

# COMPACT INDUSTRIAL WET/WET DIFFERENTIAL PRESSURE TRANSDUCER

## STANDARD AND METRIC MODELS

**0-2 to 0-500 psid-  
Standard Models**  
**0-140 mbar to 0-35 bar-  
Metric Models**

**Differential Pressure**  
**mV/V Output**  
**0 to 5 Vdc Output**  
**4 to 20 mA Output**

1 bar = 14.5 psi  
1 kg/cm<sup>2</sup> = 14.22 psi  
1 atmosphere = 14.7 psi = 29.93 inHg = 760.2 mmHg = 1.014 bar

### PX81/PXM81 Series



- ✓ High-Accuracy Wet/Wet Differential Pressure
- ✓ All Stainless Steel Construction for Harsh Industrial Environments
- ✓ High Operating Temperature
- ✓ 5-Point Calibration Provided: 0%, 50%, 100%, 50%, 0%

OMEGA's PX81/PXM81 Series wet/wet, differential pressure transducers are compact and highly accurate, designed for industrial applications in which low drift and long-term reliability are important. Their small temperature-compensation error minimizes errors due to changing process temperatures, and the rugged all stainless steel construction allows the PX81/PXM81 to withstand typical harsh environments found in chemical and industrial plants. Available with either mV/V, 0 to 5 Vdc, or 4 to 20 mA outputs, PX81/PXM81 Series transducers will interface with most control systems.



