ALL STAINLESS STEEL TRANSDUCER **MULTIMEDIA COMPATIBILITY** HIGH-PERFORMANCE SILICON TECHNOLOGY

PX309 Series

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

Starts at 175

Metric thread adaptors available, see section C.

LARGE ast Shipment!









- ✓ 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

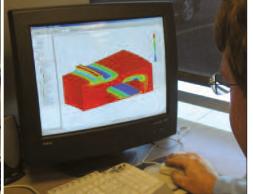


We provide a complete range of services from product inception, through design and prototypes, to manufacturing and testing. Our application engineers work closely with our customers to customize, design or create entirely **new products**. Call us—

whether you're an OEM. manufacturer, or end user.

All models shown actual size.

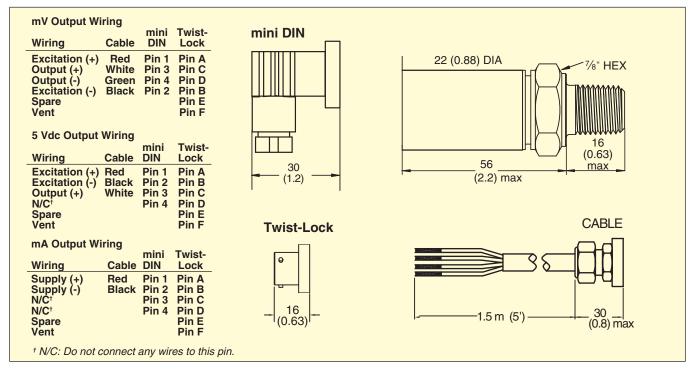




Engineered from 1 to 10,000 psi. Low Pressure Ranges: 1, 2 & 5 psi.

RUGGED, GENERAL PURPOSE TRANSDUCER

COMMON SPECIFICATIONS



COMMON SPECIFICATIONS

OMEGA's PX309 Series models below 100 psi use a high-accuracy silicon sensor protected by an oilfilled stainless steel diaphragm. Units 100 psi and above use silicon strain gages molecularly bonded to the stainless steel diaphragm

Long-Term Stability (1 Year):

±0.25% typical

Typical Life: 10 million cycles typical **Operating Temperature:** -40 to 85°C (-40 to 185°F)

Proof Pressure:

All psia and ≤50 psig Ranges:

3x capacity or 20 psi, whichever is greater

100 psig Ranges: 2x capacity **Burst Pressure:** 500% of capacity or 25 psi, whichever is greater

Response Time: <1 ms Shock: 50 g, 11 ms half-sine

Vibration: ±20 g Protection Class: IP 65 Wetted Parts:

316 SS for all psia and 1 to 50 psig ranges; 17-4 PH stainless steel for

ranges 100 to 10,000 psig Pressure Port: ¼-18 MNPT Electrical Connections:

PX309: 1.5 m (5') 2-, 3-, or 4-conductor cable (mA, 5V, mV

outputs, respectively)

PX319: mini DIN connector with mating connector included

Compatible Meters/Controllers for PX309 Series Pressure Transducers

Starting at \$150, the iSeries is available in 1/32, 1/6, and 1/8 DIN programmable process controllers with serial and embedded Internet/Ethernet communications (Order El Option CNi16D). The iSeries features programmable color displays, free software and **ActiveX Controls.** selectable full autotune PID

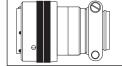


control, and NEMA 4 (IP65) rated front bezel. Ordering Examples: DPiS8, strain/process (monitor only), ½ DIN, \$300; CNiS8, strain/process controller with 2 control outputs, \$370. See pages D-7 thru D-21 for the complete selection.

PX329: Twist-lock connector, vented mating connector sold separately (PT06V-10-6S)

Weight:

PX309: 154 g (5.4 oz) **PX319:** 100 g (3.5 oz) **PX329:** 100 g (3.5 oz)



PX329 Mating Connector PT06V-10-6S \$26.50



HOW TO ORDER PX309 SERIES

RUGGED, GENERAL PURPOSE TRANSDUCERS **WITH 100 mV OUTPUTS**

See Section Y for a Selection of Scientific, Technical, and Reference Books Ávailable from omega.com

PX309 Series

100 mV Output 0-1 to 0-10,000 psi 0-70 mbar to 0-690 bar

mini DIN style.

