

# HIGH-ACCURACY ELECTRONIC BAROMETER

## STANDARD AND METRIC MODELS

**0 to 5 Vdc or 4 to 20 mA Output**  
**3 Ranges Available**  
**16 to 32 inHg – 542 to 1084 hPa**  
**26 to 32 inHg – 880 to 1084 hPa**  
**28 to 32 inHg – 948 to 1084 hPa**

### PX02/PXM02 Series



- ✓ High Accuracy
- ✓ Broad Compensated Temperature Range  
-18 to 66°C (0 to 150°F)
- ✓ All Stainless Steel Construction
- ✓ Hermetically Sealed for Harsh Environments
- ✓ Cable or Connector Models
- ✓ Mounting Bracket Option
- ✓ Optional Pressure Ports to Fit Most Industrial Applications

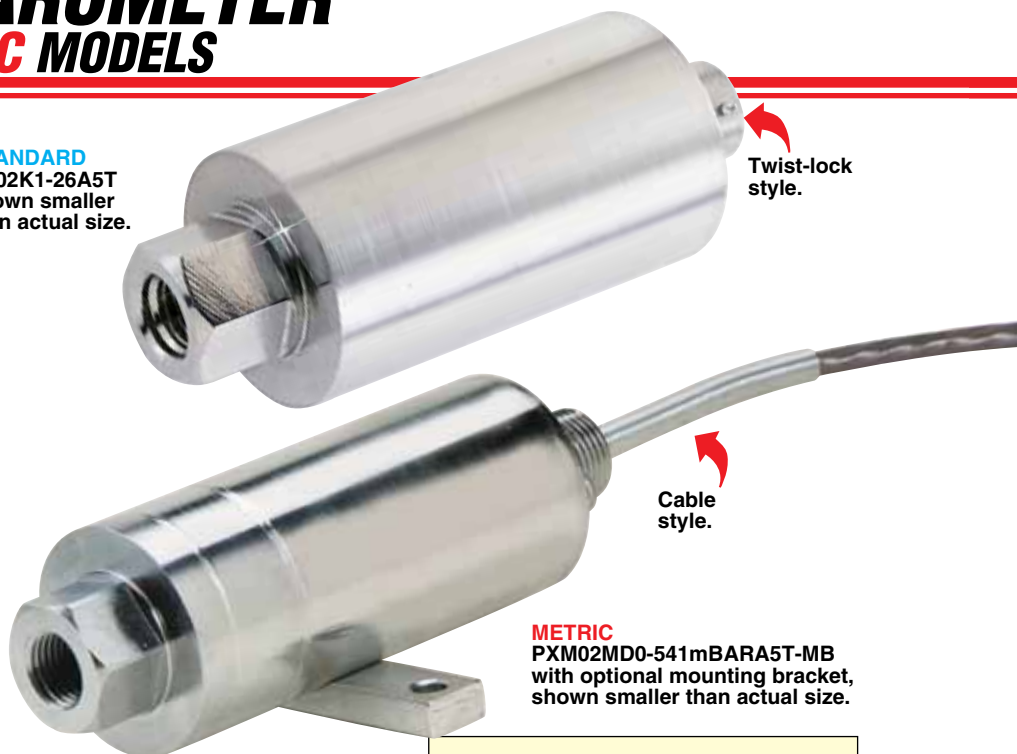
OMEGA's PX02 electronic barometer is a high-accuracy electronic barometer available in three ranges: 16 to 32 inHg, 26 to 32 inHg, or 28 to 32 inHg (absolute pressure) for laboratory or industrial test applications.

### SPECIFICATIONS

**0 to 5 V Model**  
**Input, Recommended:** 24 to 32 Vdc  
**Input, Maximum:** 32 Vdc  
**Output, FS:** 0 to 5 Vdc  
**Linearity:** ±0.15% FS  
**Hysteresis:** ±0.1% FS  
**Repeatability:** ±0.05% FS  
**Zero Balance:** 0 ±10% FS, adjustable  
**Thermal Effects:**  
**Span:** 0.005% rdg/°F (0.009%/°C)  
**Zero:** 0.005% FS/°F (0.009%/°C)

**4 to 20 mA Model**  
**Input, Recommended:** 10 to 40 Vdc

**STANDARD**  
 PX02K1-26A5T  
 shown smaller  
 than actual size.



Twist-lock style.

Cable style.

