Product Data Sheet
September 2017
212-75-090, Rev J

Paine™ 212-75-090 Series Pressure Transmitter

VDC, Rugged, Industrial, +121 °C, 0-100 to 0-10,000 PSIS (6 to 689 BAR)

The Paine 212-75-090 Series is our industrial VDC transmitter specifically designed to help manage your pressure measurements by more efficiently providing rapid, accurate information that enhances your system's operational performance, thus reducing possible failures and lowering operational and maintenance expenses.

With internal amplification, the Paine 212-75-090 Series is provided sealed with all-welded construction making it suitable for applications where high vibration and extreme conditions are present and can be easily customized.

EMERSON

Solutions

- 5/8-in. diameter package
- All-welded, sealed construction
- Harsh/extreme environment ready
- Wide operating pressure range

Potential applications

- Hydraulic press systems
- Industrial machinery, metal works, and pumps
- Commercial hydraulic and pneumatic controls
- Test and automation equipment
- OEM and end-user applications

Features

- **Total error band:** ±1.5% of Full Scale (F.S.) sensitivity
- **Output:** VDC
- **Operating temperature:** –40 to +250 °F (–40 to +121 °C)
- **Pressure range:** 0–100 to 0–10,000 PSIA (6 to 698 BAR)
- **Operating media:** Any compatible with 15-5 PH CRES
- **Pressure fitting:** Per AS4395E04, except inner port diameter

Specifications

Calibration: Calibration certificates are supplied with each unit and available online.

Performance

Total error band: Includes static error band, temperature effects and input voltage variation. Shall not exceed 1.50% of the F.S. (best straight line method).

Static error band: ± 0.50% F.S. output (best straight line method)

Output at zero pressure: 0.1 ± 0.1 VDC over compensated temperature range

Output at rated pressure: 5.1 ± 0.1 VDC

Environmental

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

Calibrated temperature range: –25 to +225 °F (–31 to +107 °C)

Pressure media: Any compatible with 15-5 PH CRES

Contents

Mechanical

Pressure range: Contact factory for additional pressure ranges.

Table 1. Pressure Table

Standard part number	Pressure range PSIS[1] (BAR)	Proof pressure PSIS (BAR)	Burst pressure PSIS (BAR)
212-75-090-01	0–100 (6)	150 (10)	250 (17)
212-75-090-02	0–500 (34)	750 (51)	1,250 (86)
212-75-090-03	0–1,000 (68)	1,500 (103)	2,500 (172)
212-75-090-04	0–5,000 (344)	7,500 (517)	12,500 (861)
212-75-090-05	0–10,000 (689)	15,000 (1,034)	25,000 (1,723)

1. PSIS designation references a sealed chamber. The output is referenced to 14,696 PSIA.

Pressure fitting: Per AS4395E04 except inner diameter

Operating media: Any compatible with 15-5 PH CRES

Electrical

Input voltage: 11 VDC minimum, 40 VDC maximum. Reverse polarity protected (derated over temperature)

Input current: 18 mA maximum

Input/output isolation: Not isolated

Output load: 50 k Ω minimum, short circuit protected

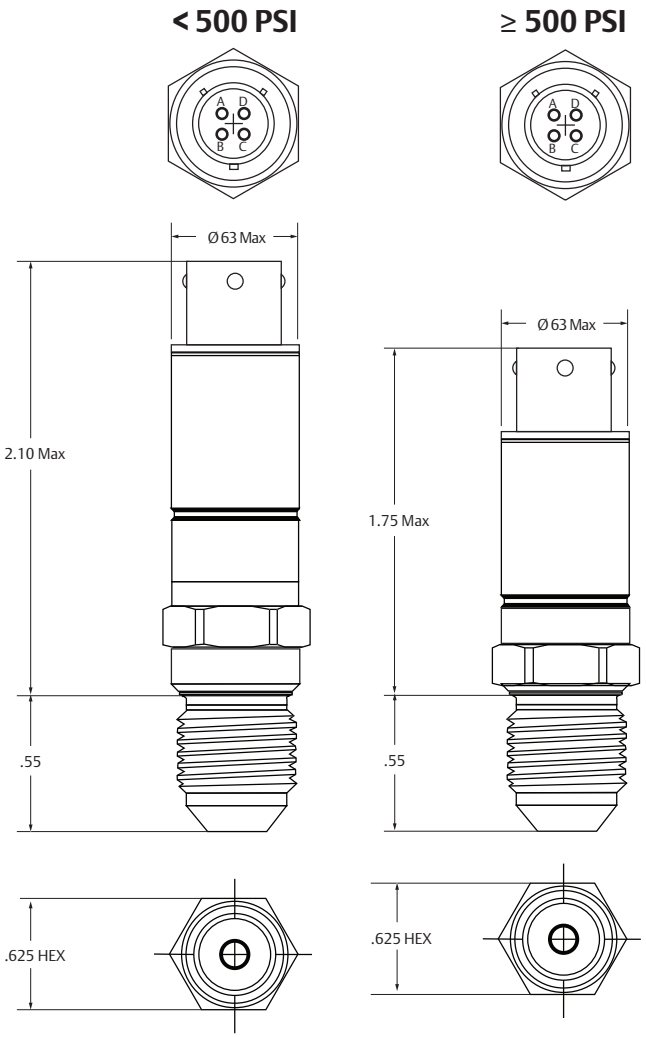
Output ripple: ≤ 35 mV peak to peak (typical). 0–1 kHz bandwidth

Insulation resistance: All conductors together to case, 100 M Ω minimum at 50 VDC and +77 °F

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

Dimensional Drawings

Figure 1. Paine 212-75-090 Series



Connections	
PIN	**Function**
A	+ Input
B	- Output
C	Do not connect
D	Common return

Dimensions are shown in inches.

This page is intentionally left blank.

Rosemount Specialty Product LLC
Emerson Automation Solutions
5545 Nelpar Drive
East Wenatchee, WA 98822, USA
+1 509 881 2100
+1 509 881 2115
Paine.Products@Emerson.com

Linkedin.com/company/Emerson-Automation-Solutions

Twitter.com/Rosemount_News

Facebook.com/Rosemount

Youtube.com/user/RosemountMeasurement

Google.com/+RosemountMeasurement

PAINE™

EMERSON™