

HEAVY-DUTY INDUSTRIAL TRANSMITTER

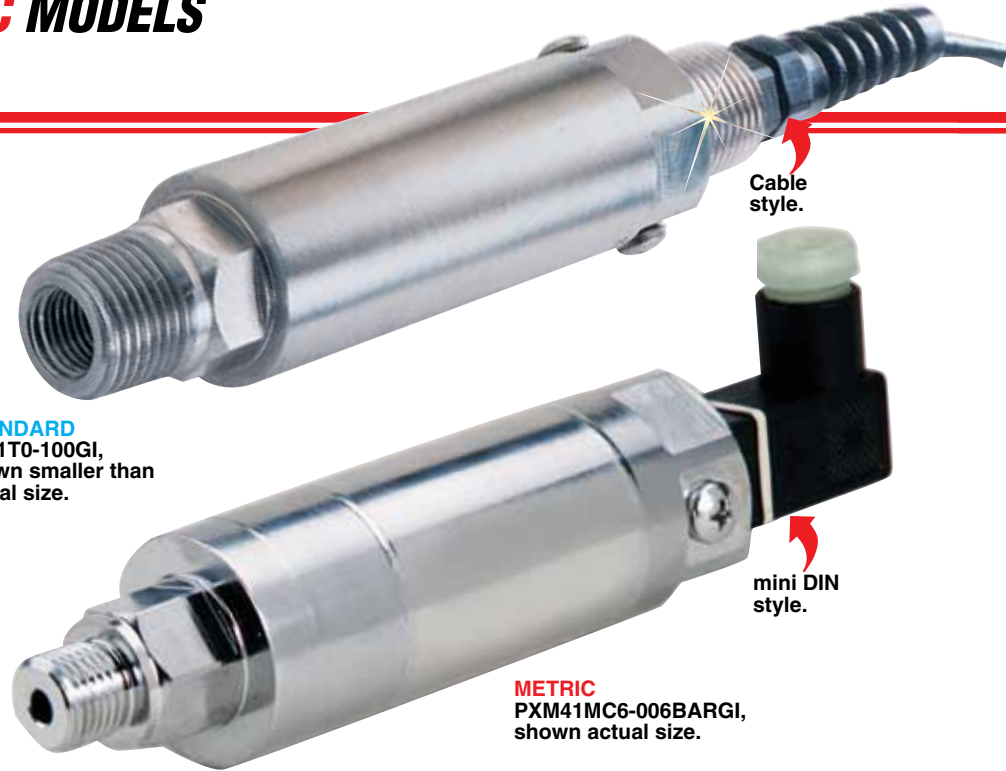
STANDARD AND METRIC MODELS

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

STANDARD
 PX41T0-100GI,
 shown smaller than
 actual size.

METRIC
 PXM41MC6-006BARGI,
 shown actual size.



PX41/PXM41 Series



- ✓ FM Approved for Hazardous Locations Optional on Select Models
- ✓ MSHA Approved Version Available
- ✓ All Stainless Steel Construction
- ✓ Sealed SS Case for Harsh Environments

OMEGA's PX41/PXM41 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 6 pin connector is also available. A wide selection of amplified voltage and current outputs makes the PX41/PXM41 a truly versatile family of industrial transmitters.

SPECIFICATIONS

4 to 20 mA Output

Excitation: 10 to 40 Vdc
Output: 4 to 20 mA (±10% adj)
Zero Balance: 4 mA +10% -2% adj

Agency Approvals:
 Must be specified at time of order

FM Hazardous Location:
 S/I/1/ABCD optional. Available on absolute pressure and sealed gage units with cable termination. Must be specified at time of order.

MSHA: Mine Safety and Health Administration—optional. Must be specified at time of order.

