

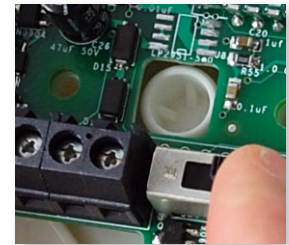
PRESSURE SENSORS



PRESSURE

PDP3 Series 0-2"	32
PDP3 Series 0-10", 0-25"	34
PG Gauge Series	36
PW Wet-Wet Series (Cable Version)	38
PW Wet-Wet Series (Conduit Version)	40
PW Series Ordering Guidance	42

Selectable ranges and an LCD are a technician's best friend, that's why we make them standard on every dry media differential pressure sensor!



Selectable pressure ranges, output type and uni/bi-directional settings (on 002-A models) for easy installation

Three installation friendly packages

Choose from our open frame panel mount, NEMA4 with integral duct probe, or NEMA4 with brass hose barb fittings. Each model offers the standard LCD and selectable range selector for ease of installation.

Dual outputs on every device save time when ordering and all low pressure models offer uni/bi-directional modes. Available in inches of water column or pascals models.



*Probe, duct, panel***Low Differential Pressure**

0-2" W.C., 0-500Pa version All-in-one
Zero-drift sensing technology
Standard LCD display
Dual 0-5/10VDC and 4-20mA outputs

NEMA 4 Duct Probe
PDP32NEMA 4
PDP31Panel Mount
PDP30**DESCRIPTION**

This PDP series dry media pressure sensors cover up to 0-2" (0-500Pa) and offers industry-leading long-term stability thanks to a fully calibrated and temperature compensated application specific integrated circuit (ASIC) in the piezoresistive silicon pressure sensor. The sensor features five field selectable ranges in both inches of WC and pascals, dual 0-5/0-10VDC and 4-20mA outputs, uni/bi-directional modes, and LCD readout for ease of installation.

APPLICATIONS

- Ideal for clean rooms, hospitals, fume hoods, computer rooms, and other very low differential pressure applications
- Static pressure in duct or room, variable air volume system control, and filter status monitoring

FEATURES**Industry-leading long-term stability**

- On-board application specific integrated circuit (ASIC)
- Fully calibrated and temperature compensated for sensor offset, sensitivity, temperature effects, and non-linearity

Easy to install and maintain

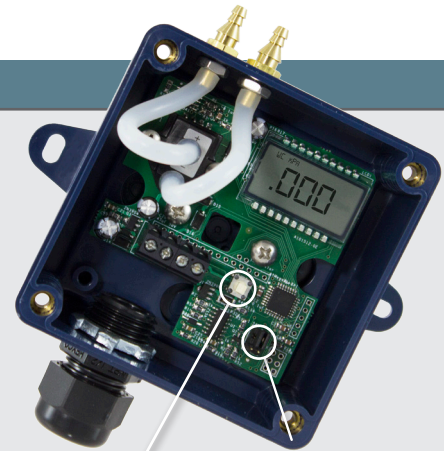
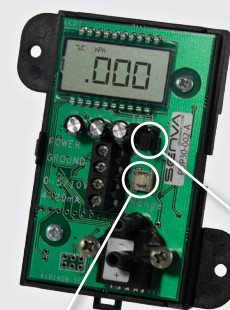
- Mount in any position. No gravity effect
- LCD display for easy setup and commissioning

Push button selectable ranges, outputs, and modes

- One model with five ranges: 0-2" (0.1, 0.25, 0.5, 1.0, 2.0) and 0-500Pa (.025, .062, .125, .250, .500kPa)
- Jumper selectable uni- or bi-directional
- Dual outputs 4-20mA and jumper selectable 0-5V or 0-10V

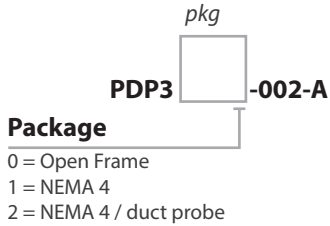
Three Versatile package styles:

