PX SERIES

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Digital Pressure Transducer
Dry Media

Installer's Specifications

Media Compatibility	Dry air or inert gas
Input Power	12-30VDC, or 24VAC nominal
Output	Field-selectable: 2-wire, loop-powered 4-20mA (DC only, clipped and capped), or 3-wire 0-5V/0-10V
Pressure Ranges:	
PX: 01	Unidirectional: 0.1/0.25/0.5/1.0" W.C. F.S., switch selectable Bidirectional: ±0.1/±0.25/±0.5/±1.0" W.C. F.S., switch selectable Unidirectional: 25 Pa/50 Pa/100 Pa/250 Pa, F.S., switch selectable Bidirectional: ±25 Pa/±50 Pa/±100 Pa/±250 Pa, F.S., switch selectable
PX: 02	Unidirectional: 1.0/2.5/5.0/10" W.C. F.S., switch selectable Bidirectional: ±1.0/±2.5/±5.0/±10" W.C. F.S., switch selectable Unidirectional: 0.250 kPa/0.500 kPa/1.000 kPa/2.500 kPa, F.S., switch selectable Bidirectional: ±0.250 kPa/±0.500kPa/±1.000 kPa/±2.500 kPa, F.S., switch selectable
PXU: 05	Unidirectional: 0.1/0.25/0.5/1.0/2.5/5/10" W.C. F.S., switch selectable Bidirectional: ±0.1/0.25/0.5/1.0/2.5/5/10" W.C. F.S., switch selectable Unidirectional: 25Pa/50Pa/100Pa/250Pa/0.5kPa/1kPa/2.5kPa F.S., switch selectable Bidirectional: ±25Pa/50Pa/100Pa/250Pa/0.5kPa/1kPa/2.5kPa F.S., switch selectable
Response Time	Standard: T95 in 20 sec, Fast: T95 in 2 sec, jumper selectable
Mode	Unidirectional or bidirectional, jumper selectable
Display (option)	Signed 3-1/2 digit LCD, indicates pressure, overrange indicator
Proof Pressure	3 psid (20.6kPa)
Burst Pressure	5 psid (34.5kPa)
Accuracy	±1% F.S. of selected range (combined linearity and hysteresis)
Temperature Effect	1" (250Pa) models: 0.05%/°C; 10" (2.5kPa) models: 0.01%/°C (Relative to 25°C) 0° to 50°C (32° to 122°F)
Zero Drift (1-year)	1" (250Pa) models: 2.0% max.; 10" (2.5kPa) models: 0.5% max.
Zero Adjust	Pushbutton auto-zero and digital input (2-pos terminal block)
Operating Environment	0°- 60°C (32° to 140°F); 0 to 90% RH non-condensing
Fittings	Brass barb; 0.24" (6.1mm) o.d.
Physical	UL 94 V-0 Fire Retardant ABS

EMC Conformance: EN 61000-6-3:2001 Class B, EN 61000-6-1:2001, EN 61000-3-2:2000, EN 61000-3-3:2001, EMC Test Methods: CISPR 22:1997 (Amended A1:2000, Class B A2:2002), IEC 61000-4-2:2002, IEC 61000-4-3:2006, IEC 61000-4-4:2004, IEC 61000-4-5:2001, IEC 61000-4-6:2004, IEC 61000-4-8:2001, IEC 61000-4-11:2004. EMC Special Note: Connect this product to a DC distribution network or an AC/DC power adaptor with proper SURGE PROTECTION (EN 61000-6-1:2001 specification requirements).

NOTICE

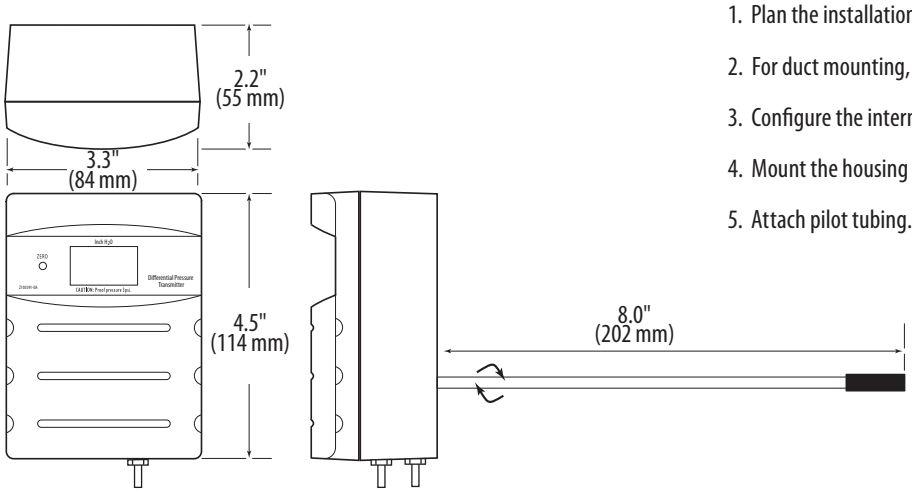
- **This product is not intended for life or safety applications.**
- **Do not install this product in hazardous or classified locations.**
- **Read and understand the instructions before installing this product.**
- **Turn off all power supplying equipment before working on it.**
- **The installer is responsible for conformance to all applicable codes.**

