HIGH PERFORMANCE TRANSMITTERS
LONG TERM RELIABILITY

PXM5500 Series
4-20mA Output
0-1 to 0-600 bar

PXM5500

$695

Model Shown

PXM5500MC6-010BARGI Shown Smaller Than Actual Size

PXM5500MC0-010BARGI Shown Smaller Than Actual Size

- **High Accuracy 0.1%**
- **Solid State Reliability**
- **Sputtered Strain Gauge 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**

OMEGA's PXM5500 Transducer Series provides high performance in demanding industrial and research applications where accuracy, reliability, and price are important. This transducer has a 10-year MTBF rate and is stable to 0.1% of FS 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 PXM5500 Series transducer may be the only cost-effective way to obtain pressure data over the long term. OMEGA's thin film technology makes this premium in a performance possible.

The strain gauges 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 gauges ensures virtually no shifting, drifting, or "creep" in the performance of the transducer. The micro-geometry design of the PXM5500 sensing element results very small, low mass sensor that reduces effects of mechanical vibration and shock. The PXM5500 gives you the accuracy, reliability, and stability at competitive prices.

MOST POPULAR MODELS HIGHLIGHTED

To Order *(Specify Model Number)*

Models with G 1/4 Male Pressure Connection, Cable or Connector & 4-20mA Output

RANGE (Bar)	MODEL NO.	PRICE	COMPATIBLE METERS**
Gauge Pressure			
0 to 1	**PXM5500MC[*]-001BARGI**	**$695**	DP41-E, DP25B-E, DP24-E
0 to 1.6	**PXM5500MC[*]-1.60BARGI**	**695**	DP41-E, DP25B-E, DP24-E
0 to 4	**PXM5500MC[*]-004BARGI**	**695**	DP41-E, DP25B-E, DP24-E
0 to 6	**PXM5500MC[*]-006BARGI**	**695**	DP41-E, DP25B-E, DP24-E
0 to 10	**PXM5500MC[*]-010BARGI**	**695**	DP41-E, DP25B-E, DP24-E
0 to 16	**PXM5500MC[*]-016BARGI**	**695**	DP41-E, DP25B-E, DP24-E
0 to 25	**PXM5500MC[*]-025BARGI**	**695**	DP41-E, DP25B-E, DP24-E
0 to 40	**PXM5500MC[*]-040BARGI**	**695**	DP41-E, DP25B-E, DP24-E
0 to 60	**PXM5500MC[*]-060BARGI**	**695**	DP41-E, DP25B-E, DP24-E
0 to 100	**PXM5500MC[*]-100BARGI**	**695**	DP41-E, DP25B-E, DP24-E
0 to 160	**PXM5500MC[*]-160BARGI**	**695**	DP41-E, DP25B-E, DP24-E
0 to 250	**PXM5500MC[*]-250BARGI**	**695**	DP41-E, DP25B-E, DP24-E
0 to 400	**PXM5500MC[*]-400BARGI**	**695**	DP41-E, DP25B-E, DP24-E
0 to 600	**PXM5500MC[*]-600BARGI**	**695**	DP41-E, DP25B-E, DP24-E

[*] = insert "0" for 0.6 m Cable or "6" for micro DIN connector

***See Section D for compatible Meters*

To order Absolute Pressure models, change "G" in the part number to "A". No charge.
To order Sealed Gauge models, change "G" in the part number to "S". No charge.

Ordering Examples:

1.) PXM5500MC0-060BARSI** is a 60 bar Sealed Gauge transducer with 4-20 mA output, 0.6 M cable connection and G 1/4 Male Pressure Port, **$695
***2.) PXM5500MC6-1.60BARAI** is a 1.6 bar Absolute Pressure transducer with 4-20 mA output, micro DIN connection and G 1/4 Male Pressure Port, **$695**. Mating connector included.*

RUGGED SPUTTERED TECHNOLOGY

SPECIFICATIONS:

(mA MODELS)

Excitation: 10 to 40 Vdc unregulated Reverse Polarity Protected

Output (FS): 4-20mA ±2mA adj

Zero Balance: 4mA ±0.4mA adj

Input Current: 20mA max. with no load

Load Impedance: 50 (V-10) Ω max where V is supply voltage (40Vdc max)

Insulation Resistance: 100 MΩ @ 45 Vdc between all pins shorted together and case

Electrostatic Discharge: Protected to 15kV max.

