

212-60-080 Series

Differential, Amplified, Compensated



Port Adapters Available!



PAINE®

The **212-60-080 Series** is temperature compensated and a 0-5VDC, high-level amplified output, full line differential pressure transducer.

The **212-60-080 Series** features built-in electronics thus eliminating the need for separate transducers and amplifier units.

Designed for dependable, long-term pressure measurement in the **212-60-080 Series** is offered in a small/light weight (3oz) manifold style mounting package for applications where space is limited.

Features:

- Pressure Range: ± 500 to $\pm 5,000$ PSID.
- Operating Temperature: -65°F to $+250^{\circ}\text{F}$ (-53°C to $+121^{\circ}\text{C}$).
- Thermal Zero Shift of $\pm 0.02\%$ of Full Scale per $^{\circ}\text{F}$.
- Differential Pressure Measurement at Full System Pressure.
- Media Compatibility: 300 Series CRES, Buna-N-Rubber, 2024-T351 AL & 15-5 PH CRES.

Applications:

- Armored Vehicle Hydraulic Controls.
- Actuator & Propulsion Controls.
- Positioning Systems.
- Fuel Pressure Monitoring.
- Aviation Engine Testing.

Options:

- Electrical connections.
- Pressure Port Adapters.



Proudly Represented By:

PAINE®



PRESSURE INSTRUMENTATION
FOR THE TOUGHEST APPLICATIONS

212-60-080 Series Specifications:

Typical Performance: The following parameters are established from production units. Calibration Certificates are supplied with each unit.

Performance:

Thermal Zero Shift: $\pm 0.02\%$ of Full Scale Output (F.S.) per $^{\circ}\text{F}$ maximum.

Thermal Sensitivity Shift: $\pm 0.02\%$ of F.S. per $^{\circ}\text{F}$ maximum.

Output at Zero Differential Pressure: 0.0 ± 0.1 VDC = E_0 over calibrated temperature range.

Output at Positive Rated Pressure ($P_1 > P_2$): $+5.0 \pm 0.1$ VDC = E_p .

Output at Negative Rated Pressure ($P_2 > P_1$): $-(E_p - 2 E_0) \pm 0.1$ VDC.

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

Environmental:

Operating Temperature Range: -40°F to $+250^{\circ}\text{F}$ (-40°C to $+121^{\circ}\text{C}$).

Compensated Temperature Range: -25°F to $+225^{\circ}\text{F}$ (-31°C to $+107^{\circ}\text{C}$).

Mechanical:

Pressure Range (Standard Products): Lower & Higher pressure ranges are available upon request.

PRESSURE TABLE				
Paine Part Number:	Pressure Range PSID	Proof Pressure PSID	Burst Pressure PSID	Static Error Band (BSLM)
212-60-080-01	± 500	± 850	$\pm 1,250$	$\pm 1.0\%$ F.S.
212-60-080-02	$\pm 1,000$	$\pm 1,700$	$\pm 2,500$	$\pm 0.75\%$ F.S.
212-60-080-03	$\pm 3,000$	$\pm 5,100$	$\pm 7,500$	$\pm 0.5\%$ F.S.
212-60-080-04	$\pm 5,000$	$\pm 8,500$	$\pm 12,500$	$\pm 0.5\%$ F.S.

Operating Media: Any compatible with 300 series CRES, Buna-N-Rubber, 2024-T351 AL and 15-5 PH CRES.

Pressure Fitting: Manifold mounting per MIL-P-5514, Type II, Class 2. O-rings (2) MS28775-008 are supplied with each transducer.

Electrical:

Positive Excitation: 11 to 40 VDC, 20 mA maximum.

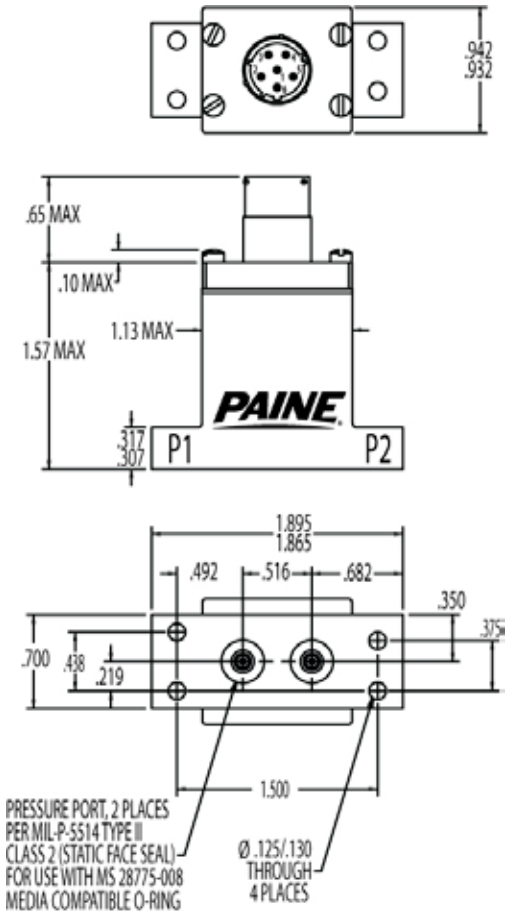
Negative Excitation: -6 to -15 VDC, 5 mA maximum.

Output Current: 50k Ω maximum load, short circuit protection.

Output Ripple: 70 mV peak to peak (typical) 0-1 kHz bandwidth.

Electrical Connections: 6 Pin bayonet locking electrical connector. Mates with M83723-75R10066 type connector, not supplied with unit.

Dimensions (inches)



PRESSURE PORT, 2 PLACES PER MIL-P-5514 TYPE II CLASS 2 (STATIC FACE SEAL) FOR USE WITH MS 28775-008 MEDIA COMPATIBLE O-RING



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



Connections

PIN	FUNCTION
1	+ EXCITATION
2	OUTPUT (+ IF $P_1 > P_2$)
3	OUTPUT RETURN
4	EXCITATION RETURN
5	DO NOT CONNECT
6	- EXCITATION

Contact us or your authorized Paine Electronics representative for many more standard and/or custom configurations or options. All specifications are subject to change, modification or improvement without notice. Visit our web site for the latest specifications. All sales are subject to Paine Electronics standard terms and conditions. PAINE® is a registered trademark of Paine Electronics, LLC. Copyright © Paine Electronics, LLC. All Rights Reserved. Product, company names, logos and trademarks used herein are the property of their respective owners.

Datasheet: 212-60-080-DS_REV-F



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