



PW2 Series



PW2

4 TO 20 mA, 2-WIRE DEVICE

FEATURES

- The jumper-selectable output switch for normal (4 to 20 mA) or reverse (20 to 4 mA) operation provides application flexibility
- Rugged, die-cast enclosure provides NEMA 4 sealing
- Selectable differential units: psid or bard
- Dual sensor design for improved overpressure tolerance... eliminates the requirement for a bypass valve assembly in most applications
- Jumper-controlled electronic surge dampening for high stability
- Pushbutton zero calibration – no trim pots to adjust... maintain accuracy and reduce callbacks with automatic zero calibration
- Jumper-selectable port swap feature eliminates costly replumbing the high and low ports are improperly plumbed... change the jumper position from normal to swap – problem solved!
- Switch-selectable pressure ranges... fewer models to order and stock
- LCD displays high pressure, low pressure, and differential pressure with easy readability

DESCRIPTION

The **PW2 Series** 2-wire, 4 to 20 mA wet pressure transducers incorporate microprocessor profiled sensors for exceptional accuracy and reliability. Easy to use and designed to provide exceptional installation savings, the PW2 Series is ideal for measuring pressure across pumps, filters, heat exchangers, compressors, and other non-corrosive wet media applications

APPLICATIONS

- Monitoring and controlling pump differential pressure
- Chiller/boiler differential pressure drop
- CW/HW system differential pressure

SPECIFICATIONS

GENERAL	
Input Power	Class 2; 12 to 24 Vdc, loop powered (polarity insensitive)
Maximum Current Draw	29 mA
Output	2-wire transmitter; user selectable 4 to 20 mA (clipped & capped)*
Surge Damping	Electronic; 5-second averaging
Zero Adjust	Pushbutton auto-zero terminals
Housing Material	White powder-coated aluminum
PRESSURE RANGES (SELECTABLE)	
0 to 50 psi (0 to 3.45 barg) (Gauge)	0-5/10/25/50 psid (0-0.34/0.69/1.72/3.45 bard) (Differential)
0 to 100 psig (0 to 6.89 barg) (Gauge)	0-10/20/50/100 psid (Differential) (0-0.69/1.38/3.45/6.89 bard) (Differential)
0 to 250 psi (0 to 17.24 bar) (Gauge)	0-25/50/125/250 psid (Differential) (0-1.72/3.45/8.62/17.24 bard) (Differential)
SENSOR	
Accuracy @ 25 °C**	Range A, B, C: $\pm 1\%$ F.S.; Range D: $\pm 2\%$ F.S.***
Media Compatibility	Media compatible with 17-4 PH stainless steel
Long Term Stability	$\pm 0.25\%$ per year
Proof Pressure	Max. 2x F.S. range
Burst Pressure	Max. 5x F.S. range
Temperature Compensated Range	0 to 50 °C (32 to 122 °F); TC Zero $< \pm 1.5\%$ of product F.S. per sensor; TC Span $< \pm 1.5\%$ of product F.S. per sensor, (2 sensors per unit)
Media Temperature Limits	-20 to 85 °C (-4 to 185 °F); 0 to 90% RH non-condensing
Product Operating Environment	-10 to 55 °C (14 to 130 °F); 0 to 90% RH non-condensing
WARRANTY	
Limited Warranty	5 years

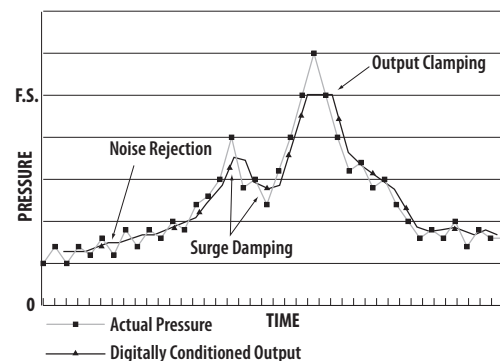
* Minimum input voltage: 250 Ω loop = 12 Vdc; 500 Ω loop = 17 Vdc

**Accuracy combines linearity, hysteresis, and repeatability.

***FS is defined as full span of selected range in bi-directional mode.

EMC Conformance - CE option: Low voltage directive 2006/95/EC; EMC directive 2004/108/EC.

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).

