

LOW-RANGE WET/WET INDUSTRIAL DIFFERENTIAL TRANSDUCER

PXM82 Series

0-130 mbar to 0-2 bar

0-2 to 0-30 psi

Differential Pressure

mV/V Output

0 to 5 Vdc Output

4 to 20 mA Output

1 psi = 27.68 inH₂O

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

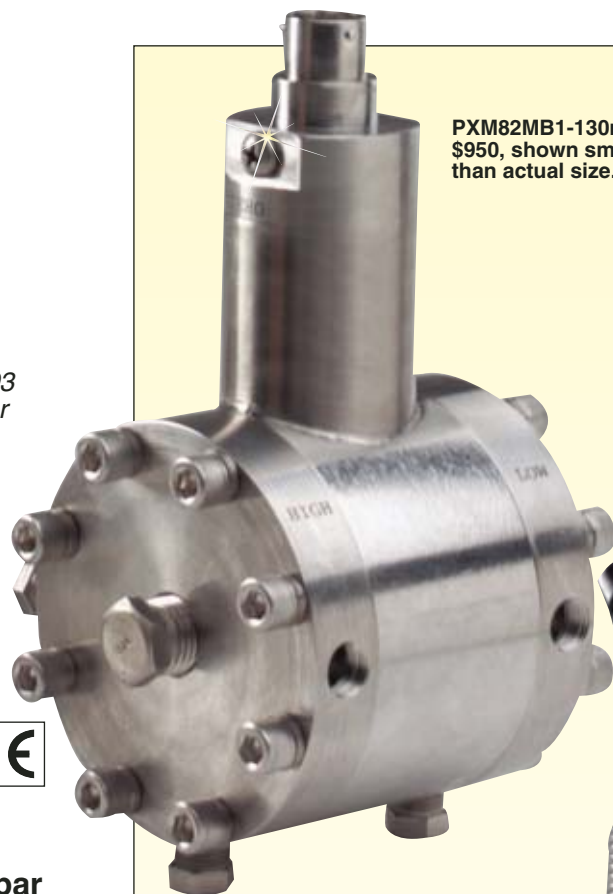
Starts at

\$795



- ✓ Inches of Water Differential at Line Pressure—Up to 100 bar (1500 psi)
- ✓ FM Approved Intrinsically Safe
- ✓ Stainless Steel/Inconel Construction for Harsh Industrial Environments
- ✓ High Overpressure Capability
- ✓ High Operating Temperature
- ✓ 5-Point Calibration Provided: 0%, 50%, 100%, 50%, 0%

OMEGA's PXM82 Series wet/wet, differential pressure transducers can measure inches of water differential at line pressures of up to 103 bar (1500 psi). This high line pressure capacity, a high operating temperature, and excellent temperature compensation make the PXM82 an extremely accurate and reliable transducer. An FM Approved Intrinsically Safe rating is standard. The rugged Inconel® diaphragms and stainless steel body give the PXM82 high reliability in harsh industrial environments. The PXM82 Series is available with mV/V, 5 V, or 4 to 20 mA outputs.



PXM82MB1-130mBARDI,
\$950, shown smaller
than actual size.



PXM82MB1-001BARD5V,
\$950, shown smaller
than actual size.

LOW-RANGE WET/WET INDUSTRIAL DIFFERENTIAL TRANSDUCER

SPECIFICATIONS

mV/V Output ELECTRICAL

Excitation: 10 Vdc (15 V max)

Output: 1.5 mV/V nominal

Input Resistance: 5000 Ω min

Output Resistance: 5000 Ω ±25 Ω

Zero Balance: ±2% FS

0.5 to 5.5 Vdc Output

Electrical:

Excitation: 10 to 35 Vdc

Output: 0.5 to 5.5 Vdc ±10%

Zero Balance: 0.5 V ±2% adj

4 to 20mA Output

Electrical:

Excitation: 10 to 40 Vdc

Output: 4 to 20 mA ±10% adj

Zero Balance: 4 mA +10% -2% adj

COMMON SPECIFICATIONS PERFORMANCE

Accuracy: 0.5% linearity, hysteresis and repeatability combined

Agency Approvals: FM Intrinsically Safe IS/I.II.III/1/CDEFG standard

ENVIRONMENTAL

Operating Temp Range:

-34 to 107°C (-30 to 225°F)

Compensated Temp Range:

-1 to 54°C (30 to 130°F)

Pressure Effects:

Zero: <2%/1000 psi line pressure

Span: -2.45%/1000 psi line pressure

Thermal Effects:

Zero: ±0.50% FSO maximum over compensated range

Span: ±0.50% rdg maximum over compensated range

PRESSURE

Line Operating Pressure:

100 bar (1500 psi)

Safe Overpressure:

70 bar (1000 psi) each side

Burst Pressure:

170 bar (2500 psi) minimum

MECHANICAL

Wetted Parts: 17-4 PH stainless steel and Inconel 625

Pressure Port: Three G 1/8 and one G 1/4 female per side

Electrical Connection:

Style 0: 3 m (10') cable

Style 1: PTIH-10-6P (or equal)

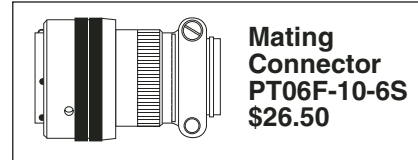
Style 6: Micro DIN

Mating Connector:

Style 1: PT06F-10-6S

(not included)

Style 6: Mating connector (included)



CUSTOM CONFIGURATIONS

MODEL NUMBER SPECIFICATION:

PXM82MB0-002BARDV

PXM82MB0-001BARDI,
\$950, shown smaller
than actual size.

OUTPUT: V = 1.5 mV/V nominal
5V = 0.5 to 5.5 Vdc
I = 4 to 20 mA

DIFFERENTIAL PRESSURE

RANGE IN bar

ELECTRICAL CONNECTION:

0 = 3 m (10') cable

1 = PTIH-10-6P connector
or equivalent

6 = micro DIN connector*
* no shunt

PRESSURE PORT: B = 1/8-27 NPTF

Comes with 5-point calibration.

To order extra cable on cable style models, add suffix “-(Total length in meters)M” and \$6.50/m beyond the standard 3 m (10') length.

Ordering Examples: PXM82MD0-350mBARDI-10M, 350 mbar range model with 4 to 20 mA output and 10 m (32') cable, \$950 + (7 x 6.50) = \$995.50. PXM82MD1-500BARDV, 500 mbar range model with mV/V output and PTIH-10-6P, twist-lock connector, \$795. PT06F-10-6S, mating connector (not included), \$26.50. PXM82MD6-001BARD5V, 1 bar range model with 0.5 to 5.5 Vdc output and micro DIN connector, \$950. Mating connector included.

HOW TO ORDER PXM82 SERIES LOW-RANGE WET/WET INDUSTRIAL DIFFERENTIAL TRANSDUCER WITH mV/V OUTPUT

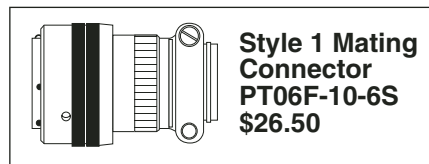
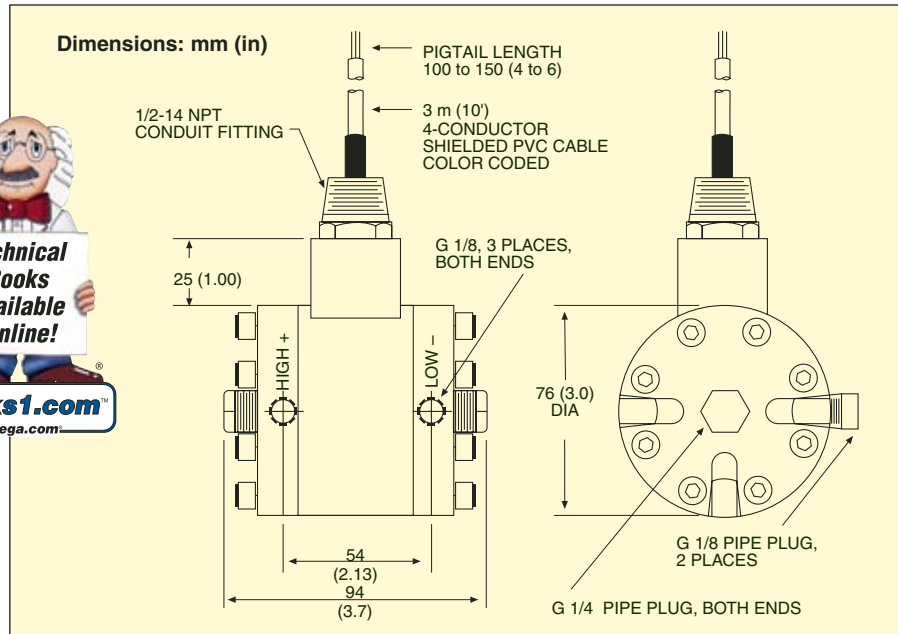
PXM82 Series
mV/V Output
0-130 mbar to 0-2 bar
0-2 to 0-30 psi
Differential Pressure