- Open Frame: Panel mount DIN or screw-mount model
- Probe: NEMA 4 with integral duct probe
- Duct: NEMA 4 with brass hose barb fittings

Push button
Selectable ranges
for high resolutionSelect output type and uni/
bi-directional modesPush button
Selectable ranges
for high resolutionSelect output
type and uni/
bi-directional modes

7 year limited warranty

ORDERING



(Write your selected Package number in the box above)

SPECIFICATIONS

Power Supply	12-30VDC/24VAC ⁽¹⁾ , 30mA max. 15-30VDC/24VAC Required for 10V F.S. Output
Output Type	Dual 3-wire 0-5/10VDC and 3-wire 4-20mA 0-2" (0.1/0.25/0.5/1.0/2.0"W.C.)
Output scaling	Model PDP3X-002-A, selectable ranges 0-500Pa (.025/.062/.125/.250/.500kPa) uni or bi-directional (jumper selectable)
Operating Environment	Temperature range 32 to 122 F (0-50C) Humidity range 0-95% RH
Media compatibility	Dry, oil-free air. Nitrogen
Sensor Type	Silicon Ceramic Diaphragm
Sensor Performance	Position effects None - position insensitive Zero Drift None Accuracy +/-0.25% of full scale BFSL Total Band Error +/-2.5% of full scale Maximum Working Pressure 135"W.C. Maximum Over Pressure 270"W.C. Burst Pressure 415"W.C. Maximum Common Mode Pressure 1400"W.C.
Enclosure	PDP30-002-A (Panel Mount) Open frame, 35mm DIN rail or screw mount PDP31-002-A (Duct or Panel Mount) IP65, screw mount, brass hose barb fittings PDP32-002-A (Duct Mount w/pickup tube) IP65, screw mount, brass hose barb fitting and static pickup tube

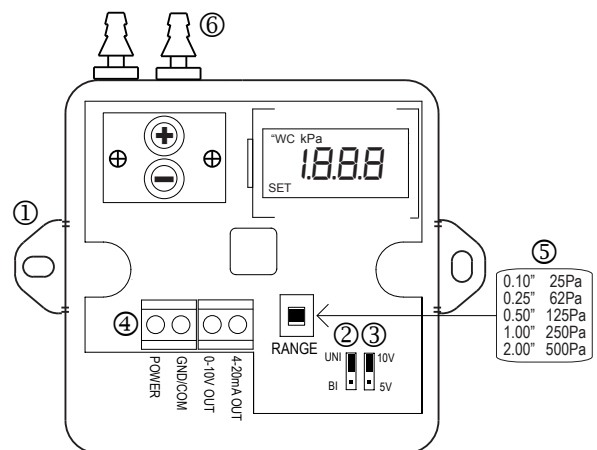
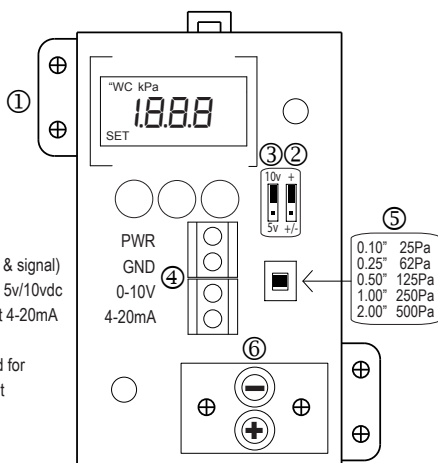
(1) One side of transformer secondary is connected to signal common. Dedicated transformer is recommended.

