

## PX SERIES

Selectable Ranges, LCD Display and Automatic Zero for Easy Operation



The digital PX Series differential pressure transducers utilize highly accurate, microprocessor profiled sensors and an advanced ceramic capacitive sensing element. Designed to monitor duct and room pressure in commercial buildings, the PX Series offers exceptional job-site flexibility. PXD and PXU models feature four field-selectable ranges. The PXU features seven field-selectable ranges, allowing just one model to cover applications for 0 to 0.1" to 0 to 10" W.C. The directional mode jumper is used to configure the transducer in uni-directional or bi-directional mode for room and building static pressure applications. All models feature a pushbutton and digital input terminal to zero the output. The microprocessor is programmed to reduce accidental zero adjustment during normal operation.

### SPECIFICATIONS

#### GENERAL

Media Compatibility	Dry air or inert gas
Input Power	Class 2; 12 to 30 Vdc, or 24 Vac nominal; 2-wire: 20 mA max.; 3-wire: 30 mA max.
Output	Field-selectable: 2-wire, loop-powered 4 to 20 mA (DC only, clipped & capped), or 3-wire 0-5 V/0-10 V *
Mode	Unidirectional or bidirectional, switch selectable
Display (option)	Signed 3-1/2 digit LCD, indicates pressure, overrange indicator
Zero Adjust	Pushbutton auto-zero & digital input (2-pos terminal block)
Fittings	Brass barb; 0.24" (6.1 mm) o.d.
Physical	UL 94 V-0 Fire Retardant ABS

#### PRESSURE RANGES

PX: 01 Uni-directional Bi-directional	0.1/0.25/0.5/1.0" W.C. F.S., switch selectable ±0.1/±0.25/±0.5/±1.0" W.C. F.S., switch selectable 25 Pa/50 Pa/100 Pa/250 Pa, F.S., switch selectable ±25 Pa/±50 Pa/±100 Pa/±250 Pa, F.S., switch selectable
PX: 02 Uni-directional Bi-directional	1.0/2.5/5.0/10" W.C. F.S., switch selectable ±1.0/±2.5/±5.0/±10" W.C. F.S., switch selectable 0.25 kPa/0.5 kPa/1.0 kPa/2.5 kPa, F.S., switch selectable ±0.25 kPa/±0.5 kPa/±1.0 kPa/±2.5 kPa, F.S., switch selectable

## Reduce field failures

Excellent tolerance to overpressure & vibration reduces field failures

## High accuracy

High accuracy digital sensor maintains calibration and reduces callbacks

## Maintenance free

High reliability sensor technology for long-term, maintenance-free operation

### APPLICATIONS

- Static pressure in building, duct or room applications
- Variable air volume system control
- Filter status monitoring
- Clean rooms, hospitals, fume hoods, computer rooms, and other very low differential pressure applications

## Reduce setup

Selectable ranges and scales reduce setup time and number of models to stock

## Microprocessor

Microprocessor-based design allows for digitally profiled sensor increasing product accuracy and reliability

## Circuit protection

Circuit protection avoids damage due to incorrect input wiring

PXU: 05 Uni-directional	0.1/0.25/0.5/1.0/2.5/5/10" W.C. 25 Pa/50 Pa/100 Pa/250 Pa/0.5 kPa/1 kPa/2.5 kPa F.S. switch selectable
Bi-directional	±0.1/0.25/0.5/1.0/2.5/5/10" W.C. 25 Pa/50 Pa/100 Pa/250 Pa/0.5 kPa/1 kPa/2.5 kPa F.S. switch selectable

#### SENSOR

Response Time	Standard: T95 in 20 sec, Fast: T95 in 2 sec, switch selectable
Proof Pressure	3 psid (20.6 kPa)
Burst Pressure	5 psid (34.5 kPa)
Accuracy	±1%F.S. of selected range (combined linearity and hysteresis)
Temperature Effect	1" (250 Pa) models: 0.05%/°C; 10" (2.5 kPa) models: 0.01%/°C; (Relative to 25°C) 0° to 50°C (32° to 122°F)
Zero Drift (1-year)	1" (250 Pa) models: 2.0% max.; 10" (2.5 kPa) models: 0.5% max.
Operating Environment	0 to 60 °C (32 to 140 °F); 0 to 90% RH non-condensing

#### WARRANTY

Limited Warranty	5 years
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#### AGENCY APPROVALS



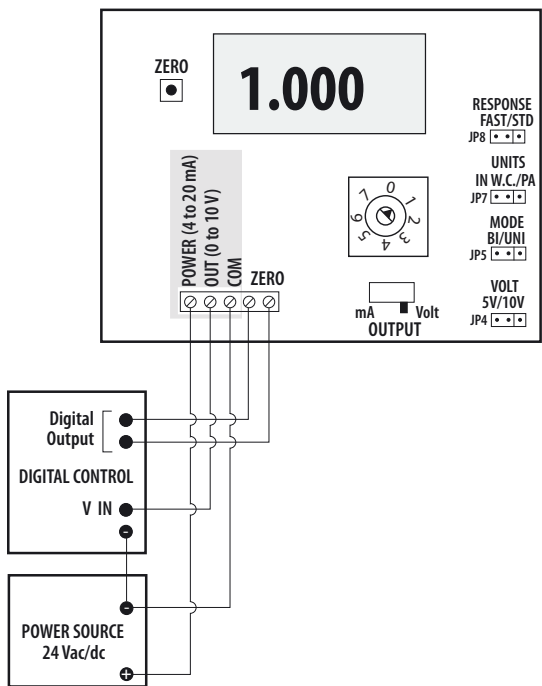
EMC Conformance: Low voltage directive 2014/35/EU; EMC directive 2014/30/EU.  
EMC Special Note: Connect this product to a DC distribution network or an AC/DC power adaptor with proper surge protection (EN 61000-6-1 specification requirements).  
\*Minimum input voltage for 4 to 20 mA operation: 250 Ω loop = 13 Vdc; 500 Ω loop = 19 Vdc.

