"Pressure Instrumentation For the Toughest Applications"

Downhole, Absolute, Uncompensated Pressure Transducers

The **210-38-520** series is a very rugged transducer for use in all industrial applications where corrosive materials are present. The **210-38-520** is offered in pressure ranges from **0-5,000** to **0-30,000 PSIA**, operates at temperatures from **-40°F** to **425°F** (-40°C to 218°C).

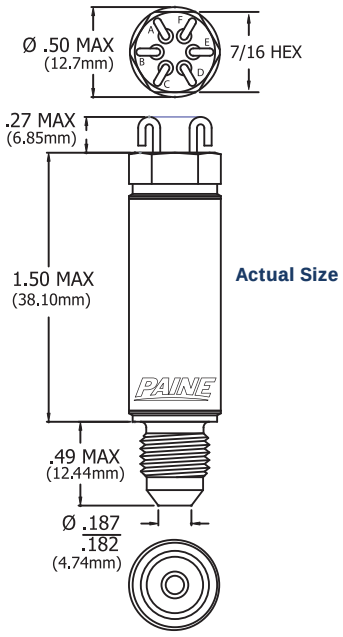
This series features all welded, Inconel 718®™ construction to provide a high degree of compatibility and system integrity. Each transducer is provided with coeffecients to load into your electronics for temperature and non-linearity compensation.

210-38-520-XX*
0-5,000 to 0-30,000 PSIA

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: ±0.15% of Full Scale Output (F.S.O.) maximum (Best Straight Line Method).
Total Error Band Including Non-Linearity, Hysteresis and Thermal Effects: ± .15% F.S.O. **
Operating Temperature Range: -40°F to +425°F (-40°C to +218°C).
Calibrated Temperature Range: +75°F to +350°F (+24°C to +177°C).

Mechanical: *
Pressure Range: 0-5,000 to 0-30,000 PSIA.
Proof Pressure: 125% to 150% of rated range (depending on part option).
Burst Pressure: 150%, 200% to 40,000 PSI of rated range (depending on part option).
Pressure Media: Any compatible with alloy UNS N07718 Rockwell C 40 maximum.
Environmental: Error due to combined effect of shock, vibration and acceleration shall be less than 0.01% of F.S.O. per G , 20G maximum.
External Case Pressure: Up to 20,000 PSI.
Electrical Connections: High temperature solderable connections.
Pressure Port: Per MS33656-E3.
Weight: 2.0 ounces nominal (.056 kg).
Installation Information: Manafold mount on port using Paine Electronics annealed Inconel 600 replaceable seal. Thermal coefficient of the manafold expansion should not exceed 8.3 x 10^ - 6 in/in °F for operation above 100°C.
Recommended Installation Torque: 125 to 150 in-lb (14-17 Nm).



Electrical: *
Excitation: 1 to 20 VDC (10 VDC nominal).
Input Resistance: 1500 ± 300 Ω.
Output Resistance: 1500 ± 150 Ω.
Output at Zero Pressure: 0 ± 2.0% F.S.O.
Full scale (F.S.) Sensitivity: 2.6 mV/V ± 0.2%.
Insulation Resistance: All conductors together to case, 10GΩ minimum at 50 VDC and +77°F .
Platinum Resistance Temperature Detector (RTD): 0ºC, 1000 Ohms ± .06% Ω to IEC 751, Class A, Alpha = .00385 nominal.
Electrical Connections: A= + Excitation, B= + Signal, C= - Signal, D= - Excitation, E= RTD, F= RTD.

TÜV USA Member of the TÜV NORD Group
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Paine Electronics, LLC is a proud ISO-9001/AS9100 registered company

Datasheet P/N: 210-38-520-DS_REV-E

* Contact us or your authorized Paine Electronics representative for other standard and/or custom configurations or options.
** Information is referenced to a 2nd order polynomial.
All specifications are subject to change or modification without notice.
PAINE ® is a registered trademark of Paine Electronics, LLC.

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