

Pressure Sensor F6301 Series

With 4-20 mA Output

- 4-20 mA electrical output
- Long-term stability & repeatability
- Wide range of pressure ratings
- Stainless steel NEMA 4X enclosure

The F6301 Pressure Sensors utilize polysilicone strain resistors to create very low noise levels with very high signal output. The metal diaphragm and polysilicone bridge are unaffected by shock, vibration or mounting position.

SPECIFICATIONS

Overpressure:

Full scale in PSI	0-15 to 0-2000	0-3000 to 0-5000	0-6000 to 0-15,000
Proof	200%	150%	120%
Burst	800%	300%	150%

Accuracy:

±1% of full scale
Non-linearity ±0.7%
Hysteresis ±0.2%
Non-repeatability ±0.07%

Durability:

108 cycles 20/80% full scale with negligible performance change

Response Time:

<5ms

Environmental Effects:

Humidity	No performance effect at 95% relative humidity, non-condensing
Position Effect	<0.01% full scale

Temperature:

Storage	-65 to +250 °F (-54 to +121 °C)
Operating	-20 to +180 °F (-29 to +82 °C)
Compensating	-20 to +160 °F (-29 to +71 °C)

Thermal Coefficients (68 °F ref.) % full scale / °F Standard:

Zero	±0.04%
Span	±0.04%

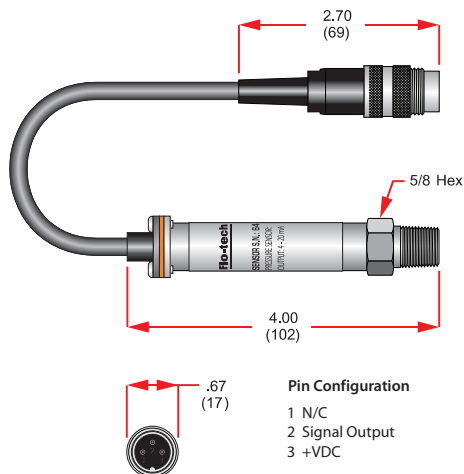
Vibration Sweep:

<±0.1% full scale effect for 0-2000 Hz at 20 g's in any axis

Shock:

<±0.5% full scale effect for 100 g's, 20 ms shock in any axis

DIMENSIONS - Inches (mm)



Power Requirements:

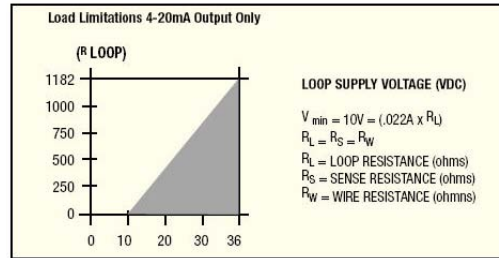
10-36 VDC unregulated
4-20 mA reverse polarity protected

Circuit to Case

Insulation Resistance: 100 M Ohms @ 50 VDC

Electrical Output:

Signal 4-20 mA (2 wire)



Physical:

Enclosure NEMA 4X
Weight 2 oz (approximate without cable)

Materials:

Case 300 Series stainless steel
Cable #24 AWG, 36" PVC, shielded, vented, UL approved
Diaphragm 17-4 PH stainless steel
Connection 1/4 NPT male

ORDERING INFORMATION

PART NUMBER	PSI	Bar	kg/cm ²
F6301-15	0 - 15	0 - 1.034	0 - 1.055
F6301-30	0 - 30	0 - 1.999	0 - 1.999
F6301-60	0 - 60	0 - 4.13	0 - 4.22
F6301-100	0 - 100	0 - 6.89	0 - 7.03
F6301-150	0 - 150	0 - 10.34	0 - 10.55
F6301-200	0 - 200	0 - 13.78	0 - 14.06
F6301-300	0 - 300	0 - 19.99	0 - 19.99
F6301-500	0 - 500	0 - 34.5	0 - 35.1
F6301-750	0 - 750	0 - 51.7	0 - 52.7
F6301-1K	0 - 1000	0 - 68.9	0 - 70.3
F6301-2K	0 - 2000	0 - 137.8	0 - 140.6
F6301-3K	0 - 3000	0 - 199.9	0 - 199.9
F6301-5K	0 - 5000	0 - 345	0 - 351
F6301-6K	0 - 6000	0 - 414	0 - 422
F6301-7.5K	0 - 7500	0 - 517	0 - 527
F6301-10K	0 - 10,000	0 - 689	0 - 703
F6301-15K	0 - 15,000	0 - 1034	0 - 1055