TYPICAL WIRING

WIRING:

PWR = Power Supply +
GND = Common (power & signal)
0-10V = Voltage output 5v/10vdc
4-20mA = Current output 4-20mA

(PWR and GND required for both Voltage and Current output operation)



WIRING:

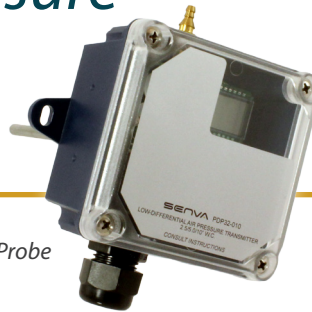
POWER = Power Supply +
GND/COM = Common (power & signal)
0-10V OUT = Voltage output 5v/10vdc
4-20mA OUT = Current output 4-20mA

(PWR and GND required for both Vdc and mA operation)

Probe, duct, panel Static - Differential Pressure

0-25", 0-7000 Pa versions
Accurate silicon piezoresistive sensor
LCD display (WC or pascal models)
Dual 0-5/10VDC and 4-20mA outputs

NEMA 4 Duct Probe
PDP32



NEMA 4
PDP31



Panel Mount
PDP 30



DESCRIPTION

This PDP series dry media pressure sensors cover up to 0-25" (0-7000Pa). The transmitter features field selectable pressure ranges LCD readout for ease of installation. Piezoresistive sensor chip provides accurate and reliable sensing.

APPLICATIONS

- Static pressure in duct or room, variable air volume system control, and filter status monitoring

FEATURES

Integrated, micromachined silicon piezoresistive sensor

- Outstanding sensitivity, linearity, and hysteresis

Switch-selectable ranges

- Three WC models with three ranges each: 0-10" (Selectable 2.5, 5.0, 10.0"WC) or 0-25" (Selectable 10, 15, 25"WC)
- Three Pa models with three ranges each: 0-2500Pa (0-2500/1250/250"Pa uni-directional only) or 0-7000Pa (Selectable 0-7000 (7000/5000/2500 Pa uni-directional))
- Dual outputs 4-20mA and jumper selectable 0-5V or 0-10V

Easy to install and maintain

- LCD display for easy setup and commissioning
- Auto zero push button input and auto zero control contact for system accuracy
- Dual outputs: 4-20mA and jumper selectable 0-5V or 0-10V

Three Versatile package styles:

- Open Frame: Panel mount DIN or screw-mount model
- Probe: NEMA 4 with integral duct probe
- Duct: NEMA 4 with brass hose barb fittings

Push button and
remote zero



Selectable ranges for high
resolution



7 year limited warranty

ORDERING

PDP3

Package

0 = Panel Mount
1 = NEMA 4
2 = NEMA 4 with duct probe

Pressure Range

-010 = 0-10" (Selectable 2.5, 5, 10"WC)
-025 = 0-25" (Selectable 10, 15, 25"WC)
-2500Pa (Selectable 2500, 1250, 250 Pa)
-7000Pa (Selectable 7000, 5000, 2500 Pa)

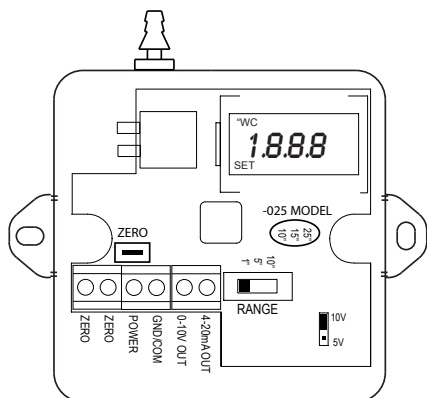
(Write your selected Package and Pressure Range numbers in the boxes above)

SPECIFICATIONS

Power Supply	12-30VDC/24VAC ⁽¹⁾ , 30mA max. (13VDC min for 10V f.s. output)
Output type	Dual outputs 3-wire 0-5/10VDC and 3-wire 4-20mA
Output scaling	Model PDP[XX]-010 0-10" (Selectable 2.5, 5, 10"WC) Model PDP[XX]-025 0-25" (Selectable 10, 15, 25"WC) PDP[XX]-2500Pa 0-2500Pa (Selectable 2500, 1250, 250 Pa) PDP[XX]-7000Pa 0-7000Pa (Selectable 7000, 5000, 2500 Pa)
Operating Environment	Calibrated temperature range 50 to 140 F (10-60C) Humidity range 0-90% RH
Media compatibility	Dry, oil-free air, N2
Sensor Type	Integrated, micromachined silicon piezoresistive
Sensor Performance	Accuracy (Linearity, hysteresis, temperature) 2.5% f.s. Auto-zero input Push-button and contact closure input provided
Enclosure	PDP30-XXX (Duct or Panel Mount) IP65, screw mount, brass hose barb fittings PDP31-XXX (Duct or Panel Mount) IP65, screw mount, brass hose barb fittings PDP32-XXX (Duct Mount w/pickup tube) IP65, screw mount, brass hose barb fitting and static pickup tube

