



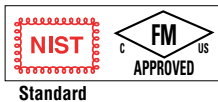
INTRINSICALLY SAFE PRESSURE TRANSMITTERS FOR HAZARDOUS LOCATIONS

STANDARD AND METRIC MODELS

Unique Dual 1/2 and 1/4 NPT Fitting
4 to 20 mA Output
0-10 to 0-30,000 psi-Standard Models
0-0.7 to 0-2000 bar-Metric Models

1 bar = 14.5 psi
 1 kg/cm² = 14.22 psi
 1 atmosphere = 14.7 psi = 29.93 inHg = 760.2 mmHg = 1.014 bar

PX51/PXM51-IS Series



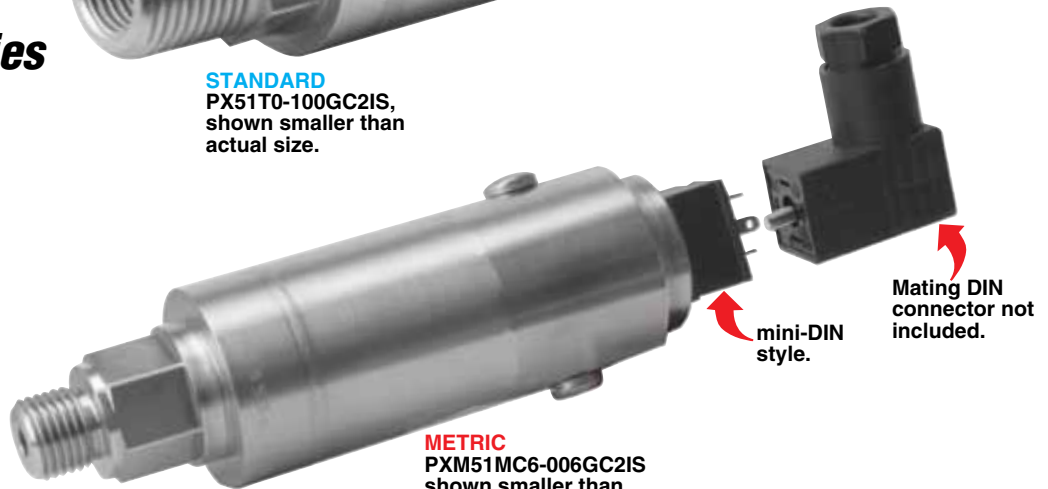
- ✓ FM Intrinsically Safe Rating Standard
- ✓ Rugged Thick Film Sensing Element
- ✓ All Stainless Steel Construction
- ✓ Sealed SS Case for Harsh Environments

OMEGA's PX51 Series consists of high-accuracy, low-cost pressure transmitters. Their sealed, all stainless steel construction makes them suitable for the harshest environments. They are available in gage, absolute, or sealed gage models. Ten feet of PVC insulated shielded cable is standard, or a twist-lock style connector is also available. A wide selection of amplified voltage and current outputs makes the PX51 a truly versatile family of industrial transmitters.



Cable style.

STANDARD
 PX51T0-100GC2IS,
 shown smaller than
 actual size.



mini-DIN style.

Mating DIN connector not included.

METRIC
 PXM51MC6-006GC2IS
 shown smaller than
 actual size.

Please Note:
 Not for export,
 USA and Canada only

SPECIFICATIONS

4 to 20 mA Output

Excitation Voltage: 10 to 28 Vdc, Output 4 to 20 mA

Accuracy (Combined Linearity, Hysteresis and Repeatability): ±0.25% FS

Minimum Resistance between Transducer Body and Any Wire: 100 MΩ @ 50 Vdc

With Potentiometers Zero and Span Adjustable: ±10% FS

Without Potentiometers Zero and Span Set: ±0.5% typical, ±1% max

Compensated Temperature Range: 16 to 71°C (60 to 160°F)