Sensing Element: 4 active-arm bridge using sputter-deposited thin-film elements

Accuracy: Combined Linearity, Hysteresis and Repeatability: ±0.10% FS (BFSL) <70 bar ±0.15% FS 70 bar and above

Vibration Sensitivity: At 20g peak sinusoidal vibration from 10 Hz to 2000 Hz (½" D.A.), the output shall not exceed 0.04% FS/g for 1bar range, decreasing to 0.003% FS/g for 70 bar and above

Natural Frequency: 5 kHz for 1bar, increasing logarithmically to 50 kHz for 300 bar

Shock: Qualification level of 100g, 11 milliseconds half sine wave without damage

Operating Temp Range: -40° to +85°C (-40° to +185°F)

Compensated Temp Range: -18° to +82° C (0° to +180°F)

Thermal Effects: (Over the compensated range)
Span: ±0.036% FS/°C
Zero: ±0.036% FS/°C

Proof Pressure: 2.0 times rated pressure or 1,000 bar, whichever is less, will not cause changes in performance beyond the specified tolerance

Burst Pressure: 3.0 times rated pressure or 1,300 bar whichever is less, will not cause rupture of the pressure containment cavity

Wetted Parts: 17-4 PH or 15-5 PH Stainless Steel

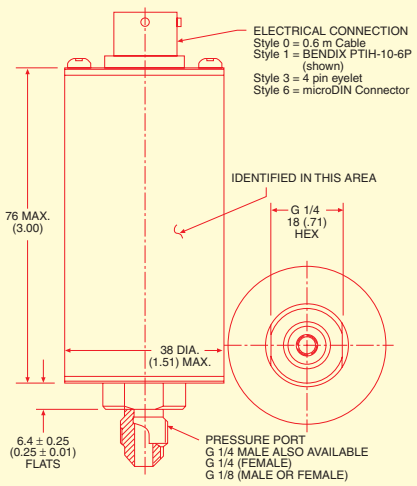
Electrical Connection: 0.6 m Cable or microDIN- see Custom Configurations

Pressure Port: G 1/4 Standard - see Custom Configurations

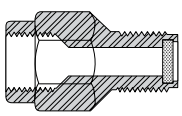
Optional: G 1/4 Female, G 1/8 Male/Female

Mating Connector: Style 1 PTS06A-10-6S (not included) Style 6: Included

Weight: 225 g (8 oz) maximum



DIN	Pin	Wire Code
1	A	RED = + Input
3	B	YEL = N/C
4	C	BL = N/C
2	D	WT = – Input
	E	= N/C
	F	= N/C



G 1/4 Pressure Snubbers $20
PSM-4 = G 1/4

CUSTOM CONFIGURATIONS

–MODEL NUMBER SPECIFICATION:

PXM5500MC0-006BARAI

OPTION CODES (add to end of model number)
–CAL5 (for 5 point calibration certificate)
–CAL11 (for 11 point calibration certificate)
–[ ]m (Optional cable length Example: –12m = 12 metres total of cable)

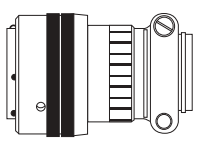
OUTPUT: V = 3 mV/V nominal
5T = 0 to 5 Vdc
I = 4 to 20 mA

UNITS (A = absolute, S = sealed gauge, G = gauge)

RANGE

ELECTRICAL CONNECTION:
0 = 0.6 m cable
1 = PTIH-10-6P connector or equiv.
3 = 4 pin eyelet
6 = micro DIN connector

PRESSURE PORT: MA = G 1/8 male
MB = G 1/8 female
MC = G 1/4 male - (std)
MD = G 1/4 female



Style 1 Mating Connector PTS06A-10-6S, $47.00

Ordering Examples:

1.) PX5500MC1-025BARSI, *25 bar Sealed Gauge Pressure range and 4 to 20 mA output with G 1/4 male fitting and PTIH-10-6P electrical connection,* ***$695****. Mating connector (not included)* ***PTS06A-10-6S****,* ***$47.00****.*

2.) PX5500MD0-001BARAI, *1 bar Absolute Pressure range and 4 to 20 mA output with G 1/4 female fitting and 0.6 m cable,* ***$695****.*

3.) PXM5500MA6-006BARGI, *6 bar Gauge Pressure range and 4 to 20 mA output with G 1/8 male pressure port and micro DIN electrical connection,* ***$695****. Mating connector included.*