

HEAVY-DUTY VOLTAGE OUTPUT PRESSURE TRANSDUCER

STANDARD AND METRIC MODELS

0.5 to 5.5 Vdc Output
0-10 to 0-30,000 psi-Standard Models
0-1 to 0-400 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



PX41T0-100G5V,
shown actual size.

PX41/PXM41 Series



- ✓ FM Approved Intrinsically Safe Standard
- ✓ Special MSHA-Approved Model Available
- ✓ All Stainless Steel Body
- ✓ Heavy-Duty Construction for Harsh Environments
- ✓ Available in Gage, Sealed Gage, and Absolute Pressure Models

OMEGA's PX41/PXM41 are high-accuracy, rugged, low-cost, 5V output industrial pressure transducers. All stainless steel construction makes them suitable for the harshest environments. They are available in gage, absolute, or sealed models. Ten feet of 4-conductor shielded cable is standard. A twist-lock-

style connector or DIN connector are available. A wide model selection makes this a truly versatile family of industrial transducers.

SPECIFICATIONS

Excitation: 10 to 40 Vdc
Output: 0.5 to 5.5 Vdc
Zero Balance: 0.5V adj ±10% FSO
AGENCY APPROVAL

FM Intrinsically Safe: IS/I.II.III/1/CDEFG standard on all models

MSHA (Optional): Mine Safety and Health Administration (must be specified at time of order)

Accuracy: 0.25% FS linearity and hysteresis combined

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

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

Thermal Effects:

Span: 0.0054% of rdg/°F

Zero: 0.008% of FSO/°F

Proof Pressure: 150% of rated pressure

Burst Pressure: 300% of rated pressure

Wetted Parts: 17-4 PH stainless steel

Pressure Port:

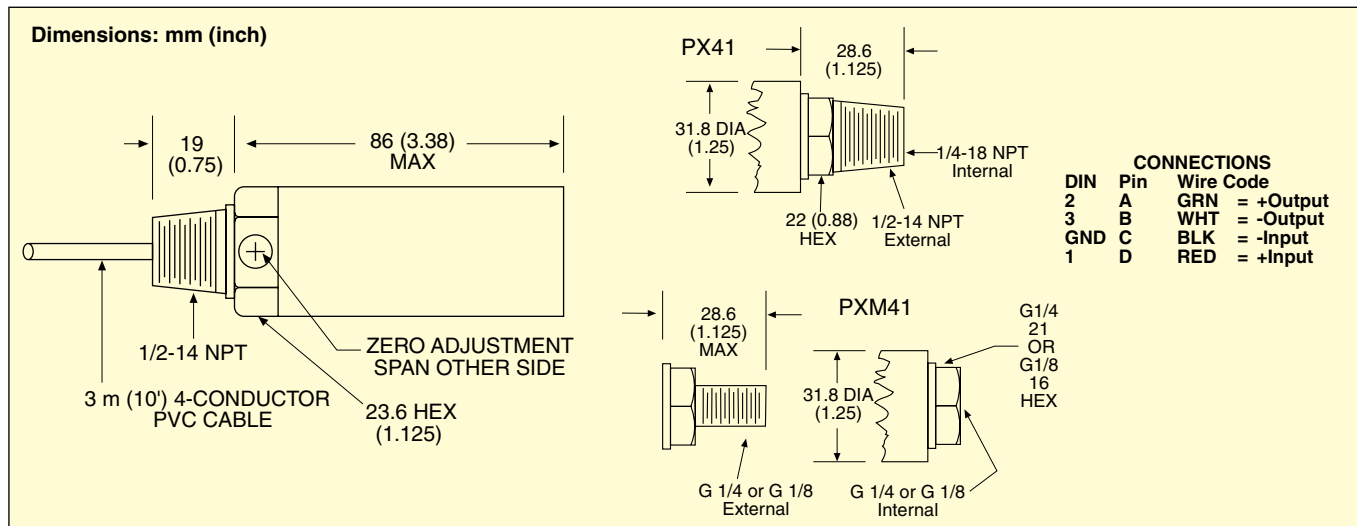
<10,000 psi: See dimensional drawings below

≥10,000 psi: 3/16"-18, 1/4" HP tube

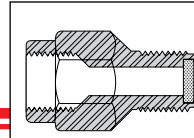
Electrical Connection: 3 m (10') 4-conductor PVC cable, twist-lock 6 pin connector. or DIN connector

† Refer to custom configurations chart on page B-107 for ordering MSHA-approved units.