**METRIC**  
 PXM02MD0-541mBARA5T-MB  
 with optional mounting bracket,  
 shown smaller than actual size.

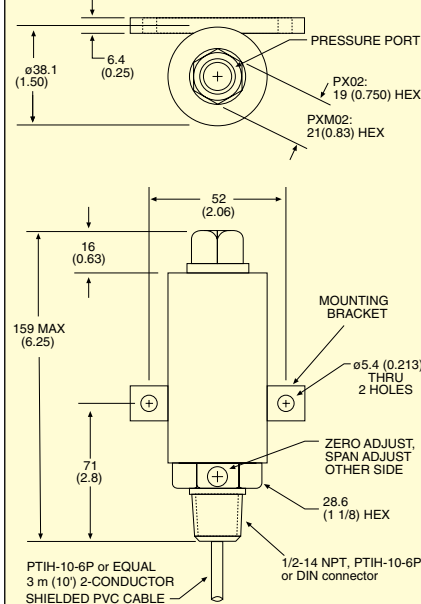
Available with  
 Optional Mounting  
 Bracket

**Input, Maximum:** 40 Vdc  
**Output, FS:** 4 to 20 mA  
**Accuracy:** 0.25% FS, linearity, hysteresis and repeatability combined  
**Zero Balance:** 4 mA +10% -2% FS adj  
**Thermal Effects:**  
**Span:** 0.005% rdg/°F (0.009%/°C)  
**Zero:** 0.005% FS/°F (0.009%/°C)

### COMMON SPECIFICATIONS

**Operating Temp Range:** -47 to 121°C (-50 to 250°F)  
**Compensated Temp Range:** -18 to 66°C (0 to 150°F)  
**Proof Pressure:** 150% of rated pressure  
**Burst Pressure:** 300% of rated pressure  
**Wetted Parts:** 17-4 PH stainless steel  
**Pressure Port:** See Custom Configurations  
**Electrical Connection:** PTIH-10-6P or equal; 3 m (10') cable: DIN connector  
**Mating Connector (Style 1):** PT06F10-6S (sold separately)  
**Weight:** 425 g (15 oz)

PX02/PXM02 Barometer with Mounting Bracket

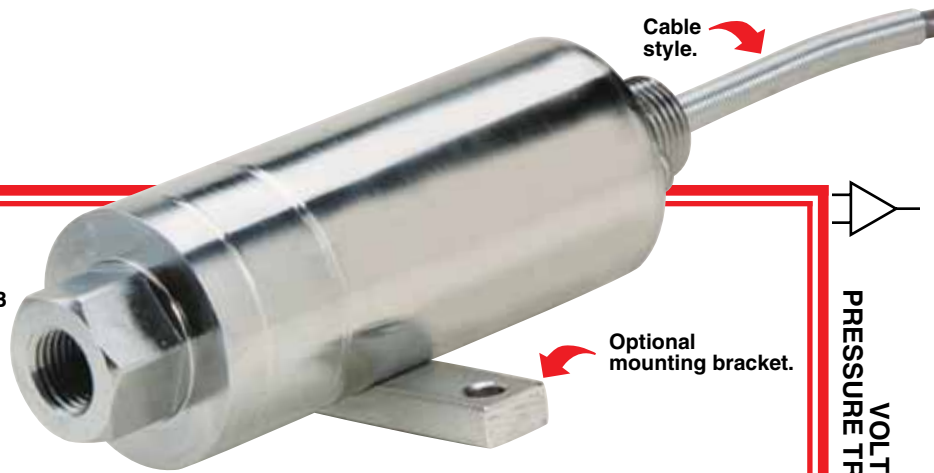


**Dimensions: mm (inch)**  
 ø = diameter

### WIRING

DIN	Voltage	DIN	Current
2	A +Sig Green	1	A +Red
3	B -Sig White	2	B -Black
GND	C -Exc Black		
1	D +Exc Red		
	E Shunt		
	F Shunt		

# ELECTRONIC BAROMETER



PXM02MD0-541mBARA5T-MB cable style, with optional mounting bracket, shown actual size.

Optional mounting bracket.