Zero Shift: 0.005%FS/°F

Span Shift: 0.003% Reading/°F

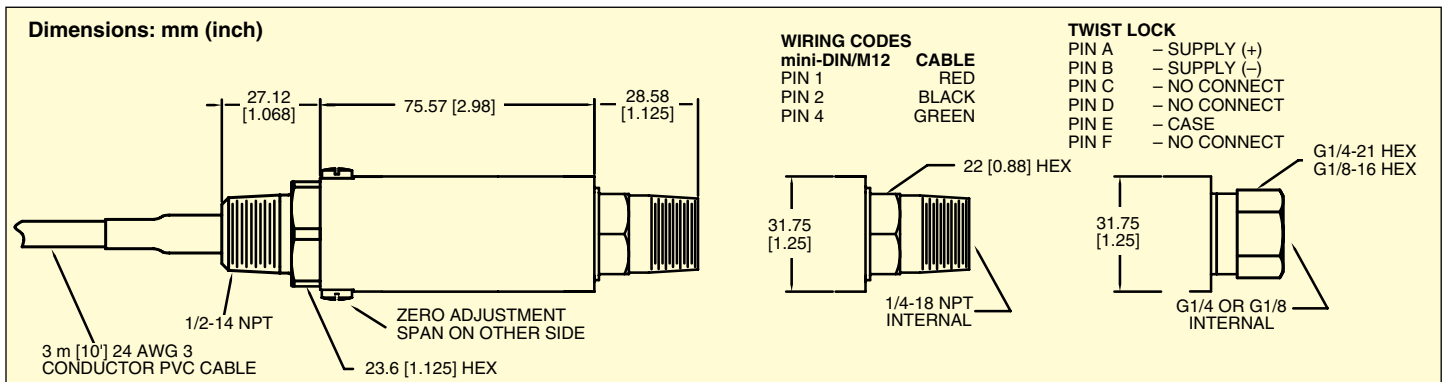
Operating Temperature: -40 to 75°C (-40 to 167°F) per Approval Spec

Wetted Material: 17-4 Stainless Steel
EMC Compliant: Up to 30 m (98.4') of cable

EN 61326-1:2006

EN 61326-2-3:2006 Industrial levels

Electrical Connection: PT06F10-6S (sold separately)



AGENCY APPROVALS

TYPE	AGENCY	APPROVAL LISTINGS
Intrinsically Safe (US and Canada)	FM	Hazardous (Classified) Location, Rated Intrinsically Safe, Securite Intrinsique Class I, II, III, Division 1 Gr A, B, C, D, E, F, G Class I, Zone 0 Aex ia IIc (US), Class I, Zone 0 Ex ia IIC (Canada), T4, Ta = -40 to 75°C
Non-Incendive	FM	FM Hazardous (Classified) Location, Rated Non-Incendive Class I Division 2 Groups A, B, C, D (US and Canada) T4, Ta = -40 to 75°C, Conduit electrical connections only

NOTE: Please refer to www.omega.com/approvals/ for downloadable copies of FM Approvals Certificate of Compliance and installation control drawings.

ELECTRICAL TERMINATION STYLES (For both standard and metric)

