

## FLIGHT QUALIFIED FLOW-THRU PRESSURE TRANSDUCER

### MODEL 7900

#### FEATURES:

- Lightweight, compact size <55 grams
- Flight qualified
- High accuracy, <0.1% FSO RSS
- "S" Class electronics available (see Model 7901)
- Full traceability
- Shock and vibration tested to MIL-STD-810C&E requirements

#### APPLICATIONS:

- Miniature propulsion platforms
- Space vehicles
- Satellite propulsion
- Launch vehicles
- Life support systems

#### PRODUCT OVERVIEW:

Model 7900 series is a light weight flow-thru pressure transmitter designed for flight propulsion systems. The flow thru design is engineered to measure up to 0.1% of full scale pressure flow across the sensor and will stand up to the rigorous conditions associated with propulsion applications.

#### FIELD OPTIONS:

- mV/V, 0 to 5 Vdc, 0 to 10 Vdc (4-wire isolated output options) or 4-20 mA output
- Temperature (RTD) output
- Improved temperature compensation
- B+ and "S" Class electronics (see model 7901)
- D38999/27YB98PN, D38999/27YA35PN electrical connectors

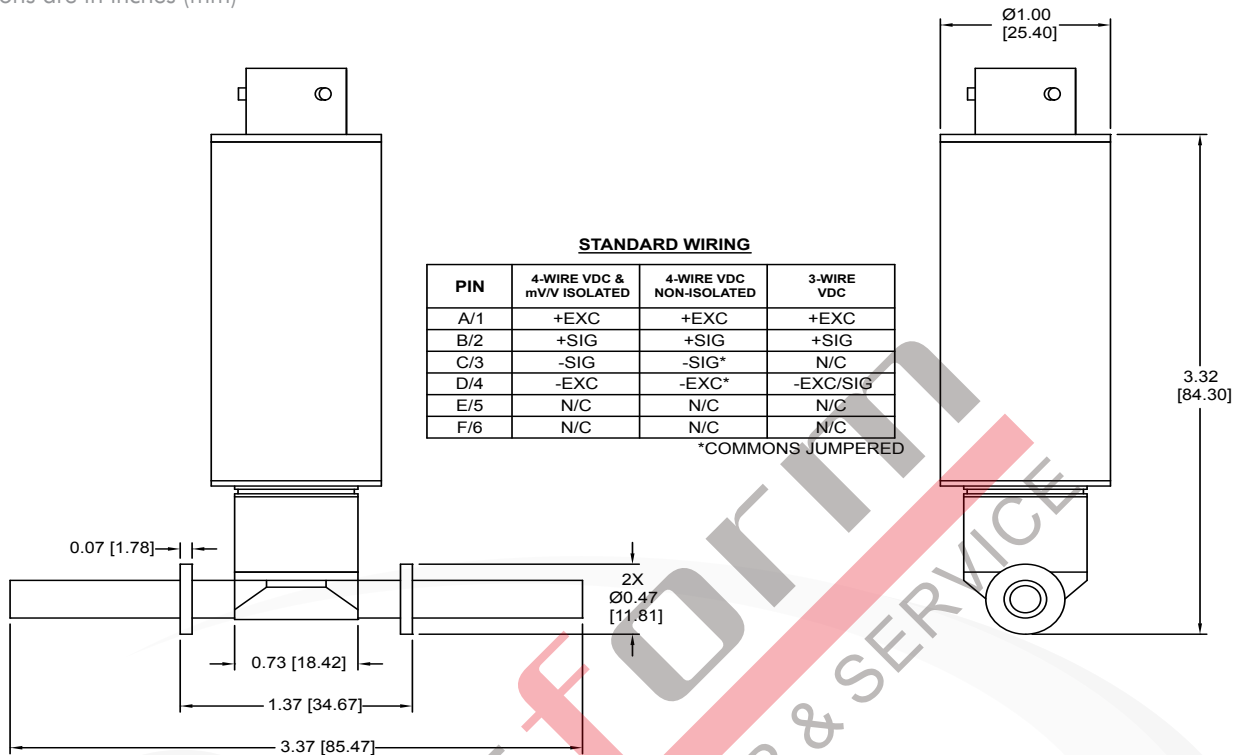


Model 7900  
Flight Qualified Flow-thru  
Pressure Transducer

# GP:50 MODEL 7900

## DIMENSIONAL DRAWING

All dimensions are in inches (mm)



## REFERENCE SPECIFICATIONS

<b>ELECTRICAL</b> <ul style="list-style-type: none"> <li>• Output Signal: 3mV/V, 0 to 5 Vdc and 0 to 10 Vdc isolated and non isolated</li> <li>• Supply Voltage: 5 Vdc, 12 Vdc, and 18 to 36 Vdc isolated</li> <li>• Response Time: &lt;4 ms</li> <li>• Connection: MIL-PTIH-10-6 standard, other options available</li> <li>• Circuit Protection: Reverse polarity protection design meets MIL-STD-461/EMI/RFI (some options may affect rating)</li> </ul>	<b>MECHANICAL</b> <ul style="list-style-type: none"> <li>• Process connection: Welded 1/4" ID stainless steel tube, flow through, in-line design (other ports available)</li> <li>• Proof Pressure: 1.5X FSO</li> <li>• Burst Pressure: 2.0X FSO</li> <li>• Weight: &lt;55 grams</li> </ul>
<b>MATERIALS OF CONSTRUCTION</b> <ul style="list-style-type: none"> <li>• Wetted Parts: 316 stainless steel</li> <li>• Housing: 316L stainless steel</li> </ul>	<b>PRESSURE RANGES</b> 0 to 50 thru 0 to 5,000 PSIA, PSIG or PSISG (3.4 thru 345 BAR)
<b>ACCURACY</b> Static Accuracy (RSS): <±0.3% FSO, ±0.1 % FSO optional Non-repeatability: <± 0.1% FSO Hysteresis: <±0.2% FSO Non-linearity: <±0.2% FSO Total Error Band: ± 0.1% FSO	<b>THERMAL SPECIFICATIONS</b> <ul style="list-style-type: none"> <li>• Compensated: -20 °F to +120 °F (-29 °C to +49 °C) expanded range available</li> <li>• Operating: -100 °F to +250 °F (-73 °C to +121 °C)</li> <li>• Effect on Zero/Span: ±1.0% FSO/100 °F</li> </ul>
	<b>OPTIONAL</b> <ul style="list-style-type: none"> <li>• NIST Traceability/Calibration: ANSI-Z540-1</li> <li>• Workmanship: J-001/NASA 8739.3 standard</li> <li>• Quality System: ISO 9001:2008</li> </ul>

**Standard configurations shown.  
Please consult factory for other options.**

All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without notice. Please contact GP:50 for assistance with your application.