VOLTAGE OUTPUT
PRESSURE TRANSDUCERS
B



HEAVY-DUTY INDUSTRIAL TRANSDUCER



¼ NPT Pressure Snubbers:
PS-4G = Gas
PS-4E = Lt Oil
PS-4D = Dense Lq

STANDARD CUSTOM CONFIGURATIONS

PX41 SERIES	PRESSURE PORT [1]	ELECTRICAL CONNECTION [2]	RANGE (psi) [3]	UNITS [4]	OUTPUT [5]	OPTIONS [6]
C = ¼-18 NPT-M			010	S,G,A	5V = 0.5 to 5.5 Vdc output PX41 ≥ 50 psi < 50 psi	FM FM Hazardous Location + additional cost 4 to 20 mA output "S" or "A" pres. only
D = ¼-18 NPT-F, no charge			015	S,G,A		
T = Dual ½-14 NPT external			020	S,G,A	5T = 0 to 5 Vdc output add cost all ranges	MSHA Mine Safety and Health Admin. 0.5 to 5.5V or 4 to 20 mA output.
¼-18 NPT internal			025	S,G,A		
K = 7/16-20 UNF-F			030	S,G,A	10V = 0.5 to 10.5 Vdc output n/c all ranges	OX Cleaned for Oxygen use + additional cost plus 2 weeks
J = 7/16-20 UNF-M			050	S,G,A		
S = ¼ HP tube fitting (≥10,000 psi ranges)			075	S,G,A	10T = 0 to 10 Vdc output add cost all ranges	
			100	S,G,A		
			200	S,G,A	I = 4 to 20 mA output add cost all ranges	
			300	S,G,A		
			500	S,G,A		
	0 = 3 m (10') pigtail + add cost/ft over 3 m (10')		750	S,G,A		
	1 = PTIH-10-6P connector (or equal), no charge (not available with FM option). Mating connector (sold separately), order		1K	S,G,A		
	PT06F10-6S		1.5K	S,G,A		
	6 = mini DIN connector (no charge)		2K	S,G,A		
			2.5K	S,G,A		
			3K	S,G,A		
			3.5K	S,G,A		
			5K	S,G,A		
			7.5K	S,G,A		
			10K†	S,G,A		
			15K†	S,G,A		
			20K†	S,G,A		
			30K†	S,G,A		

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

† = Supplied with ¼" HP tube fitting.

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).

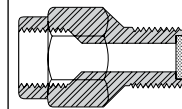
PX41T0-1KSI-FM, 1000 psi sealed gage pressure transmitter with 3 m (10') cable, 4 to 20 mA output and FM approval for use in hazardous locations.

PX41T0-015A10V, 15 psi absolute pressure transducer with 3 m (10') cable and 0.5 to 10.5 Vdc output.

PX41S0-30K5V, 30,000 psi sealed gage pressure transducer with 3 m (10') cable and 0.5 to 5.5 Vdc output.