PX319-050GV, \$175, mini DIN connector included, shown smaller than actual size.

Metric thread adaptors available, see section C.

LOW-PRESSURE RANGES HIGHLIGHTED

TO U	rder <i>(S)</i>	ecity Mod	lei Nu	imber)				
RANGE		1.5 m CABLE		MINI DIN		TWIST-LOCK		
bar	psi	CONNECTION	PRICE	CONNECTION	PRICE	CONNECTION	PRICE	
ABSOLUTE PRESSURE								
0 to 0.34	0 to 5	PX309-005AV	\$300	PX319-005AV	\$300	PX329-005AV	\$300	
0 to 1	0 to 15	PX309-015AV	195	PX319-015AV	215	PX329-015AV	235	
0 to 2.1	0 to 30	PX309-030AV	195	PX319-030AV	215	PX329-030AV	235	
0 to 3.4	0 to 50	PX309-050AV	195	PX319-050AV	215	PX329-050AV	235	
0 to 6.9	0 to 100	PX309-100AV	195	PX319-100AV	215	PX329-100AV	235	
0 to 14	0 to 200	PX309-200AV	195	PX319-200AV	215	PX329-200AV	235	
0 to 21	0 to 300	PX309-300AV	195	PX319-300AV	215	PX329-300AV	235	
GAGE P	RESSURE							
0 to 0.07	0 to 1	PX309-001GV	\$300	PX319-001GV	\$300	PX329-001GV	\$300	
0 to 0.14	0 to 2	PX309-002GV	300	PX319-002GV	300	PX329-002GV	300	
0 to 0.34	0 to 5	PX309-005GV	300	PX319-005GV	300	PX329-005GV	300	
0 to 1	0 to 15	PX309-015GV	175	PX319-015GV	175	PX329-015GV	215	
0 to 2.1	0 to 30	PX309-030GV	175	PX319-030GV	175	PX329-030GV	215	
0 to 3.4	0 to 50	PX309-050GV	175	PX319-050GV	175	PX329-050GV	215	
0 to 6.9	0 to 100	PX309-100GV	175	PX319-100GV	175	PX329-100GV	215	
0 to 10	0 to 150	PX309-150GV	175	PX319-150GV	175	PX329-150GV	215	
0 to 14	0 to 200	PX309-200GV	175	PX319-200GV	175	PX329-200GV	215	
0 to 21	0 to 300	PX309-300GV	175	PX319-300GV	175	PX329-300GV	215	
0 to 34	0 to 500	PX309-500GV	175	PX319-500GV	175	PX329-500GV	215	
0 to 69	0 to 1000	PX309-1KGV	175	PX319-1KGV	175	PX329-1KGV	215	
0 to 138	0 to 2000	PX309-2KGV	175	PX319-2KGV	175	PX329-2KGV	215	
0 to 207	0 to 3000	PX309-3KGV	175	PX319-3KGV	175	PX329-3KGV	215	

Comes complete with 5-point NIST-traceable calibration.

PX309-5KGV

PX309-7.5KGV

Notes: 1. Units 100 psig and above may be subjected to vacuum on the pressure port without damage. 2. For alternative performance specifications to suit your application, contact Engineering.

175

175

PX319-5KGV

175 PX319-10KGV

PX319-7.5KGV

175

175

PX329-5KGV

PX329-7.5KGV

PX329-10KGV

215

215

215

Ordering Examples: PX309-100GV, 100 psi gage pressure transducer with 100 mV output at 5 Vdc excitation and 1.5 m cable termination, \$175. PX319-015AV, 15 psi absolute pressure transducer with 100 mV output @ 10 Vdc excitation and mini DIN termination, \$215.

PX329-3KGV, 3000 psi gage pressure transducer with 100 mV output @ 5 Vdc excitation and twist-lock termination, **\$215**. Mating connector sold separately, order **PT06V-10-6S**, **\$26.50**. Consult Sales for OEM pricing.

