

How to Order PX309 Series with 100 mV Outputs



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

PX309 Series



Standard

100 mV Output Specifications

(In Addition to Common Specifications on page 2)

Setting Accuracy Zero and Span:
±2% FS (±4% FS for 1 and 2 psi)

Supply Voltage:

-15 to 50 psig and 0 to 1000 psia: 10 Vdc, 100 to 10,000 psig: 5 Vdc typical

100 mV Outputs		
Range	Output	Excitation*
5 to 1000 psia	100 mV	10 Vdc
1 psig	20 mV	10 Vdc
2 psig	40 mV	10 Vdc
5 to 50 psig	100 mV	10 Vdc
100 to 10,000 psig	100 mV	5 Vdc
0 to -15 psig	0 to 100 mV	10 Vdc
-15 to 0 to +15 psig	-100 to 0 to +100 mV	10 Vdc
-15 to 30/50 psig	0 to 100 mV	10 Vdc
-15 to 100/150 psig	0 to 100 mV	5 Vdc

* Ratiometric Excitation Range: 2 to 10 or 1 to 5 Vdc

Input Impedance: 4k to 13k Ω

Output Impedance: 4k to 6k Ω

Zero Shift:

-15 to 50 psig and 0 to 1000 psia: ±0.03%/°C (0 to 5 psig/psia is ±0.06%/°C, 0 to 2 psig is ±0.08%/°C, 0 to 1 psig is ±0.1%/°C). 100 to 10,000 psig: ±2% over compensated range ref 25°C

Span Shift:

-15 to 50 psig and 0 to 1000 psia: ±0.03%/°C (0 to 5 psig/psia is ±0.04%/°C, 0 to 2 psig is ±0.05%/°C, 0 to 1 psig is ±0.06%/°C). 100 to 10,000 psig: ±2% over compensated range ref 25°C

Compensated Temperature:

-15 to 50 psig and 0 to 1000 psia: 0 to 50°C, 100 to 10,000 psig: 0 to 55°C

Metric Versions of PX309 also available from OMEGA. Please see PXM309 series.

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



mini DIN style.

