

Remote Conduit Mounted Sensors

Wet-Wet Differential Pressure

- Conduit adapter design
- 0 to 10~500 PSID
- Revolutionary design eliminates plumbing
- LCD display (PSID or kPa jumper selectable)
- Dual 0-5/10VDC and 4-20mA outputs



DESCRIPTION

The PW Conduit Wet-Wet series remote sensors are installed directly into the pipe and electrical connection is made between the PWC remote sensors and PW transmitter via 4-conductor shielded cable run through conduit. This dramatically reduces labor cost by eliminating plumbing/piping to a traditional transducer. Startup time is reduced since purging air out of the lines is not necessary. Traditional plumbed bypass assemblies are no longer required. Choose between the PW10 and PW20 model based on your anticipated PSID range.

APPLICATIONS

- Ideal for monitoring pumps and load differential pressures in HVAC systems and processes where local indication is needed.
- Process control systems
- Flow measurement of various gases or liquids

FEATURES

Conduit ports on transmitter and elements

- Run conduit and 4-conductor shielded cable from transmitter to elements to wire in the field
- Eliminates costly plumbing and by-pass manifolds

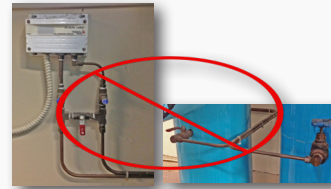
Versatile Universal Transmitter

- Three selectable PSID ranges per sensing element
- Low and standard PSID range transmitter models
- 500 PSIG is ideal for high rise applications
- User friendly LCD displays in PSID or kPa

Jumper selectable features for easy installation

- Absolute mode outputs absolute value of difference
- Port swap corrects plumbing errors
- Fast/slow to select desired response time
- Uni/bi directional
- Test mode—forces full-scale output
- Over range icon flashes if differential pressure is over-range, alerting technician to move range switch to next higher dp setting and rescale panel
- Switch selectable outputs: 2-wire 4-20mA, 3-wire 0-5V or 0-10V

Don't waste time and money on plumbing like this ever again!



Revolutionary design eliminates costly field plumbing. Simply run wires to sensors instead of costly plumbing! Also eliminates the need for costly bypass assemblies.

High Reliability

- Industry's only standard built-in t-shaped snubbers protect sensing elements from water hammer damage
- MEMS sensor technology

ORDERING

Ordering sensors: *Order elements based on expected maximum PSIG. Order quantity of (2) PWCxxx sensors of same pressure range per (1) PW transmitter. Conduit, conduit connectors and 4-conductor shielded cable not provided.*

UNIVERSAL TRANSMITTER: PW range

Transmitter Ranges

10 = Low PSID selectable ranges
20 = Standard PSID selectable ranges

PRESSURE SENSOR SERVICE VALVE: PWBV



Optional service valve PWBV for live sensor swap. Order 1 PWBV service valve for each PWCxxx element.

REMOTE SENSORS: PWC element number

Element Number

Element Number	Element Range	PW10 Selectable Ranges	PW20 Selectable Ranges
100	100 PSIG	10/20/40 PSID	50/75/100 PSID
250	250 PSIG	25/50/100 PSID	75/150/250 PSID
500	500 PSIG	50/100/150 PSID	100/250/500 PSID

SPECIFICATIONS

Power Supply	Voltage output mode 0-5V	12-30VDC/24VAC ⁽¹⁾ , 20mA max.		
	Voltage output mode 0-10V	15-30VDC/24VAC required for 10V full scale output		
	Current (4-20 mA) output mode	12-30VDC, 20mA max.		
Output type	Switch selectable	3-wire 0-5/10VDC and 2-wire 4-20mA		
Pressure Ranges	Model PWS100	100 PSIG (Select 10/20/40 or 50/75/100 PSID based on PW Model)		
	Model PWS250	250 PSIG (Select 25/50/100 or 75/150/250 PSID based on PW Model)		
	Model PWS500	500 PSIG (Select 50/100/150 or 100/250/500 PSID based on PW Model)		
Operating Temperature	Transmitter	32 to 140F (0-60°C)		
Media compatibility	Type	Water; other 17-4 SS compatible media		
	Temperature	32 to 250°F (0-125°C)		
Zero Adjustment	Automatic	Push-button, terminal block switch input, Push button for 5-seconds to re-zero. Hold for 10-seconds to restore factory settings		
Transmitter Performance ⁽²⁾	PW10 Accuracy	Range	A	B/C
		All PSIG Elements	±4% FS	±2% FS
	PW20 Accuracy	Range	A	B/C
		All PSIG Elements	±2% FS	±1% FS
Sensor Type		Micro-machined silicon strain gauge		
Sensor Performance	Accuracy	< ±0.25% BFSL		
	Zero Offset	< ±1%		
	Span Tolerance	< ±1%		
	Stability (1 Year)	±0.25%FS, typ		
	Overrange Protection	2X Rated Pressure		
	Burst Pressure	5X or 60,000 psi (whichever is less)		
	Pressure Cycles	> 100 Million		
	Compensated Range	0 to 60°C (30 to 140°F)		
	Temperature Compensation	Zero, <±1% of FS Span, <±1% of FS		
		Shock	100G, 11 msec, 1/2 sine	
	Vibration	10G peak, 20 to 2000 Hz.		
	EMI/RFI Protection	Yes		
Enclosure, PW Transmitter	Construction	Powdered coated steel		
	Sealing	IP65 (when installed with water-tight fittings)		
Enclosure, PWS (xxx) Sensor	Construction	Stainless Steel 316L 1/4" MNPT, Deutsch DT series connector		
	Sealing	IP65 (when installed with armored cable option)		
Enclosure, PWBV Service Valve	Construction	Chrome-plated brass, 1/4" NPT Female x Male		

(1) One side of transformer secondary is connected to signal common. Dedicated transformer is recommended.

(2) FS is defined as the full scale of the selected range in bi-directional mode.