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

- 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

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.
SPECIFICATIONS

Output: 4 to 20 mA (2-wire)
Supply Voltage: 12 to 32 Vdc
Vmin=12V+(0.022Ax loop res)
Insulation Resistance: 50 Vdc (>100 MΩ)

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)

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).