Range		1.5 m Cable Connection	mini DIN Connection	Twist-Lock Connection	M12 Connection
psi	bar				
Absolute Pressure					
0 to 5	0 to 0.34	PX309-005AV	PX319-005AV	PX329-005AV	PX359-005AV
0 to 15	0 to 1	PX309-015AV	PX319-015AV	PX329-015AV	PX359-015AV
0 to 30	0 to 2.1	PX309-030AV	PX319-030AV	PX329-030AV	PX359-030AV
0 to 50	0 to 3.4	PX309-050AV	PX319-050AV	PX329-050AV	PX359-050AV
0 to 100	0 to 6.9	PX309-100AV	PX319-100AV	PX329-100AV	PX359-100AV
0 to 200	0 to 14	PX309-200AV	PX319-200AV	PX329-200AV	PX359-200AV
0 to 300	0 to 21	PX309-300AV	PX319-300AV	PX329-300AV	PX359-300AV
0 to 500	0 to 34	PX309-500AV	PX319-500AV	PX320-500AV	PX359-500AV
0 to 1000	0 to 69	PX309-1KAV	PX319-1KAV	PX329-1KAV	PX359-1KAV
Gage Pressure					
0 to 1	0 to 0.07	PX309-001GV	PX319-001GV	PX329-001GV	PX359-001GV
0 to 2	0 to 0.14	PX309-002GV	PX319-002GV	PX329-002GV	PX359-002GV
0 to 5	0 to 0.34	PX309-005GV	PX319-005GV	PX329-005GV	PX359-005GV
0 to 15	0 to 1	PX309-015GV	PX319-015GV	PX329-015GV	PX359-015GV
0 to 30	0 to 2.1	PX309-030GV	PX319-030GV	PX329-030GV	PX359-030GV
0 to 50	0 to 3.4	PX309-050GV	PX319-050GV	PX329-050GV	PX359-050GV
0 to 100	0 to 6.9	PX309-100GV	PX319-100GV	PX329-100GV	PX359-100GV
0 to 150	0 to 10	PX309-150GV	PX319-150GV	PX329-150GV	PX359-150GV
0 to 200	0 to 14	PX309-200GV	PX319-200GV	PX329-200GV	PX359-200GV
0 to 300	0 to 21	PX309-300GV	PX319-300GV	PX329-300GV	PX359-300GV
0 to 500	0 to 34	PX309-500GV	PX319-500GV	PX329-500GV	PX359-500GV
0 to 1000	0 to 69	PX309-1KGV	PX319-1KGV	PX329-1KGV	PX359-1KGV
0 to 2000	0 to 138	PX309-2KGV	PX319-2KGV	PX329-2KGV	PX359-2KGV
0 to 3000	0 to 207	PX309-3KGV	PX319-3KGV	PX329-3KGV	PX359-3KGV
0 to 5000	0 to 345	PX309-5KGV	PX319-5KGV	PX329-5KGV	PX359-5KGV
0 to 7500	0 to 517	PX309-7.5KGV	PX319-7.5KGV	PX329-7.5KGV	PX359-7.5KGV
0 to 10,000	0 to 690	PX309-10KGV	PX319-10KGV	PX329-10KGV	PX359-10KGV
Vacuum and Compound Gage Pressure					
-0 to -15	—	PX309-015VV	PX319-015VV	PX329-015VV	PX359-015VV
-15 to 0 to +15	—	PX309-015CGV	PX319-015CGV	PX329-015CGV	PX359-015CGV
-15 to 30	-1.03 to 2.1	PX309-V030GV	PX319-V030GV	PX329-V030GV	PX359-V030GV
-15 to 50	-1.03 to 3.4	PX309-V050GV	PX319-V050GV	PX329-V050GV	PX359-V050GV
-15 to 100	-1.03 to 6.9	PX309-V100GV	PX319-V100GV	PX329-V100GV	PX359-V100GV
-15 to 150	-1.03 to 10.3	PX309-V150GV	PX319-V150GV	PX329-V150GV	PX359-V150GV

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

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

How to Order PX309 Series with 0 to 5 Vdc Output

0 to 5 Vdc Output
0-1 to 0-10,000 psi
0-70 mbar to 0-690 bar



PX329-015G5V
shown smaller than
actual size.



Twist-lock
style.

PX309 Series



Standard

5V Output Specifications

(In Addition to Common Specifications on page 2)
Total Error Band (Includes Linearity, Hysteresis, Repeatability, Thermal Hysteresis and Thermal Errors, Not Including Zero and Span Setting Accuracy): $\pm 1.0\%$
(5 psig/psia is $\pm 1.5\%$, 2 psig is 3.0% and 1 psig is 4.5%)
Supply Voltage: 9 to 30 Vdc,
Supply Current < 10 mA

0 to 5 Vdc Outputs		
Range	Output	Excitation*
5 to 1000 psia	0 to 5 Vdc	9 to 30 Vdc
1 to 10,000 psig	0 to 5 Vdc	9 to 30 Vdc
-15 to 30/50/100/150 psig	0 to 5 Vdc	9 to 30 Vdc
0 to -15 psig	0 to 5 Vdc	9 to 30 Vdc
-15 to 0 to +15 psig	-5 to 0 to +5 Vdc	9 to 30 Vdc

* Supply Current < 10 mA

Compensated Temperature:

-20 to 85°C (≤ 5 psig/psia
is 0 to 50°C)