Accuracy: 0.25% linearity, hysteresis and repeatability combined

Sensing Element: 4-active-arm bridge with hermetically sealed thick-film strain gages

Operating Temp Range: -47 to 121°C (-50 to 250°F)

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

Thermal Effects:
Span: 0.003% rdg/°F
Zero: 0.005% FSO/F

Proof Pressure: 150% of rated pressure

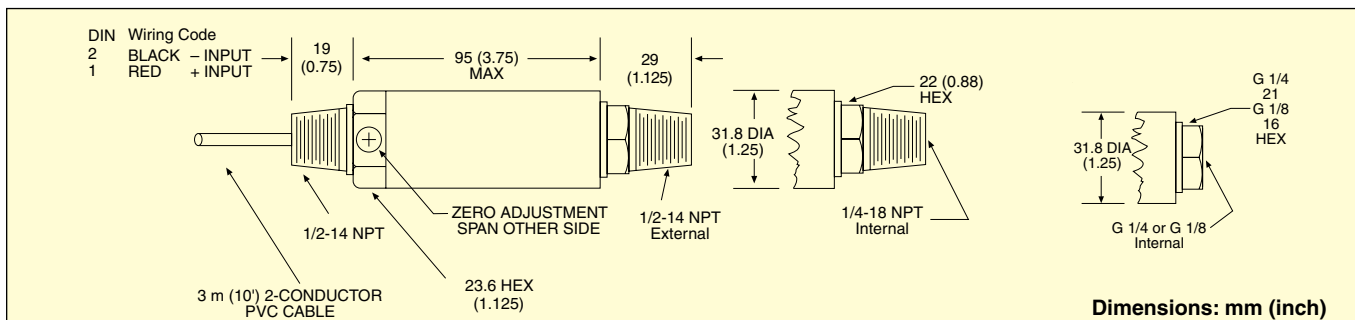
Burst Pressure: 300% of rated pressure

Wetted Parts: 17-4 PH and 316 SS

Pressure Port: <10,000 psi 1/2-14 NPT external and 1/4-18 NPT internal
 10,000 F250C autoclave 3/16-18 thread

Electrical Connection: Shown: 3 m (10'), 2-conductor, PVC insulated cable. Also available: PTIH-10-6P connector. Mating connector (sold separately) PT06F10-6S

Units with FM option do not have external zero or span.



HEAVY-DUTY INDUSTRIAL TRANSMITTER



CURRENT OUTPUT PRESSURE TRANSDUCERS
B

STANDARD CUSTOM CONFIGURATIONS

| PX41 SERIES | PRESSURE PORT [1] | ELECTRICAL CONNECTION [2] | RANGE (psi) [3] | UNITS [4] | OUTPUT [5] | OPTIONS [6] |
|--|------------------------|--------------------------------|----------------------|----------------|---|---|
| C = 1/4-18 NPT-M | | | 010 | A,G,S | 5T = 0 to 5 Vdc output 10V = 0.5 to 10.5 Vdc output 10T = 0 to 10 Vdc output I = 4 to 20 mA output | FM FM Hazardous Location 4 to 20 mA output "S" or "A" pres. only; no zero or span adjustments MSHA Mine Safety and Health Admin. 0.5 to 5.5 V or 4 to 20 mA output. OX Cleaned for Oxygen use ()ft = Optional cable length in feet |
| D = 1/4-18 NPT-F, no charge | | | 015 | A,G,S | | |
| T = Dual 1/2-14 NPT external | | | 020 | A,G,S | | |
| 1/4-18 NPT internal | | | 025 | A,G,S | | |
| K = 7/16-20 UNF-F | | | 030 | A,G,S | | |
| J = 7/16-20 UNF-M | | | 050 | A,G,S | | |
| S = 1/4 HP Tube Fitting (≥10,000 psi ranges) | | | 075 | A,G,S | | |
| | | | 100 | A,G,S | | |
| | | | 200 | A,G,S | | |
| | | | 300 | A,G,S | | |
| 0 = 3 m (10') pigtail | | | 500 | A,G,S | | |
| 1 = PTIH-10-6P connector (or equal, no charge) (not FM approved). Mating connector (sold separately), order PT06F10-6S . | | | 750 | A,G,S | | |
| | | | 1K | A,G,S | | |
| 5 = Lightning-protected amplifier housing (4 to 20 mA model only) | | | 1.5K | A,G,S | | |
| 6 = mini DIN connector | | | 2K | A,G,S | | |
| | | | 2.5K | A,G,S | | |
| | | | 3K | A,G,S | | |
| | | | 3.5K | A,G,S | | |
| | | | 5K | A,G,S | | |
| | | | 7.5K | A,G,S | | |
| | | | 10K [†] | A,G,S | | |
| | | | 15K [†] | A,G,S | | |
| Visit us online for additional options, including extended compensated temperatures. | | | 20K [†] | A,G,S | | |
| | | | 30K [†] | A,G,S | | |

[†] = Supplied with 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 options and agency approvals

Ordering Examples: **PX41T1-100GI**, 100 psi gage pressure transmitter with PTIH-10-6P connector, and 4 to 20 mA output. **PT06F10-6S**, mating connector (sold separately). **PX41T0-1KSI-FM**, 1000 psi sealed gage pressure transmitter with 3 m (10') cable, 4 to 20 mA output and FM Approval for Hazardous Locations.