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

TYPICAL WIRING



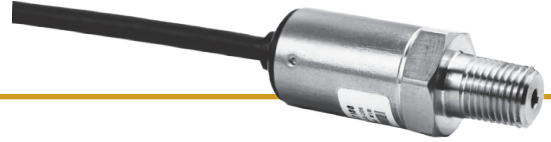
WIRING:

POWER = Power Supply +
GND/COM = Common (power & signal)
0-10V OUT = Voltage output 5v/10vdc
4-20mA OUT = Current output 4-20mA
ZERO = Contact closure input

(PWR and GND required for both Vdc and mA operation)

Stainless thread mount Gauge Pressure Transducer

Stainless Steel Wet Media
1/4" MNPT
0-5VDC or 4-20mA outputs



DESCRIPTION

This PG Series is a rugged and accurate gauge pressure sensor. It is compatible with a wide variety of liquids and gases. The MEMS technology gives the PG series flexibility to be used in virtually any OEM application. Whether measuring hydraulic pressure in a manifold or corrosive liquids and gases such as sea water or hydrogen, the PG series industrial pressure sensor provides a thick diaphragm to maintain long-term stability.

APPLICATIONS

- Refrigeration Pump Controls
- Chillers
- Freon and Ammonia Cooling Systems
- CO2 Systems
- Building Controls
- Water Pressure Systems
- Boiler Controls
- Environmental Test Chambers

FEATURES

Versatile

- Compact, Robust Package
- 48" wire leads; 1/4" MNPT
- Chemical Compatibilities: Any gas or liquid compatible with 17-4 stainless steel.

High Reliability...fewer call backs

- Burst pressure 5X full scale
- Reverse voltage protected
- Rugged stainless steel construction
- UL508 Certified
- No oil, welds or internal o-rings

Superb Accuracy

- < $\pm 0.5\%$ BFSL @ room temperature (Accuracy includes non-linearity, hysteresis & non-repeatability)

ORDERING

PG- -S-

Pressure Range

15 = 15 PSI
50 = 50 PSI
75 = 75 PSI
100 = 100 PSI
200 = 200PSI
300 = 300 PSI
500 = 500 PSI

Output Type

B = 0-5 VDC
C = 4-20 mA

ELECTRICAL DATA

Output	4-20mA	0-5VDC
Power Supply	10-28VDC	10-28VDC
Output Impedance	>10k Ohms	<100 Ohms, Nominal
Current Consumption	20mA, typical	<10mA
Bandwidth	(-3dB): DC to 250 Hz	(-3dB): DC to 1kHz
Output Noise	-	<2mV RMS
Zero Offset	<±1% of FS	<±1% of FS
Span Tolerance	<±1.5% of FS	<±1.5% of FS
Output Load	0-800 Ohms @ 10-28VDC	10k Ohms, min
Reverse Polarity Protection	Yes	Yes

ENVIRONMENTAL DATA

Temperature	
Operating	-40 to 85°C (-40 to 185°F)
Storage	-40 to 100°C (-40 to 212°F)
Thermal Limits	
Compensated Range	0 to 55°C (32 to 132°F)
TC Zero	<±1.5% of FS
TC Span	<±1.5% of FS
Other	
Shock	EN 60068-2-27
Vibration	EN 60068-2-6, 60068-2-64, and IEC 68-2-32
EMI/RFI Protection	Yes
Rating	IP-66 (housing only)

PERFORMANCE @ 25°C (77°F)