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



G ¼ Pressure Snubbers:
PS-4G-MG = Gas
PS-4E-MG = Lt Oil
PS-4D-MG = Dense Liquid

METRIC CUSTOM CONFIGURATIONS

PXM41 SERIES	PRESSURE PORT [1]	ELECTRICAL CONNECTION [2]	RANGE (BAR) [3]	UNITS [4]	OUTPUT [5]	OPTIONS [6]
MA = G½B Male			1.0	S,G,A	5V = 0.5 to 5.5 Vdc output PXM41 ≥2.5 bar <2.5 bar	FM FM Hazardous Location + additional cost 4 to 20 mA output "S" or "A" pres. only
MB = G½B Female no charge			1.6	S,G,A		
MC = G¾B Male			2.5	S,G,A	5T = 0 to 5 Vdc output add cost all ranges	MSHA Mine Safety and Health Admin. 0.5 to 5.5V or 4 to 20 mA output.
MD = G¾B Female no charge			4.0	S,G,A		
			6.0	S,G,A	10V = 0.5 to 10.5 Vdc output n/c all ranges	OX Cleaned for Oxygen use + additional cost plus 2 weeks
			10	S,G,A		
	0 = 3 m (10') cable (std) + add cost/ft over 3 m (10')		16	S,G,A	10T = 0 to 10 Vdc output add cost all ranges	
	1 = PTIH-10-6P connector (or equal), no charge (not available with FM option).		25	S,G,A		
	6 = mini DIN connector (no charge)		40	S,G,A	I = 4 to 20 mA output add cost all ranges	
			60	S,G,A		
			100	S,G,A		
			160	S,G,A		
			250	S,G,A		
			400	S,G,A		

Visit us online for additional options including extended compensated temperatures.

Ordering Examples: **PXM41MB0-010BAR5V**, 10 bar sealed gage pressure transducer with G½B female connection and 3 m (10') cable termination.

PXM41MD1-010BAR5V, 10 bar absolute pressure transducer with G¾B female connection and twist-lock 6 pin connector. **PTS06A-10-6S**, mating connector (sold separately).

STANDARD MODELS

To Order

MODELS WITH DUAL 1/2 NPT EXTERNAL/ 1/4 NPT INTERNAL PRESSURE CONNECTION

RANGE		MODEL NO.	COMPATIBLE METERS**
ABSOLUTE PRESSURE (All Ranges Available in Absolute Pressure)			
0 to 15 psi	0 to 1.0 bar	PX41T0-015A5V	DP41-E, DP25B-E, DP24-E
0 to 20 psi	0 to 1.4 bar	PX41T0-020A5V	DP41-E, DP25B-E, DP24-E
0 to 30 psi	0 to 2.1 bar	PX41T0-030A5V	DP41-E, DP25B-E, DP24-E
0 to 50 psi	0 to 3.4 bar	PX41T0-050A5V	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	PX41T0-010G5V	DP41-E, DP25B-E, DP24-E
0 to 15 psi	0 to 1.0 bar	PX41T0-015G5V	DP41-E, DP25B-E, DP24-E
0 to 20 psi	0 to 1.4 bar	PX41T0-020G5V	DP41-E, DP25B-E, DP24-E
0 to 30 psi	0 to 2.1 bar	PX41T0-030G5V	DP41-E, DP25B-E, DP24-E
0 to 50 psi	0 to 3.4 bar	PX41T0-050G5V	DP41-E, DP25B-E, DP24-E
0 to 75 psi	0 to 5.2 bar	PX41T0-075G5V	DP41-E, DP25B-E, DP24-E
0 to 100 psi	0 to 6.9 bar	PX41T0-100G5V	DP41-E, DP25B-E, DP24-E
0 to 200 psi	0 to 13.8 bar	PX41T0-200G5V	DP41-E, DP25B-E, DP24-E
0 to 300 psi	0 to 20.7 bar	PX41T0-300G5V	DP41-E, DP25B-E, DP24-E
0 to 500 psi	0 to 34.5 bar	PX41T0-500G5V	DP41-E, DP25B-E, DP24-E
0 to 1000 psi	0 to 68.9 bar	PX41T0-1KG5V	DP41-E, DP25B-E, DP24-E
0 to 2000 psi	0 to 138 bar	PX41T0-2KG5V	DP41-E, DP25B-E, DP24-E
0 to 2500 psi	0 to 172 bar	PX41T0-2.5KG5V	DP41-E, DP25B-E, DP24-E
0 to 3500 psi	0 to 241 bar	PX41T0-3.5KG5V	DP41-E, DP25B-E, DP24-E
0 to 5000 psi	0 to 345 bar	PX41T0-5KG5V	DP41-E, DP25B-E, DP24-E
0 to 10,000 psi	0 to 689 bar	PX41S0-10KG5V†	DP41-E, DP25B-E, DP24-E*
0 to 20,000 psi	0 to 1379 bar	PX41S0-20KG5V†	DP41-E, DP25B-E*, DP24-E*
0 to 30,000 psi	0 to 2068 bar	PX41S0-30KG5V†	DP41-E, DP25B-E*, DP24-E*

Comes complete with 5-point NIST traceable calibration.

