Flush Diaphragm Pressure Transmitter



Precision Grade-"Non-Filled" Flush Diaphragm Sensor

Designed for the highest system integrity

Tel-Tru's P221 Pressure Transmitter is designed for the OEM and end user where ruggedness, high performance, and reliability are required at a competitive price. Key feature of the P221 is its non oil –filled sensing element. The sensing diaphragm is machined from a solid piece of steel, and can withstand the most abrasive cyclical applications. No thin diaphragm to break, to oil or to leak.

Manufactured for extended life cycle

The P221 is designed to last in high cyclical environments with or without the presence of water-hammering or spiking. Advanced manufacturing techniques, extreme environmental burn-in and thorough residual stress relieving procedures ensure the P221 maintains its performance over time.

Designed to meet Intrinsically Safe standards

The P221 is designed to meet or exceed the standards for IS. FM/CSA approvals are pending.

Certification

Every P221 is shipped with a NIST traceable calibration certificate.

CE

Conforms to EN50081-2 and EN50082-2

Standard Features

 \pm = 0.5% FSO Static Accuracy NEMA 4X Packaging \pm = 0.25% FSO /YR stability

- Available Options

 \pm = 0.25% FSO Static Accuracy Alternate Wetted Materials Zero/Span Controls/ Shunt Cal Hastelloy or Inconel sensors available



NEMA 4X Packaging

Note: specifications are subject to change.



P221 Pressure Transmitter

Precision Grade Flush Diaphragm 0-100 psi through 0-7,500 psi



Product Specifications

——— Electrical

P221A, P221B 8-38 Vdc*

P221C 2-15 Vdc

Output

Excitation

P221A 4-20 mA P221B 0-5 Vdc*

P221G 0-3 Vuc P221C 1-2 mV/V*

Zero Balance $= \pm 1\%$ FSO FSO Setting $= \pm 1\%$ FSO

Resolution Infinite (±.001% FSO usable)

Response Time

P221A, P221B < 3 mS P221C < 0.5 mS

Insulation Resistance 1000 MO @ 50 Vdc

Reverse Polarity Protected Warm-up < 10 mS

Power Supply Effect = $\pm .002\%$ FSO per V input (P221A, P221B)

EMI/RFI Internal Filtering (P221A, P221B)
Short Circuit Protected Up to 40 Vdc (P221A, P221B)

Static Accuracy $= \pm 0.5\%$ FSO* (BFSL, RSS)* (combined effects of non-linearity, hysteresis & repeatability)

Performance

Repeatability = $\pm 0.1\%$ FSO

Temperature Effects = $\pm 1.5\%$ FSO over comp range*

(combined effects of Zero & FSO with reference at 70° F) Long Term Stability = $\pm 0.25\%$ FSO per year

Note: specifications are subject to change.

Mechanical

Pressure Ranges 0-100 through 0-7,500 psi

(Customer may specify any range/eng. unit FOC) (Absolute, vacuum, compound available options)

Proof Pressure 2X Full Scale*

Burst Pressure 5X Full Scale* (15k psi max)

Materials

Wetted Parts* 15-5 SST*

Non-wetted Parts 316 SST plus electrical connector*

Pressure Port 34-16 UNF Flush with 'O'-Ring*

Electrical Connector NEMA 4X cab le exit (24" cable)*

Dimensions per outline below Weight nominal 10 oz

Environmental -

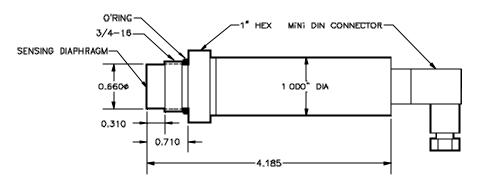
Compensated Temp Range 0 to 170 °F

Operating Temp Range -40 to 200 °F

Storage Temp Range -40 to 250 °F

* Options Available







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