Code

0



3 m (10') cable (standard) with 1/2 NPT conduit

1



PTIH-10-6P twist-lock connector

5



M12 connector

Code

6



mini-DIN connector

GW



Submersible waterproof cable with 1/2 NPT conduit



HEAVY-DUTY INDUSTRIAL TRANSMITTER

STANDARD CUSTOM CONFIGURATIONS

PX51 SERIES	PRESSURE PORT [1]	ELECTRICAL CONNECTION* [2] —	RANGE (psi) [3]	UNITS [4]	OUTPUT [5]	APPROVALS [6]	OPTIONS [7]
C = 1/4-18 NPT-M			010	A,G,SG	C2= 4 to 20 mA output	(No Suffix) = Potentiometers Standard	NP = No Potentiometers
D = 1/4-18 NPT-F			015	A,G,SG			
T = Dual 1/2-14 NPT external			025	A,G,SG			
1/4-18 NPT internal			030	A,G,SG			
K = 7/16-20 UNF-F			050	A,G,SG			
J = 7/16-20 UNF-M			075	A,G,SG			
S = 1/4 HP Tube Fitting (≥10,000 psi ranges)			100	A,G,SG			
			200	A,G,SG			
			300	A,G,SG			
			500	A,G,SG			
0 = 3 m (10') pigtail with 1/2 NPT conduit			750	A,G,SG			
1 = PTIH-10-6P twist-lock connector			1K	A,G,SG			
			1.5K	A,G,SG			
5 = M12 connector			2K	A,G,SG			
6 = mini-DIN connector (mating DIN connector not included)			2.5K	A,G,SG			
GW = Submersible waterproof cable with 1/2 NPT conduit			3K	A,G,SG			
			3.5K	A,G,SG			
			5K	A,G,SG			
			7.5K	A,G,SG			
			10K†	A,G,SG			
			15K†	A,G,SG			
			20K†	A,G,SG			
			30K†	A,G,SG			

IS= Intrinsically Safe
IS FM Approval

† = Supplied with type "S" pressure port; 1/4" HP tube fitting.

To order a custom configuration:

1. Select a pressure port
2. Select electrical connection
3. Select a pressure range
4. Select pressure units - Absolute, Gage or Sealed Gage
5. Select output
6. Select approvals
7. Select options

* Any cable or connector must meet the requirements of the environment where it is being installed. The safety engineer should specify the cables and connectors.

Ordering Examples: **PX51T1-100GC2IS**, 100 psi gage pressure transmitter with dual 1/2-14 NPT external 1/4-18 NPT internal and **PTIH-10-6P** connector, 4 to 20 mA output and FM Approval for Hazardous Locations. **PT06F10-6S**, mating connector (sold separately). **PX51T0-1KSGC2IS**, 1000 psi sealed pressure transmitter with dual 1/2-14 NPT external 1/4-18 NPT internal and 3 m (10') cable, 4 to 20 mA output and FM Approval for Hazardous Locations.

METRIC CUSTOM CONFIGURATIONS

PXM51 SERIES	PRESSURE PORT [1]	ELECTRICAL CONNECTION* [2] —	RANGE (BAR) [3]	UNITS [4]	OUTPUT [5]	APPROVALS [6]	OPTIONS [7]
MA = G1/8B Male			0.7	A,G,SG	C2= 4 to 20 mA output	(No Suffix) = Potentiometers Standard	NP = No Potentiometers
MB = G1/8B Female			001	A,G,SG			
MC = G1/8B Male			1.60	A,G,SG			
MD = G1/8B Female			2.50	A,G,SG			
			004	A,G,SG			
0 = 3 m (10') cable (std) with 1/2 NPT conduit			006	A,G,SG			
1 = PTIH-10-6P twist-lock connector			010	A,G,SG			
			016	A,G,SG			
5 = M12 connector			025	A,G,SG			
6 = mini-DIN connector (mating DIN connector not included)			040	A,G,SG			
GW = Submersible waterproof cable with 1/2 NPT conduit			060	A,G,SG			
			100	A,G,SG			
			160	A,G,SG			
			250	A,G,SG			
			400	A,G,SG			

IS= Intrinsically Safe
IS FM Approval

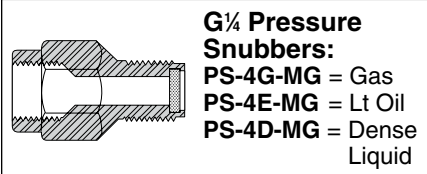
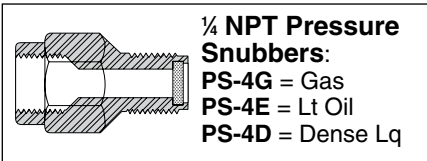
To order a custom configuration:

1. Select a pressure port
2. Select electrical connection
3. Select a pressure range
4. Select pressure units - Absolute, Gage or Sealed Gage
5. Select output
6. Select approvals
7. Select options

* Any cable or connector must meet the requirements of the environment where it is being installed. The safety engineer should specify the cables and connectors.

