



"PRESSURE INSTRUMENTATION
FOR THE TOUGHEST APPLICATIONS"

DOWNHOLE +600°F, HIGH TEMPERATURE PRESSURE TRANSDUCER SERIES

Designed to survive extremely high temperature while providing exceptional pressure performance, accuracy, long term stability, reliability and repeatability. These pressure transducers can withstand continuous operating temperatures up to **+600°F (+316°C)** and are well suited for **End User** and **OEM applications** in **Energy Exploration** and **Production, Geothermal, Power Generation** and more....

The units are available in pressure ranges up to **+50,000 PSIA**. Featuring 2.6mV/V nominal output with a total error band including thermal effects of $\pm 0.2\%$ Full Scale Output or better as referenced to a 2nd order polynomial. With a hermetically sealed, welded all Inconel® 725 construction for environmental protection, these units are well suited for the toughest applications.

Specifications:

Typical Performance: The following parameters are established from production units.

Calibration Data: Calibration Certificates are supplied with each unit.

Performance: *

Non-Linearity and Hysteresis Combined: $\pm 0.150\%$ Full Scale Output (F.S.O.) maximum (Best Straight Line Method).

Total Error (Non-Linearity, Hysteresis and Thermal Effects) Bounds Shall Be: $\pm 0.200\%$ F.S.O. as compared to the serial number specific polynomial model P(T mv) for all input pressures and temperatures over the calibrated range.

Operating Temperature Range: -40°F to +600°F (-40°C to +316°C).

Calibrated Temperature Range: +75°F to +500°F (+23°C to +260°C).

Mechanical: *

Pressure Range: 0- 5,000 to 0-50,000 PSIA.

Proof Pressure: 110% to 150% of rated range (depending on part option).

Burst Pressure: 133% to 200% of rated range (depending on part option).

Pressure Media: Any compatible with UNS N07725, solution annealed and aged to a maximum hardness of 43 HRC.

Environmental: Error due to combined effects of shock, vibration and acceleration shall be less than 0.01% of F.S.O. per G.

Electrical Connections: High temperature solderable connections. Six inch 22 AWG jacketed leads.

Pressure Port: Per MS33656-E4.

Weight: 2.0 ounces maximum (.056 kg)

Installation Information: 37 degree flare. For optional mounting configurations, contact Paine Electronics.

Electrical: *

Excitation: 1 to 20 VDC (10 VDC nominal).

Input Resistance: 1500 \pm 300 Ω .

Output Resistance: 1500 \pm 150 Ω .

Output At Zero Pressure Over The Calibrated Pressure Range: 0 \pm 2.5 mV/V.

Full scale (F.S.) Sensitivity over the Calibrated Temperature Range: 2.6 mV/V nominal.

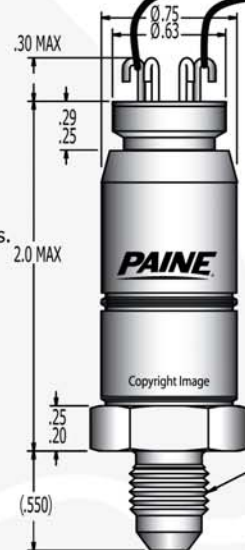
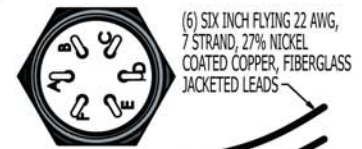
Platinum Resistance Temperature Detector (RTD): 0°C 1000 Ω \pm .06% Ω to IEC 751, Class A Alpha = .00385 nominal.

Insulation Resistance: All conductors together to case: 10G Ω Min at 50 VDC and +77°F.

Electrical Connections: A= + Excitation, B= + Signal, C= - Signal, D= - Excitation, E= RTD, F= RTD



211-55-010-XX*
0-5,000 to 0-50,000 PSIA



Actual Size

Datasheet P/N: 211-55-010-DS_REV-F

* Contact us or your authorized Paine Electronics representative for many more standard and/or custom configurations or options.

All specifications are subject to change or modification without notice. PAINE® is a registered trademark of Paine Electronics, LLC. Copyright © Paine Electronics, LLC | All Rights Reserved

Call or email us today for more information!

509-881-2100
moreinfo@paineelectronics.com

Paine Electronics, LLC
5545 Nelpar Drive, East Wenatchee WA 98802
Tel: (509) 881-2100 | Fax: (509) 881-2115

Visit us on the web at:
www.paineelectronics.com