

RANGEABLE WET/WET DIFFERENTIAL PRESSURE TRANSMITTER LCD WITH BACKLIGHT



Bi-Directional Ranges:
 ± 4 inH₂O to ± 200 inH₂O
 [± 10 to ± 500 mbar (hPa)]
Unidirectional Ranges:
 0 to 4 inH₂O to 0 to 400 inH₂O
 [10 to 1000 mbar (hPa)]
 4 to 20 mA output

PX5200 Series



- ✓ Compact Size
- ✓ NEMA 4X (IP65) Environmental Rating
- ✓ Backlit LCD for Easy Reading
- ✓ Display Can Be Scaled to Any Units
- ✓ Display Rotates in 90° Increments to Fit Location
- ✓ Stainless Steel, FKM, and Ceramic Wetted Parts
- ✓ Flow measurement Totalization/Square Root Extraction Function
- ✓ Quick Ranging with Internal Push-Buttons
- ✓ Scale to Display in Any Engineering Units
- ✓ MIN/MAX and HOLD Functions
- ✓ Loop Check Function to Check Circuit
- ✓ Program Lock Function

The new OMEGA® PX5200 is a compact wet/wet differential pressure dP transmitter, ideal for flow and tank level applications where reliable, low dP measurements are required. Equipped with a solid state sensor and a 316 Stainless Steel isolating diaphragm, the PX5200 can monitor a wide variety of wet or dry media. Available in unidirectional ranges from 0 - 4 to 0 - 400 inH₂O and bi-directional ranges up to



± 200 inH₂O, the PX5200 operates on line (static) pressures up to 300 psi. A rugged aluminum NEMA 4X (IP65) enclosure measures only 65 mm (2.56") in diameter and incorporates a backlit LCD display for local reading. The output is a two-wire configurable 4 to 20 mA signal that can be adjusted to re-range the transmitter or "tare" unwanted fluid head preloads. In addition, this instrument offers flow measurement/

square root extraction, where the indicated flow rate and analog signal can be displayed. Rangeability for zero and span are from -10 to 110% FS URL (Upper Range Limit). This means a 20 inH₂O transducer can have the zero set between -2 inH₂O to FS 22 inH₂O. Span can be set over that range also. For example zero could be set for 2 inH₂O and 22 inH₂O maximum so the output would be 4 mA at 2 inH₂O, midpoint 12 mA would be 12 inH₂O and 20 mA would be 22 inH₂O.

PRESSURE TRANSDUCERS B



SPECIFICATIONS

Output: 4 to 20 mAdc (2-wire)

Supply Voltage: 12 to 32 Vdc
 $V_{min} = 12V + (0.022Ax \text{ loop res})$

Insulation Resistance: 50 Vdc
 (>100 M Ω)

Rangeability/Adjustments:

Zero: -10% to 110% FS

Span: -10% to 110% FS

Accuracy: $\pm 0.5\%$ FS URL (upper range limit) @23°C includes linearity, hysteresis and repeatability

Note: Accuracy and output resolution based upon FS URL (upper range limit) value.

Stability: $\pm 0.25\%$ FS/year

Response Time: 100 ms (adjustable)

Output Resolution: 0.1% FS URL

Display: 4-digit, 10 mm LCD with LED backlight

Display Accuracy: $\pm 0.5\%$ FS URL (upper range limit) + 1 digit

Storage Temperature: -15 to 65°C
 (5 to 150°F)

Operating Temperature: -10 to 60°C
 (14 to 140°F)

Compensated Temperature: -10 to 60°C
 (14 to 140°F)

Temperature Effects (Over Comp Range): $\pm 0.03\%$ FS URL /°C (from 23°C reference)

Static (Line) Pressure (All Ranges):

Proof: 300 psi

Burst: 800 psi

Static (Line) Pressure Effects:

$\geq 20 \text{ inH}_2\text{O}$, $\pm 8 \text{ inH}_2\text{O}$: $\pm 0.03\%$ FS/
 100 psi

$8 \text{ inH}_2\text{O}$, $\pm 4 \text{ inH}_2\text{O}$: $\pm 0.07\%$ FS/
 100 psi

$4 \text{ inH}_2\text{O}$: $\pm 0.15\%$ FS/100 psi

Single Side (Differential) Limits:

$\leq 8 \text{ inH}_2\text{O}$, $\pm 4 \text{ inH}_2\text{O}$:

Proof: 30 psid

Burst: 130 psi

$\geq 20 \text{ inH}_2\text{O}$, $\pm 8 \text{ inH}_2\text{O}$:

Proof: 100 psid

Burst: 130 psi

Vibration: 5 g 150 Hz

Shock: 10 g 16 ms

Pressure Connection: ¼ NPT female

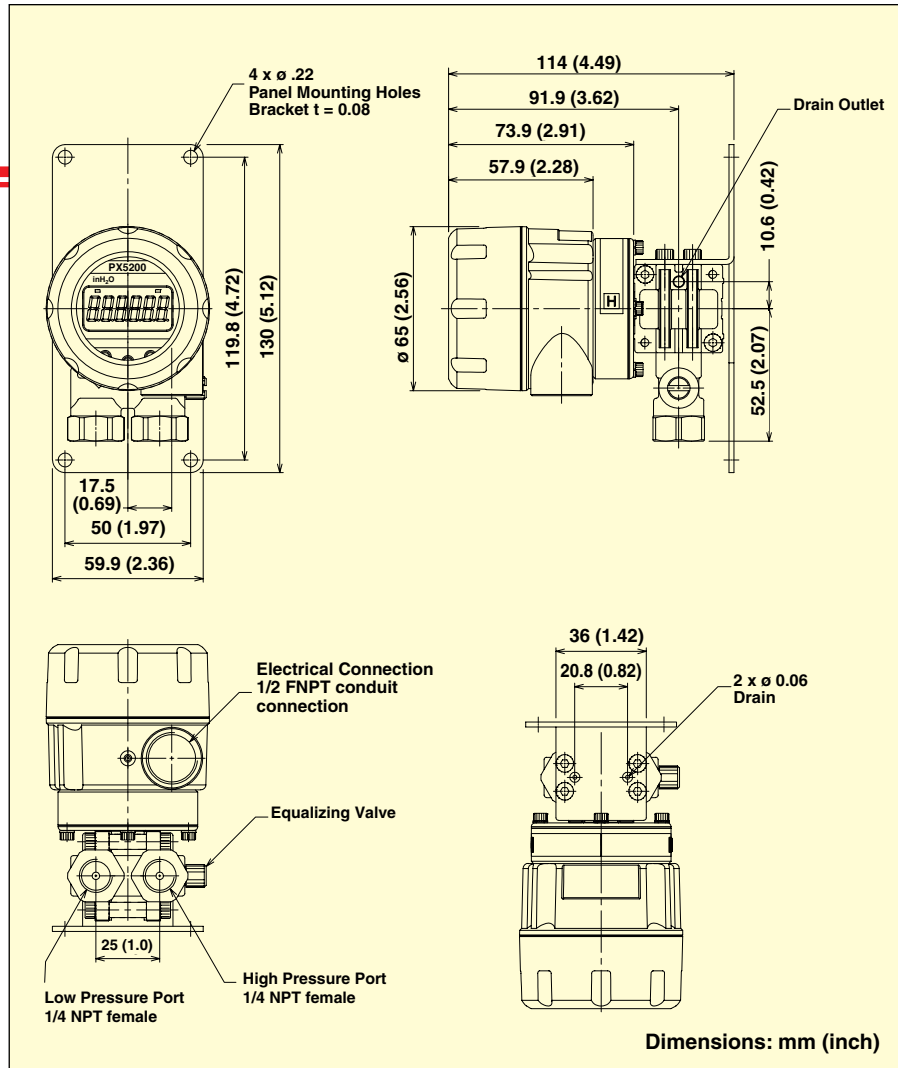
Electrical Termination: ½ NPT female
 conduit fitting

Environmental Rating:

NEMA 4X (IP65)

Media: Fluids and gasses compatible with 316SS, FKM, and alumina ceramic

Weight: Approx 454 g (1 lb)



To Order Visit omega.com/px5200 for Pricing and Details

SPAN AND ZERO ADJUSTABLE -10% to +110% FS URL

RANGE		
inH ₂ O	mb (hPa)	MODEL NO.
BI-DIRECTIONAL RANGES		
$\pm 4 \text{ inH}_2\text{O}$	$\pm 10 \text{ mbar}$	PX5200-004WBDI
$\pm 8 \text{ inH}_2\text{O}$	$\pm 20 \text{ mbar}$	PX5200-008WBDI
$\pm 20 \text{ inH}_2\text{O}$	$\pm 50 \text{ mbar}$	PX5200-020WBDI
$\pm 40 \text{ inH}_2\text{O}$	$\pm 100 \text{ mbar}$	PX5200-040WBDI
$\pm 80 \text{ inH}_2\text{O}$	$\pm 200 \text{ mbar}$	PX5200-080WBDI
$\pm 200 \text{ inH}_2\text{O}$	$\pm 500 \text{ mbar}$	PX5200-200WBDI
UNI-DIRECTIONAL RANGES		
0 to 4 inH ₂ O	0 to 10 mbar	PX5200-004WUDI
0 to 8 inH ₂ O	0 to 20 mbar	PX5200-008WUDI
0 to 20 inH ₂ O	0 to 50 mbar	PX5200-020WUDI
0 to 40 inH ₂ O	0 to 100 mbar	PX5200-040WUDI
0 to 80 inH ₂ O	0 to 200 mbar	PX5200-080WUDI
0 to 200 inH ₂ O	0 to 500 mbar	PX5200-200WUDI
0 to 400 inH ₂ O	0 to 1000 mbar	PX5200-400WUDI
OPTION (ADD AS SUFFIX TO MODEL NO.)		
-XRH	9-point NIST traceable calibration, must specify at time of order	

Comes complete with mounting bracket and operator's manual.

Ordering Examples: PX5200-020WUDI, 0 to 20 inH₂O unidirectional differential pressure rangeable transmitter, 4 to 20 mA output.

PX5200-004WBDI, $\pm 4 \text{ inH}_2\text{O}$ bidirectional differential pressure rangeable transmitter, 4 to 20 mA output (4 mA = -4 inH₂O, 20 mA = +4 inH₂O), ¼ NPT female.