

PW30 Series

Remote Wet-to-Wet Differential Pressure Sensor

Revolutionary design eliminates plumbing/bypass assemblies 16 selectable differential ranges in one device LCD display for verification of high, low, and differential pressures Swap or replace remote sensors with ease













DESCRIPTION

The PW30 Series uses remote sensors to eliminate the need for costly bypass assemblies, enabling fast, cost effective installation. The remote sensors mount directly to pipe to eliminate bleeding and additional plumbing. Optional factory pre-wired harnesses also available in wire and armored cable versions. NEW! Order pre-fabricated with a 3 or 5-valve bypass assembly for easy bleeding and installation where bypass is required. Standard LCD screen and dip switches make configuration a breeze. Measure 16 differential pressure ranges from 1-500 PSID with a single device without sacrificing accuracy. Selectable output 0-5V, 0-10V, or 2 Wire 4-20mA.

APPLICATIONS

- Demand measurement in HVAC systems for pump speed control and local indication
- · Process control systems
- Flow measurement of gases, vapors, and liquids compatible with 316L SS
- Filter status monitoring
- System leak detection
- · Great for data center wet pressure sensing



Remote sensors eliminate need for bypasses



Ease of installation - Independent installation for mechanical & electrical trades



Save on commissioning and maintenance -Order fully assembled with bypass manifold sensors are field swappable!



Save time - Available with prewired armored cable or shielded cable



High reliability - Metal or Plastic tamper resistant enclosures provided added layer of security



Flexibility - Accepts rigid conduit and field wiring



FEATURES

- Drastically reduce plumbing needs and save installation time
- Order with pre-fabricated wireor pre-fabricated bypass assembly
- Single device for 1-500 PSID makes ordering easy
- Swap or replace remote sensors with ease
- LCD and dip switches make configuration fast and simple
- Remote sensors come standard with DIN43650 connection for easy plug-and-play, no wire twisting
- MEMS sensor technology
- Integrated surge snubber protects sensor from water hammer for reliable long term performance
- Manual and remote zero for maintained accuracy
- Port swap corrects plumbing errors
- Uni/bi directional
- Conduit and wire connection compatible

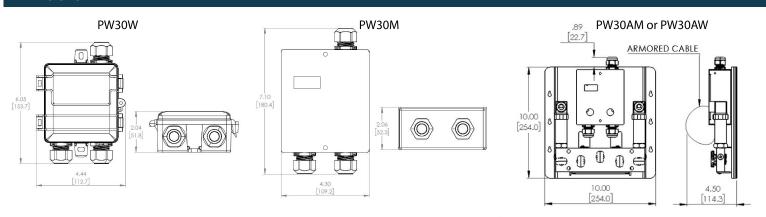
ORDERING

	Tran	smitter	Cable	Ren	note Sensor
	PW30	_	-	_	
	E	nclosure	User Provided Cable	Factory Cable Type	Pipe Pressure Range
	W	/ = Rugged Plastic	$C = Conduit \ and \ terminal \ connections \ (for \ field \ wiring)$	Blank = Standard	050 = 0-50 PSIG
	M	1 = Metal	Optional Factory Cable (Pre-wired)	A = Armored	100 = 0-100 PSIG
		003 = 3 feet (36in)		250 = 0-250 PSIG	
			006 = 6 feet (72in)		500 = 0-500 PSIG
			009 = 9 feet (108in)		
			015 = 15 feet (180in)		
Add a bypass manifold			020 = 20 feet (240in)		Optional Service Valve
			025 = 25 feet (300in)		
		030 = 30 feet (360in)			
- j 0 j			035 = 35 feet (420in)	PWBV	
T same T		7	040 = 40 feet (480in)		
P	WV-3 3-valve	PWV-5 5-valve	045 = 45 feet (540in) 050 = 50 feet (600in)		Optional service valve PWBV for live sensor swap
			075 = 75 feet (900in)		for live sensor swap
			100 = 100 feet (1200in)		
			100 = 100 leet (1200ll)		
Fully Ass	embled with Byp	ass Manifold			
	Transmitter	Bypass	Remote Sensor		
PW30		_		FINAL STATE OF THE	
	Enclosure	Bypass	Range		
	W = Rugged Plastic	3V = 3 Valves	050 = 0-50 PSIG		
	M = Metal	5V = 5 Valves	100 = 0-100 PSIG		
			250 = 0-250 PSIG	SERVA	