Ordering Examples: **PXM51MB0-010SGC2IS**, 10 bar sealed gage pressure transmitter with G1/8B Female pressure port and 3 m (10') cable, 4 to 20 mA output and FM Approval for Hazardous Locations. **PXM51MD1-010AC2IS**, 10 bar absolute pressure transducer with G1/8B Female pressure port and **PTIH-10-6P** connector, 4 to 20 mA output and FM Approval for Hazardous Locations.

STANDARD MODELS



To Order

RANGE		MODEL NO.	COMPATIBLE METERS
ABSOLUTE PRESSURE (All Ranges Available in Absolute Pressure)			
0 to 15 psi	0 to 1.0 bar	PX51T[*]-015AC2IS	DP41-E, DP25B-E, DP24-E
0 to 25 psi	0 to 1.4 bar	PX51T[*]-025AC2IS	DP41-E, DP25B-E, DP24-E
0 to 30 psi	0 to 2.1 bar	PX51T[*]-030AC2IS	DP41-E, DP25B-E, DP24-E
0 to 50 psi	0 to 3.4 bar	PX51T[*]-050AC2IS	DP41-E, DP25B-E, DP24-E
GAGE PRESSURE (All Ranges Also Available in Sealed Gage Pressure)			
0 to 10 psi	0 to 0.69 bar	PX51T[*]-010GC2IS	DP41-E, DP25B-E, DP24-E
0 to 15 psi	0 to 1.0 bar	PX51T[*]-015GC2IS	DP41-E, DP25B-E, DP24-E
0 to 20 psi	0 to 1.4 bar	PX51T[*]-020GC2IS	DP41-E, DP25B-E, DP24-E
0 to 30 psi	0 to 2.1 bar	PX51T[*]-030GC2IS	DP41-E, DP25B-E, DP24-E
0 to 50 psi	0 to 3.4 bar	PX51T[*]-050GC2IS	DP41-E, DP25B-E, DP24-E
0 to 75 psi	0 to 5.2 bar	PX51T[*]-075GC2IS	DP41-E, DP25B-E, DP24-E
0 to 100 psi	0 to 6.9 bar	PX51T[*]-100GC2IS	DP41-E, DP25B-E, DP24-E
0 to 200 psi	0 to 13.8 bar	PX51T[*]-200GC2IS	DP41-E, DP25B-E, DP24-E
0 to 300 psi	0 to 20.7 bar	PX51T[*]-300GC2IS	DP41-E, DP25B-E, DP24-E
0 to 500 psi	0 to 34.5 bar	PX51T[*]-500GC2IS	DP41-E, DP25B-E, DP24-E
0 to 750 psi	0 to 51.7 bar	PX51T[*]-750GC2IS	DP41-E, DP25B-E, DP24-E
0 to 1000 psi	0 to 68.9 bar	PX51T[*]-1KGC2IS	DP41-E, DP25B-E, DP24-E
0 to 1500 psi	0 to 103 bar	PX51T[*]-1.5KGC2IS	DP41-E, DP25B-E, DP24-E
0 to 2000 psi	0 to 138 bar	PX51T[*]-2KGC2IS	DP41-E, DP25B-E, DP24-E
0 to 3500 psi	0 to 241 bar	PX51T[*]-3.5KGC2IS	DP41-E, DP25B-E, DP24-E
0 to 5000 psi	0 to 345 bar	PX51T[*]-5KGC2IS	DP41-E, DP25B-E, DP24-E
0 to 7500 psi	0 to 517 bar	PX51T[*]-7.5KGC2IS	DP41-E, DP25B-E, DP24-E
0 to 10,000 psi	0 to 689 bar	PX51S[*]-10KGC2IS	DP41-E, DP25B-E†, DP24-E†
0 to 15,000 psi	0 to 1034 bar	PX51S[*]-15KGC2IS	DP41-E, DP25B-E†, DP24-E†
0 to 20,000 psi	0 to 1379 bar	PX51S[*]-20KGC2IS	DP41-E, DP25B-E†, DP24-E†
0 to 30,000 psi	0 to 2068 bar	PX51S[*]-30KGC2IS	DP41-E, DP25B-E†, DP24-E†

All models come complete with 5-point NIST traceable calibration.