Accuracy ⁽¹⁾	<±0.5% BFSL
Stability (1 year)	±0.25% FS, typical
Over Range Protection	2X Rated Pressure
Burst Pressure	5X or 20,000 PSI (whichever is less)
Pressure Cycles	> 100 Million

(1) Accuracy includes non-linearity, hysteresis & non-repeatability

WIRING CONNECTIONS

0-5 VDC Models	3-wire voltage
4-20mA Models	2-wire loop powered

Remote cable mounted sensors

Wet-wet Differential Pressure

Prefabricated cables design
 0 to 5~500 PSID (0 to 273~3447 kPa)
 Revolutionary design eliminates plumbing
 LCD display (PSID or kPa jumper selectable)
 Dual 0-5/10VDC and 4-20mA outputs



DESCRIPTION

The PW Cable Wet-Wet series remote sensors are installed directly into the pipe and electrical connection is made between the PWS remote sensors and the PW transmitter via cables. 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
- Liquid level measurement of pressurized vessels

FEATURES

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
- Display units in PSI/kPa
- 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

High Reliability

- Standard built-in snubbers protect sensing elements from water hammer damage
- MEMS sensor technology

Snap on deutsch sensor connection

- Allows for mounting sensor and quick connection of wire later
- Eliminates wire twisting when tightening sensors in pipe fitting

Save time and money--pull wires, not pipe!

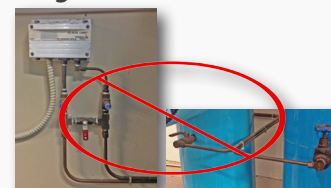


Pre-wired leads for fast snap connection to sensors



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

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



Cables are prefabricated and snap onto sensors with industrial deutsch connectors. This eliminates wire twisting when tightening sensors. IP65 rated for outdoor use when armored.

ORDERING



Ordering sensors: Order elements based on expected maximum PSIG. Order quantity of (2) PWSxxx sensors of same pressure range per (1) PW transmitter. The PW cables are prefabricated and cut to custom lengths at the factory.
Need further explanation: Turn to page 42

UNIVERSAL TRANSMITTER: PW

Transmitter Ranges

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

Sensor Cable Length (feet)

A = 3' E = 20' I = 40' M = 100'
 B = 6' F = 25' J = 45"
 C = 9' G = 30' K = 50'
 D = 15' H = 35' L = 75'

Sensor Cable Type

A = Armored plenum cable Blank = Standard plenum cable

range length type

range

length

type

REMOTE SENSORS: PWS

Element Number

element number

element number

Element Number	Element Range	PW10 Selectable Ranges	PW20 Selectable Ranges
025	25 PSIG	5/10/25 PSID	5/10/25 PSID
050	50 PSIG	5/10/25 PSID	10/25/50 PSID
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

PRESSURE SENSOR SERVICE VALVE: PWBV



Optional service valve PWBV for live sensor swap

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		
	Model PWS025	25 PSIG (Select 5/10/25 PSID)		
Pressure Ranges	Model PWS050	50 PSIG (Select 5/10/25 or 10/25/50 PSID based on PW Model)		
	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
		25 PSI Element	±2% FS	±1% FS
	PW20 Accuracy	50-500 PSI Element	±4% FS	±2% FS
		Range	A	B/C
Sensor Type	All PSIG Elements	±2% FS	±1% FS	
	Micro-machined silicon strain gauge			
	Accuracy	< ±0.5% BFSL		
	Zero Offset	< ±2%		
	Span Tolerance	< ±2%		
	Stability (1 Year)	±0.25%FS, typ		
	Overrange Protection	2X Rated Pressure		
	Burst Pressure	5X or 20,000 psi (whichever is less)		
	Pressure Cycles	> 100 Million		
	Compensated Range	0 to 55°C (30 to 130°F)		
	Temperature Compensation	Zero, <±1.5% of FS		
		Span, <±1.5% of FS		
	Shock	100G, 11 msec, 1/2 sine		
	Vibration	10G peak, 20 to 2000 Hz.		
	EMI/RFI Protection	Yes		
Enclosure, PW20 Transmitter	Construction	Powdered coated steel		
	Sealing	IP65 (when installed with water-tight fittings)		
Enclosure, PWS (xxx) Sensor	Construction	Stainless Steel 17-4, 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.

