## **PW2 SERIES**



**( E** available

## 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**



\* IMPORTANT!

Select operational range according to maximum gauge pressure, NOT differential pressure. Example: High gauge pressure=90 psig, Select 100 psig model (04).

## DIMENSIONS



# **PW2 SERIES**

## Wet Media Differential Pressure Transducer

#### Installer's Specifications

Media Compatibility	17-4 PH stainless steel
Input Power	12 to 24VDC, 29mA max.; loop powered
Output	2-wire transmitter; 4-20mA (clipped and capped)
Pressure Ranges:	
0-50 psi (0-3.45 bar)	5/10/25/50 psid (0-0.34/0.69/1.72/3.45 bar)
0-100 psi (0-6.89 bar)	10/20/50/100 psid (0-0.69/1.38/3.45/6.89 bar)
0-250 (0-17.24 bar)	25/50/125/250 psid (0-1.72/3.45/8.62/17.24 bar)
Proof Pressure	2x max. F.S. range
Burst Pressure	5x max. F.S. range
Accuracy at 25°C*	Ranges A, B, C: ±1% F.S.**
	Range D: ±2% F.S.**
Surge Damping	Electronic; 5-second averaging
Temperature Compensated Range	0° to 50°C (32° to 122°F);
	TC Zero <1.5% of product F.S. per sensor;
	TC Span <1.5% of product F.S. per sensor
Sensor Operating Range	-20° to 85°C (-4° to 185°F)
Long Term Stability	±0.25% per year
Zero Adjust	Pushbutton auto-zero
Operating Environment	-10° to 55°C (14° to 131°F); 10-90% RH noncondensing
Fittings	1/8" NPT female, stainless steel 17-4 PH
Physical	White powder-coated aluminum

To conform to EMC Standards, use shielded cabling. Technical information is available from the factory on request or on our website (www.veris.com/ce)

\* Accuracy combines linearity, hysteresis, and repeatability.

\*\* F.S. is defined as full span of selected range in bidirectional mode.

The PW2 Series sensor is designed to accept high differential pressure. Install the sensor on a duct or pipe across a pump, filter, heat exchanger, compressor, or other non-corrosive wet media. The dual sensor design eliminates the need for a bypass valve, and the bi-directional capability reduces installation errors. A pushbutton allows easy zero adjustment.

## **QUICK INSTALL**

- 1. Mount sensor on a duct or pipe, across the pump, filter, or other pressure differential.
- 2. Wire as shown (see page 2).
- 3. Configure the jumpers (see page 2).

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## **INSTALLATION GUIDE**

Output is mA only.

## WIRING



F.S. differential pressure.

Example: PW2-04 **Bidirectional Operation** Input Conditions Result **Outputs Read HI PORT** LO PORT DP 4-20mA 100 psi 0 psi +100 psi 20mA 100 psi 50 psi +50 psi 16mA 12mA 50 psi 50 psi 0 psi 50 psi 100 psi -50 psi 8mA 0 psi 100 psi -100 psi 4mA

Optional: Connect Zero terminals to digital output (contact closure) of control system.

Caution: Zero input is for dry-contact only. Do not apply voltage to the Zero terminals.

## CONFIGURATION

Jumper	Notes
Port Swap/Norm	Reverses polarity of the pressure ports (i.e. makes the LO port operate as the HI port and vice versa); used when the sensor is incorrectly plumbed.
Bi-Dr/Normal	Normal: 0 to F.S. pressure Bidirectional: -F.S. pressure to +F.S. pressure; output reads ½ when pressure is zero.
Slow Avg/Fast Norm	Slow mode provides 5 second averaging for surge damping.
Analog Rev/Norm	Normal: output increases as pressure increases; Reverse: output is maximum when pressure differential is zero and decreases as pressure increases.
Bar/PSI	Select output units.

## **OPERATION**

Auto-Zero: Press and hold the Zero button for 2 seconds or provide contact closure on the auxiliary 'Remote Zero' terminal to reset the output to zero pressure. To protect the device from accidental zeroing, this feature is only enabled when the detected pressure is within 5% of factory calibration.