

# Paine 210-35-010 Series Pressure Transducer

mV/V, Rugged, +121 °C, Ranges to 5,000 PSIS (244 BAR)



**Rugged stainless steel pressure sensor. Offered in pressure ranges from 0–500 to 0–5,000 PSIA and PSIS. All-welded, hermetically sealed construction to operate in the harshest hydraulic and pneumatic environments.**

**Reliable system pressure monitoring for informed decision making, which can lead to lower operating costs, reduced system failures and optimized operations.**

## Solutions

- PSIS and PSIA (Sealed and Absolute Options).
- All-Welded, Sealed Construction.
- Harsh/Extreme Environment Ready.
- 5/8-in. Diameter Package.

## Potential Applications

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

## Features

- **Full Scale (F.S.) Sensitivity:** 2.5 mV/VV ± 10%.
- **Output at Zero Pressure:** 0 ± 5% of Full Scale per °F maximum.
- **Operating Temperature:** -65 °F to +250 °F (-53 °C to +121 °C).
- **Pressure Range:** 0–500 to 0–5,000 psia (34 to 344 bar).
- **Operating Media:** Any compatible with 17-4 PH CRES or 15-5 PH CRES.
- **Pressure Fitting:** Per AS4395E04.

## Specifications

**Calibration:** Calibration Certificates are supplied with each unit and available on-line.

## Performance

**Full Scale (F.S.) Sensitivity:** Sensitivity: 2.5 mV/VV ± 10%.

**Thermal Zero Shift:** ± 0.01% of Full Scale (F.S.) per °F maximum.

**Thermal Sensitivity Shift:** ± 0.005% of Full Scale per °F maximum.

**Static Error Band (Non-Linearity, Hysteresis):** See Pressure table.

**Output at Zero Pressure:** 0 ± 5% of Full Scale.

**Repeatability:** Within ± 0.05% of Full Scale.

## 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-STD-810, method 513.1, Procedure I.

■ **Vibration:** 20 G's per MIL-STD-810, method 514.1, Procedure V Part 1.

■ **Shock:** 30 G's Per Mil-STD-810, Method 516.1, Procedure IV.

**Operating Temperature Range:** -65 °F to +250 °F (-53 °C to +121 °C).

**Compensated Temperature Range:** -25 °F to +250 °F (-31 °C to +121 °C).

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## Mechanical

**Pressure Range:** Contact factory for additional pressure ranges.

Pressure table				
Standard part number	Pressure range PSIS (BAR)	Proof pressure PSIS (BAR)	Burst pressure PSIS (BAR)	Static error band (BSLM)
210-35-010-05	0–5,000 (0–344)	7,500 (517)	10,000 (689)	± 0.25% F.S.

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

**Pressure Fitting:** Per AS4395E04.

**Recommended Installation Torque:** 65 in-lb maximum.

**Optional Mounting:** 0.250 O.D. tubing with 37° flare.

## Electrical

**Excitation:** 10 VDC.

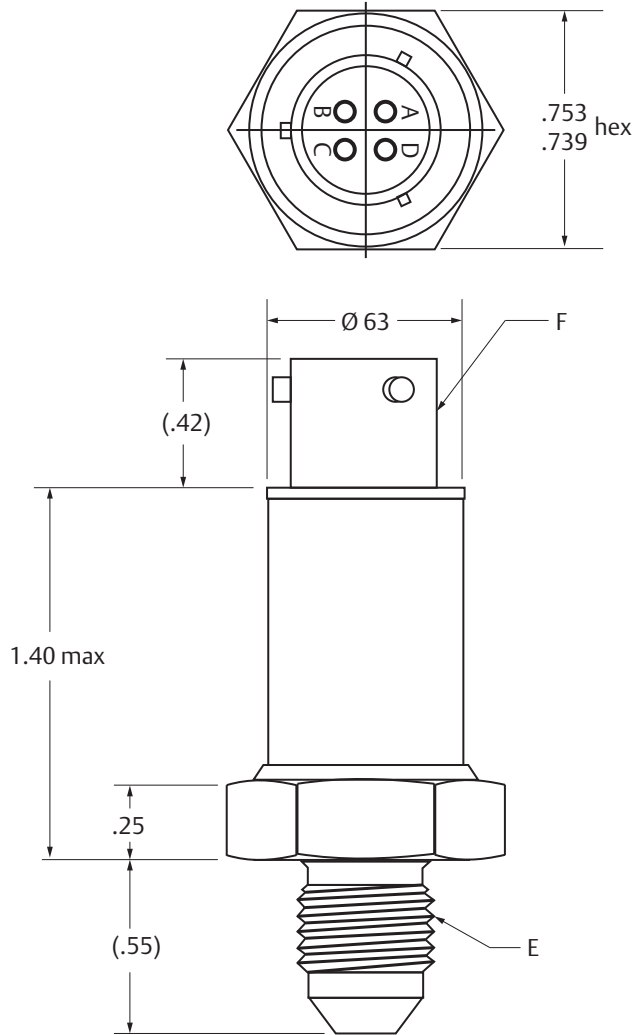
**Input Resistance:** 350 ± 70 Ω.

**Output Resistance:** 350 ± 35 Ω.

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

# Dimensional Drawings

Figure 1. 210-35-010 Series



Connections	
PIN	Function
A	+ Excitation
B	+ Signal
C	- Signal
D	- Excitation

- A–D. See Connections table
- E. Pressure fitting per AS4395E04
- F. 4 pin bayonet lock electrical connector

Dimensions are inches.


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**Rosemount Specialty Product LLC**


**Emerson Process Management**


5545 Nelpar Drive

East Wenatchee, WA 98822, USA

 +1 509 881 2100


 +1 509 881 2115


 Paine.Products@Emerson.com

 [Linkedin.com/company/Emerson-Process-Management](https://www.linkedin.com/company/Emerson-Process-Management)

 [Twitter.com/Rosemount\\_News](https://twitter.com/Rosemount_News)

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