500 = 0-500 PSIG



DIMENSIONS



A

Warning: The datasheet is designed for reference only. Refer to installation instructions that accompany the product and heed all safety instructions. Product improvement is a continuing process at Senva. Changes may occur to products without prior notice.



SPECIFICATIONS				
Power supply	Voltage output mode (0-5v)		12-30VDC/24VAC (1), 20mA max.	
	Voltage output mode (0-10v)		13-30VDC/24VAC required for 10V FS output	
	Current (4-20mA) output mode		15-30VDC (0 Ohm)/16-30VDC (250 Ohm)/ 18-30VDC (500 Ohm) , 20mA max.	
Outputs	Switch selectable		2-wire 4-20mA, 3-wire 0-5V/10V	
Operating Temperature	Transmitter		-22 to 158°F (-30 to 70°C)	
Media Compatibility	Туре		Water, other 316 SS compatible media (316L diaphragm)	
	Temperature		32 to 250°F (0-125°C)	
Zero adjustment	Automatic		Pushbutton, terminal block switch input	
			Press button for 5 seconds to re-zero	
			Hold for 10 seconds to restore factory settings	
Sensor Type			Micro-machined silicon strain gauge	
PW Transmitter Accuracy	Sensor PSIG	2% Accuracy Ranges	1% Accuracy Ranges	
	25 PSIG	0-1 / 0-2 PSID	0-5 / 0-10 / 0-15 / 0-20 / 0-25 PSID	
	50 PSIG	0-10 / 0-15 PSID	0-20 / 0-25 / 0-30 / 0-40 / 0-50 PSID	
	100 PSIG	0-15 / 0-20 / 0-25 / 0-30 PSID	0-40/ 0-50 / 0-75 / 0-100 PSID	
	250 PSIG	0-30 / 0-40 / 0-50 PSID	0-75 / 0-100 / 0-125 / 0-150 / 0-250 PSID	
	500 PSIG	0-75 / 0-100 / 0-125 PSID	0-150 / 0-250 / 0-500 PSID	
Sensor Performance	Accuracy		< ±0.25% BFSL	
	Stability (1 year)		±0.25% FS, typ	
	Over-range protection		200% rated pressure	
	Pressure Cycles		> 100 Million	
	Compensated Operating Range		14 to 158°F (-10-70°C)	
	Temperature Compensation %FS/C		Zero, $<\pm 0.03$ (<100 kPa), $<\pm 0.02$ (>100 kPa)	
			Span, <±0.03(<100kPa), <±0.02(>100kPa)	
	Vibration		10G peak, 20 to 2000 Hz	
Enclosure	Construction PW30		PC/ABS (Plastic), Powder coated steel (metal)	
	Environmental PW30		Nema 4X (plastic), Nema 3R (Metal)	
	Environmental PW30A		Nema 4X (plastic), Nema 3R (Metal)	
	Construction PWT[xxx]	Sensor	Stainless Steel, 304, 1/4" MNPT, 1/2" Conduit Fitting	

⁽¹⁾ FS is defined as the full scale of the selected range. Accuracy includes non-linearity, hysteresis, and repeatability.

⁽²⁾ Because of lower accuracy, it is not factory recommended to use an output range less than 10% of the total sensor PSIG.

^{*} Product improvement is a continual process at Senva and product features and specification may change without prior notice. Refer to instructions that accompany the product for installation and wiring.