[*] = Insert "0" for 3 m (10') cable, "1" for twist-lock connector, "5" for M12 connector, "6" for mini-DIN connector (mating DIN connector not included), or "GW" for submersible waterproof cable.

Note: To order Standard configurations including Potentiometers, no suffix required. For "No Potentiometers", add "NP" suffix.

† 4-digit meter, counts in increments of 10.

Ordering Examples: PX51S0-010GC2IS, 10 psi gage transmitter with 3 m (10') cable. PX51T0-5KGC2IS, 5000 psi gage pressure transmitter with 3 m (10') cable.



CURRENT OUTPUT PRESSURE TRANSDUCERS

METRIC MODELS

To Order

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

RANGE		MODEL NO.	COMPATIBLE METERS
GAGE PRESSURE			
0 to 0.7 bar	0 to 10 psi	PXM51MC[*]-0.7GC2IS	iSeries, DP41-E, DP25B-E
0 to 1 bar	0 to 15 psi	PXM51MC[*]-001GC2IS	iSeries, DP41-E, DP25B-E
0 to 1.60 bar	0 to 23 psi	PXM51MC[*]-1.60GC2IS	iSeries, DP41-E, DP25B-E
0 to 2.50 bar	0 to 36 psi	PXM51MC[*]-2.50GC2IS	iSeries, DP41-E, DP25B-E
0 to 4 bar	0 to 58 psi	PXM51MC[*]-004GC2IS	iSeries, DP41-E, DP25B-E
0 to 6 bar	0 to 87 psi	PXM51MC[*]-006GC2IS	iSeries, DP41-E, DP25B-E
0 to 10 bar	0 to 145 psi	PXM51MC[*]-010GC2IS	iSeries, DP41-E, DP25B-E
0 to 16 bar	0 to 232 psi	PXM51MC[*]-016GC2IS	iSeries, DP41-E, DP25B-E
0 to 25 bar	0 to 363 psi	PXM51MC[*]-025GC2IS	iSeries, DP41-E, DP25B-E
0 to 40 bar	0 to 580 psi	PXM51MC[*]-040GC2IS	iSeries, DP41-E, DP25B-E
0 to 60 bar	0 to 870 psi	PXM51MC[*]-060GC2IS	iSeries, DP41-E, DP25B-E
0 to 100 bar	0 to 1450 psi	PXM51MC[*]-100GC2IS	iSeries, DP41-E, DP25B-E
0 to 160 bar	0 to 2321 psi	PXM51MC[*]-160GC2IS	iSeries, DP41-E, DP25B-E
0 to 250 bar	0 to 3626 psi	PXM51MC[*]-250GC2IS	iSeries, DP41-E, DP25B-E
0 to 400 bar	0 to 5802 psi	PXM51MC[*]-400GC2IS	iSeries, DP41-E, DP25B-E

All models come complete with 5-point NIST traceable calibration. Pressure port for all metric models is G1/4B male.

[*] = Insert "0" for 3 m (10') cable, "1" for twist-lock connector, "5" for M12 connector, "6" for mini-DIN connector (mating DIN connector not included), or "GW" for submersible waterproof cable.

To order sealed gage pressure models, replace "G" in model number with "SG" (no extra charge).

To order absolute pressure models, replace "G" in model number with "A" (no extra charge).

Note: To order Metric configurations including Potentiometers, no suffix required. For "No Potentiometers", add "NP" suffix.

Ordering Examples: PXM51MC6-25GC2IS, 25 bar gage pressure transducer with G 1/4 male thread, mini-DIN connector and 4 to 20 mA output. PXM51MDO-1.60AC2IS, 1.6 bar absolute pressure transducer with G 1/4 internal thread, 3 m (10') cable and 4 to 20 mA output.