

SPEC SHEET
PX5500-mV

Interchangeable with
CEC Model 5500-xxxx

\$550
Model Shown

PX5500 Series
mV/V Output

0-15 to 0-10,000 psi
0-1 to 0-700 bar

1 bar = 14.5 psi
1 kg/cm² = 14.22 psi
1 Atmosphere = 14.7 psi = 29.93 in-Hg = 760.2 mm-Hg = 1.014 bar

- ☑ High Accuracy 0.1%
- ☑ Solid State Reliability
- ☑ Sputtered Strain Gage Design
- ☑ High Shock and Vibration
- ☑ Low Drift

Applications

- ☑ Testing
- ☑ R&D/Engineering Test Laboratories
- ☑ Functional Test Systems
- ☑ Production Testing
- ☑ Product Quality Assurance
- ☑ Flight Testing
- ☑ Gas Turbine and Engine Test Standards
- ☑ Ground Support Equipment
- ☑ Hydraulic Systems
- ☑ Custody Transfer Measurements

For Sales and Service
In U.S.A. and Canada

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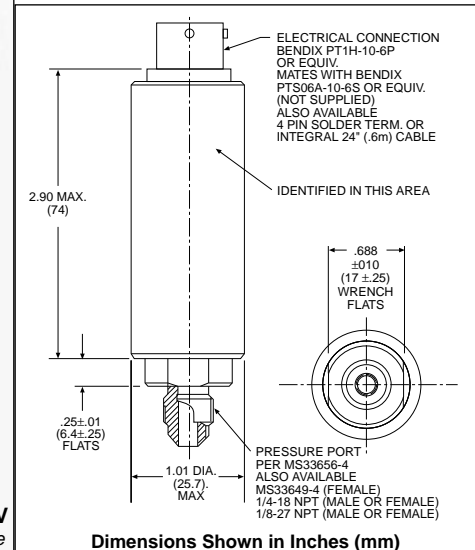


High Performance Pressure Transducer

Long Term Reliability



Model PX5500L1-100GV
Shown Smaller Than Actual Size



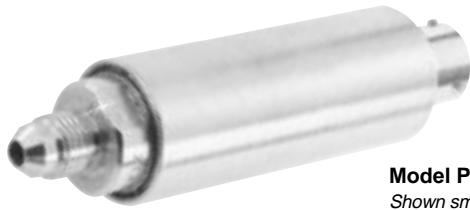
► **Most Popular Models Highlighted** ◀ **Prices Shown in U.S. Dollars**

To Order: (Specify Model Number)			
Models with mV/V Output, MS33656-4 Connection, Integral Connector			
Range (psi)	Model Number	Price	Compatible Meters
Absolute Pressure (All Ranges Available in Absolute Pressure)			
0-15	PX5500L1-015AV	\$550	INFS, INFCS
0-25	PX5500L1-025AV	550	INFS, INFCS
0-50	PX5500L1-050AV	550	INFS, INFCS
0-100	PX5500L1-100AV	550	INFS, INFCS
Gage Pressure (All Ranges also Available in Sealed Gage Pressure)			
0-15	PX5500L1-015GV	550	INFS, INFCS
0-25	PX5500L1-025GV	550	INFS, INFCS
0-50	PX5500L1-050GV	550	INFS, INFCS
0-100	PX5500L1-100GV	550	INFS, INFCS
0-250	PX5500L1-250GV	550	INFS, INFCS
0-500	PX5500L1-500GV	550	INFS, INFCS
0-1,000	PX5500L1-1KGV	550	INFS, INFCS
0-1,500	PX5500L1-1.5KGV	550	INFS, INFCS
0-2,500	PX5500L1-2.5KGV	550	INFS, INFCS
0-3,000	PX5500L1-3KGV	550	INFS, INFCS
0-5,000	PX5500L1-5KGV	550	INFS, INFCS
0-10,000	PX5500L1-10KGV	550	INFS, INFCS

Interchangeable with CEC Model 5500-xxxx Metric Ranges Available - Consult Engineering
To order Absolute Pressure models, change "G" in the part number to "A". No charge.
To order Sealed Gage models, change "G" in the part number to "S". No charge.

Ordering Examples: 1.) PX5500L1-1KSV is a 1,000 psi Sealed Gage transducer with PT1H-10-6P electrical connection and MS33656-4 Male Pressure Port, \$550. Mating Connector (not included) PTS06A-10-6S \$47 ea. 2.) PX5500L1-100AV is a 100 psi Absolute Pressure transducer with PT1H-10-6P electrical connection and MS33656-4 Male Pressure Port, \$550. Mating Connector (not included) PTS06A-10-6S \$47 ea.

Wiring Code		
Pin	Wire	Function
A	RD	+ Input
B	YE	+ Output
C	BL	- Output
D	WT	- Input
E	Shorted to C	
F	Shorted to D	



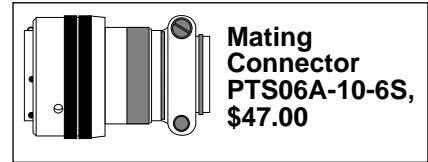
Model PX5000L1-100GV
Shown smaller than actual size

The OMEGADYNE™ Transducer Series PX5500 provide high performance in demanding industrial and research applications where accuracy, reliability, and price are important. These transducers have a 10 year MTBF rate and are stable to 0.1% of FSO over an 18 month period. This translates into less down time, fewer test reruns, more time between calibrations, and high confidence in your pressure data. When recalibration is impossible, relying on the high stability of the PX5500 Series transducer may be the only cost-effective way to obtain pressure data over the long term. OMEGADYNE's thin film technology makes this premium performance possible. The strain gages and associated structures are sputter-deposited directly onto the pressure sensing element thus eliminating the need for adhesives. The resulting molecular bond between the sensing element and the strain gages ensures virtually no shifting, drifting, or "creep" in the performance of the transducer. The micro-geometry design of the PX5500 sensing element results in a very small, low mass sensor that reduces effects of mechanical vibration and shock. The PX5500 gives you the accuracy, reliability, and stability at competitive prices.

