



SPEC SHEET
PX83-5V

Interchangeable with
Model TH-DV3

PX83 Series
0-5 Vdc Output
0-1 to 0-3,000 psi
0-70 mbar to 0-200 bar
Differential Pressure

1 bar = 14.5 psi
1 kg/cm² = 14.22 psi
1 Atmosphere = 14.7 psi = 29.93 in-Hg = 760.2 mm-Hg = 1.014 bar

- Low Differential Pressure at High Line Pressure - up to 6,000 psi**
- FM/CSA Intrinsically Safe**
- All Stainless Steel Construction**
- Hermetically Sealed for Harsh Environments**
- High Overpressure Capability**

The OMEGADYNESM PX83 is a heavy duty, wet-wet, differential pressure transducer available in ranges from 0-1 to 0-5000 psid. The triple range 0-5V output is suitable for applications where the pressure may vary from operation to operation and high accuracy and resolution are required for all situations. An extremely high over pressure capacity of 1500 psi or 150% (whichever is greater) make the PX83 an extremely durable transducer. FM/CSA approved Intrinsically Safe rating is standard.

TRIPLE RANGE INDUSTRIAL WET/WET DIFFERENTIAL PRESSURE TRANSDUCER

\$1300
Model Shown

Model PX83D1-1KD5T
Shown Smaller Than Actual Size

**For Sales and Service
In U.S.A. and Canada**

1-800-872-3963SM
1-800-USA-DYNE

**International Customers Dial
(614) 965-9340**
24-Hour FAX (614) 965-9438

OMEGADYNESM FAX

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1-800-344-3963SM
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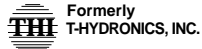
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OMEGADYNE, Inc.

149 Steizer Court, Sunbury, OH 43074

<http://www.omegadyne.com>

e-mail: info@omegadyne.com



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➔ **Most Popular Models Highlighted** ←

Prices Shown in U.S. Dollars

To Order: (Specify Model Number)			
Models with 0-5V Triple Range Output and Integral Connector			
Range (psid)	Model Number	Price	Compatible Meters
002/004/006	PX83D1-006D5T	\$1350	INFP, INFCP
004/008/012	PX83D1-012D5T	1350	INFP, INFCP
06/012/018	PX83D1-018D5T	1350	INFP, INFCP
025/050/075	PX83D1-075D5T	1300	INFP, INFCP
050/100/150	PX83D1-150D5T	1300	INFP, INFCP
100/200/300	PX83D1-300D5T	1300	INFP, INFCP
200/400/600	PX83D1-600D5T	1300	INFP, INFCP
500/750/1K	PX83B1-1KD5T	1300	INFP, INFCP
750/1.5K/2K	PX83B1-2KD5T	1300	INFP, INFCP
1K/2K/3K	PX83B1-3KD5T	1300	INFP, INFCP

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Metric Ranges Available - Consult Engineering

Ordering Examples: 1.) **PX83D1-018D5T** is a Triple Range 6, 12, 18 psid range differential transducer with 0-5 Vdc output, 1/4-18 NPT pressure fittings, and a Bendix style electrical connector, \$1350. 2.) **PX83B1-600D5T** is a Triple Range 200, 400 and 600 psid range differential transducer with 0-5 Vdc output, 1/4-18 NPT pressure fittings, and a Bendix style electrical connector, \$1300. Mating Connector (not included) **PT06F-10-6S, \$26.50.**

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SPECIFICATIONS: Triple Range
(specifications apply to all ranges)

Electrical:

Excitation: 24-32 Vdc

Output: 0-5 Vdc $\pm 10\%$ adj.

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

Performance:

Accuracy Class:

≤ 30 psid: 0.5%

>30 psid: 0.25%

Linearity:

≤ 30 psid: $\pm 0.5\%$ FSO

>30 psid: $\pm 0.25\%$ FSO

Hysteresis:

≤ 30 psid: $\pm 0.15\%$ \pm FSO

>30 psid: $\pm 0.10\%$ FSO

Repeatability: $\pm 0.1\%$ FSO

Agency Approvals: FM/CSA

Intrinsically Safe IS/I.II.III/1/CDEFG
Standard

Environmental:

Operational Temp Range:

≤ 30 psid: -33 to +93°C (-30 to +200°F)

>30 psid: -46 to +107°C (-50 to +225°F)

Compensated Temp Range:

≤ 30 psid: -1 to +54°C (+30 to +130°F)

>30 psid: +17 to +71°C (+60 to +160°F)

Thermal Effects:

Zero: ≤ 30 psid: 0.007% FSO/°F

>30 psid: 0.005% FSO/°F

Span: ≤ 30 psid: 0.007% Rdg/°F

>30 psid: 0.005% Rdg/°F

Pressure:

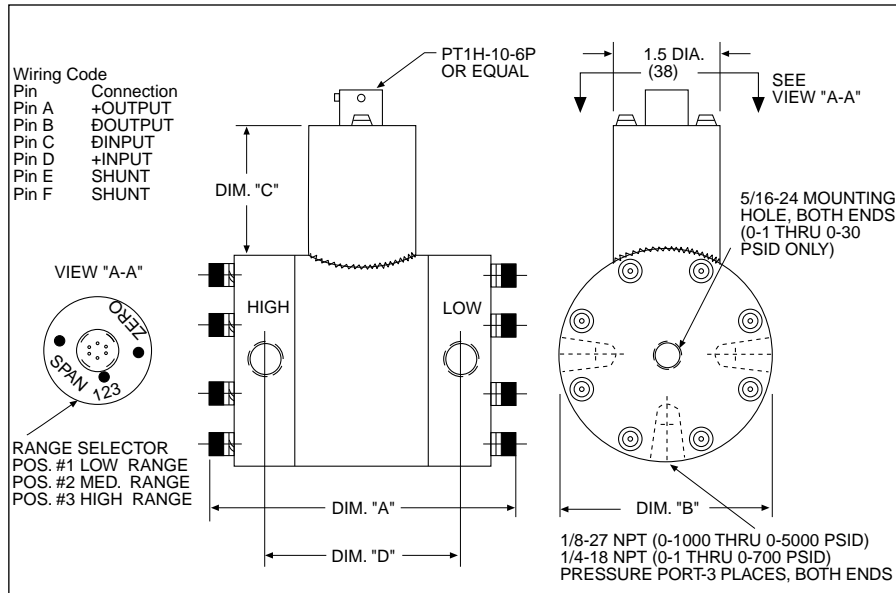
Ranges psid (specify max range

when ordering): 2/4/6, 4/8/12, 6/12/18,

25/50/75, 50/100/150, 100/200/300,

200/400/600, 500/150/1.5K,

750/1.5K/2K, 1K/2K/3K



Dimensions Shown in Inches (mm)

Capacity (highest)	A	B	C	D
1 to 30 psid	4.43 (113)	3.5 (89)	2.44 (62)	2.69 (68)
50 to 700 psid	4.38 (111)	3.0 (76)	2.44 (62)	2.94 (75)
1000 to 5000 psid	3.0 (76)	2.0 (51)	3.0 (76)	2.0 (51)

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

Burst Pressure: 6000 psi minimum

Mechanical:

Wetted Parts:

≤ 30 psid: 316 Stainless Steel

>30 psid: 17-4 PH Stainless Steel

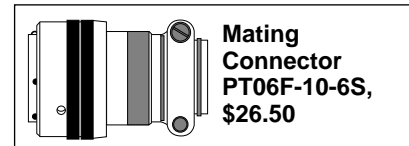
Pressure Port:

$\frac{1}{4}$ " NPTF for Ranges 0-1 to 0-700 psi

$\frac{1}{8}$ " NPTF for Ranges ≤ 3 0-1000 psi

Electrical Connection: PT1H-10-6P (or equal)

Mating Connector: PT06F-10-6S (not included)



CUSTOM CONFIGURATIONS:

SERIES	PRESSURE PORT	ELECTRICAL CONNECTION	RANGE (PSID)	UNITS	OUTPUT	OPTIONS
PX83	[1]	[2]	[3]	[4]	[5]	[6]
	B = $\frac{1}{4}$ " NPT-Female (Ranges >700 psid)		006/004/002	D = differential pressure	5T = 0-5Vdc Triple Range	
	D = $\frac{1}{4}$ " NPT-F (no charge) (Ranges ≤ 700 psid)		012/008/004			
			018/012/006			
			075/050/025			
			150/100/050			
			300/200/100			
			600/400/200			
			1K/750/500			
			2K/1.5K/750			
			3K/2K/1K			
		1 = PT1H-10-6P Connector or equal (no charge). Mating Connector not included order PT06F-10-6S \$26.50				

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

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