

TRIPLE-RANGE INDUSTRIAL WET/WET DIFFERENTIAL PRESSURE TRANSDUCER

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

Metric thread
 adaptors
 and snubbers
 available,
 visit us online

**Three Calibrated
 Ranges in 1
 Transducer!**

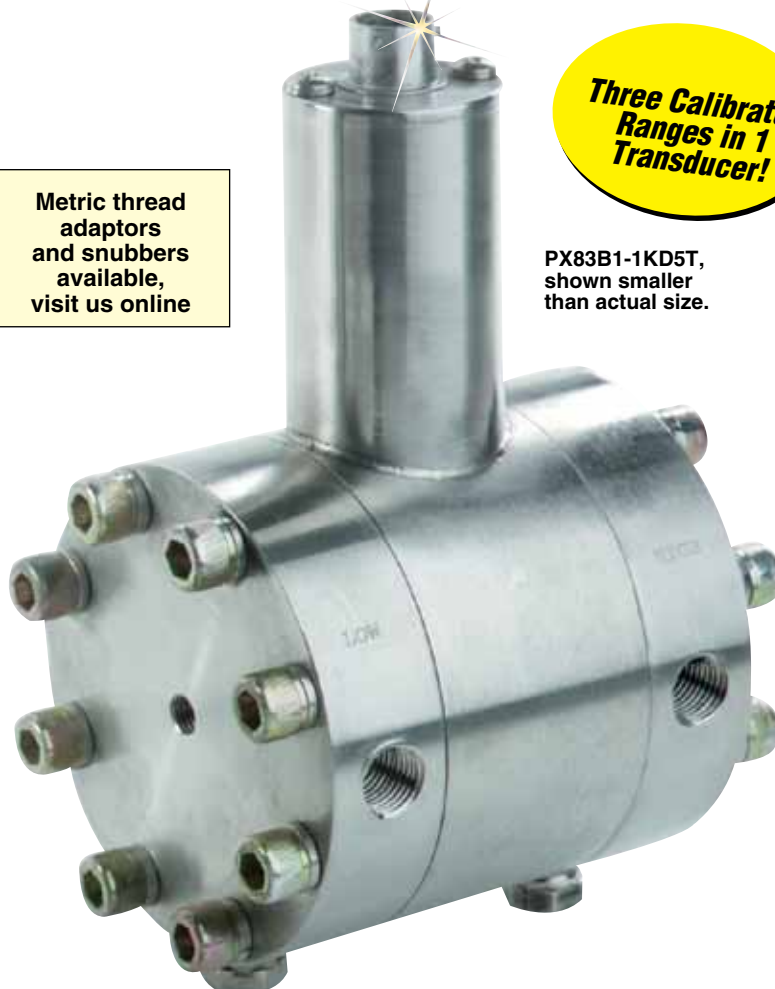
PX83B1-1KD5T,
 shown smaller
 than actual size.

PX83 Series



- ✓ Low Differential Pressure at High Line Pressure—Up to 3000 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.



BUILT TO ORDER!

To Order

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

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

Comes complete with 5-point calibration.

Metric ranges available – consult Engineering.

* Visit us online 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 twist-lock 6 pin electrical termination. PT06F10-6S-R, mating connector (sold separately).

ACCESSORY

MODEL NO.	DESCRIPTION
PT06F10-6S-R	Mating connector for PX83 transducers

TRIPLE-RANGE DIFFERENTIAL PRESSURE TRANSDUCER

SPECIFICATIONS

Triple Range

(Specifications Apply to All Ranges)

Electrical:

Excitation: 24 to 32 Vdc

Output: 0 to 5 Vdc $\pm 10\%$ adj

Zero Balance: 0 V $\pm 10\%$ adj

Performance:

Accuracy: 0.25%

Linearity: $\pm 0.50\%$ FSO (1-30 PSID)

$\pm 0.35\%$ FSO (>30 PSID)

Hysteresis: $\pm 0.15\%$ FSO (1-30 PSID)

$\pm 0.10\%$ FSO (>30 PSID)