SPECIFICATIONS: (mV/V Models)

Electrical:
Excitation: 10 V ac/dc (15V ac/dc Max)
Output FSO: 3 mV/V typical, 2.6 mV/V minimum
Input Resistance: 1000 ohms typical, 800 ohms minimum, 1500 ohms max. For 350 ohm bridge models see custom configurations.
Output Resistance: 1000 ohms typical, 800 ohms minimum, 1200 ohms maximum
Insulation Resistance: 500 Megohms @ 45 Vdc over the compensated range
Sensing Element: 4 active-arm bridge using sputtered-deposited thin-film elements
Performance:
Accuracy: Combined Linearity, Hysteresis and Nonrepeatability: ±0.10% FSO (BFSL) <1000 psi ±0.15% FSO 1000 psi and above
Calibration Stability: ±0.1% for 18 months
Environmental:
Vibration Sensitivity: At 35g peak sinusoidal vibration from 10 Hz to 2000 Hz (1/2" D.A.), the output shall not exceed 0.04% FSO/g for 15 psi range, decreasing to 0.003% FSO/g for 1000 psi and above
Natural Frequency: 5 kHz for 15 psi, increasing logarithmically to 50 kHz for 5,000 psi

Shock: Qualification level of 100g, 11 milliseconds half sine wave without damage
Electrostatic Discharge (ESD): Protected to 15kV
Operating Temp Range: -54° to +150°C (-65° to +300°F)
Compensated Temp Range: -18° to +82° C (0° to +180°F)
Thermal Effects: Span: ±0.0025% FSO/°F Zero: ±0.0025% FSO/°F
Pressure:
Proof Pressure: 2.0 times rated pressure or 15,000 psi, whichever is less, will not cause changes in performance beyond the specified tolerance
Burst Pressure: 3.0 times rated pressure or 20,000 psi whichever is less, will not cause rupture of the pressure containment cavity
Mechanical:
Wetted Parts: 17-4 PH or 15-5 PH Stainless Steel
Electrical Connection: PT1H-10-6P standard - see custom configurations
Pressure Port: MS33656-4 (Male), standard - see custom configurations
Optional: MS33649-4, 1/4"-18 NPT Male/Female, 1/8"-27 NPT Male/Female
Mating Connector: PTS06A-10-6S Not Included
Weight: 7 oz (200g) maximum



CUSTOM CONFIGURATIONS

SERIES	PRESSURE PORT	ELECTRICAL CONNECTION	RANGE	UNITS	OUTPUT	OPTIONS
PX5500*	[1]	[2]	[3]	[4]	[5]	[6]
A = 1/8"-27 NPT Male			015 psi	A, G, S	V = mV/V \$550	CAL5 = 5pt Cal
B = 1/8"-27 NPT Female			025	A, G, S	5T = 0-5V \$695	+75
C = 1/4"-18 NPT Male			050	A, G, S	I = 4-20mA \$695	CAL11 = 11pt Cal
D = 1/4"-18 NPT Female			100	A, G, S		+150
L = MS33656-4			250	A, G, S		
M = MS33649-4			500	A, G, S		
	0 = 2 foot (.6m) cable		1K	A, G, S		
	\$2/ft over 2 ft		1.5K	A, G, S		
	1 = PT1H-10-6P Connector		2.5K	A, G, S		
	(or Equal)		3K	A, G, S		
	Mating Connector (not included)		5K	A, G, S		
	PTS06A-10-6S		10K	A, G, S		
	\$47					
	3 = 4 - Pin Eyelet Header					

***For 350 ohm bridge specify Model PX5503**

To Order a Custom Configuration:

1. Select a Pressure Port
2. Select Electrical Connection
3. Select a Pressure Range
4. Select Pressure Units
5. Select Output
6. Select Options and Agency Approvals

Interchangeable with CEC Model 5500-xxxx

Metric Ranges Available - Consult Engineering

Ordering Examples: 1.) **PX5500A1-015AV** has a 1000 ohm bridge, 1/8"-27 NPT male pressure port, Bendix style connector, 15 psi Absolute Pressure range and mV/V output, \$550. Mating connector (not included) **PTS06A-10-6S, \$47.00.**
2.) **PX5503C1-100SV** has a 350 ohm bridge, 1/4"-18 NPT male pressure port, Bendix style connector, 100 psi Sealed Gage pressure range and mV/V output, \$550. Mating connector (not included) **PTS06A-10-6S, \$47.00.**
3.) **PX5500M1-10KG5T** has a 1000 ohm bridge, MS33649-4 female pressure port, Bendix style connector, 10,000 psi Gage Pressure range and 0-5 Vdc output, \$695. Mating connector (not included) **PTS06A-10-6S, \$47.00.**
4.) **PX5500L0-015A1-25FT** has a 1000 ohm bridge, MS33656-4 male pressure port, 25 ft (8m) lead wire, 15 psi Absolute Pressure range and 4-20mA output, \$695+46= \$741.

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