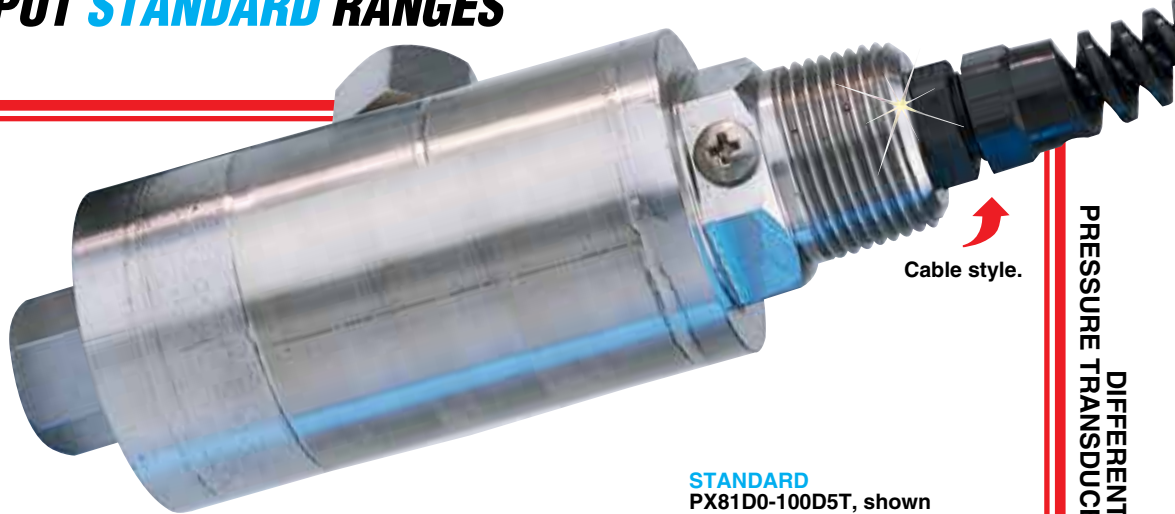






# 0 to 5 Vdc OUTPUT STANDARD RANGES

**0 to 5 Vdc Output**  
**0-2 to 0-500 psi**  
**(0-140 mbar to 0-35 bar)**  
**Differential Pressure**



**PX81 Series**  
**5 V Models**

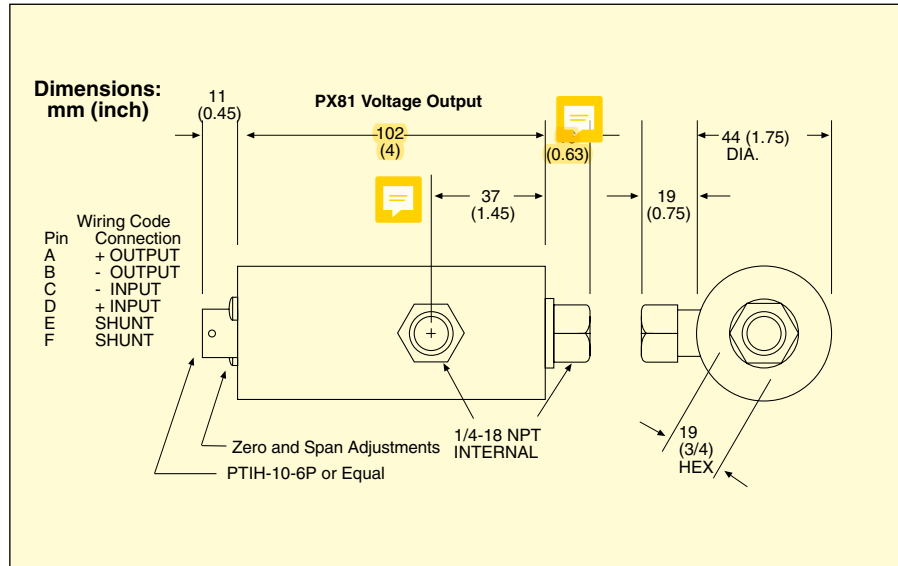


Standard

**STANDARD**  
**PX81D0-100D5T, shown**  
**actual size.**

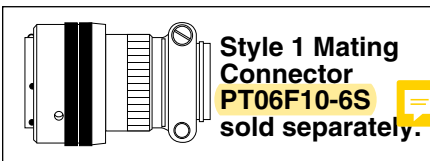
**DIFFERENTIAL PRESSURE TRANSDUCERS**

- ✓ High-Accuracy Wet/Wet Differential Pressure
- ✓ All Stainless Steel Construction for Harsh Industrial Environments
- ✓ High Operating Temperature
- ✓ 5-Point Calibration Provided: 0%, 50%, 100%, 50%, 0%



## CONNECTIONS 5 V

	PIN	Cable	DIN
+Output	A	Green	2
-Output	B	White	3
-Input	C	Black	GRND
+Input	D	Red	4
Shunt	E	Orange	
Shunt	F	Blue	



## STANDARD MODELS

<b>To Order</b>			
<b>MODELS WITH 0 to 5 Vdc OUTPUT</b>			
	<b>RANGE</b>	<b>MODEL NO.</b>	<b>COMPATIBLE METERS*</b>
	0 to 2 psid	0 to 0.14 bar	<b>PX81D[*]-002D5T</b> DP41-E, DP25B-E, DP24-E
	0 to 5 psid	0 to 0.34 bar	<b>PX81D[*]-005D5T</b> DP41-E, DP25B-E, DP24-E
	0 to 10 psid	0 to 0.69 bar	<b>PX81D[*]-010D5T</b> DP41-E, DP25B-E, DP24-E
	0 to 20 psid	0 to 1.4 bar	<b>PX81D[*]-020D5T</b> DP41-E, DP25B-E, DP24-E
	0 to 50 psid	0 to 3.4 bar	<b>PX81D[*]-050D5T</b> DP41-E, DP25B-E, DP24-E
	0 to 100 psid	0 to 6.9 bar	<b>PX81D[*]-100D5T</b> DP41-E, DP25B-E, DP24-E
	0 to 200 psid	0 to 13.8 bar	<b>PX81D[*]-200D5T</b> DP41-E, DP25B-E, DP24-E
	0 to 300 psid	0 to 20.7 bar	<b>PX81D[*]-300D5T</b> DP41-E, DP25B-E, DP24-E
	0 to 500 psid	0 to 34.5 bar	<b>PX81D[*]-500D5T</b> DP41-E, DP25B-E, DP24-E

Comes complete with 5-point NIST traceable calibration.

\* Visit us online for compatible meters.

[\*] To specify electrical termination, insert "0" for 3 m (10') cable, "1" for twist-lock connector, or "6" for mini DIN connector.

**Ordering Examples:** PX81D1-010D5T, 10 psi differential pressure transducer with 0 to 5 Vdc output and twist-lock connector. PT06F10-6S, mating connector (sold separately).