Repeatability: $\pm 0.1\%$ FSO

Balance: 0V $\pm 10\%$ adjustable

Agency Approvals:

FM Intrinsically Safe

IS/I.II.III/1/CDEFG standard

Environmental:

Operating Temp Range:

-34 to 94°C (-30 to 200°F) for 1-30 PSID

-46 to 107°C (-50 to 225°F) for >30 PSID

Compensated Temp Range:

-1 to 55°C (30 to 130°F) for 1-30 PSID

17 to 71°C (60 to 160°F) for >30 PSID

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:

$\frac{1}{8}$ -27 NPTF for ranges ≥ 1000 psi

$\frac{1}{4}$ -18 NPTF for ranges ≤ 700 psi

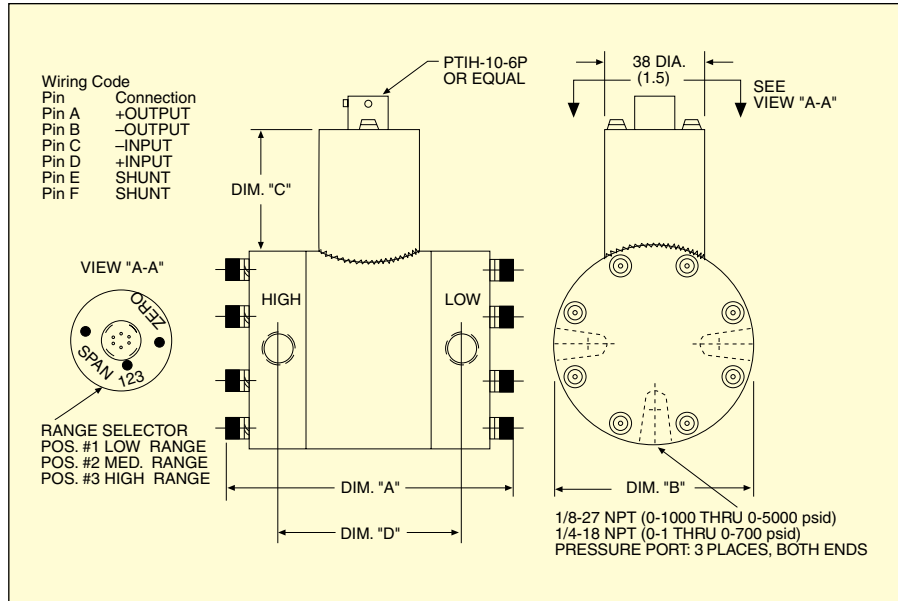
CUSTOM CONFIGURATIONS

PX83 SERIES	PRESSURE PORT [1]	ELECTRICAL CONNECTION [2]	RANGE (psid) [3]	UNITS [4]	OUTPUT [5]	OPTIONS [6]
	B = $\frac{1}{8}$ -27 NPT female (ranges >700 psid) D = $\frac{1}{4}$ -18 NPT female (ranges ≤ 700 psid)		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
1 = PTIH-10-6P connector (or equal, no charge). Mating connector (sold separately) order PT06F10-6S-R						

Metric ranges available – consult Engineering.

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

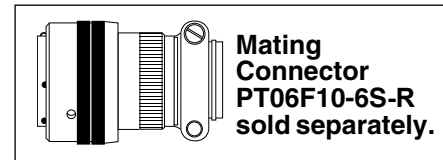


Dimensions: mm (inch)

CAPACITY (HIGHEST)	A	B	C	D
<1000 psid	111 (4.38)	76 (3.0)	62 (2.44)	75 (2.94)
≥ 1000 psid	76 (3.0)	51 (2.0)	76 (3.0)	51 (2.0)

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

Mating Connector: PT06F10-6S-R (sold separately)



Ordering Example: PX83B1-600D5T, triple-range 200, 400 and 600 psid range differential transducer with 5 Vdc output, $\frac{1}{4}$ -18 NPT pressure fittings and twist-lock 6 pin electrical connector. PT06F10-6S-R, mating connector (sold separately).