VOLTAGE OUTPUT  
PRESSURE TRANSDUCERS  
**B**

## STANDARD CUSTOM CONFIGURATIONS

SERIES PX02 Barometer	PRESSURE PORT [ 1 ]	ELECTRICAL CONNECTION [ 2 ]	RANGE (inHg) [ 3 ]	UNITS [ 4 ]	OUTPUT [ 5 ]	OPTIONS [ 6 ]
C = 1/4-18 NPT-M D = 1/4-18 NPT-F J = 7/16-20 UNF-M K = 7/16-20 UNF-F			16 to 32 inHg 26 to 32 inHg 28 to 32 inHg	A A A	5T = 0 to 5 Vdc output I = 4 to 20 mA output	OX = Cleaned for oxygen service OL = Overload stops ( )M = Optional cable length in meters -MB = Mounting bracket + additional cost
<p>0 = 3 m (10') cable (std) + add cost/ft over 3 m (10')</p> <p>1 = PTIH-10-6P connector (or equal) Mating connector (sold separately), order <b>PT06F10-6S</b>.</p> <p>5 = Lightning-protected amplifier box (4 to 20 mA models only)</p> <p>6 = mini DIN connector</p>						
<p><b>To order a custom configuration:</b></p> <ol style="list-style-type: none"> <li>1. Select a pressure port</li> <li>2. Select electrical connection</li> <li>3. Select a pressure range</li> <li>4. Select pressure units</li> <li>5. Select output</li> <li>6. Select options</li> </ol>						

**Ordering Examples:** PX02K1-26AI-MB, 26 to 32 inHg calibrated electronic barometer with 7/16-20 UNF internal connection, 4 to 20 mA output, twist connector and optional mounting bracket. PT06F10-6S, mating connector (sold separately).

PX02 K1-28A5T-MB, 28 to 32 inHg calibrated electronic barometer with 7/16-20 UNF internal connection, 0 to 5 Vdc output and twist connector. PT06F10-6S, mating connector (sold separately).

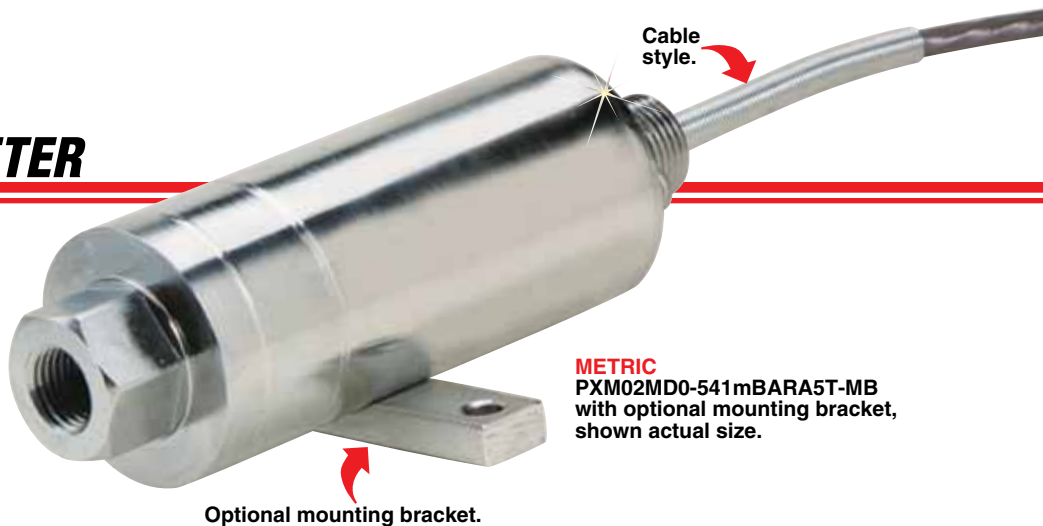
## METRIC CUSTOM CONFIGURATIONS

SERIES PXM02 Barometer	PRESSURE PORT [ 1 ]	ELECTRICAL CONNECTION [ 2 ]	RANGE (hPa) [ 3 ]	UNITS [ 4 ]	OUTPUT [ 5 ]	OPTIONS [ 6 ]
MA = G1/8 Male MB = G1/8 Female MC = G1/4 Male MD = G1/4 Female			542 to 1084 hPa 880 to 1084 hPa 948 to 1084 hPa	A A A	5T = 0 to 5 Vdc output I = 4 to 20 mA output	OX = Cleaned for oxygen service OL = Overload stops ( )m = optional cable length in meters -MB = Mounting bracket + additional cost
<p>0 = 3 m (10') cable (std) + add cost/m over 3 m (10')</p> <p>1 = PTIH-10-6P connector (or equal) Mating connector (sold separately), order <b>PT06F10-6S</b></p> <p>5 = Lightning-protected amplifier box (4 to 20 mA models only)</p> <p>6 = mini DIN connector</p>						
<p><b>To order a custom configuration:</b></p> <ol style="list-style-type: none"> <li>1. Select a pressure port</li> <li>2. Select electrical connection</li> <li>3. Select a pressure range</li> <li>4. Select pressure units</li> <li>5. Select output</li> <li>6. Select options</li> </ol>						

**Ordering Examples:** PXM02MD1-880MBARAI-MB, 880 to 1084 hPa calibrated electronic barometer with G1/4 female pressure port, 4 to 20 mA output, twist-lock connector and optional mounting bracket. PT06F10-6S, mating connector (sold separately).