# 0 to 5 Vdc OUTPUT **METRIC** RANGES

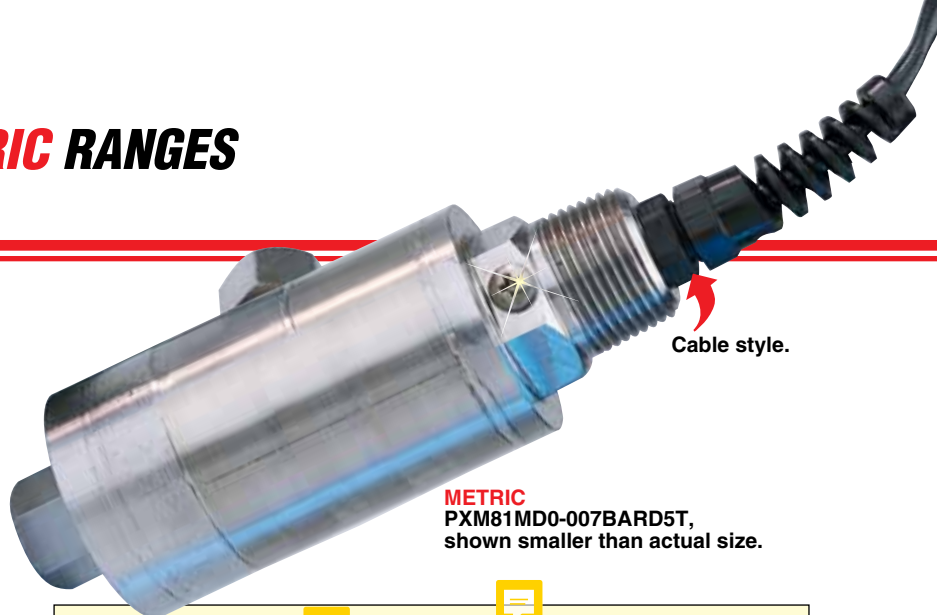
**0 to 5 Vdc Output**  
**0-160 mbar to 0-35 bar**  
**0-2 to 0-500 psi**  
**Differential Pressure**

## PXM81 Series 5 V Model

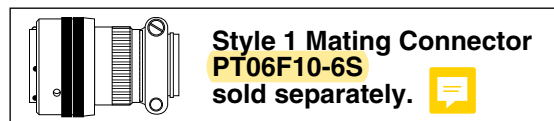
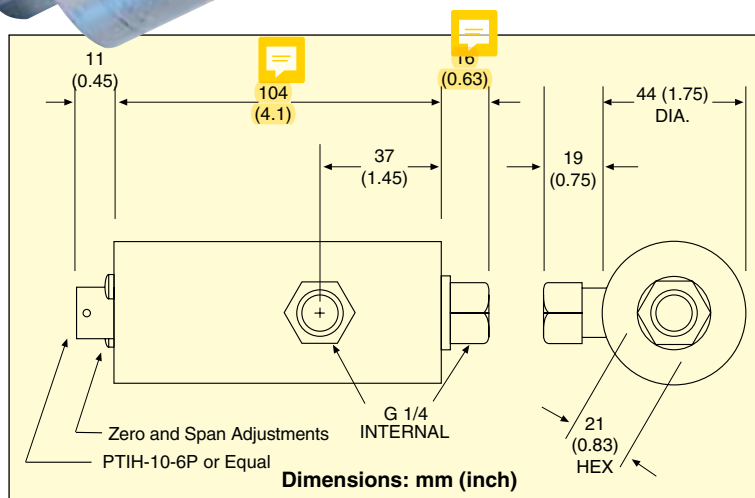


- ✓ High-Accuracy Wet/Wet Differential Pressure
- ✓ All Stainless Steel Construction for Harsh Industrial Environments
- ✓ High Operating Temperature
- ✓ 5-Point Calibration Provided: 0%, 50%, 100%, 50%, 0%

CONNECTIONS 5 V			
	PIN	Cable	DIN
+Output	A	Green	2
-Output	B	White	3
-Input	C	Black	GRND
+Input	D	Red	4
Shunt	E	Orange	
Shunt	F	Blue	



