# HIGH ACCURACY WET/WET DIFFERENTIAL PRESSURE TRANSDUCER COMPACT SIZE

# PXM81 Series

0-160 mbar to 0-35 bar 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 in-Hg = 760.2 mm-Hg = 1.014 bar





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



### MOST POPULAR MODELS HIGHLIGHTED!

To Order <i>(Specify Model Number)</i>			
G 1/4 Pressure Connection, Specify Electrical Termination			
RANGE	MODEL NO.	PRICE	
Differential Pressure		5V or mA	mV/V
0 to 160 mbar	PXM81MD[*]-160MBARD[**]	£459	N/A
0 to 350 mbar	PXM81MD[*]-350MBARD[**]	459	£369
0 to 700 mbar	PXM81MD[*]-700MBARD[**]	459	369
0 to 1.4 bar	PXM81MD[*]-1.40BARD[**]	459	369
0 to 3.5 bar	PXM81MD[*]-3.50BARD[**]	459	369
0 to 7 bar	PXM81MD[*]-007BARD[**]	459	369
0 to 14 bar	PXM81MD[*]-014BARD[**]	459	369
0 to 20 bar	PXM81MD[*]-020BARD[**]	459	369
0 to 35 bar	PXM81MD[*]-035BARD[**]	459	369

[\*] Insert "**0**" for 3 m cable, "**1**" for twist lock connector, or "**6**" for micro DIN connector. [\*\*] Insert "**I**" for 4 to 20 mA, "**5**T" for 0 to 5 Vdc, or "**V**" for mV/V output.

See page 291 for compatible meters.

To order extra cable on Cable Style models, add suffix "-(total length in metres)M" and add £4.35/m over the standard 3 m length.

**Ordering Examples: PXM81MD0-014BARDI-10M**, 14 bar differential pressure transducer with 4 to 20 mA output and 10 m cable,  $\pounds 459 + (7 \times 4.35) = \pounds 489.45$ . **PXM81MD1-350MBARDI**, 350 millibar differential pressure transducer with 4 to 20 mA output and a twist lock connector,  $\pounds 459$ . Mating connector (not included), **PT06F10-6S**,  $\pounds 17.75$ .



### SPECIFICATIONS

**mV/V OUTPUT:** Excitation: 10 Vdc (15 V max) Output: 3 mV/V nominal **Bridge Resistance:** 350 Ω minimum Zero Balance: ±1% FSO

**5 Vdc OUTPUT** Excitation: 24 to 32 Vdc Output: 0 to 5 Vdc ±10% adj Zero Balance: 0 V ±10% adj

#### 4 to 20 mA OUTPUT Excitation: 10 to 40 Vdc Output: 4 to 20 mA ±10%

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



### COMMON **SPECIFICATIONS**

Accuracy: ±0.5% Linearity, Hysteresis and Repeatability Combined

**Environmental: Operational Temp Range:** mV/V: -73 to 163°C 5T and I: -46 to 121°C **Compensated Temp Range:** +17 to 71°C Thermal Effects: mV/V and 5V

Zero: ±0.009% FSO/°C Span: ±0.0054% rdg/°C 4 to 20 mA

Zero: ±0.009% FSO/°C Span: ±0.009% rdg/°C Pressure:

#### Safe Over Pressure: 150% rated pressure Burst Pressure: 300% rated pressure

Mechanical: Wetted Parts: 17-4 PH stainless steel Pressure Port: G ¼ Female

#### **Electrical Connection:**

Style 0: 3 m cable, Style 1: PTIH-10-6P (or equal) Style 6: micro DIN

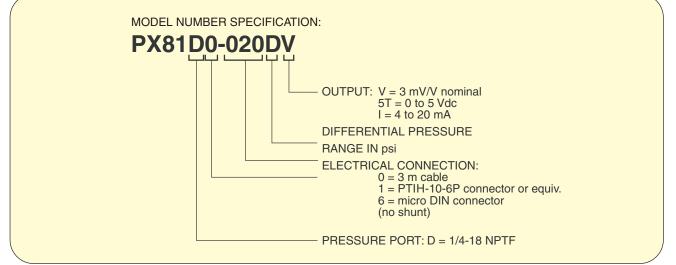
Mating Connector:

Style 1: PT06F10-6S (not included) Style 6: Mating connector included



PXM81MD0-1.40BARDI, £369, shown close to than actual size.

### **CUSTOM CONFIGURATIONS**



To order extra cable on cable style models, add suffix "-(total length in metres)M" add £4.35/m over the standard 3 m length.

Ordering Examples: PXM81MD0-350mBARDI-10M, 350 mbar range model with 4 to 20 mA output and 10 metre cable, £459 + (7 x 4.35) = £489.45. PXM81MD1-3.50BARDV, 3.5 bar range model with mV/V output and PTIH-10-6P twist lock connector, £369. Mating connector (not included) PT06F10-6S £17.75. PXM81MD6-014BARD5T, 14 bar range model with 0 to 5 Vdc output with a micro DIN connector, £459. Mating connector included.

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