

TRIPLE-RANGE INDUSTRIAL WET/WET DIFFERENTIAL PRESSURE TRANSDUCER

PX83 Series

0 to 5 Vdc Output
0-25 to 0-5000 psi
0-2 to 0-345 bar
Differential Pressure

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
\$1300



- ✓ Low Differential Pressure at High Line Pressure—Up to 5000 psi
- ✓ FM Intrinsically Safe
- ✓ All Stainless Steel Construction
- ✓ Hermetically Sealed for Harsh Environments
- ✓ High Overpressure Capability

OMEGA's PX83 Series is a heavy-duty, wet/wet, differential pressure transducer available in ranges from 25 to 5000 psid. The triple-range 0 to 5 V output is suitable for applications in which the pressure may vary from operation to operation and high accuracy and resolution are required. An extremely high overpressure capacity of 1500 psi or 150% (whichever is greater) makes the PX83 a very durable transducer. An FM Approved Intrinsically Safe rating is standard.

SPECIFICATIONS

Triple Range
(Specifications Apply to All Ranges)

Electrical:

Excitation: 24 to 32 Vdc
Output: 0 to 5 Vdc ±10% adj

Zero Balance: 0 V ±10% adj



Three Calibrated Ranges in 1 Transducer!

PX83B1-1KD5T, \$1300, shown smaller than actual size.



BUILT TO ORDER

To Order (Specify Model Number)

Models with 0 to 5 V Triple-Range Output and Integral Connector

RANGE psid	RANGE bar	MODEL NO.	PRICE	COMPATIBLE METERS*
025/050/075	1.7/3.4/5.2	PX83D1-075D5T	\$1300	DP41-E, DP25B-E
050/100/150	3.4/6.9/10.3	PX83D1-150D5T	1300	DP41-E, DP25B-E
100/200/300	6.9/13.8/20.7	PX83D1-300D5T	1300	DP41-E, DP25B-E
200/400/600	13.8/27.6/41.4	PX83D1-600D5T	1300	DP41-E, DP25B-E
500/750/1K	345/51.7/68.9	PX83B1-1KD5T	1300	DP41-E, DP25B-E
750/1.5K/2K	51.7/103/138	PX83B1-2KD5T	1300	DP41-E, DP25B-E
1K/2K/3K	68.9/138/207	PX83B1-3KD5T	1300	DP41-E, DP25B-E
1.5K/3.5K/5K	103/241/345	PX83B1-5KD5T	1300	DP41-E, DP25B-E

Comes with 5-point calibration.

Metric ranges available – consult Engineering.

* See section D for compatible meters.

Ordering Examples: PX83B1-600D5T, triple-range 200, 400, and 600 psid range differential transducer with 0 to 5 Vdc output, 1/4-18 NPT pressure fittings and Bendix style electrical connector, \$1300. PT06F-10-6S, mating connector (not included), \$26.50.

ACCESSORY

MODEL NO.	PRICE	DESCRIPTION
EE-2582	\$110	Reference Book: Mechanical Variables Measurement

TRIPLE-RANGE DIFFERENTIAL PRESSURE TRANSDUCER

DIFFERENTIAL PRESSURE TRANSDUCERS **B**

Performance:

- Accuracy:** 0.25%
- Linearity:** ±0.25% FSO
- Hysteresis:** ±0.10% FSO
- Repeatability:** ±0.1% FSO

Agency Approvals:

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

Environmental:

- Operating Temp Range:** -46 to 107°C (-50 to 225°F)
- Compensated Temp Range:** 17 to 71°C (60 to 160°F)

Thermal Effects:

- Zero:** 0.009% FSO/°C (0.005% FSO/°F)
- Span:** 0.009% FSO/°C (0.005% FSO/°F)

Line Pressure: 1500 psi or 150% of rated pressure, whichever is greater
Burst Pressure: 6000 psi minimum

Mechanical:

Wetted Parts: 17-4 PH stainless steel

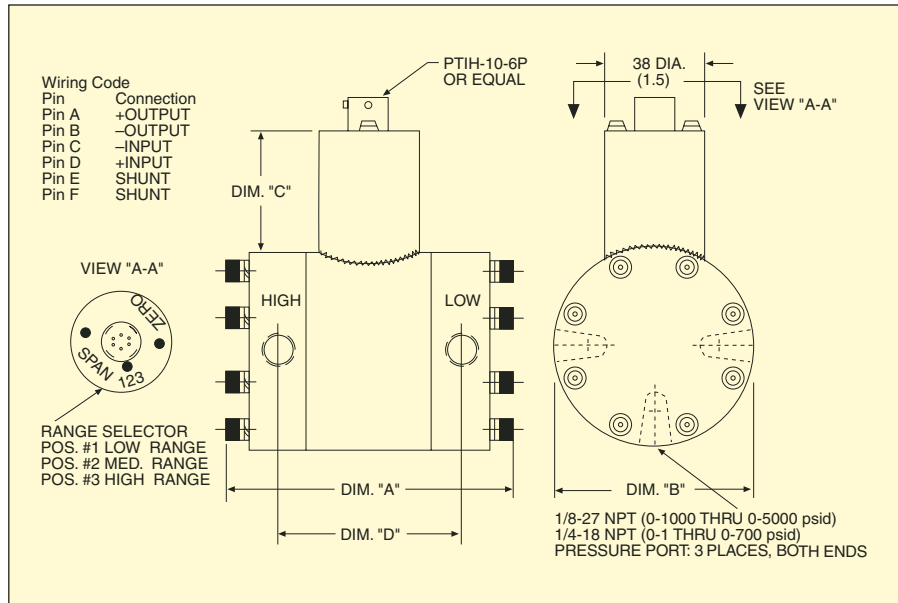
Pressure Port:

¼-18 NPTF for ranges 0-25 to 0-700 psid
⅝-27 NPTF for ranges ≥ 0-1000 psi

Electrical Connection: Cable or PTIH-10-6P (or equal)

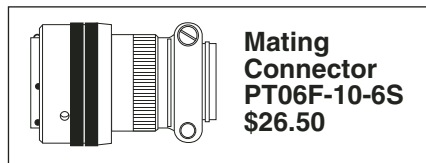
Mating Connector:

PT06F-10-6S (not included)



Dimensions: mm (in)

Capacity (highest)	A	B	C	D
25 to 700 psid	111 (4.38)	76 (3.0)	62 (2.44)	75 (2.94)
1000 to 5000 psid	76 (3.0)	51 (2.0)	76 (3.0)	51 (2.0)



Custom Configurations

SERIES	PRESSURE PORT [1]	ELECTRICAL CONNECTION [2]	RANGE (psid) [3]	UNITS [4]	OUTPUT [5]	OPTIONS [6]
PX83	B = ⅝-27 NPT female (ranges >700 psid) D = ¼-18 NPT female (ranges ≤700 psid)	1 = PTIH-10-6P connector (or equal, no charge). Mating connector (not included) order PT06F-10-6S \$26.50	075/050/025 150/100/050 300/200/100 600/400/200 1K/750/500 2K/1.5K/750 3K/2K/1K 5K/3.5K/1.5K	D = Differential pressure	5T = 0 to 5 Vdc triple range	High Line Pressure LP2K = 2000 psi LP3K = 3000 psi LP5K = 5000 psi
			\$1300			

To order a custom configuration:

1. Select a pressure port
2. Select electrical connection
3. Select a pressure range
4. Select pressure units
5. Select output
6. Select agency approvals

Metric ranges available – consult Engineering.

Ordering Example: PX83B1-600D5T, triple-range 200, 400 and 600 psid range differential transducer with 5 Vdc output, ¼-18 NPT pressure fittings and Bendix style electrical connector, \$1300. PT06F-10-6S, mating connector (not included), \$26.50.