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

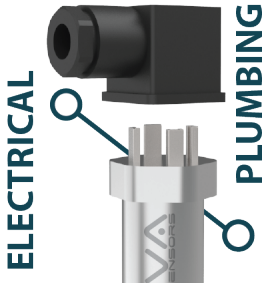
DESCRIPTION

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

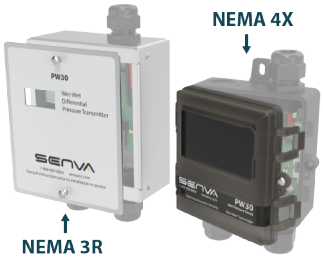
Remote sensors eliminate need for bypasses



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

	Transmitter		Cable		Remote Sensor	
PW30	☐	–	☐	–	☐	– ☐
	Enclosure W = Rugged Plastic M = Metal		**User Provided Cable** C = Conduit and terminal connections (for field wiring) **Optional Factory Cable (Pre-wired)** 003 = 3 feet (36in) 006 = 6 feet (72in) 009 = 9 feet (108in) 015 = 15 feet (180in) 020 = 20 feet (240in) 025 = 25 feet (300in) 030 = 30 feet (360in) 035 = 35 feet (420in) 040 = 40 feet (480in) 045 = 45 feet (540in) 050 = 50 feet (600in) 075 = 75 feet (900in) 100 = 100 feet (1200in)		**Factory Cable Type** Blank = Standard A = Armored	**Pipe Pressure Range** 050 = 0-50 PSIG 100 = 0-100 PSIG 250 = 0-250 PSIG 500 = 0-500 PSIG

Add a bypass manifold...

PWV-3 3-valve

PWV-5 5-valve

Optional Service Valve

PWBV 

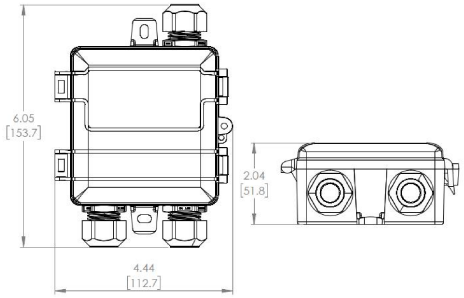
Optional service valve PWBV for live sensor swap

Fully Assembled with Bypass Manifold

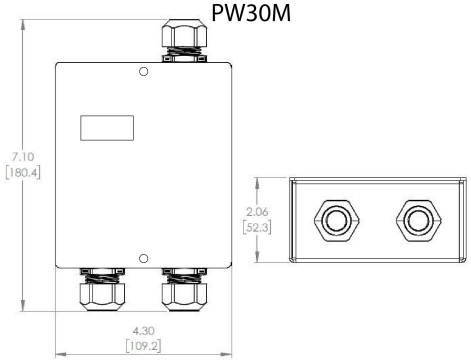
	Transmitter		Bypass		Remote Sensor
PW30	☐	–	☐	–	☐
	Enclosure W = Rugged Plastic M = Metal		**Bypass** 3V = 3 Valves 5V = 5 Valves		**Range** 050 = 0-50 PSIG 100 = 0-100 PSIG 250 = 0-250 PSIG 500 = 0-500 PSIG

DIMENSIONS

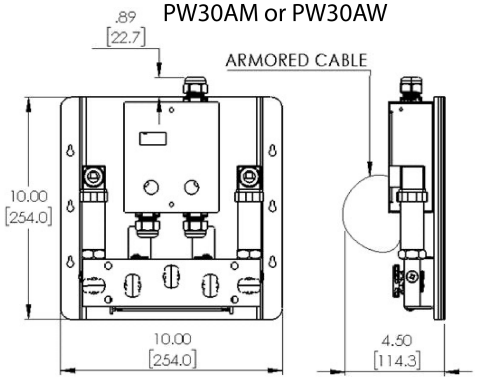
PW30W



PW30M



PW30AM or PW30AW



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[1] 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	Type		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[2]	*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[3]		< ±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, <±0.03(<100kPa), <±0.02(>100kPa)	
		Span, <±0.03(<100kPa), <±0.02(>100kPa)	
	Vibration	10G peak, 20 to 2000 Hz	
Enclosure	PW30M	Construction	Powder coated steel (metal)
		Rating	Nema 3R (Metal), IP65
	PW30W	Construction	PC/ABS (Plastic)
		Rating	Nema 4X (plastic), IP65
	PWT [xxx]	Construction	Stainless Steel, 304, 1/4" MNPT, 1/2" Conduit Fitting

(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. Accuracy includes non-linearity, hysteresis, and repeatability.

(3) 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.*