ACCESSORIES

0 to 345

0 to 517

0 to 5000

0 to 7500

0 to 690 0 to 10,000 **PX309-10KGV**

ACCECCOTILEC				
MODEL NO. PRICE		DESCRIPTION		
CAL-3 \$150.00		Recalibration: 5-point NIST traceable		
PT06V-10-6S 26.50		Mating connector for PX329		
CA-39-4PC22-5	90.00	4-conductor mating twist-lock connector with 1.5 m (5') cable for PX329		
CX5302	15.00	Extra mini DIN connector for PX319		

Starts at 175



- Gage or Absolute Pressure
- ✓ Low Pressure to 1 psig
- Rugged Solid State Design
- ✓ All Stainless Steel Construction
- High Stability, Low Drift
- ✓ 0.25% Accuracy

100 mV Output Specifications **Excitation:**

0 to 50 psig and All psia Ranges: 10 Vdc (ratiometric), (5 to 12 Vdc limits) 100 to 10,000 psig Ranges:

5 Vdc (ratiometric), (3 to 10 Vdc limits)

Output: 0 to 100 mV, except 2 psi = 40 mV and 1 psi = 20 mV Accuracy: ±0.25% FS BSL at 25°C; includes linearity, hysteresis and repeatability

Zero Offset: ±2% FSO; ±4% for 1 and 2 psi ranges Span Setting: ±2% FSO: ±4% for 1 and 2 psi ranges

Compensated Temperature: 0 to 50°C

(32 to 122°F)

Thermal Zero and Span Effects (Over Compensated Range):

15 to 10,000 psi Ranges: ±2% FSO

5 psi Range: ±3% FSO 2 psi Range: ±4% FSO 1 psi Range: ±5% FSO

HOW TO ORDER PX309 SERIES RUGGED, GENERAL PURPOSE TRANSDUCERS WITH O TO 5 Vdc OUTPUT

See Section Y for a Selection of Scientific, Technical, and Reference Books Ávailable from omega.com

PX309 Series

O to 5 Vdc Output 0-1 to 0-10,000 psi 0-70 mbar to 0-690 bar Twist-lock style.

PX329-015G5V, \$275, shown larger than actual size.

Metric thread adaptors available, see section C.

LOW-PRESSURE RANGES HIGHLIGHTED

To Order *(Specify Model Number)* 1.5 m CABLE TWIST-LOCK **CONNECTION PRICE** CONNECTION **PRICE CONNECTION PRICE** ABSOLUTE PRESSURE 0 to 0.34 PX309-005A5V PX319-005A5V \$325 PX329-005A5V 0 to 5 \$325 \$350 PX319-015A5V 0 to 1 0 to 15 PX309-015A5V 245 245 PX329-015A5V 295 0 to 2.1 0 to 30 PX309-030A5V 245 PX319-030A5V 245 PX329-030A5V 295 0 to 3.4 245 0 to 50 PX309-050A5V 245 PX319-050A5V PX329-050A5V 295 PX309-100A5V 245 PX319-100A5V 245 PX329-100A5V 295 0 to 6.9 0 to 100 245 0 to 200 PX309-200A5V PX319-200A5V PX329-200A5V 0 to 14 245 295 PX309-300A5V 245 PX319-300A5V 245 PX329-300A5V 295 0 to 21 0 to 300 **GAGE PRESSURE** PX329-001G5V 0 to 0.07 0 to 1 PX309-001G5V \$345 PX319-001G5V \$345 \$370 0 to 0.14 PX309-002G5V 325 PX319-002G5V 325 PX329-002G5V 0 to 2 350 0 to 0.34 300 PX319-005G5V 300 PX329-005G5V 0 to 5 PX309-005G5V 325 0 to 1 0 to 15 PX309-015G5V 225 PX319-015G5V 225 PX329-015G5V 275 225 PX319-030G5V 0 to 2.1 0 to 30 PX309-030G5V 225 PX329-030G5V 275 0 to 3.4 0 to 50 PX309-050G5V 225 PX319-050G5V 225 PX329-050G5V 275 0 to 6.9 PX309-100G5V 225 PX319-100G5V 225 PX329-100G5V 0 to 100 275 225 0 to 10 0 to 150 PX309-150G5V 225 PX319-150G5V PX329-150G5V 275 PX309-200G5V PX319-200G5V 225 0 to 14 0 to 200 225 PX329-200G5V 275 0 to 21 0 to 300 PX309-300G5V 225 PX319-300G5V 225 PX329-300G5V 275 0 to 500 PX309-500G5V 225 PX319-500G5V 225 PX329-500G5V 0 to 34 275 225 0 to 69 0 to 1000 PX309-1KG5V 225 PX319-1KG5V PX329-1KG5V 275 0 to 2000 PX319-2KG5V 225 0 to 138 PX309-2KG5V 225 PX329-2KG5V 275 0 to 207 0 to 3000 PX309-3KG5V 225 PX319-3KG5V 225 PX329-3KG5V 275 0 to 5000 PX309-5KG5V PX319-5KG5V 225 PX329-5KG5V 0 to 345 225 275 0 to 517 0 to 7500 PX309-7.5KG5V PX319-7.5KG5V 225 PX329-7.5KG5V 225 275 0 to 690 0 to 10,000 PX309-10KG5V 225 PX319-10KG5V 225 PX329-10KG5V 275

