

Interchangeable with
Model TH-DV

SPEC SHEET
PX80-5V

INDUSTRIAL WET/WET DIFFERENTIAL PRESSURE TRANSDUCER with Amplified Voltage Output

**PX80 Series
0-5 Vdc Output**

**0-1 to 5,000 psi
0-70 mbar to 0-340 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 - Standard**
- ✓ **All Stainless Steel Construction**
- ✓ **Hermetically Sealed for Harsh Environments**
- ✓ **High Overpressure Capability**

The OMEGADYNE™ PX80 is a heavy duty, wet-wet, differential pressure transducer available in ranges from 0-1 to 0-5000 psid. The amplified 0-5V output is suitable for interface with most PLCs and computer based control systems. An extremely high over pressure capacity of 1500 psi or 150% of capacity (whichever is greater) make the PX80 an extremely durable transducer. FM and CSA approved Intrinsically Safe rating is standard. The all stainless steel construction, high over pressure protection and FM/CSA approved, make the PX80 Series differential pressure transducers a high reliability transducer in harsh industrial environments.

**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**

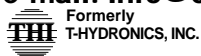
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Document # 3699

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➔ **Most Popular Models Highlighted** ←

Prices Shown in U.S. Dollars

To Order: (Specify Model Number)

Models with 0-5V Output and Integral Connector Connections

Range (psid)	Model Number	Price	Compatible Meters
0-1	PX80D[*]-001D5T	\$1100	INFP, INFPCP, IDP
0-2	PX80D[*]-002D5T	1100	INFP, INFPCP, IDP
0-4	PX80D[*]-004D5T	1100	INFP, INFPCP, IDP
0-8	PX80D[*]-008D5T	1100	INFP, INFPCP, IDP
0-12	PX80D[*]-012D5T	1100	INFP, INFPCP, IDP
0-20	PX80D[*]-020D5T	1100	INFP, INFPCP, IDP
0-30	PX80D[*]-030D5T	1100	INFP, INFPCP, IDP
0-50	PX80D[*]-050D5T	1045	INFP, INFPCP, IDP
0-100	PX80D[*]-100D5T	1045	INFP, INFPCP, IDP
0-200	PX80D[*]-200D5T	1045	INFP, INFPCP, IDP
0-300	PX80D[*]-300D5T	1045	INFP, INFPCP, IDP
0-500	PX80D[*]-500D5T	1045	INFP, INFPCP, IDP
0-700	PX80D[*]-700D5T	1045	INFP, INFPCP, IDP
0-1000	PX80B[*]-1KD5T	1045	INFP, INFPCP, IDP
0-1500	PX80B[*]-1.5KD5T	1045	INFP, INFPCP, IDP
0-2000	PX80B[*]-2KD5T	1045	INFP, INFPCP, IDP
0-2500	PX80B[*]-2.5KD5T	1045	INFP, INFPCP, IDP
0-3000	PX80B[*]-3KD5T	1045	INFP, INFPCP, IDP
0-5000	PX80B[*]-5KD5T	1045	INFP, INFPCP, IDP

Interchangeable with Model TH-DV

Metric Ranges Available - Consult Engineering

[*] Insert 0 for 10 ft cable or 1 for Bendix Connector

Ordering Examples: 1.) **PX80D1-020D5T** is a ±20 psid range differential transducer with 0-5 Vdc output, 1/4-18 NPT pressure fittings, and a Bendix style electrical connector, \$1100. Mating Connector (not included) **PT06F-10-6S**, \$26.50.

2.) **PX80B0-1KD5T** is a 1,000 psid range differential transducer with 0-5 Vdc output, 1/8-27 NPT pressure fittings, and 10 ft (3m) PVC cable, \$1045.

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SPECIFICATIONS: 5Vdc Output

Electrical:

Excitation: 24-32 Vdc

Output: 0-5 Vdc ±10% adj.

Zero Balance: 0 V ±10% adj

Performance:

Accuracy Class:

≤30 psid: 0.5%

>30 psid: 0.25%

Linearity: ≤30 psid: ±0.5 % FSO

>30 psid: ±0.25% FSO

Hysteresis: ≤30 psid: ±0.15 % FSO

>30 psid: ±0.10% FSO

Repeatability: ±0.1% FSO

Agency Approvals: FM/CSA Intrinsically Safe IS/I.II.III/1/CDEFG

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:

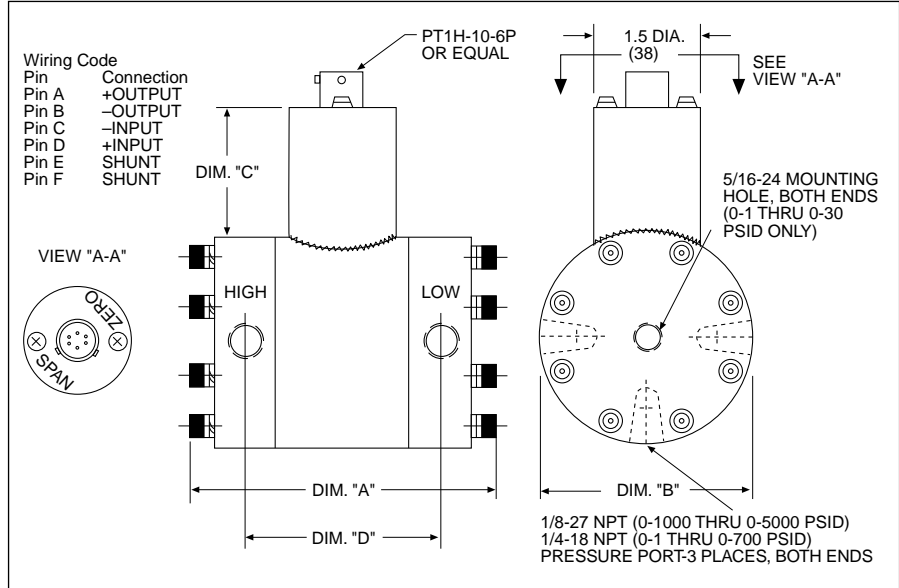
≤30 psid: -1 to +54°C (+30 to +130°F)

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

Thermal Effects:

Zero: ≤30 psid: 0.007% of FSO/°F

>30 psid: 0.005% of FSO/°F



Dimensions Shown in Inches (mm)

Capacity	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)

Span: ≤30 psid: 0.007% of Rdg/°F
 >30 psid: 0.005% of Rdg/°F

Pressure:

Ranges psid: 1, 2, 4, 8, 12, 20, 30, 50, 100, 200, 300, 500, 700, 1K, 1.5K, 2K, 2.5K, 3K, 5K,

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: 17-4PH Stainless Steel

Pressure Port:

1/4-18 NPTF for 0-1 to 0-700 psi

1/2-27 NPTF for 0-1000 psi and up

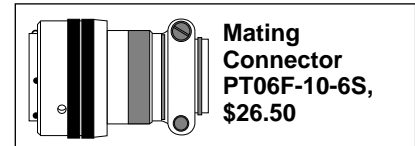
Electrical Connection:

PT1H-10-6P (or equal)

Optional: 10 ft (3m) Shielded PVC Cable

Mating Connector: PT06F-10-6S

(not included)



CUSTOM CONFIGURATIONS:

SERIES	PRESSURE PORT	ELECTRICAL CONNECTION	RANGE (PSID)	UNITS	OUTPUT	OPTIONS
PX80	[1]	[2]	[3]	[4]	[5]	[6]
	B = 1/2-27 NPT-Female (Ranges ≥1000 psid)	0 = 10 ft PVC Cable \$2/ft over 10 ft (3m) 1 = PT1H-10-6P Connector or equal (no charge). Mating Connector (not included) order PT06F-10-6S \$26.50 5 = Explosion-proof Amplifier Box (no charge) (4-20 mA model only)	001	D = differential pressure mV/V 5Volt 4-20mA \$950 \$1100 \$1100	V = mV/V 5T = 0-5Vdc I = 4-20 mA	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
	D = 1/4-18 NPT-F (no charge) (Ranges ≤700 psid)		002			
			004			
			008			
			012			
			020			
			030			
			050			
			100			
			200			
			300			
			500			
			700			
			1K			
			1.5K			
		2K				
		2.5K				
		3K				
		5K				

Interchangeable with Model TH-D, TH-DV, TH-DVA

Metric Ranges Available - Consult Engineering

To order extra cable on Cable Style models, add suffix “-(length in feet)FT” and \$2/ft over the standard 10 ft (3m) length.

Ordering Examples: 1.) PX80B5-1KDI is a 1000 psid range model with 4-20 mA output and a lightning protected amplifier box, \$1045.

2.) PX80D5-001DI-25FT is a 1 psid range model, 4-20 mA output and 25 ft (7.6m) cable, 1100+30 = \$1130

3.) PX80D1-200DV is a 200 psid range model with mV/V output and an integral connector, \$895. Mating Connector (not included)

PT06F-10-6S, \$26.50. 4.) PX80D1-012D5T is a 12 psid range model with 0-5 Vdc output and an integral connector \$1100. Mating Connector (not included) PT06F-10-6S, \$26.50.