PW SERIES

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

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

Flexible

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

Switch-selectable

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

Rugged

Rugged, die-cast enclosure provides NEMA 4 sealing

High stability

DIP switch 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

SPECIFICATIONS

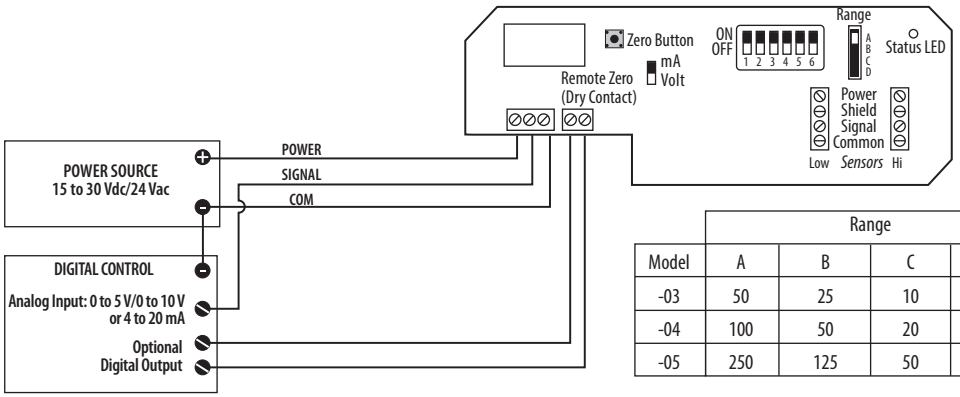
GENERAL	
Input Power	Class 2; 15 to 30 Vdc, 24 Vac nom. 50/60 Hz*
Max. Current Draw	DC: 125 mA; AC: 280 mA
Output	3-wire transmitter; user selectable 4 to 20 mA (clipped & capped)/0-5 V/0-10 V*
Surge Damping	Electronic; 1 or 5 second averaging
Test Mode	Overrides output to full-scale (20 mA, 5 V, 10 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 Green/Red Blinking = Underpressure
Zero Offset (Bidirectional and Port Swap modes only)	0.5%
Housing Material	White powder-coated aluminum NEMA 4, IP65
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**	Ranges A and B: ±1% F.S. typical***; Range C: ±1.5% F.S. typical***; Range D: ±2% F.S. typical***
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)
Media Temp. Limits	-20 to 85 °C (-4 to 185 °F); 0 to 90% RH non-condensing
Operating Environment	-10 to 50 °C (14 to 122 °F); 10 to 90% RH non-condensing
WARRANTY	
Limited Warranty	5 years

AGENCY APPROVALS

CE

*VFD systems and system wiring generate fields that can disrupt electrical devices. Ensure that these fields are minimized and are not affecting the sensor or sensor wiring.
**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).

WIRING DIAGRAM



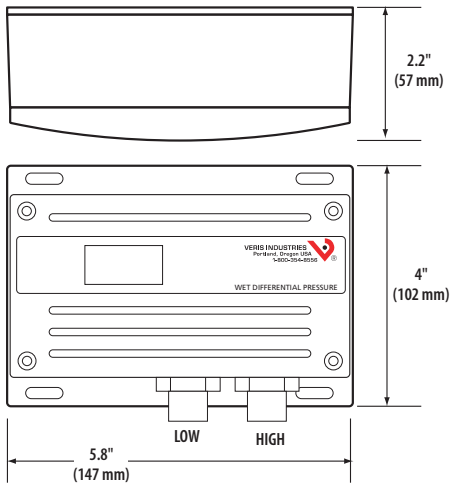
	Range			
Model	A	B	C	D
-03	50	25	10	5
-04	100	50	20	10
-05	250	125	50	25

DIP Switches		
Num	Function	Off/On[1]
1	Damping	Fast/Slow
2	Test	Operate/Test
3	Mode	Normal/Bidirec.
4	Analog	Normal/Reverse
5	Port	Normal/Swap
6	Voltage Out[2]	0 to 10 V/0 to 5 V

1. "Off" position is the default setting for all DIP switches.
2. Ignored in mA mode.

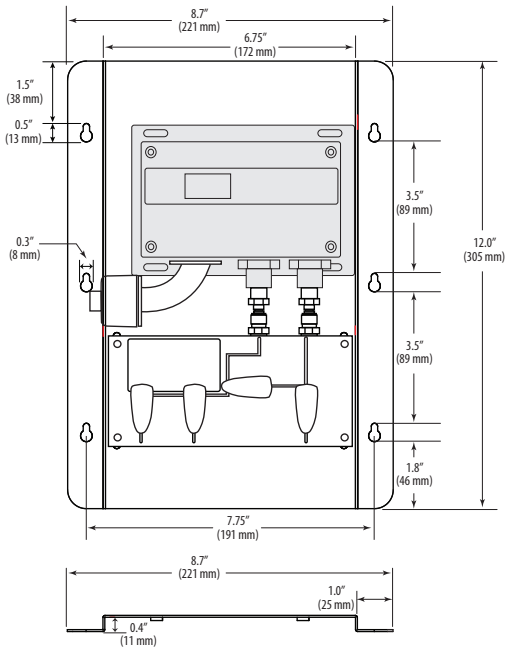
DIMENSIONAL DRAWING

PW Series (PWxxxS)



DIMENSIONAL DRAWING

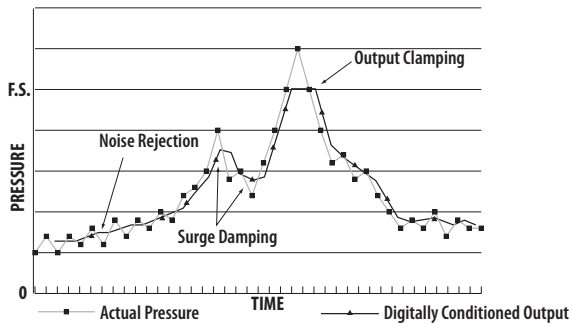
PW Series with Optional Mounted Bypass Assembly (PWxxxBP)*



* Bypass valve assembly also sold separately as AA14A.

MICROPROCESSOR PROVIDES DIGITAL SIGNAL CONDITIONING

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



ORDERING INFORMATION

Local Display	NIST	Operational Range*	Options
PW ☐	☐	☐	☐
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**

Example: PW L X 04 S

* Select operational range according to maximum gauge pressure, NOT differential pressure.
** Bypass valve assembly also sold separately as AA14A.

ACCESSORIES

Brass Snubber, 1/8" NPT (AA11)
Brass Snubber, 1/4" NPT (AA69)
Stainless Steel Snubber, 1/8" NPT (AA12)
Stainless Steel Snubber, 1/4" NPT (AA70)
Pigtail Steam Siphon (AA13)


AA11/AA69


AA12/AA70


AA13