

## PXR

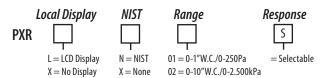




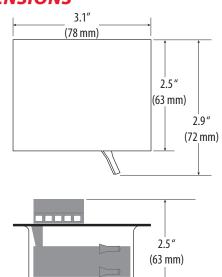
## **NOTICE**

- 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**



#### **DIMENSIONS**



## PXR

# Digital Pressure Transducer Dry Media

#### Installer's Specifications

Media Compatibility	Dry air or inert gas			
Input Power	12-30VDC, or 24VAC nominal; 2-wire: 20mA max.; 3-wire: 30mA max.			
Output	Field-selectable: 2-wire, loop-powered 4-20mA			
·	(DC only, clipped and capped), or 3-wire 0-5V/0-10V*			
Pressure Ranges:				
PXR: 01	Unidirectional: 0.1/0.25/0.5/1.0" W.C. F.S., switch selectable			
	Bidirectional: $\pm 0.1/\pm 0.25/\pm 0.5/\pm 1.0''$ W.C. F.S., switch selectable			
	Unidirectional: 25 Pa/50 Pa/100 Pa/250 Pa, F.S., switch selectable			
	Bidirectional: $\pm 25 \text{ Pa}/\pm 50 \text{ Pa}/\pm 100 \text{ Pa}/\pm 250 \text{ Pa}$ , F.S., switch selectable			
PXR: 02	Unidirectional: 1.0/2.5/5.0/10" W.C. F.S., switch selectable			
	Bidirectional: $\pm 1.0/\pm 2.5/\pm 5.0/\pm 10''$ W.C. F.S., switch selectable			
Unidirectional: 0.250 kPa/0.500 kPa/1.000 kPa/2.500 kPa, F.S., switch selectable				
Bidirectional	$\pm 0.250 \text{ kPa}/\pm 0.500 \text{ kPa}/\pm 1.000 \text{ kPa}/\pm 2.500 \text{ kPa}$ , 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 3½ digit LCD, indicates pressure, overrange indicator			
Proof Pressure	3 psid (20.6 kPa)			
Burst Pressure	5 psid (34.5 kPa)			
Accuracy	$\pm$ 1% F.S. of selected range (combined linearity and hysteresis)			
Temperature Effect	1" (250 Pa) range: 0.05%/°C; 10" (2.5 kPa) range: 0.01%/°C			
	(Relative to 25°C) 0° to 50°C (32° to 122°F)			
Zero Drift (1-year)	1" (250 Pa) range: 2.0% max.; 10" (2.5 kPa) range: 0.5% max.			
Zero Adjust	Pushbutton auto-zero and digital input (2-pos terminal block)			
Operating Environme	nt 0° to 60°C (32° to 140°F); 0 to 90% RH non-condensing			
Fittings	Barb, 0.205" (5.2 mm) and 0.125" (3.2 mm) o.d.			

EMC Conformance: Emissions EN 61000-6-3:2007 and A1:2011 Class B. Radiated Immunity EN 61000-4-3:2008; Conducted Immunity EN61000-4-6:2008; EFT EN61000-4-4:2004; Magnetic Field Immunity EN61000-4-8:2001.

EMC Special Note: Connect this product to a DC distribution network or an AC/DC power adaptor with proper surge protection (EN 61000-6-1:2007 specification requirements).

Note: If using this device with a Siemens Universal input controller in mA mode, contact Veris Technical Support for application assistance.

#### **QUICK INSTALL**



Observe precautions for handling static sensitive devices to avoid damage to the circuitry that is not covered under the factory warranty.

- 1. Mount the PXR onto DIN rail.
- 2. Configure the tubing for differential or static pressure monitoring.
- 3. Wire the PXR.
- 4. Configure the jumpers for operation.

<sup>\*</sup> Minimum input voltage for 4-20 mA operation: 250  $\Omega$  loop = 13 VDC; 500  $\Omega$  loop = 19 VDC



#### **OPERATION**

PX Series devices employ ceramic capacitive sensors and sophisticated temperature compensation circuitry to achieve accurate pressure readings in dry media applications. For best results, allow an initial warm-up period to ensure accuracy at the lowest pressure ranges.

The PXR has a ZERO pushbutton to reset the output and display to zero pressure. Press and hold the ZERO pushbutton for 2 seconds or provide contact closure on the "AUX ZERO" terminal. To protect the unit from accidental zero, this feature is enabled only when the detected pressure is within about 0.1 in. W.C. (25 Pa) of the factory calibration. The optional LCD displays the current reading and the selected units. "SET" appears each time a selection is made. "OVER" appears when the measured pressure is over the device's range.

#### INSTALLATION

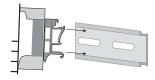


Observe precautions for handling static sensitive devices to avoid damage to the circuitry that is not covered under the factory warranty.

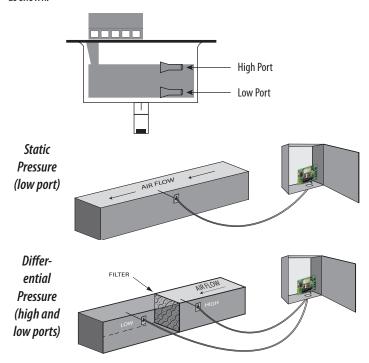


### !\ Disconnect power to the panel.

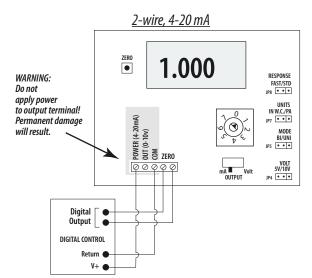
1. Select a location in the panel, near the area to be monitored. Mount the PXR onto DIN Rail.



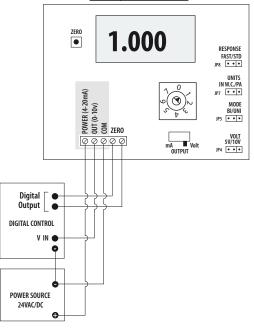
2. Determine the length of tubing needed for differential or static pressure. Configure as shown:



Wire the PXR: connect the transmitter to the control system and the power supply as indicated below. Optional: Connect the ZERO terminals to the digital output (contact closure) of the control system.



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





4. Configure the output switch, jumpers, and range.

A. Use the switch to select voltage (V) or current (mA) mode.

B. Jumpers:

Jumper JP4: select 0-10 V or 0-5 V 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.

C. Align the arrow (not the slot) on the rotary dial to the desired full-scale range.

LCD models momentarily indicate the selected range.

#### Range Selection Guide

	PX01		PX02	
Rotary Switch Position	Inches W.C.	Pascal	Inches W.C.	Pascal
0	0.1	25	1	250
1	0.25	50	1	250
2	0.5	100	1	250
3	1	250	1	250
4	1	250	2.5	0.5 kPa
5	1	250	5	1 kPa
6	1	250	10	2.5 kPa
7	1	250	10	2.5 kPa

5. Secure the panel and reconnect power.