

# PW SERIES

## Jumper Selectable Port Swap Feature



PWxxxS



PWxxxBP

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

The jumper-selectable port swap feature eliminates costly replumbing when the high and low ports are improperly plumbed, allowing the jumper position to be changed from normal to swap.

The optional pre-assembled bypass valve is designed for easy maintenance and one-step installation.

### SPECIFICATIONS

GENERAL	
Input Power	Class 2; 12 to 30 Vdc or 24 Vac nominal, 50/60 Hz
Max. Current Draw	DC: 125 mA; AC: 280 mA
Output	3-wire transmitter; user selectable 4 to 20 mA (clipped & capped)/0-5 V/0-10 V*
Surge Damping	Electronic; 5-second averaging
Test Mode	Overrides output to full-scale (20 mA, 5 V, 10 V)
Zero Adjust	Pushbutton auto-zero & digital input (2-pos terminal block)
Status Indication	Dual-color LED: Green = Normal, Green Blinking = Low > High Red = Overrange, Red Blinking = Overpressure
Housing Material	White powder-coated aluminum
Fittings	1/8" NPT female thread, 17 to 4 PH stainless steel

### PRESSURE RANGES (SELECTABLE)

0 to 50 psig (Gauge)	0 to 5/10/25/50 psid (Differential)
0 to 100 psig (Gauge)	0 to 10/20/50/100 psid (Differential)
0 to 250 psig (Gauge)	0 to 25/50/125/250 psid (Differential)

### SENSOR

Accuracy @ 25 °C**	Range A, B, C: ±1% F.S.; Range D: ±2% F.S.***
Long Term Stability	±0.25% per year
Media Compatibility	Media compatible with 17 to 4 PH stainless steel
Proof Pressure	2x max. F.S. range***
Burst Pressure	5x max. 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)

## Jumper-selectable Switch-selectable

The jumper-selectable output switch for normal (4 to 20 mA) or reverse (20 to 4 mA) operation provides application flexibility

Switch-selectable pressure ranges...fewer models to order and stock

## Rugged

Rugged, die-cast enclosure provides NEMA 4 sealing

## High stability

Jumper-controlled electronic surge dampening

## Zero calibration

Pushbutton and remote zero adjustment...maintain accuracy and reduce callbacks with automatic zero calibration

### APPLICATIONS

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

Media Temp Limits	-20 to 85 °C (-4 to 185 °F); 0 to 90% RH non-condensing
Product Operating Environment	-10 to 55 °C (14 to 122 °F); 10 to 90% RH non-condensing

### WARRANTY

Limited Warranty	5 years
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### AGENCY APPROVALS



\*Minimum input voltage for 4 to 20 mA operation: 250 Ω loop (1 to 5 V) = 12 Vdc; 500 Ω loop (2 to 10 V) = 15 Vdc; Minimum input voltage for volt operation: 0 to 5 Vdc output = 12 Vdc; 0 to 10 Vdc output = 15 Vdc.

\*\*Accuracy combines linearity, hysteresis, and repeatability.

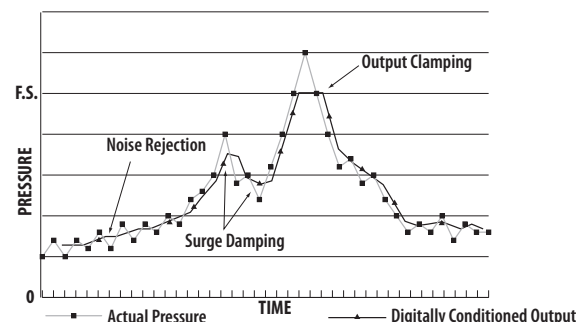
\*\*\* FS is defined as full span of selected range in bi-directional mode.

EMC Conformance - Low voltage directive 2014/35/EU; EMC directive 2014/30/EU.