To Order

Range		1.5 m Cable Connection	mini DIN Connection	Twist-Lock Connection	M12 Connection
psi	bar				
Absolute Pressure					
0 to 5	0 to 0.34	PX309-005A5V	PX319-005A5V	PX329-005A5V	PX359-005A5V
0 to 15	0 to 1	PX309-015A5V	PX319-015A5V	PX329-015A5V	PX359-015A5V
0 to 30	0 to 2.1	PX309-030A5V	PX319-030A5V	PX329-030A5V	PX359-030A5V
0 to 50	0 to 3.4	PX309-050A5V	PX319-050A5V	PX329-050A5V	PX359-050A5V
0 to 100	0 to 6.9	PX309-100A5V	PX319-100A5V	PX329-100A5V	PX359-100A5V
0 to 200	0 to 14	PX309-200A5V	PX319-200A5V	PX329-200A5V	PX359-200A5V
0 to 300	0 to 21	PX309-300A5V	PX319-300A5V	PX329-300A5V	PX359-300A5V
0 to 500	0 to 34	PX309-500A5V	PX319-500A5V	PX320-500A5V	PX359-500A5V
0 to 1000	0 to 69	PX309-1KA5V	PX319-1KA5V	PX329-1KA5V	PX359-1KA5V
Gage Pressure					
0 to 1	0 to 0.07	PX309-001G5V	PX319-001G5V	PX329-001G5V	PX359-001G5V
0 to 2	0 to 0.14	PX309-002G5V	PX319-002G5V	PX329-002G5V	PX359-002G5V
0 to 5	0 to 0.34	PX309-005G5V	PX319-005G5V	PX329-005G5V	PX359-005G5V
0 to 15	0 to 1	PX309-015G5V	PX319-015G5V	PX329-015G5V	PX359-015G5V
0 to 30	0 to 2.1	PX309-030G5V	PX319-030G5V	PX329-030G5V	PX359-030G5V
0 to 50	0 to 3.4	PX309-050G5V	PX319-050G5V	PX329-050G5V	PX359-050G5V
0 to 100	0 to 6.9	PX309-100G5V	PX319-100G5V	PX329-100G5V	PX359-100G5V
0 to 150	0 to 10	PX309-150G5V	PX319-150G5V	PX329-150G5V	PX359-150G5V
0 to 200	0 to 14	PX309-200G5V	PX319-200G5V	PX329-200G5V	PX359-200G5V
0 to 300	0 to 21	PX309-300G5V	PX319-300G5V	PX329-300G5V	PX359-300G5V
0 to 500	0 to 34	PX309-500G5V	PX319-500G5V	PX329-500G5V	PX359-500G5V
0 to 1000	0 to 69	PX309-1KG5V	PX319-1KG5V	PX329-1KG5V	PX359-1KG5V
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0 to 5000	0 to 345	PX309-5KG5V	PX319-5KG5V	PX329-5KG5V	PX359-5KG5V
0 to 7500	0 to 517	PX309-7.5KG5V	PX319-7.5KG5V	PX329-7.5KG5V	PX359-7.5KG5V
0 to 10,000	0 to 690	PX309-10KG5V	PX319-10KG5V	PX329-10KG5V	PX359-10KG5V
Vacuum and Compound Gage Pressure					
0 to -15	—	PX309-015V5V	PX319-015V5V	PX329-015V5V	PX359-015V5V
-15 to 0 to +15	—	PX309-015CG5V	PX319-015CG5V	PX329-015CG5V	PX359-015CG5V
-15 to 30	-1.03 to 2.1	PX309-V030G5V	PX319-V030G5V	PX329-V030G5V	PX359-V030G5V
-15 to 50	-1.03 to 3.4	PX309-V050G5V	PX319-V050G5V	PX329-V050G5V	PX359-V050G5V
-15 to 100	-1.03 to 6.9	PX309-V100G5V	PX319-V100G5V	PX329-V100G5V	PX359-V100G5V
-15 to 150	-1.03 to 10.3	PX309-V150G5V	PX319-V150G5V	PX329-V150G5V	PX359-V150G5V

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PX329-3KG5V, 3000 psi gage pressure transducer with 0 to 5 Vdc output and twist-lock 6 pin connector termination. Mating connector sold separately; order PT06V-10-6S. Consult Sales for OEM pricing.

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