All Ranges
\$795
mV Unit

- ✓ mbar Differential at Line Pressure—Up to 100 bar
- ✓ Stainless Steel/Inconel Construction for Harsh Industrial Environments
- ✓ High Overpressure Capability
- ✓ High Operating Temperature
- ✓ 5-Point Calibration Provided: 0%, 50%, 100%, 50%, 0%

mV/V Output
ELECTRICAL
Excitation: 10 Vdc (15 V max)
Output: 1.5 mV/V nominal
Input Resistance: 5000 Ω min
Output Resistance: 5000 Ω ±25 Ω
Zero Balance: ±2% FS

PXM82MB1-190mBARD1, \$950,
shown smaller than actual size.



CONNECTIONS mV/V

	PIN	Cable	DIN
+Output	A	Green	2
-Output	B	White	3
-Input	C	Black	GRND
+Input	D	Red	1

MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

mV/V Output with G 1/4 Pressure Connection, Specify Electrical Termination

RANGE	MODEL NO.	PRICE	COMPATIBLE METERS*
DIFFERENTIAL PRESSURE			
0 to 130 mbar 0 to 1.9 psi	PXM82MB[*]-130mBARDV	\$795	DP41-S, DP25B-S
0 to 190 mbar 0 to 2.8 psi	PXM82MB[*]-190mBARDV	795	DP41-S, DP25B-S
0 to 250 mbar 0 to 3.6 psi	PXM82MB[*]-250mBARDV	795	DP41-S, DP25B-S
0 to 370 mbar 0 to 5.4 psi	PXM82MB[*]-370mBARDV	795	DP41-S, DP25B-S
0 to 500 mbar 0 to 7.3 psi	PXM82MB[*]-500mBARDV	795	DP41-S, DP25B-S
0 to 750 mbar 0 to 11 psi	PXM82MB[*]-750mBARDV	795	DP41-S, DP25B-S
0 to 1.00 bar 0 to 15 psi	PXM82MB[*]-001BARDV	795	DP41-S, DP25B-S
0 to 1.25 bar 0 to 18 psi	PXM82MB[*]-1.25BARDV	795	DP41-S, DP25B-S
0 to 2.00 bar 0 to 30 psi	PXM82MB[*]-002BARDV	795	DP41-S, DP25B-S

Comes with 5-point calibration.

[*] Insert "0" for 3 m (10') cable, "1" for twist-lock connector or "6" for micro DIN connector.

* See section D for compatible meters.

To order extra cable on cable style models, add suffix "--(Total length in meters)M" and \$6.50/m beyond the standard 3 m (10') length.

Ordering Examples: PXM82MD0-130mBARDV-10M, 130 mbar differential pressure transducer with 1.5 mV/V output and 10 m (32') cable, \$795 + (7 x 6.50) = \$840.50.

PXM82MD1-001BARDV, 1 bar differential pressure transducer with 1.5 mV/V output and twist-lock connector, \$795. PT06F-10-6S, mating connector (not included), \$26.50.

