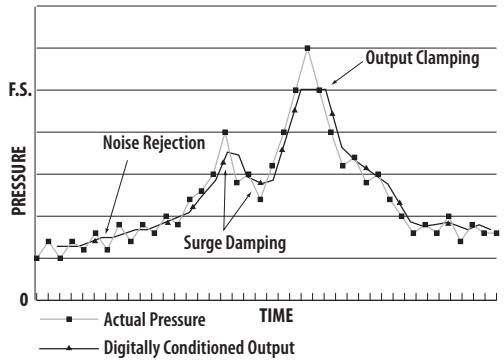
Wet Media Differential Pressure Transducer

4-20 mA, 2-Wire Device

PW2

DESCRIPTION

The **PW2 Series** 2-wire, 4-20mA wet/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.



Microprocessor provides digital signal conditioning

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

APPLICATIONS

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

FEATURES

- The jumper-selectable output switch for normal (4-20mA) or reverse (20-4mA) 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 prevent callbacks with automatic zero calibration
- Jumper-selectable port swap feature eliminates costly replumbing when 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

PRESSURE

SPECIFICATIONS

5 Year Warranty

Input Power	12 to 24VDC, loop powered
Maximum Current Draw	29mA
Output	2-wire transmitter; user selectable 4-20mA (clipped and capped) †
Accuracy @ 25°C*	Range A, B, C: ±1% F.S.; Range D: ±2% F.S.**
Surge Damping	Electronic; 5-second averaging
Pressure Ranges (Selectable):	
0-50 psi (0-3.45 bar)	0-5/10/25/50 psid (0-0.34/0.69/1.72/3.45 bard)
0-100 psi (0-6.89 bar)	0-10/20/50/100 psid (0-0.69/1.38/3.45/6.89 bard)
0-250 psi (0-17.24 bar)	0-25/50/125/250 psid (0-1.72/3.45/8.62/17.24 bard)
Product Operating Environment	-10° to 55°C (14° to 130°F); 0 to 90%RH noncondensing
Long Term Stability	±0.25% per year
Zero Adjust	Pushbutton auto-zero
Housing Material	White powder-coated aluminum
Sensor:	
Media Compatibility	Media compatible with 17-4 PH stainless steel
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 <±1.5% of product F.S. per sensor ; TC Span<±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
Fittings	1/8" NPT female thread, 17-4 PH stainless

† Minimum input voltage: 250 Ω loop = 12VDC; 500 Ω loop = 17VDC

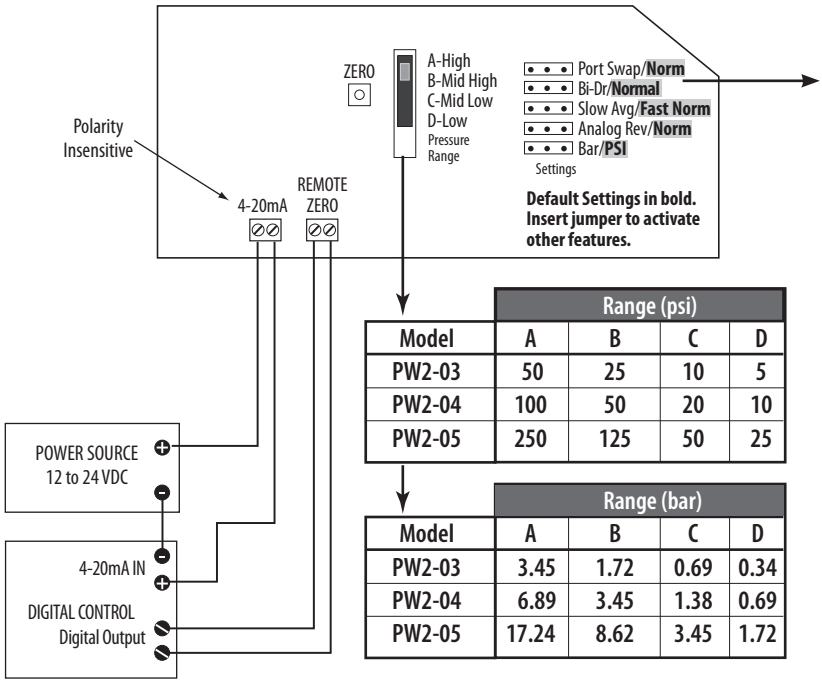
** Accuracy combines linearity, hysteresis, and repeatability. ** FS is defined as full span of selected range in bi-directional mode.*

EMC Conformance: 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).

VERIS INDUSTRIES

APPLICATION/WIRING DIAGRAM



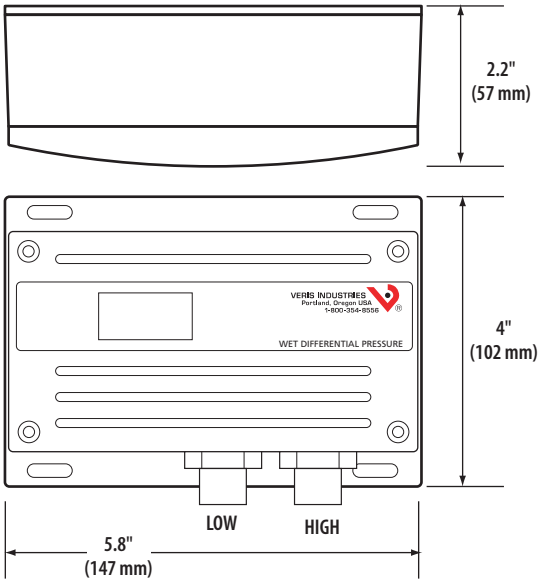
Bidirectional Operation

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
50 psi	50 psi	0 psi	12mA
50 psi	100 psi	-50 psi	8mA
0 psi	100 psi	-100 psi	4mA

	Range (psi)			
Model	A	B	C	D
PW2-03	50	25	10	5
PW2-04	100	50	20	10
PW2-05	250	125	50	25

	Range (bar)			
Model	A	B	C	D
PW2-03	3.45	1.72	0.69	0.34
PW2-04	6.89	3.45	1.38	0.69
PW2-05	17.24	8.62	3.45	1.72

DIMENSIONAL DRAWING



ORDERING INFORMATION

CE *Available*

	Local Display	NIST	Operational Range [1]	US or EU
PW2	☐	☐	☐	☐
	L = LCD Display **X** = No Display	**N** = NIST **X** = None	**03** = 0-50 psi/3.45 bar **04** = 0-100 psi/6.89 bar **05** = 0-250 psi/17.24 bar	**S** = Standard **C** = CE

Example:

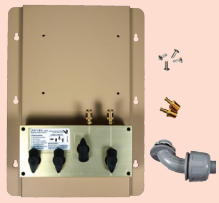
PW2	L	X	04	C

ACCESSORIES

Bypass Valve assemblies (AA14A)
PW installed on bypass valve manifold (AA16A)
Snubbers (AA11, AA12), steam siphon (AA13)


AA11


AA13


AA14A

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

PRESSURE