**METRIC**  
**PXM81MD0-007BARD5T,**  
 shown smaller than actual size.



### METRIC MODELS

#### To Order

0 to 5 Vdc OUTPUT WITH G ¼ PRESSURE CONNECTION, SPECIFY ELECTRICAL TERMINATION

RANGE		MODEL NO.	COMPATIBLE METERS*
<b>DIFFERENTIAL PRESSURE</b>			
0 to 160 mbar	0 to 2.3 psi	<b>PXM81MD[*]-160mBARD5T</b>	DP41-E, DP25B-E, DP24-E
0 to 350 mbar	0 to 5 psi	<b>PXM81MD[*]-350mBARD5T</b>	DP41-E, DP25B-E, DP24-E
0 to 700 mbar	0 to 10 psi	<b>PXM81MD[*]-700mBARD5T</b>	DP41-E, DP25B-E, DP24-E
0 to 1.4 bar	0 to 20 psi	<b>PXM81MD[*]-1.40BARD5T</b>	DP41-E, DP25B-E, DP24-E
0 to 3.5 bar	0 to 51 psi	<b>PXM81MD[*]-3.50BARD5T</b>	DP41-E, DP25B-E, DP24-E
0 to 7 bar	0 to 102 psi	<b>PXM81MD[*]-007BARD5T</b>	DP41-E, DP25B-E, DP24-E
0 to 14 bar	0 to 203 psi	<b>PXM81MD[*]-014BARD5T</b>	DP41-E, DP25B-E, DP24-E
0 to 20 bar	0 to 290 psi	<b>PXM81MD[*]-020BARD5T</b>	DP41-E, DP25B-E, DP24-E
0 to 35 bar	0 to 508 psi	<b>PXM81MD[*]-035BARD5T</b>	DP41-E, DP25B-E, DP24-E

Comes complete with 5-point NIST traceable calibration.

\* Visit us online for compatible meters.

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

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

**Ordering Examples:** **PXM81MD0-014BAR5T-10M**, 14 bar differential pressure transmitter with 0 to 5 Vdc output and 10 m (32') cable.

**PXM81MD1-350mBAR5T**, 350 millibar differential pressure transmitter with 0 to 5 Vdc output and twist-lock connector. **PT06F10-6S**, mating connector (sold separately).



# 4 to 20 mA OUTPUT STANDARD RANGES

**4 to 20 mA Output**  
**0-2 to 0-500 psid**  
**0-140 mbar to 0-35 bar**  
**Differential Pressure**

## PX81 Series

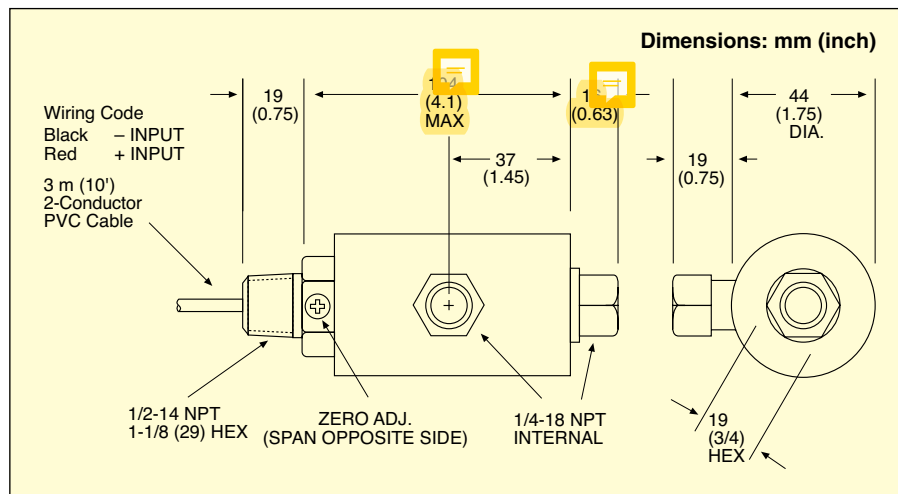
4 to 20 mA Models



**STANDARD**  
 PX81D0-005DI, shown smaller than actual size.

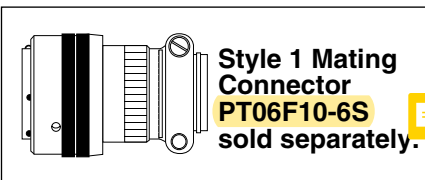
DIFFERENTIAL PRESSURE TRANSDUCERS **B**

- ✓ High-Accuracy Wet/Wet Differential Pressure
- ✓ All Stainless Steel Construction for Harsh Industrial Environments
- ✓ High Operating Temperature
- ✓ 5-Point Calibration Provided: 0%, 50%, 100%, 50%, 0%