METRIC CUSTOM CONFIGURATIONS

| PXM41 SERIES | PRESSURE PORT [1] | ELECTRICAL CONNECTION [2] | RANGE (BAR) [3] | UNITS [4] | OUTPUT [5] | OPTIONS [6] |
|---|------------------------|--------------------------------|----------------------|----------------|--|--|
| MA = G3/8 Male | | | 1.0 | A, G, S | PXM41 ≥2.5 bar <2.5 bar I = 4 to 20 mA | MSHA = Mine Safety and Health Admin OX = Cleaned for oxygen use ()m = Optional cable length in meters |
| MB = G3/8 Female | | | 1.6 | A, G, S | | |
| MC = G1/2 Male | | | 2.5 | A, G, S | | |
| MD = G1/2 Female | | | 4.0 | A, G, S | | |
| | | | 6.0 | A, G, S | | |
| | | | 10 | A, G, S | | |
| 0 = 3 m (10') cable (std) | | | 16 | A, G, S | | |
| 1 = PTIH-10-6P connector (or equal, no charge) | | | 25 | A, G, S | | |
| | | | 40 | A, G, S | | |
| 6 = mini DIN connector | | | 60 | A, G, S | | |
| | | | 100 | A, G, S | | |
| | | | 160 | A, G, S | | |
| | | | 250 | A, G, S | | |
| | | | 400 | A, G, S | | |

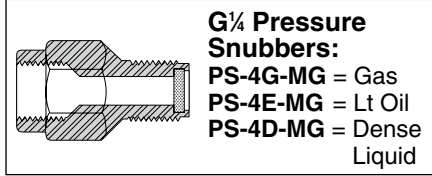
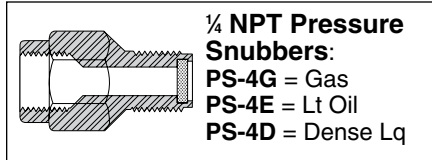
Visit us online for additional options, including extended compensated temperatures.

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 options and agency approvals

Ordering Examples: **PXM41MB0-010BARSI**, 10 bar sealed gage pressure transmitter with G3/8 female connection and 3 m (10') cable termination. **PXM41MD1-010BARAI**, 10 bar absolute pressure transducer with G3/8 female connection and twist-lock 6 pin connector. **PTS06A-10-6S**, mating connector (sold separately).

