



## FLIGHT QUALIFIED DIFFERENTIAL PRESSURE TRANSDUCER

### MODEL 7300



Model 7300  
Flight Qualified  
Differential Pressure Transducer

#### FEATURES:

- Digital correction provides an optional 0.05% FSO accuracy
- Extremely lightweight, <8 oz (0.2 kg)
- 0 to 5 Vdc, 0 to 10 Vdc, or 4-20mA output
- Line pressure shift <1% FSO/1000 PSI
- 1000 PSI line pressure rating
- Ranges from 0-1 thru 0-500 PSID

#### APPLICATIONS:

- Aviation and suborbital spacecraft
- Space qualified flight
- Commercial and military satellites
- Launch vehicles
- Test stand applications
- Ground and engine testing

#### PRODUCT OVERVIEW:

The Model 7300 series from GP:50 is a flight qualified, differential pressure transducer digitally corrected to provide high-accuracy pressure measurement. The compact, proprietary sensor design provides added zero stability required for commercial aviation, military, aerospace, UAV, satellite, and defense applications.

#### FIELD OPTIONS:

- 0 to 5 Vdc, 0 to 10 Vdc isolated output
- Bi-directional operation
- Fomblin Oil fill for O2 applications

# GP:50 MODEL 7300

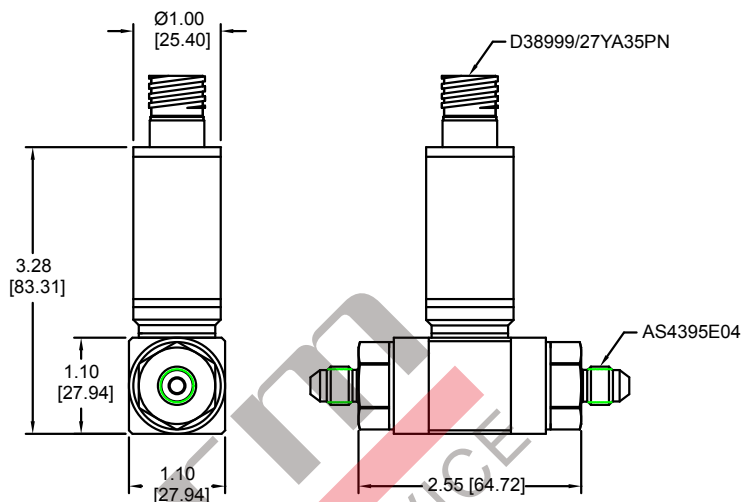
## DIMENSIONAL DRAWING

All dimensions are in inches (mm)

### STANDARD WIRING

PIN	4-20mA	4-WIRE VDC ISOLATED	4-WIRE VDC NON-ISOLATED	3-WIRE VDC
1/RED	+EXC/SIG	+EXC	+EXC	+EXC
2/GRN	N/C	+SIG	+SIG	+SIG
3/WHT	N/C	-SIG	-SIG*	N/C
4/BLK	-EXC/SIG	-EXC	-EXC*	-EXC/SIG
5/BLU	N/C	N/C	N/C	N/C
6/BRN	N/C	N/C	N/C	N/C

\* COMMONS JUMPERED



## REFERENCE SPECIFICATIONS

<p><b>ELECTRICAL</b></p> <ul style="list-style-type: none"> <li>• <b>Output Signal:</b> 0 to 5 Vdc, 0 to 10 Vdc digitally corrected</li> <li>• <b>Supply Voltage:</b> 18 to 36 Vdc (unregulated)</li> <li>• <b>Response Time:</b> ~500 Hz</li> <li>• <b>Circuit Protection:</b> Meets MIL-STD-461 EMI/RFI, Reverse polarity</li> <li>• <b>Connection:</b> PTIH-10-6P standard, options available</li> </ul>	<p><b>MECHANICAL (Other options available)</b></p> <ul style="list-style-type: none"> <li>• <b>Process connection:</b> AS5202-04 standard</li> <li>• <b>Proof Pressure:</b> 3X pressure range (Higher available)</li> <li>• <b>Burst Pressure:</b> 5X pressure range</li> <li>• <b>Static Line Pressure:</b> 1000 PSI</li> <li>• <b>Random Vibration:</b> &gt;25 G RMS (20 Hz to 2,000 Hz)</li> <li>• <b>Approximate Weight:</b> 8 oz (0.2 kg) (some options may affect weight)</li> </ul>
<p><b>ACCURACY</b></p> <ul style="list-style-type: none"> <li>• <b>Static Accuracy:</b> <math>&lt; \pm 0.10\%</math> FSO, <math>\pm 0.05\%</math> FSO available</li> <li>• <b>Zero-repeatability:</b> <math>&lt; \pm 0.04\%</math> FSO</li> <li>• <b>Hysteresis:</b> <math>&lt; \pm 0.05\%</math> FSO</li> <li>• <b>Zero/Span Balance:</b> <math>\pm 0.1\%</math> FSO</li> <li>• <b>Line Pressure Effect (Zero):</b> <math>&lt; \pm 1.0\%</math> FSO/100 PSI</li> </ul>	<p><b>PRESSURE RANGES</b></p> <ul style="list-style-type: none"> <li>• 0 to 1 thru 0 to 500 PSID (0.07 Bar thru 34.5 BAR) Bi-directional or uni-directional</li> </ul>
<p><b>MATERIALS OF CONSTRUCTION</b></p> <ul style="list-style-type: none"> <li>• <b>Wetted Parts:</b> 316L stainless steel</li> <li>• <b>Housing:</b> 300 series stainless steel</li> <li>• <b>Internal Fill:</b> Silicon Oil (Fomblin Oil Available)</li> </ul>	<p><b>THERMAL SPECIFICATION</b></p> <ul style="list-style-type: none"> <li>• <b>Compensated Range:</b> 0 °F to +180 °F (-18 °C to +83 °C) (other available)</li> <li>• <b>Operating Range:</b> -40 °F to +250 °F (-40 °C to +121 °C)</li> <li>• <b>Storage Ambient:</b> -65 °F to +250 °F (-54 °C to +121 °C)</li> <li>• <b>Effect on Zero/Span:</b> Standard: <math>\pm 0.50\%</math> FSO/100 °F Improved: <math>\pm 0.25\%</math> FSO/100 °F</li> <li>• <b>NIST Traceability</b></li> <li>• <b>Workmanship:</b> J-001</li> <li>• <b>Quality System:</b> 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.