



210-35-010 SERIES: mV/V, General Purpose Pressure Sensor 0-5,000 PSIA, +250°F

The **210-35-010 Series** is our rugged stainless steel pressure sensor for **GENERAL PURPOSE** applications.

Offered in pressure ranges from **0-500** to **0-5,000 PSIA & PSIS** the **210-35-010 Series** is all-welded, hermetically sealed construction to operate in the harshest hydraulic and pneumatic environments.

The perfect solution for Industrial and Aerospace test equipment environments and more.



Solutions!

- PSIA & PSIS (Absolute & Sealed Options).
- Harsh/Extreme Environment Ready.
- 5/8" Diameter Package.

Potential Applications:

- Industrial OEM Equipment.
- Aerospace / Defense Test Stands.
- Remotely Operated Vehicles (ROV).
- Motion Simulation Systems.
- Engine Fuel Pressure Monitoring.
- Hydraulic / Pneumatic Control Systems.

Features!

- **Operating Temperature:** -65°F to +250°F (-53°C to +121°C).
- **Output:** mV/V.
- **Pressure Range:** 0-500 to 0-5,000 PSIA.
- **Thermal Zero Shift:** ± 0.01% of Full Scale per °F.
- **Operating Media:** Compatible with 15-5 PH CRES & 17-4 PH CRES.
- **Pressure Fitting:** Boss mounting per MS33649-4 using MS28775-012 size O-ring.

Pressure Transducers, Transmitters & Temperature Solutions!

210-35-010 Series Specifications:

Calibration: Calibration Certificates are supplied with each unit and available on-line. For optimum performance, we recommend annual calibration.

Performance:

Thermal Zero Shift: $\pm 0.01\%$ of Full Scale (F.S.) per $^{\circ}\text{F}$ maximum.

Thermal Sensitivity Shift: $\pm 0.005\%$ of Full Scale per $^{\circ}\text{F}$ maximum.

Full Scale (F.S.) Sensitivity: 2.5 mV/V $\pm 10\%$.

Output at Zero Pressure: $0 \pm 5\%$ of Full Scale.

Static Error Band (Non-Linearity and Hysteresis Combined): See Pressure Table

Repeatability: Within $\pm 0.05\%$ of Full Scale maximum.

Environmental:

Environmental: Error due to combined effect of shock, vibration and acceleration shall be less than 0.01% of Full Scale per G.

- **Acceleration:** 20 G's per MIL-G-810, method 513.1, Procedure I.
- **Vibration:** 20 G's per MIL-STD-810, method 514.1, Procedure.
- **Shock:** 30 G's Per Mil-Std-810, Method 516.1, Procedure IV.

Operating Temperature Range: -65°F to $+250^{\circ}\text{F}$ (-53°C to $+121^{\circ}\text{C}$).

Compensated Temperature Range: -25°F to $+250^{\circ}\text{F}$ ($+31^{\circ}\text{C}$ to $+121^{\circ}\text{C}$).

Mechanical:

Pressure Range: Lower & Higher pressure ranges are available.

PRESSURE TABLE				
Paine Part Number:	Pressure Range PSIA	Proof Pressure PSIA	Burst Pressure PSIA	Static Error Band (BSLM)
210-35-010-04	0-5,000	7,500	10,000	$\pm 0.25\%$ F.S.

Operating Media: Any compatible with 15-5 PH CRES and 17-4 PH CRES.

Pressure Fitting: Boss mounting per MS33649-4 using MS28775-012 size O-ring. Recommended installation torque 65 in-lb. maximum. Optional mounting on .250 O.D. tubing with 37 $^{\circ}$ flare.

Electrical:

Excitation: 10 VDC.

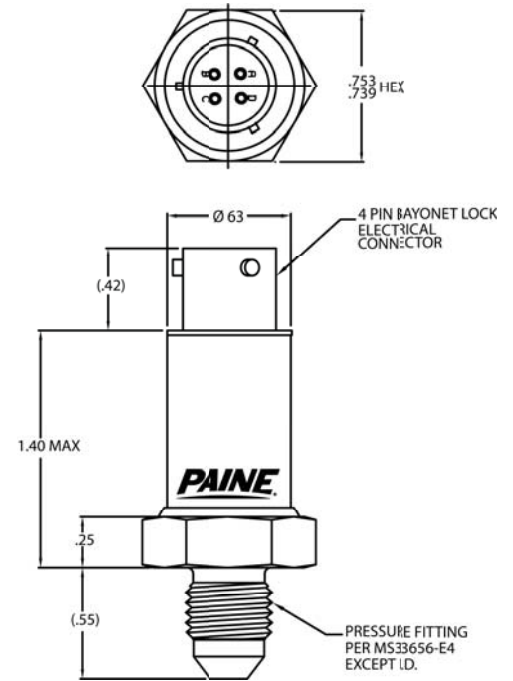
Input Resistance: $350 \pm 70 \Omega$

Output Resistance: $350 \pm 35 \Omega$

Insulation Resistance: All conductors to case, 10M Ω minimum at 50 VDC.

Electrical Connections: 4 Pin bayonet locking electrical connector. Mates with MS3116-8-4S. (Paine P/N: 247-99-100-01 sold separately).

Dimensions (inches)



CAD & model information is available on our web site or by request.

Connections

PIN	FUNCTION
A	+ EXCITATION
B	+ SIGNAL
C	- SIGNAL
D	- EXCITATION

Customized to your specific application! Drawing from thousands of top-level designs, we can customize this sensor to fit your specific needs or application. With your imagination and our design team, anything is possible!