Remote conduit mounted sensors

Wet-wet Differential Pressure

Conduit adapter design

0 to 5~500 PSID (0 to 273~3447 kPa)

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

High Reliability

- Standard built-in snubbers protect sensing elements from water hammer damage
- MEMS sensor technology

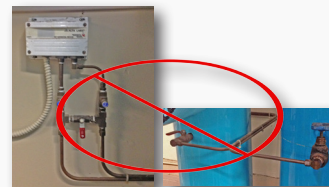
Save time and money - pull wires, not pipe!

- Run 4-conductor shielded cable in conduit from PW transmitter to PWC elements



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 copper tubing! Also eliminates the need for expensive bypass assemblies.



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.
Need further explanation: Turn to page 43

UNIVERSAL TRANSMITTER: PW

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 Range	PW10 Selectable Ranges	PW20 Selectable Ranges
025	25 PSIG	5/10/25 PSID	5/10/25 PSID
050	50 PSIG	5/10/25 PSID	10/25/50 PSID
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 PWC025	25 PSIG (Select 5/10/25 PSID)			
	Model PWC050	50 PSIG (Select 5/10/25 or 10/25/50 PSID based on PW Model)			
	Model PWC100	100 PSIG (Select 10/20/40 or 50/75/100 PSID based on PW Model)			
	Model PWC250	250 PSIG (Select 25/50/100 or 75/150/250 PSID based on PW Model)			
	Model PWC500	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	
		25 PSI Element	±2% FS	±1% FS	
	PW20 Accuracy	50-500 PSI Element	±4% FS	±2% FS	
		Range	A	B/C	
Sensor Type	All PSIG Elements	±2% FS	±1% FS		
		Micro-machined silicon strain gauge			
	Accuracy	< ±0.5% BFSL			
	Zero Offset	< ±2%			
	Span Tolerance	< ±2%			
	Stability (1 Year)	±0.25%FS, typ			
	Overrange Protection	2X Rated Pressure			
	Burst Pressure	5X or 20,000 psi (whichever is less)			
	Pressure Cycles	> 100 Million			
	Compensated Range	0 to 55°C (30 to 130°F)			
	Temperature Compensation	Zero, <±1.5% of FS			
		Span, <±1.5% of FS			
	Sensor Performance	Shock	100G, 11 msec, 1/2 sine		
		Vibration	10G peak, 20 to 2000 Hz.		
EMI/RFI Protection		Yes			
Enclosure, PW20 Transmitter		Construction	Powdered coated steel		
	Sealing	IP65 (when installed with water-tight fittings)			
Enclosure, PWC (xxx) Sensor	Construction	Stainless Steel 17-4, 1/4" MNPT, 1/2" Conduit Fitting			
	Sealing	IP65 (when installed with water tight fittings)			
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.

First time ordering our PW cable series? Let us help step by step!

What do I need?

PW Cable Wet-Wet Series



PWS Sensing Elements

Order (2) PWS sensing elements for every (1) PW transmitter. Each PWS element connects to the PW transmitter cables via snap-on deutsch connectors.



PW Transmitter

The configuration of the unit including powering the device, output, jumpers and PSID range selection is done inside of the PW transmitter. Cable length and type must be specified upon ordering.



On/Off Service Valve

Optional service valve (PWBV) for live sensor swap. Order 1 PWBV service valve for each PWS element.

