

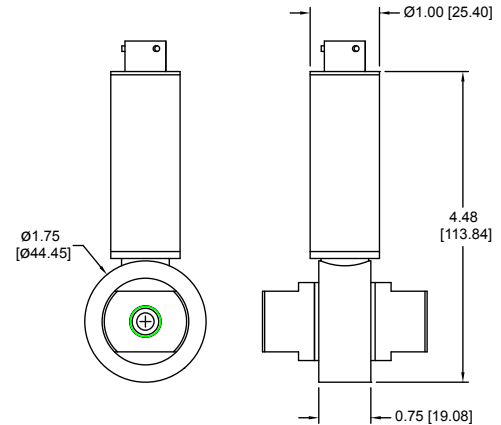
## MODEL 7400 HIGH-LINE AEROSPACE DIFFERENTIAL PRESSURE TRANSDUCER



**STANDARD WIRING**

PIN	4-20mA	4-WIRE MV/V & VDC ISOLATED	4-WIRE VDC NON-ISOLATED	3-WIRE VDC
A/1	+EXC/SIG	+EXC	+EXC	+EXC
B/2	N/C	+SIG	+SIG	+SIG
C/3	N/C	-SIG	-SIG*	N/C
D/4	-EXC/SIG	-EXC	-EXC*	-EXC/SIG
E/5	N/C	N/C	N/C	N/C
F/6	N/C	N/C	N/C	N/C

\*COMMONS JUMPERED



Standard configurations shown.  
Please consult factory for other options.

### PRODUCT OVERVIEW:

The Model 7400 from GP:50 is a high-line, high-pressure, aerospace grade differential pressure transducer. Its true wet-wet all stainless steel design allows it to effectively measure both corrosive fluid and industrial gas pressures to high degrees of accuracy and repeatability. Its optional 10X proof pressure and 10K PSI (689 BAR) line rating also facilitates its use within demanding aircraft engine and hydraulic systems. In addition to expanded ranges, a variety of pressure ports, electrical connections, outputs, and wetted part materials are available. Please consult the factory for details.

### FEATURES:

- High static line option to 10K PSI (689 BAR)
- True wet-wet design
- All stainless steel wetted parts
- High-accuracy to  $\pm 0.3\%$  FSO

### APPLICATIONS:

- Ground support systems
- Aircraft engine test stands
- Hydraulic test stands
- Launch vehicles
- Ground and engine testing

### OPTIONS:

- 4-20 mA, 0-5 and 0-10 Vdc isolated and non-isolated outputs
- Optional 10X proof and 10K PSI line rating
- RTD temperature output
- Inconel, Hastelloy, and Monel wetted parts
- Wide selection of pressure ports and electrical connections
- Various MIL-SPECS available. Consult factory.

# GP:50 MODEL 7400

## REFERENCE SPECIFICATIONS

(Standard configurations shown, consult factory for other options)

ELECTRICAL	
Output Signal:	4-20 mA, 0 to 5 Vdc or 0 to 10 Vdc (3-wire or optional 4-wire isolated)
Excitation Voltage:	18 V to 36 Vdc (others available)
Load Impedance (4-20mA):	1,350 $\Omega$ max. at 36 $\Omega$ Vdc, 750 max. at 24 Vdc, 300 $\Omega$ max. at 18 Vdc
Output Current (Vdc):	2 mA max. for <0.1% FSO attenuation
Input Current:	4-wire isolated Vdc options - 45 mA nominal, non-isolated Vdc - 10 mA nominal
Response Time:	4 ms typical

MATERIALS OF CONSTRUCTION	
Wetted Parts:	316L Stainless Steel
Housing:	300 Series Stainless Steel
Internal Fill:	Silicone oil (Fomblin oil available)

ACCURACY Hysteresis, Non-Linearity & Repeatability @ +70 °F	
Static Accuracy (RSS):	$\leq \pm 0.3\%$ FSO
Non-linearity:	$\leq \pm 0.2\%$ FSO (Typ)
Hysteresis:	$\leq \pm 0.1\%$ FSO (Typ)
Repeatability:	$\leq \pm 0.1\%$ FSO (Typ)
Zero Balance:	$\pm 1.0\%$ FSO
Span Balance:	$\pm 1.0\%$ FSO

(BFSL method used. Improved options available.)

Calibration:	NIST Traceable Cert
Workmanship:	IPC-A-610 Soldering
Quality System:	ISO 9001

Options may affect specifications.  
Please consult factory for your specific needs.

MECHANICAL	
Process Connection:	AS5202-04 (other ports available)
Electrical Connection:	PTIH-10-6P standard
Proof Pressure:	(high and low side) 2X pressure range or 3000 PSI (207 BAR, whichever is less, 10K PSI with flange option)
Burst Pressure:	(high and low side) 3X pressure range or 4,500 PSI (310 BAR, whichever is less, 10.5K PSI with flange option)
Static Line Pressure:	3K PSI (207 BAR), optional 10K PSI (689 BAR)
Random Vibration:	>25 G RMS (20 Hz to 2,000 Hz)
Approximate Weight:	1.5 lbs (0.7 kg) (some options may affect weight)

PRESSURE RANGES	
0 to 30 thru 0 to 7,500 PSID (2 thru 517 BAR) (bi-directional or uni-directional)	

THERMAL SPECIFICATIONS	
Operating Range:	-65°F to +250 °F (-54 °C to +121 °C)
Compensated Range:	0 °F to +180 °F (-18 °C to +82 °C)
Compensated Ranges from -65 °F to +250 °F (-54 °C to +121 °C) available	
Effect on Zero & Span:	$\pm 1.0\%$ FSO/100 °F (Improved specifications available)