ACCESSORY

MODEL NO.	PRICE	DESCRIPTION
EE-2455	\$170	Reference Book: The Engineering Handbook

HOW TO ORDER PXM82 SERIES LOW-RANGE WET/WET INDUSTRIAL DIFFERENTIAL TRANSMITTER WITH 0.5 TO 5.5 Vdc OUTPUT

PXM82 Series
0.5 to 5.5 Vdc Output
0-130 mbar to 0-2 bar
0-2 to 0-30 psi
Differential Pressure

All Ranges
\$950
5 V Unit

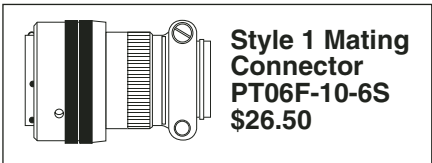


- ✓ mbar Differential at Line Pressure—Up to 100 bar
- ✓ FM Approved Intrinsically Safe
- ✓ Stainless Steel/Inconel® Construction for Harsh Industrial Environments
- ✓ High Overpressure Capability
- ✓ High Operating Temperature
- ✓ 5-Point Calibration Provided: 0%, 50%, 100%, 50%, 0%

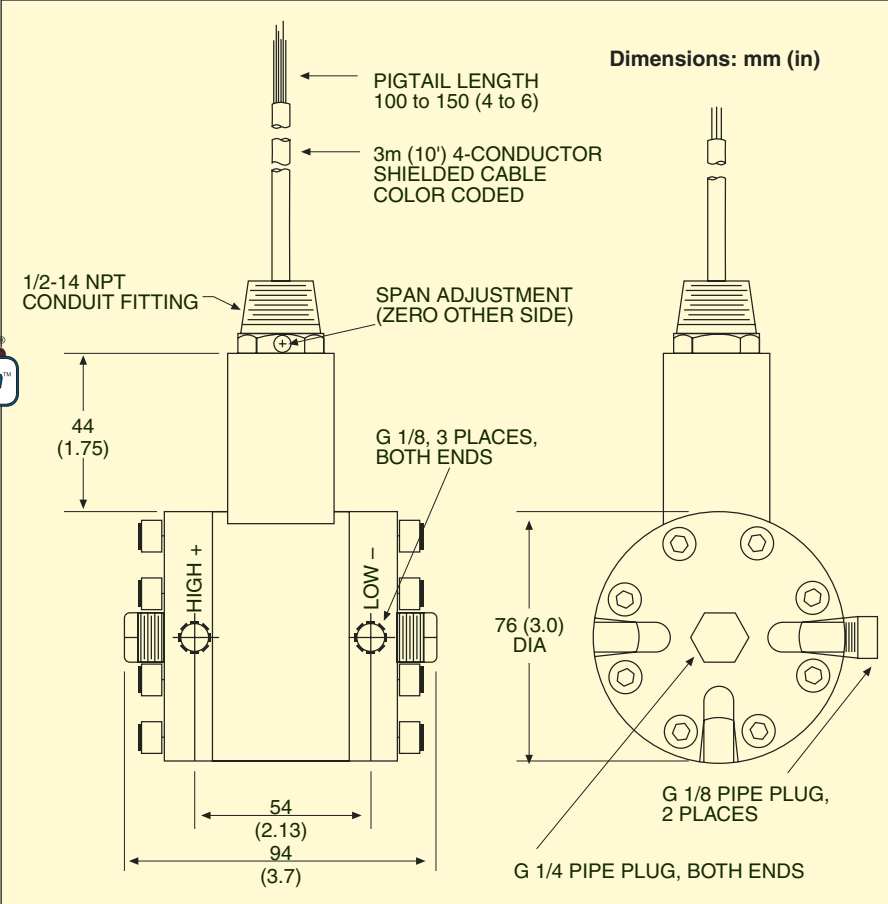
0.5 to 5.5 Vdc Output
ELECTRICAL

Excitation: 10 to 35 Vdc
Output: 0.5 to 5.5 Vdc ±10%
Zero Balance: 0.5 V ±2% adj

CONNECTIONS Volts			
	PIN	Cable	DIN
+ Output	A	Green	2
- Output	B	White	3
- Input	C	Black	GRND
+ Input	D	Red	1



