



## HIGH LINE / LOW RANGE AEROSPACE DIFFERENTIAL PRESSURE TRANSDUCER

### MODEL 7450

#### FEATURES:

- Ranges of 2.5" WCD thru 100 PSID (6.9 BAR)
- Up to 5,000 PSI line pressure option (345 BAR)
- $\pm 0.1\%$  FSO accuracy
- True Wet-Wet design
- High shock and vibration rated per MIL-STD-810F
- J-001/NASA 8739.3 standard workmanship
- Subsea rated option

#### APPLICATIONS:

- Ground support systems
- Engine testing
- Launch vehicles
- Naval subsea testing
- Ground and engine testing

#### PRODUCT OVERVIEW:

Model 7450 is a high accuracy aerospace grade, high line - low range differential pressure transducer available with static line pressure to 5,000 PSI. Differential ranges as low as 0-2.5" WCD and a 500 PSI proof pressure are standard on all ranges. A custom subsea rated design allows operation to 23,000 FT SW.

#### FIELD OPTIONS:

- Wide selection of process and electrical connections
- Bi-directional operation
- Line pressure to 5K PSI (345 BAR)
- Zero and span adjustment
- Subsea rated version



Model 7450  
High Line / Low Range Aerospace  
Differential Pressure Transducer

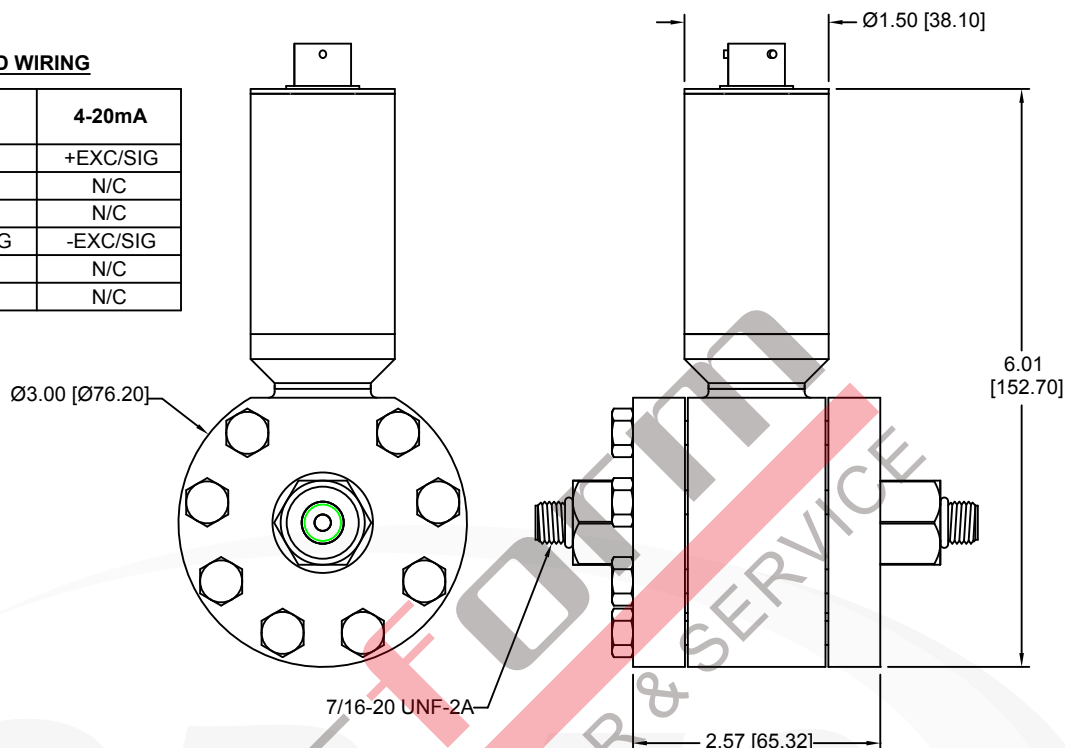
# GP:50 MODEL 7450

## DIMENSIONAL DRAWING

All dimensions are in inches (mm)

### STANDARD WIRING

PIN	VDC	4-20mA
A/1	+EXC	+EXC/SIG
B/2	+SIG	N/C
C/3	N/C	N/C
D/4	-EXC/SIG	-EXC/SIG
E/5	N/C	N/C
F/6	N/C	N/C



## REFERENCE SPECIFICATIONS

ELECTRICAL	MECHANICAL
<ul style="list-style-type: none"> <li>• Output Signal: 0 to 5 Vdc, 0 to 10 Vdc or 4-20 mA</li> <li>• Excitation Voltage: 13 to 32 Vdc</li> <li>• Connection: PTIH-10-6P standard Other options available including subsea versions</li> <li>• Load Impedance: <math>\leq 10K \Omega</math></li> </ul>	<ul style="list-style-type: none"> <li>• Process connection: AS4395E04 standard</li> <li>• Proof Pressure: 500 PSI (34.5 BAR)</li> <li>• Burst Pressure: 2500 PSI (172 BAR)</li> <li>• Line Pressure: 5,000 PSI (345 BAR)</li> <li>• Line Pressure Effect (Zero): <math>&lt; 1\%</math> FSO/1,000 PSI</li> <li>• Response Time: Typ 30ms for 90% FSO</li> <li>• Weight: <math>&lt; 3</math> lbs</li> </ul>
ACCURACY	PRESSURE RANGES
<ul style="list-style-type: none"> <li>• Static Accuracy (BFSL): <math>&lt; \pm 0.1\%</math> FSO</li> <li>• Zero/span balance: <math>\pm 0.5\%</math> FSO</li> </ul> <p>(For ranges <math>&lt; 10</math> PSI (0.7 BAR) we recommend zero and span adjustment option)</p>	<ul style="list-style-type: none"> <li>• 2.5" WCD thru 100 PSID</li> </ul>
MATERIALS OF CONSTRUCTION	THERMAL SPECIFICATION
<ul style="list-style-type: none"> <li>• Wetted Parts: 316 stainless steel (exotic materials available)</li> <li>• Housing: 316 SST, DC-200 Silicon oil filled sensor</li> </ul>	<ul style="list-style-type: none"> <li>• Compensated: <math>+32</math> °F to <math>+180</math> °F (0 °C to <math>+82</math> °C)</li> <li>• Effect on Zero/Span: <math>\pm 0.50\%</math> FSO/100 °F (Improved option: <math>\pm 0.25\%</math> FSO/100 °F)</li> <li>• Operating (ambient): 0 °F to <math>+185</math> °F (<math>-17</math> °C to <math>+85</math> °C) (Unit will operate to <math>-40</math> deg F with delayed response time)</li> <li>• NIST Traceability</li> <li>• Workmanship: J-001</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.