



Regulator Systems

MANUFACTURER OF AIR CONDITIONING CONTROLS AND INSTRUMENTATION

PX SERIES DIFFERENTIAL PRESSURE TRANSDUCER-DRY MEDIA



OVERVIEW

The digital PX Series differential pressure transducers utilize a highly accurate and stable sensor, which is microprocessor profiled for improved accuracy and reliability. The stability, accuracy and ease of use characteristics of the PX models make them the ideal product for differential pressure monitoring applications. Designed to monitor duct and static pressure in commercial buildings and to provide exceptional job-site flexibility, all PX models feature four field-selectable range options allowing just two models to cover applications for 0-0.1" to 0-10" W.C. The directional mode jumper provides the means to configure the transducer in unidirectional or bidirectional mode for room and building static pressure applications. All models feature a pushbutton and digital input terminal to zero the output. A microprocessor algorithm prevents accidental zero adjustment during normal operation.

PRESSURE SENSING TECHNOLOGY

PX Series pressure transducers utilize an advanced ceramic capacitive sensing element which provides a highly stable linear output. Output offset errors due to changes in temperature, warm-up and long term drift are significantly reduced compared to conventional sensors.

APPLICATIONS

- Static pressure in duct or room applications
- Variable air volume system
- Filter status monitoring

EXCEPTIONAL ACCURACY AND STABILITY

- Improved tolerance to overpressure and vibration reduces field failures
- High accuracy digital sensor maintains calibration and reduces callbacks
- High reliability sensor technology for long-term maintenance-free operation

LOWEST TOTAL INSTALLED COST

- Switch-selectable ranges reduce setup time and number of models to stock
- Microprocessor allows for a nine-point calibration increasing product accuracy and reliability
- Brass barb fittings prevent breakage and accommodate popular tubing sizes
- Built-in pickup tube simplifies installation and saves time (duct model)
- Circuit protection, prevents damage due to incorrect wiring

LCD DISPLAY

Low-differential room pressure sensor with LCD display

- Ideal for clean rooms, hospitals, fume hoods, computer rooms, and other very low differential pressure applications
- Monitors positive and negative pressure
- Field-adjustable ranges for maximum resolution
- Flush mount directly on wall or duct

ORDERING INFORMATION

	(Enclosure)	(Local Display)	(NIST)	(Range)	(US or EU)
PX	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	D= Duct	L= LCD Display	N= NIST	01= 0-1" wc	S= Standard
	P= Panel	X= No Display	X= None	02= 0-10" wc	

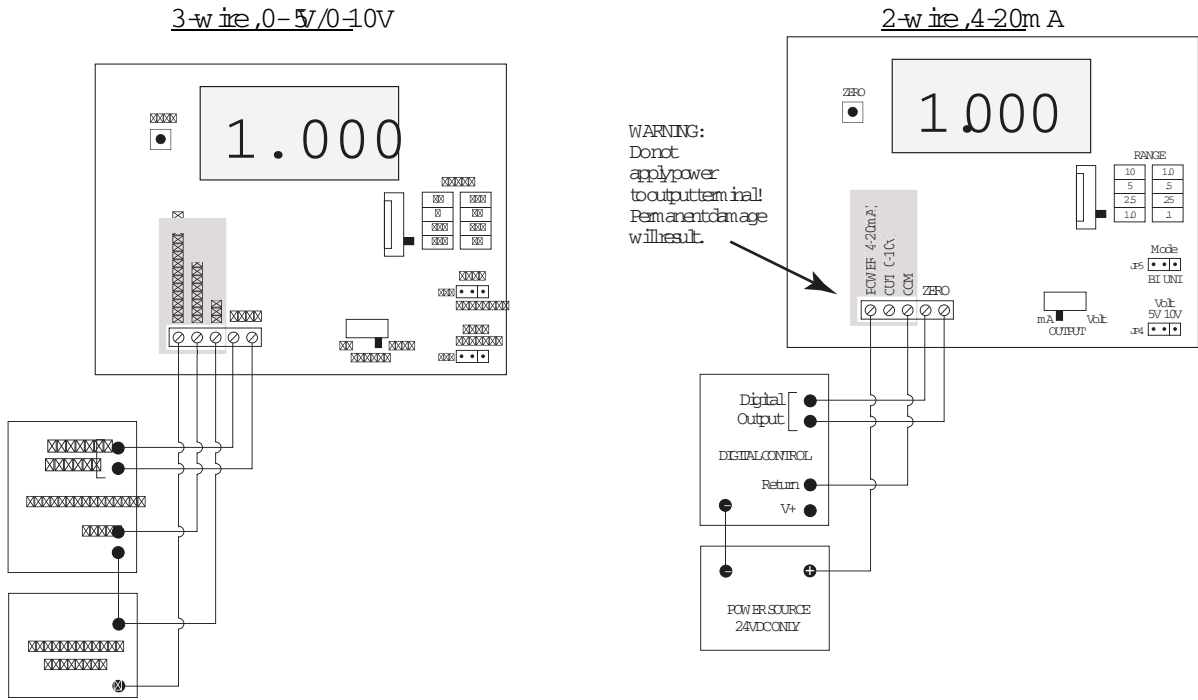
Example:

PX D L X 01 S

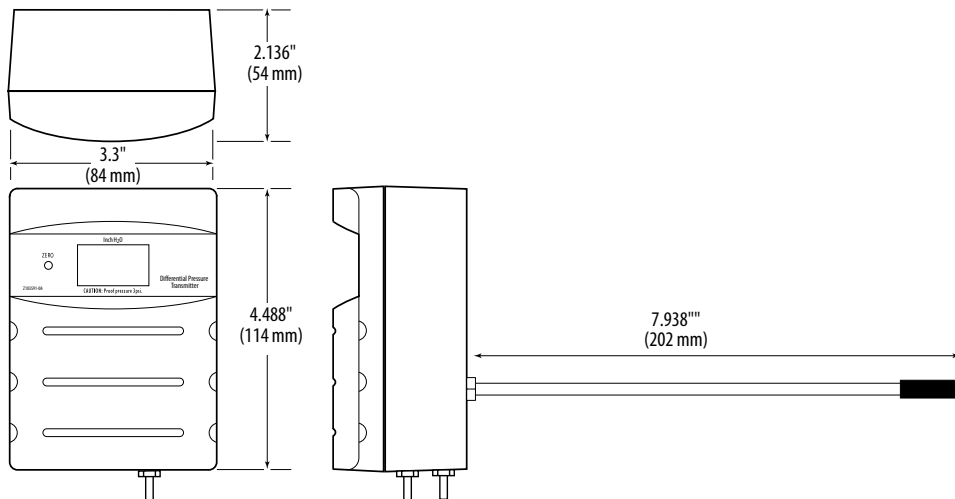


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WIRING DIAGRAMS



DIMENSIONAL DRAWINGS





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SPECIFICATIONS

Media Compatibility	Dry air or inert gas
Input Power	12-30VDC, or 24VAC nominal
Output	Field selectable: 2-wire, loop-powered 4-20mA, (clipped and capped), or 3-wire
0-5V/0-10V	
Pressure Ranges: 01	Unidirectional: 0.1/0.25/0.5/1.0" W.C. F.S., jumper-selectable
	Bidirectional: $\pm 0.1/\pm 0.25/\pm 0.5/\pm 1.0$ " W.C. F.S., jumper-selectable
02	Unidirectional: 1.0/2.5/5.0/10" W.C. F.S., jumper-selectable
	Bidirectional: $\pm 1.0/\pm 2.5/\pm 5.0/\pm 10$ " W.C. F.S., jumper-selectable
Mode	Unidirectional or bidirectional, jumper-selectable
Display (option)	Signed 3-1/2 digit LCD, indicates pressure in inches of water column
Proof Pressure	3 psid
Burst Pressure	5 psid
Accuracy	$\pm 1\%$ F.S. Combined linearity and hysteresis
Temperature Effect	1" models: 0.05%/°C; 10" models: 0.01%/°C (Relative to 25°C) 0° to 50°C
Zero Drift (1-year)	1" models: 2.0% max.; 10" models: 0.5% max.
Zero Adjust	Pushbutton auto-zero and digital input (2-pos terminal block)
Operating Environment	0°- 60°C; 0 to 90% RH non-condensing
Fittings	Brass barb; 1/8" o.d.
Physical	High-impact ABS plastic