### CONNECTIONS 4 to 20 mA

	PIN	Cable	DIN
+Input	A	Red	1
-Input	B	Black	2



### STANDARD MODELS

#### To Order

#### MODELS WITH 4 to 20 mA OUTPUT WITH 1/4 NPT FITTING

RANGE		MODEL NO.	COMPATIBLE METERS*
0 to 2 psid	0 to 0.14 bar	PX81D[*]-002DI	DP41-E, DP25B-E, DP24-E
0 to 5 psid	0 to 0.34 bar	PX81D[*]-005DI	DP41-E, DP25B-E, DP24-E
0 to 20 psid	0 to 1.4 bar	PX81D[*]-020DI	DP41-E, DP25B-E, DP24-E
0 to 50 psid	0 to 3.4 bar	PX81D[*]-050DI	DP41-E, DP25B-E, DP24-E
0 to 100 psid	0 to 6.9 bar	PX81D[*]-100DI	DP41-E, DP25B-E, DP24-E
0 to 200 psid	0 to 13.8 bar	PX81D[*]-200DI	DP41-E, DP25B-E, DP24-E
0 to 300 psid	0 to 20.7 bar	PX81D[*]-300DI	DP41-E, DP25B-E, DP24-E
0 to 500 psid	0 to 34.5 bar	PX81D[*]-500DI	DP41-E, DP25B-E, DP24-E

Comes complete with 5-point NIST traceable calibration.

\* Visit us online for compatible meters.

[\*] To specify electrical termination, insert "0" for 3 m (10') cable, "1" for twist-lock 6 pin connector, or "6" for mini DIN connector.

Ordering Examples: PX81D1-005DI, 5 psi differential pressure transmitters with 4 to 20 mA output and twist-lock 6 pin connector.

PT06F10-6S, mating connector (sold separately).

# 4 to 20 mA OUTPUT **METRIC** RANGES

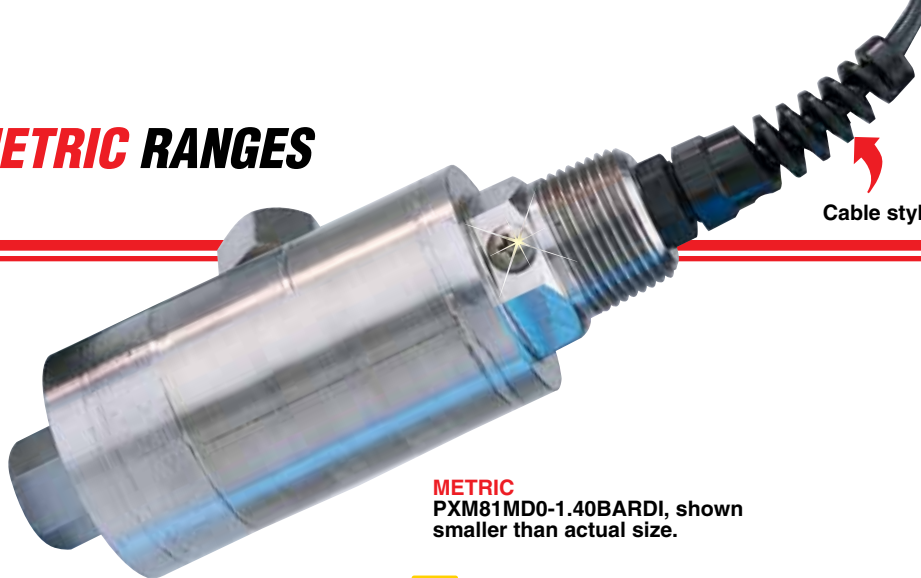
Cable style.

