Paine 220-10-020 Series Pressure Transmitter
Digital, RS485, +60°C, 0-10,000 PSIA (689 BAR) Pressure & Temperature

Designed to reduce space, lower installation costs and eliminate the need for A/D conversion, our 220-10-020 Series incorporates proprietary sensor technology with innovative microprocessor-based programmability for high accuracy measurements.

The 220-10-020 Series is fully compensated and calibrated for pressure ranges from 0-100 (6 BAR) to 0-10,000 PSIA (689 BAR) and provides designers with digital network flexibility for easy to control and monitoring of pressure and temperature measurements in the toughest remote applications!

Solutions
- Harsh / Extreme Environment Ready.
- Digital Accuracy.
- Longer & Simpler Network Connections.

Potential Applications
- Subsea Exploration.
- ROV & AUV Controls & Measurements.
- Remote / Extreme Pressure Monitoring.
- Test Stands & Industrial Automation.

Features
- Operating Temperature: -40°F to +260°F (-40°C to +126°C).
- Pressure Range: 0-100 (6 BAR) to 0-10,000 PSIA (0 to 1034 BAR).
- Resolution: 16 Bits Minimum. 0.077 PSI for 5,000 PSI (344 BAR) Full Scale.
- Temperature Output: °F or °C.
- Temperature Resolution: 16 Bits Minimum, Better Than 0.1°F.
Specifications

Performance

Total Error Band of Digital Pressure Output: See Pressure Table, over the calibrated temperature range.
Pressure Output in PSI: Fully compensated for temperature, non-linearity, zero offset and full scale output.
Pressure Resolution: 16 Bits minimum (see Pressure Table).
Temperature Output: °F or °C.
Temperature Measurement: -40°F to +260°F (-40°C to +126°C).
Temperature Resolution: 16 Bits minimum. Better than 0.1°F.
Operating Life Expectancy: See industrial digital chart DS-473.

Environmental

Operating Temperature Range: -40°F to +260°F (-40°C to +126°C).
Calibrated Temperature Range: +32°F to +250°F (0°C to +121°C).
Operating Media: Any compatible with Inconel® 725.

Mechanical

Pressure Range: Contact factory for additional pressure ranges.

<table>
<thead>
<tr>
<th>Pressure Table</th>
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<tbody>
<tr>
<td>Standard Part Number</td>
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<tr>
<td>220-10-020-01</td>
</tr>
<tr>
<td>220-10-020-02</td>
</tr>
<tr>
<td>220-10-020-03</td>
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<tr>
<td>220-10-020-04</td>
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<tr>
<td>220-10-020-05</td>
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</tbody>
</table>

Operating Media: Fluids and gases compatible with 15-5 PH CRES.
Pressure Fitting: Per AS4395E04 (37° flare JIC-4).

Electrical

Input Voltage: +5.00 VDC ± 0.25 VDC.
Input Current: 30 mA maximum @ 5 VDC.
Over Voltage Protection: Not protected from damage by the application of over voltage. Do not exceed 5.5 VDC.
Reverse Polarity: ‘POWER IN’ is protected from the application of reverse polarity.
Insulation Resistance: All pins together to case 100MΩ minimum at 50 VDC and 75°F, ± 10°F.

Dimensions (inches)

Connections

<table>
<thead>
<tr>
<th>PIN</th>
<th>FUNCTION</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>POWER IN</td>
</tr>
<tr>
<td>B</td>
<td>RS 485 “B” *</td>
</tr>
<tr>
<td>C</td>
<td>RS 485 “A” *</td>
</tr>
<tr>
<td>D</td>
<td>POWER RETURN</td>
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<tr>
<td>E</td>
<td>COMMUNICATION RETURN</td>
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<tr>
<td>F</td>
<td>NOT USED</td>
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</tbody>
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* Per TIA-485-A