PRODUCT IDENTIFICATION

	Enclosure	Local Display	NIST	Range	Response
PX	☐	☐	☐	☐	☐
	D = Duct P = Panel	L = LCD Display X = No Display	N = NIST X = None	01 = 0-1"W.C./0-250Pa 02 = 0-10"W.C./0-2.500kPa	S = Selectable F = Selectable

	Local Display	NIST	Range	Response
PXU	☐	☐	05	S
	L = LCD Display X = No Display	N = NIST X = None	= 0-10"/0-2.500kPa	= Selectable

DIMENSIONS



QUICK INSTALL

1. Plan the installation. Panel or duct mount?
2. For duct mounting, thread the probe into the rear of the device housing.
3. Configure the internal tubing for the selected installation method.
4. Mount the housing vertically.
5. Attach pilot tubing.

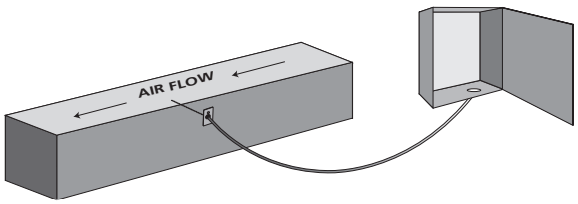
  USA 800.354.8556 or 503.598.4564 / support@veris.com