**4 to 20 mA Output**  
**0-160 mbar to 0-35 bar**  
**0-2 to 0-500 psi**  
**Differential Pressure**

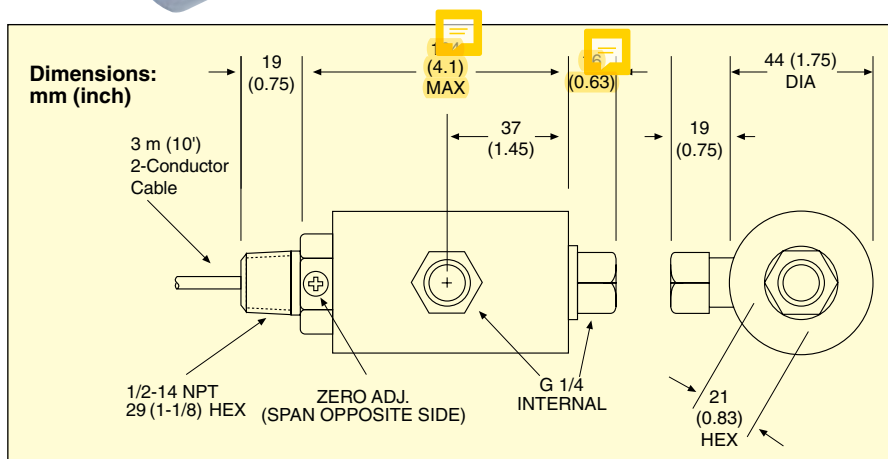
## PXM81 Series 4 TO 20 mA Models



- ✓ High-Accuracy Wet/Wet Differential Pressure
- ✓ All Stainless Steel Construction for Harsh Industrial Environments
- ✓ High Operating Temperature
- ✓ 5-Point Calibration Provided: 0%, 50%, 100%, 50%, 0%



**METRIC**  
**PXM81MD0-1.40BARDI**, shown smaller than actual size.



CONNECTIONS 4 to 20 mA			
	PIN	Cable	DIN
+Input	A	Red	1
-Input	B	Black	2

### METRIC MODELS

To Order			
4 to 20 mA OUTPUT WITH G 1/4 PRESSURE CONNECTION, SPECIFY ELECTRICAL TERMINATION			
RANGE		MODEL NO.	COMPATIBLE METERS*
<b>DIFFERENTIAL PRESSURE</b>			
0 to 160 mbar	0 to 2.3 psi	<b>PXM81MD[*]-160mBARDI</b>	DP41-E, DP25B-E, DP24-E
0 to 350 mbar	0 to 5 psi	<b>PXM81MD[*]-350mBARDI</b>	DP41-E, DP25B-E, DP24-E
0 to 700 mbar	0 to 10 psi	<b>PXM81MD[*]-700mBARDI</b>	DP41-E, DP25B-E, DP24-E
0 to 1.4 bar	0 to 20 psi	<b>PXM81MD[*]-1.40BARDI</b>	DP41-E, DP25B-E, DP24-E
0 to 3.5 bar	0 to 51 psi	<b>PXM81MD[*]-3.50BARDI</b>	DP41-E, DP25B-E, DP24-E
0 to 7 bar	0 to 102 psi	<b>PXM81MD[*]-007BARDI</b>	DP41-E, DP25B-E, DP24-E
0 to 14 bar	0 to 203 psi	<b>PXM81MD[*]-014BARDI</b>	DP41-E, DP25B-E, DP24-E
0 to 20 bar	0 to 290 psi	<b>PXM81MD[*]-020BARDI</b>	DP41-E, DP25B-E, DP24-E
0 to 35 bar	0 to 508 psi	<b>PXM81MD[*]-035BARDI</b>	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.

\* Visit us online for compatible meters.

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

Ordering Examples: **PXM81MD0-014BARDI-10M**, 14 bar differential pressure transmitter with 4 to 20 mA output and 10 m (32') cable.

**PXM81MD1-350mBARDI**, 350 mbar differential pressure transmitter with 4 to 20 mA output and a twist-lock 6 pin connector. **PT06F10-6S**, mating connector (sold separately).