MODEL NO.	PRICE	DESCRIPTION
EE-2454	\$160	Reference Book: The Industrial Electronics Handbook



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)				
Models with G 1/8 and G 1/4 Female Pressure Connection, Specify Electrical Termination				
RANGE		MODEL NO.	PRICE	COMPATIBLE METERS*
DIFFERENTIAL PRESSURE				
0 to 130 mbar	0 to 1.9 psi	PXM82MB[*]-130mBARD5V	\$950	DP41-S, DP25B-S
0 to 190 mbar	0 to 2.8 psi	PXM82MB[*]-190mBARD5V	950	DP41-S, DP25B-S
0 to 250 mbar	0 to 3.6 psi	PXM82MB[*]-250mBARD5V	950	DP41-S, DP25B-S
0 to 370 mbar	0 to 5.4 psi	PXM82MB[*]-370mBARD5V	950	DP41-S, DP25B-S
0 to 500 mbar	0 to 7.3 psi	PXM82MB[*]-500mBARD5V	950	DP41-S, DP25B-S
0 to 750 mbar	0 to 11 psi	PXM82MB[*]-750mBARD5V	950	DP41-S, DP25B-S
0 to 1.00 bar	0 to 15 psi	PXM82MB[*]-001BARD5V	950	DP41-S, DP25B-S
0 to 1.25 bar	0 to 18 psi	PXM82MB[*]-1.25BARD5V	950	DP41-S, DP25B-S
0 to 2.00 bar	0 to 30 psi	PXM82MB[*]-002BARD5V	950	DP41-S, DP25B-S

Comes with 5-point calibration.
[*] Insert "0" for 3 m (10') cable, "1" for twist-lock connector or "6" for micro DIN connector.
* See section D for compatible meters.

To order extra cable on cable-style models, add suffix "-(Total length in meters)M" and \$6.50/m beyond the standard 3 m (10') length.
Ordering Examples: PXM82MD0-130mBARD5V-10M, 130 mbar differential pressure transmitter with 0.5 to 5.5 Vdc output and 10 m (32') cable, \$950 + (7 x 6.50) = \$995.50.
PXM82MD1-001BARD5V, 1 bar differential pressure transmitter with 0.5 to 5.5 Vdc output and twist-lock connector, \$950. PT06F-10-6S, mating connector (not included), \$26.50.

HOW TO ORDER PXM82 SERIES LOW-RANGE WET/WET INDUSTRIAL DIFFERENTIAL TRANSMITTER WITH 4 TO 20 mA OUTPUT

PXM82 Series
4 to 20 mA Output
0-130 mbar to 0-2 bar
0-2 to 0-30 psi
Differential Pressure

All Ranges
\$950
mA Unit



- ✓ mbar Differential at Line Pressure—Up to 100 bar
- ✓ FM Approved Intrinsically Safe
- ✓ Stainless Steel/Inconel® Construction for Harsh Industrial Environments
- ✓ High Overpressure Capability
- ✓ High Operating Temperature
- ✓ 5-Point Calibration Provided: 0%, 50%, 100%, 50%, 0%