Comes complete with 5-point NIST-traceable calibration.

Notes: 1. Units 100 psig and above may be subjected to vacuum on the pressure port without damage. For alternative performance specifications to suit your application, contact Engineering.

Ordering Examples: PX309-100G5V, 100 psi gage pressure transducer with 0 to 5 Vdc output and 1.5 m cable termination, \$225.

PX319-015A5V, 15 psi absolute pressure transducer with 0 to 5 Vdc output and mini DIN termination, \$245. PX329-3KG5V, 3000 psi gage pressure transducer with 0 to 5 Vdc output and twist-lock termination, \$275. Mating connector sold separately; order PT06V-10-6S, \$26.50. Consult Sales for OEM pricing.

ACCESSORIES

MODEL NO.	PRICE	DESCRIPTION			
CAL-3	\$150.00	Recalibration: 5-point NIST traceable			
PT06V-10-6S	26.50	Mating connector for PX329			
CA-39-4PC22-5	90.00	4-conductor mating twist-lock connector with 1.5 m (5') cable for PX329			
CX5302	15.00	Extra mini DIN connector for PX319			

Starts at **\$225**



- Gage or Absolute Pressure
- ✓ Low Pressure to 1 psig
- Rugged Solid State Design
- All Stainless Steel Construction
- High Stability, Low Drift
- ✓ 0.25% Static Accuracy

5 V Output Specifications

Excitation: 9 to 30 Vdc (reverse polarity and overvoltage

protected) Output: 0 to 5 Vdc

Static Accuracy 5 to 10,000 psi: ±0.25% FS BSL at 25°C; includes linearity, hysteresis and repeatability

Zero Offset: ±2% FSO: ±4% for 1 and 2 psi ranges

Span Setting: ±2% FSO; ±4% for 1

and 2 psi ranges

Compensated Temperature:

>5 psi Range: -20 to 85°C (-4 to 185°F) ≤5 psi Range: 0 to 50°C (32 to 122°F)

Total Error Band: ±2% FSO: includes linearity, hysteresis, repeatability, thermal hysteresis and thermal errors (except 2 psi = $\pm 3\%$ and 1 psi = $\pm 4.5\%$)

HOW TO ORDER PX309 SERIES

RUGGED GENERAL PURPOSE TRANSDUCERS WITH 4 TO 20 mA OUTPUT

See Section Y for a Selection of Scientific, Technical, and Reference Books Available from omega.com

PX309 Series

4 to 20 mA Output 0-1 to 0-10,000 psi 0-70 mbar to 0-690 bar Cable style.

PX309-030GI, \$225, shown larger than actual size.

Metric thread adaptors available, see section C.