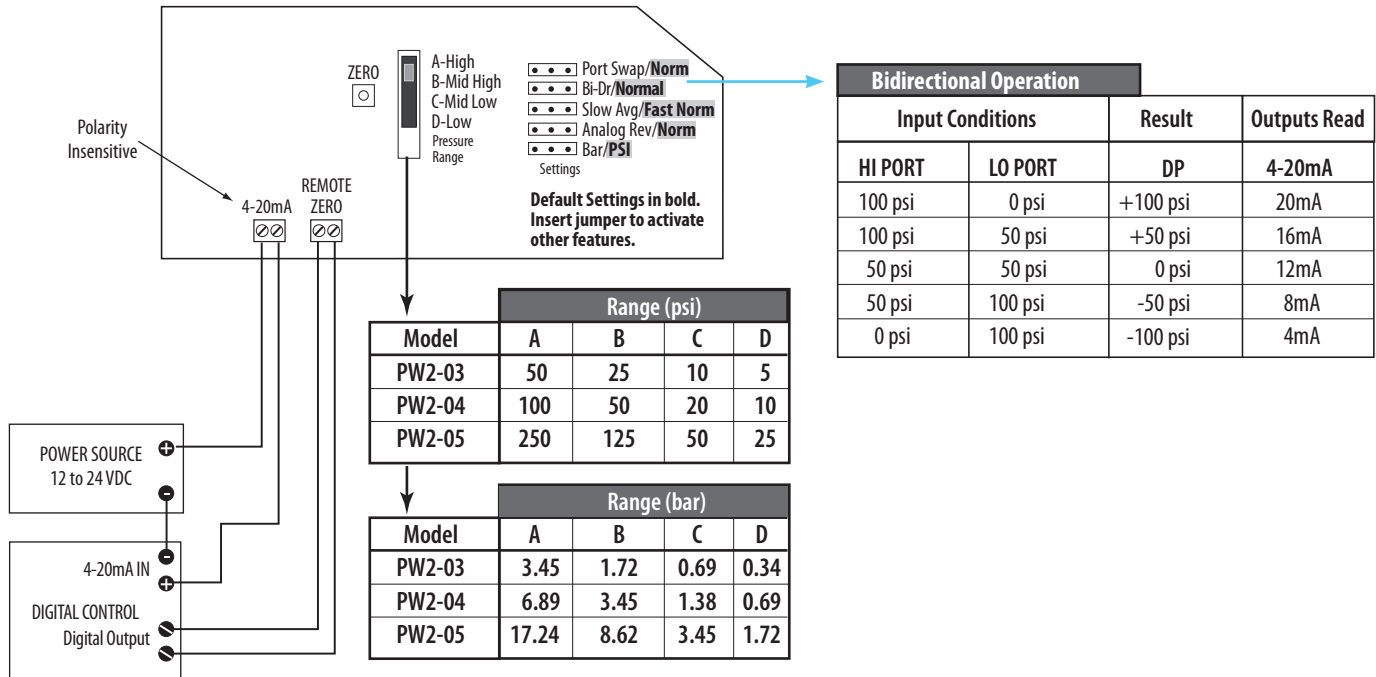


Microprocessor provides digital signal conditioning

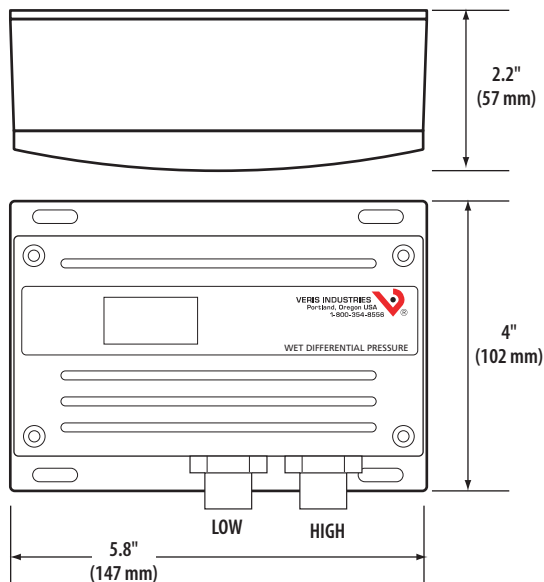
- Noise rejection reduces fluctuating readings due to noise or turbulence
- Surge damping prevents false alarms by averaging fast peaks



WIRING DIAGRAM



DIMENSIONAL DRAWING



ORDERING INFORMATION



Local Display	NIST	Operational Range**	US or EU
PW2 ☐	☐	☐	☐
L = LCD Display X = No Display	N = NIST X = None	03 = 0-50 psig/3.45 barg 04 = 0-100 psig/6.89 barg 05 = 0-250 psig/17.24 barg	S = Standard C = CE

Example:

PW2 ☐ L ☐ X ☐ 04 ☐ C

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

**Select operational range according to maximum gauge pressure, NOT differential pressure.

Example: High gauge pressure=90 psig, Select 100 psig model (04).

ACCESSORIES

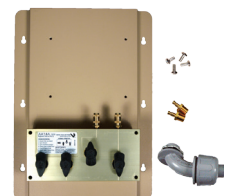
- Bypass valve assemblies (AA14A)
- PW installed on bypass valve manifold (AA16A)
- Snubbers, brass, 1/8" NPT (AA11)
- Snubbers, stainless steel, 1/8" NPT (AA12)
- Steam siphon (AA13)



AA11/AA12



AA13



AA14A