ORDERING SENSING ELEMENTS

Step 1



Element connection type

This guide is for units that include prefabricated cables with deutsch connectors cut to a custom length at the factory. (If running your own 4-conductor shielded cable through conduit is desired, see page 37 of the catalog)

Step 2



Element pressure (PSIG) range

Each sensing element has a maximum PSIG rating. Ensure that your system will not exceed this rating to avoid clipping any readings before the device calculates the differential pressure.

element number

REMOTE SENSORS: PWS

Element Number

025 = 25 PSIG
050 = 50 PSIG
100 = 100 PSIG
250 = 250 PSIG
500 = 500 PSIG

Step 3



How many PWS sensing elements do I need?

It takes a pair (2) of PWS elements with the same PSIG rating per (1) PW transmitter.

OPTIONAL SERVICE VALVES

Step 4



Do you need optional on/off service valves?

Optional service valves (PWBV) are recommended for live sensor swap and also protecting the sensing elements from debris if the system needs to be flushed.

Order (2) PWBV service valves for each (1) PW transmitter.

ORDERING TRANSMITTER

Step 5



Transmitter range

After selecting the proper pair of PWS elements, select the PW10 or PW20 transmitter based on the PSID selectable range scale that best fits your application. (Use the cross reference table below)

Element Number	Element Range	PW10 Selectable Ranges	PW20 Selectable Ranges
025	25 PSIG	5/10/25 PSID	5/10/25 PSID
050	50 PSIG	5/10/25 PSID	10/25/50 PSID
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

Step 6



Cable length and type

The PW cables are prefabricated and cut to custom lengths at the factory. (Tip: For outdoor installations order the armored plenum cable)

range length type

UNIVERSAL TRANSMITTER: PW

Transmitter Ranges

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

Sensor Cable Length (feet)

A = 3' E = 20' I = 40' M = 100'
B = 6' F = 25' J = 45"
C = 9' G = 30' K = 50'
D = 15' H = 35' L = 75'

Cable Type

A = Armored plenum cable Blank = Standard plenum cable

FURTHER ASSISTANCE

Call us at (866) 660-8864
or email sales@senvainc.com

First time ordering our PW conduit series? Let us help step by step!

What do I need?

PW Conduit Wet-Wet Series



PWC Sensing Elements

Order (2) PWC sensing elements for every (1) PW transmitter. Each PWC element has a 1/2" conduit adapter on top.



PW Transmitter

The configuration of the unit including powering the device, output, jumpers and PSID range selection is done inside of the PW transmitter.



On/Off Service Valve

Optional service valve (PWBV) for live sensor swap. Order 1 PWBV service valve for each PWC element.

ORDERING SENSING ELEMENTS

Step 1



Element connection type

This guide is for units that will require the installer to provide conduit and 4-conductor shielded cable. (If prefabricated cables are desired, please see page 36 of the catalog)

Step 2



Element pressure (PSIG) range

Each sensing element has a maximum PSIG rating. Ensure that your system will not exceed this rating to avoid clipping any readings before the device calculates the differential pressure.

element number

REMOTE SENSORS: PWC

Element Number

025 = 25 PSIG
050 = 50 PSIG
100 = 100 PSIG
250 = 250 PSIG
500 = 500 PSIG

Step 3



How many PWC sensing elements do I need?

It takes a pair (2) of PWC elements with the same PSIG rating per (1) PW transmitter.

OPTIONAL SERVICE VALVES

Step 4



Do you need optional on/off service valves?

Optional service valves (PWBV) are recommended for live sensor swap and also protecting the sensing elements from debris if the system needs to be flushed.

Order (2) PWBV service valves for each (1) PW transmitter.

ORDERING TRANSMITTER

Step 5



Transmitter range

After selecting the proper pair of PWC elements, select the PW10 or PW20 transmitter based on the PSID selectable range scale that best fits your application. (Use the table below to cross reference the PSID ranges associated with each PWC element)

range

UNIVERSAL TRANSMITTER: PW

Transmitter Ranges

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

Transmitter PSID selectable ranges

Element Number	Element Range	PW10 Selectable Ranges	PW20 Selectable Ranges
025	25 PSIG	5/10/25 PSID	5/10/25 PSID
050	50 PSIG	5/10/25 PSID	10/25/50 PSID
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

FURTHER ASSISTANCE

Still have questions?

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