LOW-PRESSURE RANGES HIGHLIGHTED

To Order (Specify Model Number) **RANGE** 1.5 m CABLE **MINI DIN** TWIST-LOCK bar **CONNECTION PRICE CONNECTION PRICE CONNECTION PRICE ABSOLUTE PRESSURE** PX319-005AI \$325 PX329-005AI 0 to 0.34 0 to 5 PX309-005AI \$325 \$350 PX309-015AI 245 PX319-015AI 245 PX329-015AI 0 to 1 0 to 15 295 PX309-030AI PX319-030AI 245 PX329-030AI 0 to 2.1 0 to 30 245 295 PX319-050AI 0 to 3.4 0 to 50 PX309-050AI 245 245 PX329-050AI 295 PX309-100AI PX319-100AI 245 PX329-100AI 295 0 to 6.9 0 to 100 245 PX309-200AI PX319-200AI PX329-200AI 0 to 14 0 to 200 245 245 295 PX329-300AI 0 to 21 0 to 300 PX309-300AI 245 PX319-300AI 245 295 **GAGE PRESSURE** 0 to 0.07 0 to 1 PX309-001GI \$345 PX319-001GI \$345 PX329-001GI \$370 0 to 0.14 0 to 2 PX309-002GI 325 PX319-002GI 325 PX329-002GI 350 0 to 0.34 PX309-005GI PX319-005GI 300 PX329-005GI 0 to 5 300 300 0 to 1 0 to 15 PX309-015GI 225 PX319-015GI 225 PX329-015GI 275 0 to 2.1 0 to 30 PX309-030GI 225 PX319-030GI 225 PX329-030GI 275 225 PX329-050GI 0 to 3.4 0 to 50 PX309-050GI 225 PX319-050GI 275 0 to 6.9 0 to 100 PX309-100GI 225 PX319-100GI 225 PX329-100GI 275 0 to 10 0 to 150 PX309-150GI 225 PX319-150GI 225 PX329-150GI 275 0 to 14 0 to 200 PX309-200GI 225 PX319-200GI 225 PX329-200GI 275 0 to 21 0 to 300 PX309-300GI 225 PX319-300GI 225 PX329-300GI 275 0 to 34 0 to 500 PX309-500GI 225 PX319-500GI 225 PX329-500GI 275 0 to 69 0 to 1000 PX309-1KGI 225 **PX319-1KGI** 225 PX329-1KGI 275 0 to 138 0 to 2000 PX309-2KGI 225 **PX319-2KGI** 225 PX329-2KGI 275 0 to 207 0 to 3000 PX309-3KGI PX319-3KGI 225 PX329-3KGI 275 225 0 to 345 0 to 5000 **PX309-5KGI** 225 **PX319-5KGI** 225 **PX329-5KGI** 275 0 to 517 0 to 7500 PX309-7.5KGI 225 PX319-7.5KGI 225 PX329-7.5KGI 275 0 to 690 | 0 to 10,000 PX309-10KGI 225 PX319-10KGI PX329-10KGI 275

Comes complete with 5-point NIST-traceable calibration.

Notes: 1. Units 100 psig and above may be subjected to vacuum on the pressure port without damage. 2. For alternative performance specifications to suit your application, contact Engineering.

Ordering Examples: PX309-100GI, 100 psi gage pressure transducer with 4 to 20 mA output and 1.5 m cable termination, \$225. PX319-015AI, 15 psi absolute pressure transducer with 4 to 20 mA output and mini DIN termination, \$300. PX329-3KGI, 3000 psi gage pressure transducer with 4 to 20 mA output and twist-lock termination, \$275. Mating connector sold separately; order PT06V-10-6S, \$26.50. Consult Sales for OEM pricing.

Starts at **\$225**



- Gage or Absolute Pressure
- ✓ Low Pressure to 1 psig
- Rugged Solid State Design
- All Stainless Steel Construction
- High Stability, Low Drift
- ✓ 0.25% Static Accuracy

4 to 20 mA Output **Specifications**

Excitation: 9 to 30 Vdc (reverse polarity and overvoltage protected)

Output: 4 to 20 mA

Static Accuracy 5 to 10,000 psi: ±0.25% FS BSL at 25°C; includes linearity, hysteresis and repeatability

Zero Offset: ±2% FSO; ±4% for 1 and 2 psi ranges **Span Setting:** ±2% FSO; ±4% for 1 and 2 psi ranges **Compensated Temperature:**

>5 psi Range: -20 to 85°C (-4 to 185°F)

≤5 psi Range: 0 to 50°C (32 to 122°F)

Total Error Band: ±2% FSO; includes linearity, hysteresis, repeatability, thermal hysteresis and thermal errors (except 2 psi = $\pm 3\%$ and 1 psi = $\pm 4.5\%$)

ACCESSORIES

A00200011120				
MODEL NO.	PRICE	DESCRIPTION		
CAL-3	\$150.00	Recalibration: 5-point NIST traceable		
PT06V-10-6S	26.50	Mating connector for PX329		
CA-39-4PC22-5	90.00	4-conductor mating twist-lock connector with 1.5 m (5') cable for PX329		
CX5302	15.00	Extra mini DIN connector for PX319		

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