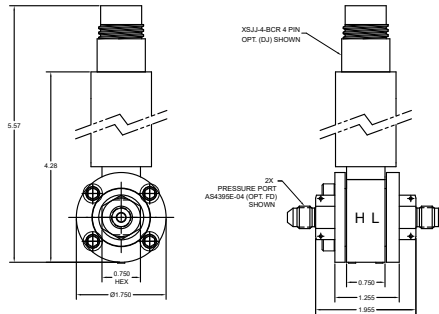


GP:50 Aerospace Heritage products can be designed to meet various MIL Specifications. Consult factory.

## MODEL 7540 SUBSEA DIFFERENTIAL PRESSURE TRANSDUCER



**PRESSURE PORT OPTION FD  
W/OPTION HM CONFIGURATION**  
(INSTALL FLANGES W/BOLT HEADS ORIENTED TOWARDS HIGH SIDE)

### STANDARD WIRING

PIN	4-20mA	4-WIRE 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

**REF DIMENSIONS ONLY.  
CONSULT FACTORY FOR ACTUAL DIMENSIONS.**

### PRODUCT OVERVIEW:

The Model 7540 from GP:50 is a highly rugged differential pressure transducer, designed to address the tough environmental challenges of subsea and other marine service environments. It is designed for applications in which higher shock and vibration levels may be present providing high-reliability within extreme environments.

### FEATURES:

- Ranges from 30 thru 7,500 PSID (2 thru 517 BAR)
- Up to 10K PSI (689 BAR) line and proof pressure
- Depths to 30,000 FTWC (9,144 meters)
- Compact, seawater rated design
- NIST traceable

### APPLICATIONS:

- Submarine hydraulic systems
- Submarine propulsion systems
- Subsea oil wellhead pressures
- BOP control systems

### OPTIONS:

- 0-5 Vdc, 0-10 Vdc or 4-20 mA output
- Optional digital output (CAN Bus, RS485, USB)
- 316L stainless steel, Inconel or Hastelloy construction
- 10K PSI (689 BAR) static line pressure
- Wide selection of subsea rated connectors
- Bidirectional or unidirectional output
- Various MIL-SPECS available. Consult factory.

# GP:50 MODEL 7540

## REFERENCE SPECIFICATIONS

(Standard configurations shown, consult factory for other options)

ELECTRICAL	
Output Signal:	0-5 Vdc, 0-10 Vdc and 4-20 mA (CAN Bus RS485 and USB)
Excitation Voltage:	18 to 36 Vdc (Vdc output) 9 to 36 Vdc (4-20 mA output)
Load Resistance:	1,325 $\Omega$ max at 36 Vdc
Output Current:	0 to 5 Vdc: 2mA max for $\pm 0.1\%$ FSO
Input Current:	10 mA nominal 4-wire isolated Vdc output - 45 mA nominal
Circuit Protection:	Reverse polarity, EMI and RFI
Response Time:	<4 ms

MATERIALS OF CONSTRUCTION	
Wetted Parts:	Inconel 718
Housing:	316L Stainless Steel (Optional Inconel, Hastelloy and Monel)
Internal Fill:	Silicone 2000

ACCURACY (BFSL): Hysteresis, Non-Linearity & Repeatability @ +70 °F	
Static Accuracy (RSS):	$\leq \pm 0.3\%$ FSO
Non-linearity:	$\leq \pm 0.20\%$ FSO (Typ)
Hysteresis:	$\pm 0.2\%$ FSO (Typ)
Repeatability:	$\leq \pm 0.1\%$ FSO (Typ)
Zero Balance:	$\pm 0.5\%$ FSO
Span Balance:	$\pm 0.5\%$ FSO
Total Error:	$\pm 2.3\%$ 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:	7/16-20 UNJF-3A (AS4320-04)
Electrical Connection:	XSJJ-2-BCR (Seacon 2-pin) standard, other options available, consult factory
Proof Pressure:	2X Pressure Range or 10K PSI (689 BAR), whichever is less (10X optional)
Burst Pressure:	3X Pressure Range or 10.5K PSI (724 BAR), whichever is less (15X optional)
Line Pressure:	2K PSI (138 BAR), optional 10K PSI (689 BAR)
Line Pressure Effect (Zero):	< $\pm 1\%$ FSO at 1K PSI (69 BAR) < $\pm 2\%$ FSO at 3K PSI (207 BAR) < $\pm 5\%$ FSO at 10K PSI option (689 BAR)
Random Vibration:	>25 G RMS (20 Hz to 2,000 Hz) (options available)
Approximate Weight:	2 lbs (0.9 kg) some options may affect weight

PRESSURE RANGES	
30 thru 7,500 PSID (2.1 thru 517.1 BAR) bidirectional or unidirectional	

THERMAL SPECIFICATIONS	
Operating Range:	-10 °F to +190 °F (-23 °C to +88 °C)
Compensated Range:	0 °F to +180 °F (-18 °C to +82 °C) (Connector and cable rating may affect this)
Effect on Zero & Span:	$\pm 1.0\%$ FSO/100 °F (Improved specifications available)