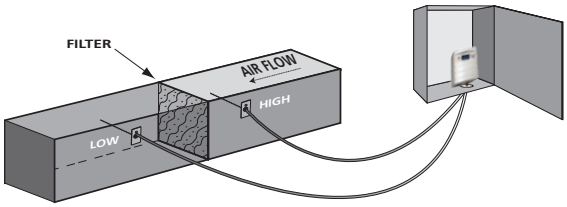
INSTALLATION

1. Plan the installation. Panel or duct mount?

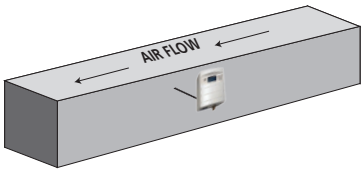
Static Pressure *Differential Pressure*

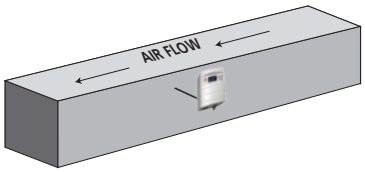
Panel Installations

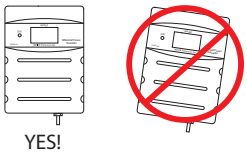


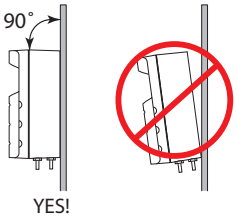


Duct Installations



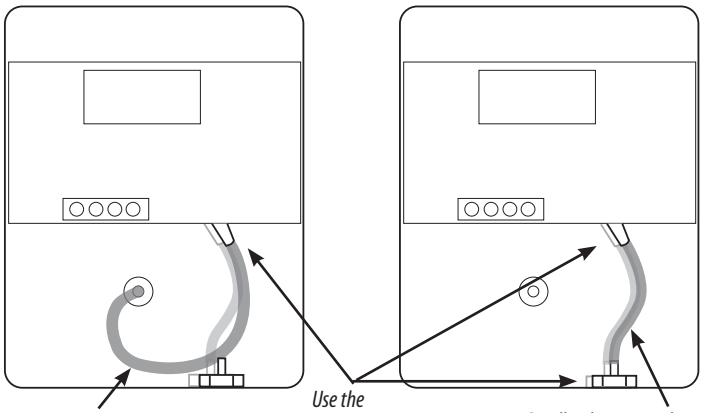






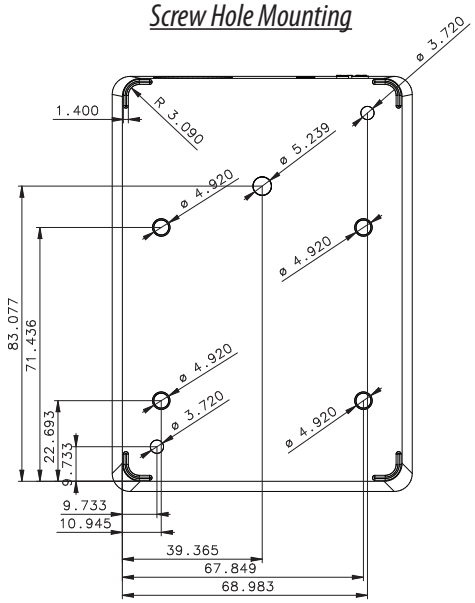
2. For duct mount applications, thread the probe into the back of the device housing.
3. Configure the internal tubing for the selected installation method as shown below. Use the larger diameter tubing for the duct mount configuration.

Tubing for Duct Mount *Tubing for Panel Mount*



4. Mount transducer (see the screw hole diagram). Position transducer vertically.

Screw Hole Mounting



5. Determine length of pilot tubing needed.

WIRING & CONFIGURATION

Connect transmitter to control system and power supply as indicated below.
Optional: Connect ZERO terminals to digital output (contact closure) of control system.
Use switch to select voltage (V) or current (mA) mode.
Jumper JP4: select 0-10V or 0-5V output span. (Voltage mode only).
Jumper JP5: select bidirectional or unidirectional mode.
Jumper JP7: select inches W.C. or Pascal scale
Jumper JP8: select fast or standard response time.
Align the arrow (not the slot) on the rotary switch to desired full-scale range. LCD models will momentarily indicate selected range.

OPERATION

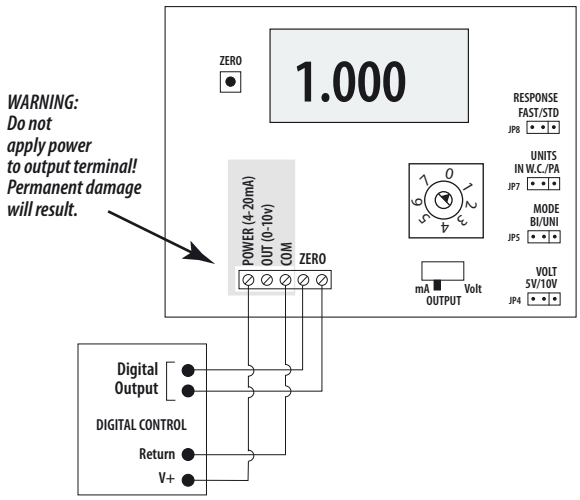
IMPORTANT: *PX Series employ ceramic capacitive sensors and sophisticated temperature compensation circuitry. Sensor achieves best accuracy after initial warm-up period. During the first few minutes of operation, readings at zero pressure and lowest pressure ranges will appear erroneous. Following this initial warm-up period, PX Series will maintain specified accuracy and stability.*

LCD DISPLAY: Display momentarily indicates range "SET" when selection is made. Pressure is normally indicated on display. Units are in inches water column (in. W.C.), Pascals (Pa) or kilopascals (kPa) as indicated on the display. Display shows OVER when pressure is over range.

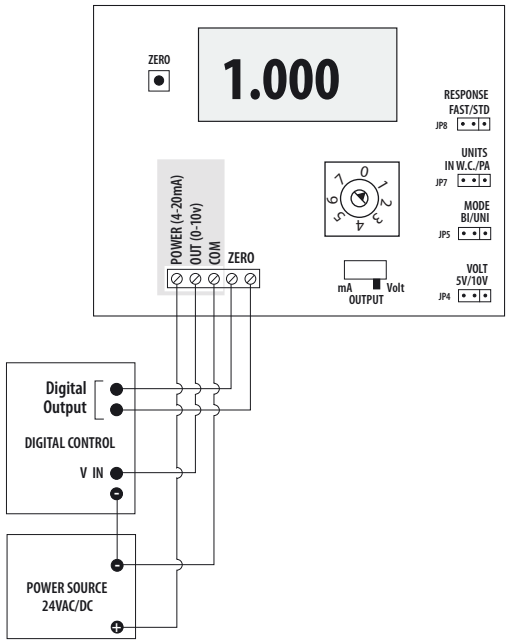
ZERO: Press and hold the ZERO pushbutton for 2 seconds or provide contact closure on 'AUX ZERO' terminal to automatically reset output and display to zero pressure. To protect the unit from accidental zero, this feature is enabled only when detected pressure is within about 0.1 in. W.C. (25Pa) of factory calibration.

Wiring Diagrams

2-wire, 4-20mA



3-wire, 0-5V/0-10V



Range Selection Guide

	PX01		*PX02*		*PX05*	
Rotary Switch Position	*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

