX419S15-500[*]V	PX419S20-500[*]V
0 to 600	0 to 41.4	PX419S15-600[*]V	N/A
TWIST-LOCK CONNECTOR TERMINATION - 10 mV/V OUTPUT			
0- to 10 inH ₂ O	0 to 25 mb	PX429S15-10WGV	PX429S20-10WGV
0 to 1	0 to 69 mb	PX429S15-001GV	PX429S20-001GV
0 to 2.5	0 to 172 mb	PX429S15-2.5GV	PX429S20-2.5GV
0 to 5	0 to 345 mb	PX429S15-005[*]V	PX429S20-005[*]V
0 to 15	0 to 1	PX429S15-015[*]V	PX429S20-015[*]V
0 to 30	0 to 2.1	PX429S15-030[*]V	PX429S20-030[*]V
0 to 50	0 to 3.4	PX429S15-050[*]V	PX429S20-050[*]V
0 to 100	0 to 6.9	PX429S15-100[*]V	PX429S20-100[*]V
0 to 150	0 to 10.3	PX429S15-150[*]V	PX429S20-150[*]V
0 to 250	0 to 17.2	PX429S15-250[*]V	PX429S20-250[*]V
0 to 500	0 to 34.5	PX429S15-500[*]V	PX429S20-500[*]V
0 to 600	0 to 41.4	PX429S15-600[*]V	N/A

[*] Insert "G" for gauge pressure or "A" for absolute pressure (≤ 5 psi), no additional charge. Other ranges and custom configurations available, see our on-line configurator at omega.co.uk/pxconfig
 To order units with conduit/cable termination, change model number from "PX409S" to "PX409CS", no additional charge.

Ordering Examples: PX409S15-10WGV, 2 m (6') cable termination, 1½" Tri-Clamp fitting, 10 inH₂O gauge pressure, 10 mV/V output.

PX419S20-30AV, mini-DIN termination, 2" Tri-Clamp fitting, 30 psi absolute pressure, 10 mV/V output.

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