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 | PX41T[*]-015AI | DP41-E, DP25B-E, DP24-E |
| 0 to 20 psi | 0 to 1.4 bar | PX41T[*]-020AI | DP41-E, DP25B-E, DP24-E |
| 0 to 30 psi | 0 to 2.1 bar | PX41T[*]-030AI | DP41-E, DP25B-E, DP24-E |
| 0 to 50 psi | 0 to 3.4 bar | PX41T[*]-050AI | 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 | PX41T[*]-010GI | DP41-E, DP25B-E, DP24-E |
| 0 to 15 psi | 0 to 1.0 bar | PX41T[*]-015GI | DP41-E, DP25B-E, DP24-E |
| 0 to 20 psi | 0 to 1.4 bar | PX41T[*]-020GI | DP41-E, DP25B-E, DP24-E |
| 0 to 30 psi | 0 to 2.1 bar | PX41T[*]-030GI | DP41-E, DP25B-E, DP24-E |
| 0 to 50 psi | 0 to 3.4 bar | PX41T[*]-050GI | DP41-E, DP25B-E, DP24-E |
| 0 to 75 psi | 0 to 5.2 bar | PX41T[*]-075GI | DP41-E, DP25B-E, DP24-E |
| 0 to 100 psi | 0 to 6.9 bar | PX41T[*]-100GI | DP41-E, DP25B-E, DP24-E |
| 0 to 200 psi | 0 to 13.8 bar | PX41T[*]-200GI | DP41-E, DP25B-E, DP24-E |
| 0 to 300 psi | 0 to 20.7 bar | PX41T[*]-300GI | DP41-E, DP25B-E, DP24-E |
| 0 to 500 psi | 0 to 34.5 bar | PX41T[*]-500GI | DP41-E, DP25B-E, DP24-E |
| 0 to 750 psi | 0 to 51.7 bar | PX41T[*]-750GI | DP41-E, DP25B-E, DP24-E |
| 0 to 1000 psi | 0 to 68.9 bar | PX41T[*]-1KGI | DP41-E, DP25B-E, DP24-E |
| 0 to 1500 psi | 0 to 103 bar | PX41T[*]-1.5KGI | DP41-E, DP25B-E, DP24-E |
| 0 to 2000 psi | 0 to 138 bar | PX41T[*]-2KGI | DP41-E, DP25B-E, DP24-E |
| 0 to 3500 psi | 0 to 241 bar | PX41T[*]-3.5KGI | DP41-E, DP25B-E, DP24-E |
| 0 to 5000 psi | 0 to 345 bar | PX41T[*]-5KGI | DP41-E, DP25B-E, DP24-E |
| 0 to 7500 psi | 0 to 517 bar | PX41T[*]-7.5KGI | DP41-E, DP25B-E, DP24-E |
| 0 to 10,000 psi | 0 to 689 bar | PX41S[*]-10KGI | DP41-E, DP25B-E, DP24-E† |
| 0 to 20,000 psi | 0 to 1379 bar | PX41S[*]-20KGI | DP41-E, DP25B-E†, DP24-E† |
| 0 to 30,000 psi | 0 to 2068 bar | PX41S[*]-30KGI | DP41-E, DP25B-E†, DP24-E† |

Comes complete with 5-point NIST traceable calibration.
 [*] = Insert "0" for 3 m (10') cable, "1" for twist-lock 6 pin connector, or "6" for mini DIN connector.
 † 4-digit meter, counts in increments of 10.
Ordering Examples: **PX41S0-10KSI**, 10,000 psi sealed gage transmitter with 3 m (10') cable.
PX41T0-5KSI-FM, 5000 psi sealed gage pressure transmitter with 3 m (10') cable and FM for Hazardous Locations rating.
PX41T0-015AI, 15 psi absolute pressure transmitter with 3 m (10') cable.

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 1 bar | 0 to 15 psi | PXM41MC[*]-001BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 1.60 bar | 0 to 23 psi | PXM41MC[*]-1.60BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 2.50 bar | 0 to 36 psi | PXM41MC[*]-2.50BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 4 bar | 0 to 58 psi | PXM41MC[*]-004BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 6 bar | 0 to 87 psi | PXM41MC[*]-006BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 10 bar | 0 to 145 psi | PXM41MC[*]-010BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 16 bar | 0 to 232 psi | PXM41MC[*]-016BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 25 bar | 0 to 363 psi | PXM41MC[*]-025BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 40 bar | 0 to 580 psi | PXM41MC[*]-040BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 60 bar | 0 to 870 psi | PXM41MC[*]-060BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 100 bar | 0 to 1450 psi | PXM41MC[*]-100BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 160 bar | 0 to 2321 psi | PXM41MC[*]-160BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 250 bar | 0 to 3626 psi | PXM41MC[*]-250BARGI | iSeries, DP41-E, DP25B-E |
| 0 to 400 bar | 0 to 5802 psi | PXM41MC[*]-400BARGI | iSeries, DP41-E, DP25B-E |

Comes complete with 5-point NIST traceable calibration.
 [*] = Insert "0" for 3 m (10') cable, "1" for twist-lock 6 pin connector, or "6" for mini-DIN connector.
Ordering Examples: **PXM41MC6-25BARGI**, 25 bar gage pressure transducer with G 1/4 male thread, mini DIN connector and 4 to 20 mA output.
PXM41MD0-1.60BARAI, 1.6 bar absolute pressure transducer with G 1/4 internal thread, 3 m (10') cable and 4 to 20 mA output.
 To order an FM Approved for Hazardous Locations version, add suffix "**-FM**" to model number. To order sealed gage pressure models, replace "**G**" in model number with "**S**" (no extra charge).
 To order absolute pressure models, replace "**G**" in model number with "**A**" (no extra charge).