Paine[™] 212-64-010 Series Pressure Transmitter

VDC, Direct Media, +121 °C, Pressure and Temperature, Ranges to 7,500 PSIA (517 BAR)



The Paine 212-64-010 Series is our VDC pressure and temperature direct media style sensor specifically designed to measure hydraulic, cooling, pneumatic, lubrication, air conditioning, and fuel system media.

With internal high amplification (longer distance communication and simplifying hardware requirements), the Paine 212-64-010 Series provides rapid response time and high measurement accuracy. It is the perfect solution for designers looking to detect the slightest changes in pressure and/or temperature within their systems.



Solutions

- Pressure and temperature measurements
- All-welded, sealed construction
- ³/4-in. diameter package
- Wide operating pressure

Potential applications

- Industrial fluid management
- Fuel and hydraulic temperature monitoring
- Aircraft, agriculture, and off road equipment monitoring
- Aerospace pressure and temperature monitoring

Features

- Operating temperature: -40 to +250 °F (-40 to +121 °C)
- Output: VDC
- Pressure range: 0–1,000 to 0–7,500 PSIA (68 to 517 bar)
- Total error band: ±1.5% of Full Scale (F.S.)
- Non-linearity and hysteresis combined: ±0.50% of F.S. maximum (BSLM)
- Operating media: Compatible with 15-5 PH CRES and 316 SS
- Pressure fitting: Per AS4395E04. Full direct media/inflow style measurement

Specifications

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

Performance

Total error band (non-linearity, hysteresis, and thermal effects): $\pm 1.5\%$ of F.S.

Non-linearity and hysteresis combined: $\pm 0.50\%$ of F.S. maximum (BSLM)

Output at zero pressure: 0.1 \pm 0.1 VDC at 75 °F

Output at rated pressure: 5.1 ± 0.1 VDC at 75 °F

Platinum resistance temperature detector (RTD): Per DIN EN 60751, 0 °C, 1000 $\Omega \pm .06\%$, Class A, Alpha = .00385 nominal

RTD Output at -25 °F (-31 °C): 0.1 ± .05 VDC (extrapolated)

RTD Output at 275 °F (135 °C): 5.1 ± 0.1 VDC (extrapolated)

Environmental

Operating temperature range: -40 to +250 °F (-40 to +121 °C)

Compensated temperature range: -25 to +250 °F (-31 to +121 °C)

Calibrated temperature points: 32 to +212 °F (0 to +100 °C)

Contents

Mechanical

Pressure range: Contact factory for additional pressure ranges.

Table 1. Pressure Table

Standard part number	Pressure range PSIS (BAR)	Proof pressure PSIS (BAR)	Burst pressure PSIS (BAR)
212-64-010-01	0–1,000 (68)	1,500 (103)	2,500 (172)
212-64-010-02	0–2,500 (172)	3,750 (258)	6,250 (430)
212-64-010-03	0–5,000 (344)	7,500 (517)	12,500 (861)
212-64-010-04	0–7,500 (517)	11,250 (775)	18,750 (1,292)

Pressure fitting: Per AS4395304, except internal port diameter

Operating media: Any compatible with 15-5 PH CRES and 316 SS

Electrical

Excitation: 9.0 VDC minimum, 38 VDC maximum

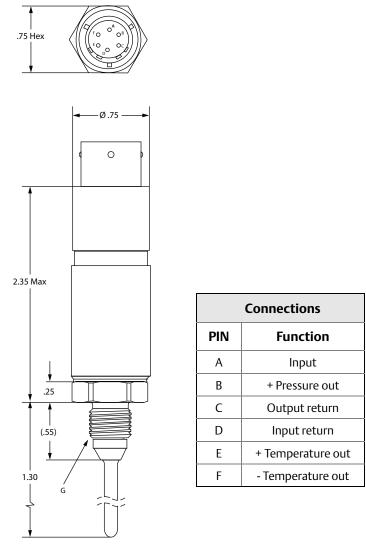
Maximum current consumption: 34 mA at 20 VDC

Insulation resistance: All conductors together to case, 10 G Ω minimum at 50 VDC and +77 $^\circ\text{F}$

Electrical connections: Six pin bayonet connector per MIL-C-26482H, MS33709-6

Dimensional drawings

Figure 1. Paine 212-64-010 Series



A-F. See connection table.

G. Pressure port Per AS4395E04 except inner diameter

Dimensions are shown in inches.

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