

RANGEABLE INDUSTRIAL PRESSURE TRANSMITTER LCD WITH BACKLIGHT



**Ranges 0-50 psi to 0-7500 psi
(0-3.4 to 0-517 bar)
Compound ranges to Vac to 50 psi
(Vac to 3.4 bar)
4 to 20 mA Output**

PX5100 Series



Optional

- ✓ Compact Size
- ✓ NEMA 4X (IP65) Environmental Rating
- ✓ Backlit LCD for Easy Reading
- ✓ Display Rotates in 90° Increments to Fit Location
- ✓ All Stainless Steel Wetted Parts
- ✓ Quick Ranging with Internal Push-Buttons
- ✓ Scale to Display in Any Engineering Units
- ✓ MIN/MAX and HOLD Functions
- ✓ Program Lock Function
- ✓ High Overpressure
- ✓ High Life Cycles
- ✓ Key Lock Function

Applications

- ✓ Pump Control
- ✓ Hydraulic Control Systems
- ✓ Compressor Control
- ✓ Process Automation
- ✓ Water and Tank Level



PX5100



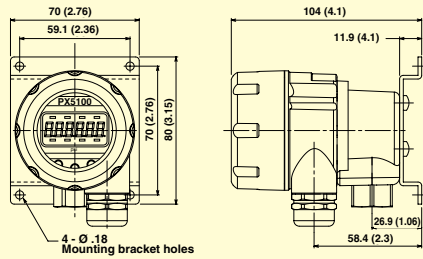
PX5100

The OMEGA PX5100 is a compact, industrial, rangeable, pressure transmitter ideal for monitoring pressures in process automation, hydraulic systems, compressors, pumps and in tank level applications where consistent, reliable pressure measurement is essential. The PX5100 has rugged field-proven thin film sensor technology and can monitor a wide variety of wet or dry media. Available in ranges from 0-50 to 0-7500 psi and compound ranges up to -15/50 psi, this versatile transmitter includes min, max to record high and low pressure events and hold feature. A rugged aluminum NEMA 4X (IP65) enclosure

measures only 2.65" 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. Rangeability for zero and span are from -10% to 110% FS URL (Upper Range Limit). This means a 100 psi transducer can have the zero set between -10 psi to FS 110 psi. For example zero could be set for 30 psi and maximum 90 psi so the output would be 4 mA at 30 psi, midpoint 12 mA would be 60 psi and 20 mA would be 90 psi.



Installation



SPECIFICATIONS

Output: 4 to 20 mAdc (2-wire)

Supply Voltage: 12 to 32 Vdc

V_{min}=12V+(0.022Ax loop res)

Insulation Resistance: 50 Vdc (>100 M Ω)

Rangeability/Adjustments:

Zero: -10 to 110% FS

Span: -10 to 110% FS

Accuracy: ±0.25% FS URL (Upper Range Limit) @23°C includes linearity, hysteresis and repeatability

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

Stability: ±0.25% FS/year

Response Time: 30 ms (adjustable)

Output Resolution: 0.1% FS (URL)

Display: 4 digit, 10 mm LCD with Red backlight

Display Accuracy: ±0.25% FS (URL) + 1 digit

Storage Temperature: -20 to 70°C (-4 to 158°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): ±0.02% FS (URL)/°C (from 23°C reference)

Overpressure (FS):

≤1500 psi

Proof: 200%

Burst: 500%

3000, 5000 psi:

Proof: 200%

Burst: 500%

7500 psi

Proof: 120%

Burst: 150%

Vibration: 5 g 150 Hz

Shock: 10 g 16 ms

Pressure Connection: ¼ NPT female

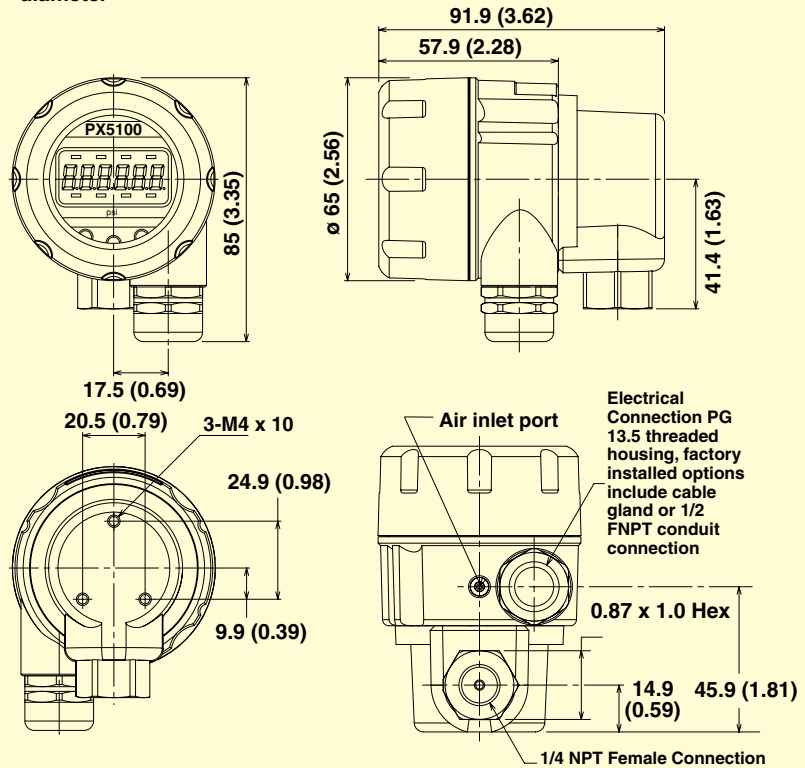
Electrical Connection: ½ NPT female conduit fitting

Environmental Rating: NEMA 4X (IP65)

Media: Fluids and gasses compatible with 316SS and 17-4 pH SS

Weight: Approx 454 g (1 lb)

Ø = diameter



Dimensions: mm (inch)

To Order

SPAN and ZERO ADJUSTABLE -10% to +110% FS (URL)

RANGE (URL)		MODEL NO.
psi	bar	
COMPOUND GAGE		
-Vac to +15	-Vac to +1	PX5100-015CGI
-Vac to +30	-Vac to +2.1	PX5100-030CGI
-Vac to +50	-Vac to +3.4	PX5100-050CGI
GAGE PRESSURE		
0 to 50	0 to 3.4	PX5100-050GI
0 to 100	0 to 6.9	PX5100-100GI
0 to 150	0 to 10	PX5100-150GI
0 to 300	0 to 21	PX5100-300GI
0 to 500	0 to 34	PX5100-500GI
0 to 1000	0 to 69	PX5100-1KGI
0 to 1500	0 to 103	PX5100-1.5KGI
0 to 3000	0 to 207	PX5100-3KGI
0 to 5000	0 to 345	PX5100-5KGI
0 to 7500	0 to 517	PX5100-7.5KGI

OPTIONS (ADD AS SUFFIX TO MODEL NO.)

-XRH	9-point NIST traceable calibration, must specify at time of order
-X6B	Oxygen cleaning

Comes complete with mounting bracket and operator's manual.

Ordering Example: PX5100-100GI, 100 psig rangeable transmitter, 4 to 20 mA output.

PX5100-015CGI, vacuum to 15 psi compound gage rangeable transmitter, 4 to 20 mA output (4 mA = vacuum, 20 mA = + 15 psi).