† 1/4" HP tube fitting. * 4-digit meter, counts in increments of 10. ** Visit us online for compatible meters.

3 m (10') cable standard. To order with PTIH-10-6P twist-lock 6 pin connector, change model number from "PX41T0"

(or "PX41S0" above 5k psi) to "PX41T1" or to order with mini DIN connector, change model number to "PX41T6". No extra charge.

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.

Ordering Examples: PX41T0-5KG5V, 5000 psi gage pressure transducer with 0.5 to 5.5 Vdc output.

PX41T0-015A5V, 15 psi absolute pressure transducer with 0.5 to 5.5 Vdc output.



METRIC
PXM41MC6-006BARG5V,
shown actual size.

VOLTAGE OUTPUT
PRESSURE TRANSDUCERS
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METRIC MODELS

MODELS WITH G1/8 MALE PRESSURE CONNECTION

RANGE		MODEL NO.	COMPATIBLE METERS**
GAGE PRESSURE			
0 to 1 bar	0 to 15 psi	PXM41MC0-001BARG5V	iSeries, DP41-E, DP25B-E
0 to 1.60 bar	0 to 23 psi	PXM41MC0-1.60BARG5V	iSeries, DP41-E, DP25B-E
0 to 2.50 bar	0 to 36 psi	PXM41MC0-2.50BARG5V	iSeries, DP41-E, DP25B-E
0 to 4 bar	0 to 58 psi	PXM41MC0-004BARG5V	iSeries, DP41-E, DP25B-E
0 to 6 bar	0 to 87 psi	PXM41MC0-006BARG5V	iSeries, DP41-E, DP25B-E
0 to 10 bar	0 to 145 psi	PXM41MC0-010BARG5V	iSeries, DP41-E, DP25B-E
0 to 16 bar	0 to 232 psi	PXM41MC0-016BARG5V	iSeries, DP41-E, DP25B-E
0 to 25 bar	0 to 363 psi	PXM41MC0-025BARG5V	iSeries, DP41-E, DP25B-E
0 to 40 bar	0 to 580 psi	PXM41MC0-040BARG5V	iSeries, DP41-E, DP25B-E
0 to 60 bar	0 to 870 psi	PXM41MC0-060BARG5V	iSeries, DP41-E, DP25B-E
0 to 100 bar	0 to 1450 psi	PXM41MC0-100BARG5V	iSeries, DP41-E, DP25B-E
0 to 160 bar	0 to 2321 psi	PXM41MC0-160BARG5V	iSeries, DP41-E, DP25B-E
0 to 250 bar	0 to 3626 psi	PXM41MC0-250BARG5V	iSeries, DP41-E, DP25B-E
0 to 400 bar	0 to 5802 psi	PXM41MC0-400BARG5V	iSeries, DP41-E, DP25B-E

Comes complete with 5-point NIST traceable calibration.

** Visit us online for compatible meters.

3 m (10') cable standard. To order with PTIH-10-6P twist-lock 6 pin connector, change model number from "PXM41MC0" to "PXM41MC1" or to order with mini DIN connector, change model number to "PXM41MC6". No extra charge.

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).

Ordering Examples: PXM41MC6-025BARG5V, 25 bar gage pressure transducer with G1/8 male thread, mini DIN and 0.5 to 5.5 Vdc output.

PXM41MD0-1.60BARA5V, 1.60 bar absolute pressure transducer with G1/8 internal thread, 3 m (10') cable and 0.5 to 5.5 Vdc output.