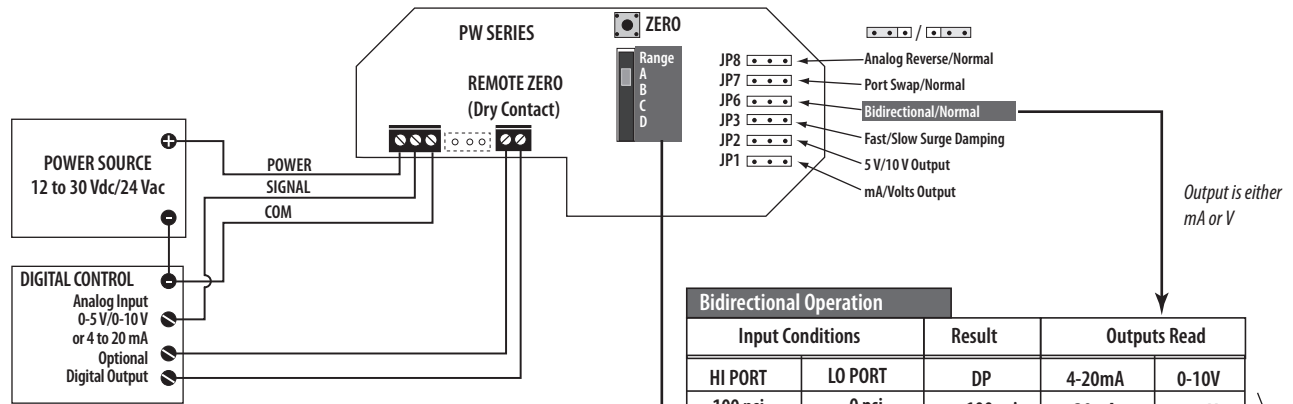
EMC Special Note: Connect this product to a DC distribution network or an AC/DC power adaptor with proper surge protection (EN 61000-6-1 specification requirements).

### 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



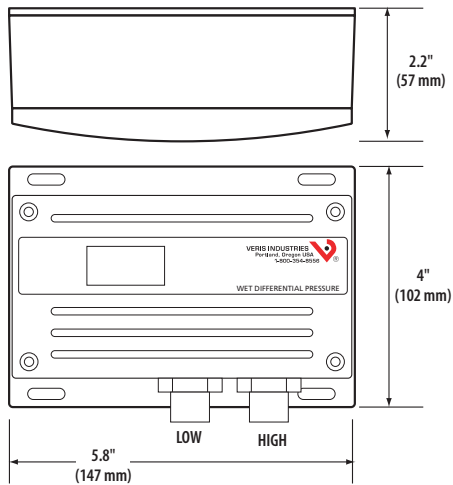
**Bidirectional Operation**

Input Conditions		Result	Outputs Read	
HI PORT	LO PORT	DP	4-20mA	0-10V
100 psi	0 psi	+100 psi	20mA	10V
100 psi	50 psi	+50 psi	16mA	7.5V
50 psi	50 psi	0 psi	12mA	5V
50 psi	100 psi	-50 psi	8mA	2.5V
0 psi	100 psi	-100 psi	4mA	0V

Output is either mA or V

### DIMENSIONAL DRAWING

PW Series (PWxxxS)

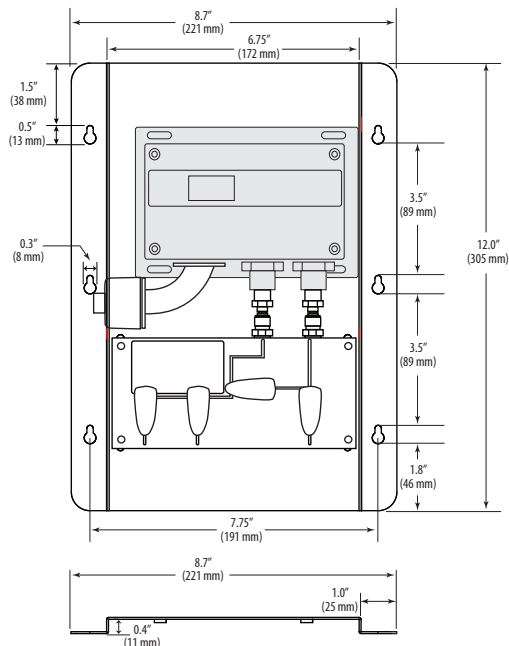


Use the Range switch to select F.S. differential pressure.

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

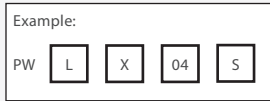
### DIMENSIONAL DRAWING

PW Series with Optional Mounted Bypass Assembly (PWxxxBP)



### ORDERING INFORMATION

Local Display	NIST	Operational Range*	Options
PW <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
L = LCD display X = No display	N = NIST X = None	03 = 0-50 psig 04 = 0-100 psig 05 = 0-250 psig	S = Standard BP = With mounted bypass assembly



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