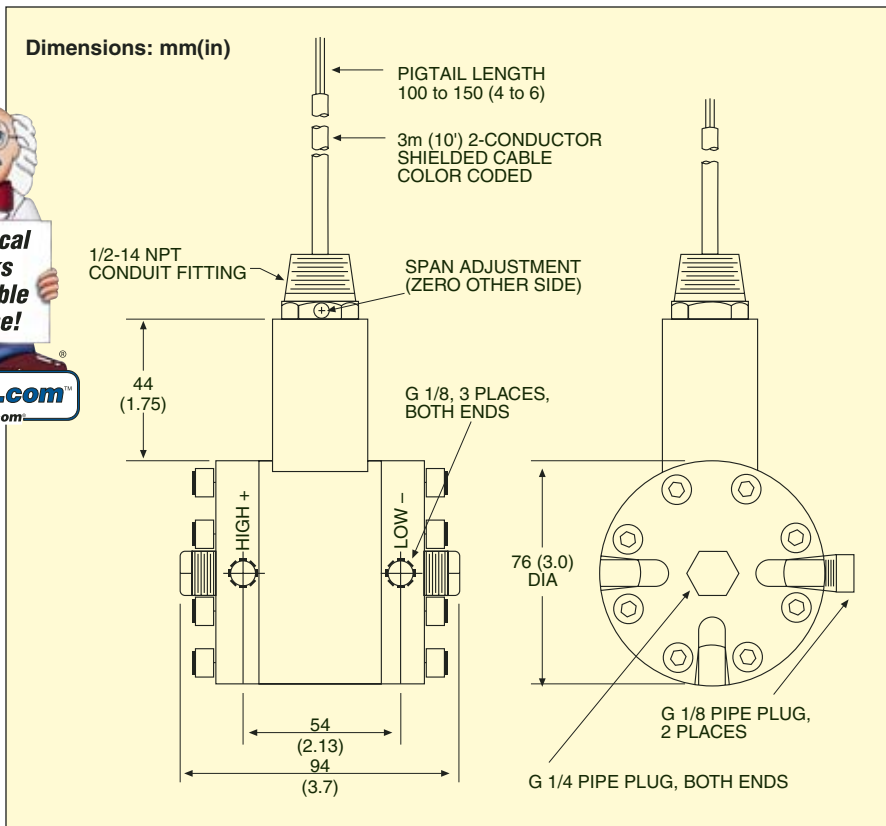
4 to 20 mA Output
ELECTRICAL

Excitation: 10 to 40 Vdc

Output: 4 to 20 mA ±10% adj

Zero Balance: 4 mA +10% -2% adj

PXM82MB1-190mBARDI, \$950, shown smaller than actual size.



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

Models with G 1/2 and G 1/4 Female Pressure Connection, Specify Electrical Termination

RANGE	MODEL NO.	PRICE	COMPATIBLE METERS*
DIFFERENTIAL PRESSURE			
0 to 130 mbar	0 to 1.9 psi	PXM82MB[*]-130mBARDI	\$950 DP41-S, DP25B-S
0 to 190 mbar	0 to 2.8 psi	PXM82MB[*]-190mBARDI	950 DP41-S, DP25B-S
0 to 250 mbar	0 to 3.6 psi	PXM82MB[*]-250mBARDI	950 DP41-S, DP25B-S
0 to 370 mbar	0 to 5.4 psi	PXM82MB[*]-370mBARDI	950 DP41-S, DP25B-S
0 to 500 mbar	0 to 7.3 psi	PXM82MB[*]-500mBARDI	950 DP41-S, DP25B-S
0 to 750 mbar	0 to 11 psi	PXM82MB[*]-750mBARDI	950 DP41-S, DP25B-S
0 to 1.00 bar	0 to 15 psi	PXM82MB[*]-001BARDI	950 DP41-S, DP25B-S
0 to 1.25 bar	0 to 18 psi	PXM82MB[*]-1.25BARDI	950 DP41-S, DP25B-S
0 to 2.00 bar	0 to 30 psi	PXM82MB[*]-002BARDI	950 DP41-S, DP25B-S

Comes with 5-point calibration.

[*] Insert "0" for 3 m (10') cable, "1" for twist-lock connector or "6" for micro DIN connector

* See Section D for compatible meters.

To order extra cable on cable-style models, add suffix "-(Total length in meters)M" and \$6.50/m beyond the standard 3 m (10') length.

Ordering Examples: PXM82MD0-130mBARDI-10M, 130 mbar differential pressure transmitter with 4 to 20 mA output and 10 m (32') cable, \$950 + (7 x 6.50) = \$995.50. PXM82MD1-001BARDI, 1 bar differential pressure transmitter with 4 to 20 mA output and twist-lock connector, \$950. PT06F-10-6S, mating connector (not included), \$26.50.

ACCESSORY

MODEL NO.	PRICE	DESCRIPTION
CE-1920	\$190	Reference Book: Thin Plates and Shells

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