PXM02MCO-948A5T-MB, 948 to 1084 hPa calibrated electronic barometer with G1/4 male pressure port, 0 to 5 Vdc output and 3 m (10') cable.

# ELECTRONIC BAROMETER



**METRIC**  
PXM02MD0-541mBARA5T-MB  
with optional mounting bracket,  
shown actual size.

## STANDARD MODELS

To Order				
MODELS WITH 1/16-20 UNF INTERNAL CONNECTION AND TWIST-LOCK CONNECTOR				
RANGE			BAROMETER MODEL NO.	COMPATIBLE METERS*
inHg	hPa	mmHg		
<b>0 TO 5 V OUTPUT</b>				
16 to 32	542 to 1084	406 to 813	PX02K1-16A5T	DP41-E, DP25B-E, DP24-E
26 to 32	880 to 1084	660 to 813	PX02K1-26A5T	DP41-E, DP25B-E, DP24-E
28 to 32	948 to 1084	711 to 813	PX02K1-28A5T	DP41-E, DP25B-E, DP24-E
<b>4 TO 20 mA OUTPUT</b>				
16 to 32	542 to 1084	406 to 813	PX02K1-16AI	DP41-E, DP25B-E, DP24-E
26 to 32	880 to 1084	660 to 813	PX02K1-26AI	DP41-E, DP25B-E, DP24-E
28 to 32	948 to 1084	711 to 813	PX02K1-28AI	DP41-E, DP25B-E, DP24-E

Comes complete with 5-point NIST-traceable calibration.

\* Visit [omega.com](http://omega.com) for compatible meters.

**Ordering Examples:** PX02K1-26AI, 26 to 32 inHg calibrated electronic barometer with 1/16-20 UNF internal connection, 4 to 20 mA output, PTIH-10-6P connector. PT06F10-6S, mating connector (sold separately).

PX02K1-28A5T-MB, 28 to 32 inHg calibrated electronic barometer with 1/16-20 UNF internal connection, 0 to 5 Vdc output, PTIH-10-6P connector and optional mounting bracket. PT06F10-6S, mating connector (sold separately).

## METRIC MODELS

MODELS WITH G 1/4 INTERNAL CONNECTION WITH CABLE OR CONNECTOR AND 5 V OUTPUT				
RANGE			BAROMETER MODEL NO.	COMPATIBLE METERS*
hPa	mmHg			
<b>0 TO 5 V OUTPUT</b>				
541-1084	406-813		PXM02MD0-541mBARA5T	DP41-E, DP25B-E, DP24-E
880-1084	660-813		PXM02MD0-880mBARA5T	DP41-E, DP25B-E, DP24-E
948-1084	711-813		PXM02MD0-948mBARA5T	DP41-E, DP25B-E, DP24-E
<b>4 TO 20 mA OUTPUT</b>				
541-1084	406-813		PXM02MD0-541mBARAI	DP41-E, DP25B-E, DP24-E
880-1084	660-813		PXM02MD0-880mBARAI	DP41-E, DP25B-E, DP24-E
948-1084	711-813		PXM02MD0-948mBARAI	DP41-E, DP25B-E, DP24-E

Comes complete with 5-point NIST-traceable calibration.

\* Visit [omega.com](http://omega.com) for compatible meters.

To order different process connections, see custom configurations below.

**Ordering Examples:** PXM02MD0-541mBARAI-MB, 541 to 1084 hPa calibrated electronic barometer with G1/4 internal thread, 4 to 20 mA output, 3 m (10') cable and the optional mounting bracket.

PXM02MD6-880mBARA5T-MB, 880 to 1084 hPa calibrated electronic barometer with G1/4 internal connection, 0 to 5 Vdc output, mini-DIN connector and the optional mounting bracket. PT06F10-6S, mating connector (sold separately).

## OPTION

ORDER SUFFIX	DESCRIPTION
-MB	Mounting Bracket

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