\*The CE mark indicates RoHS2 compliance. Please refer to the CE Declaration of Conformity for additional details.

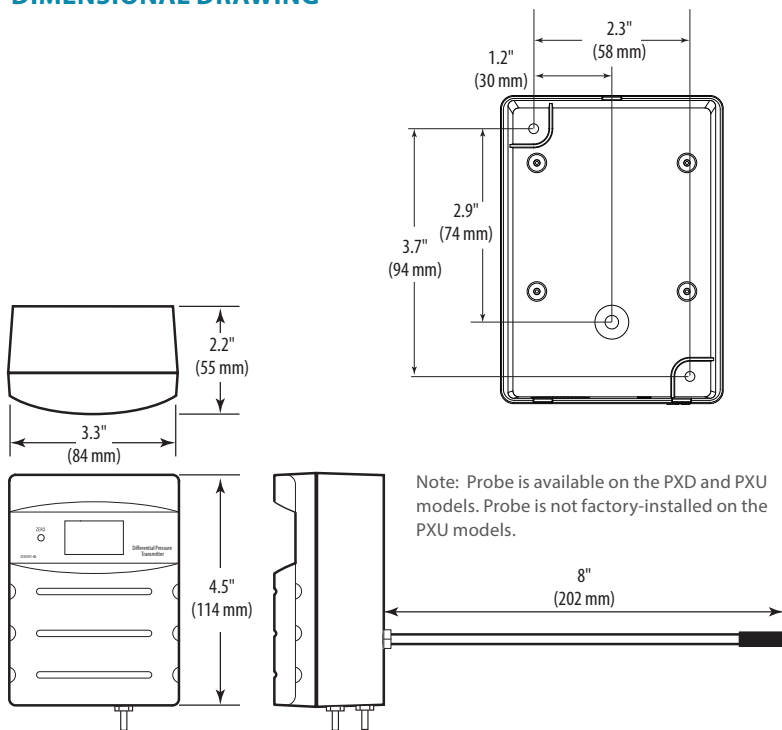


### 3-WIRE, 0-5 V/0-10 V

Wiring Diagram

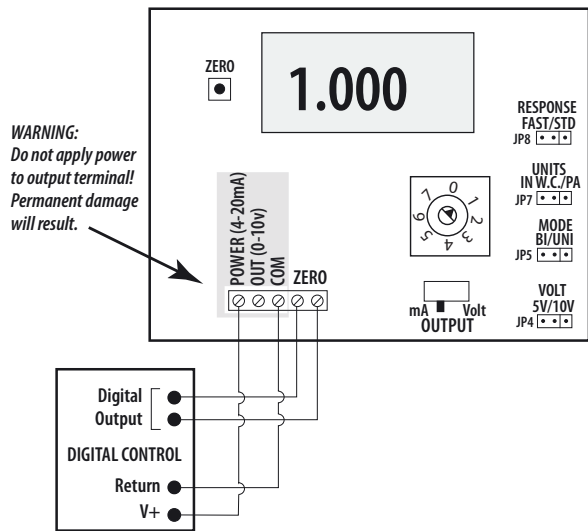


### DIMENSIONAL DRAWING



### 2-WIRE, 4 TO 20 MA

Wiring Diagram



ROTARY SWITCH POSITION	PX01		PX02		PX05	
	INCHES W.C.	PASCAL	INCHES W.C.	PASCAL	INCHES W.C.	PASCAL
0	0.1	25	1	250	0.1	25
1	0.25	50	1	250	0.25	50
2	0.5	100	1	250	0.5	100
3	1	250	1	250	1	250
4	1	250	2.5	0.5kPa	2.5	0.5kPa
5	1	250	5	1kPa	5	1kPa
6	1	250	10	2.5kPa	10	2.5kPa
7	1	250	10	2.5kPa	10	2.5kPa

### ORDERING INFORMATION

Enclosure: PX  D = Duct  P = Panel

Local Display:  L = LCD Display  X = No Display

NIST:  N = NIST  X = None

Range:  01 = 0-1"WC/0-250Pa  02 = 0-10"WC/0-2,500kPa

Response:  S = Selectable

Example: PX  D  L  X  01  S

Local Display: PXU  L = LCD Display  X = No Display

NIST:  N = NIST  X = None

Range:  05 = 0-10"WC/0-2,500kPa

Response:  S = Selectable

Example: PXU  L  N  05  S

