



# MARINE SERVICE (UNDERSEA) DIFFERENTIAL PRESSURE TRANSDUCER

## Model 7540 (OIL FILLED)

Designed for the tough challenges and environmental rigors of undersea service.

- Minisub Hydraulic Systems
- Submarine Propulsion Systems

### FEATURES:

- High accuracy and high repeatability
- Stainless steel housing and sealed electronics, Monel/Inconel available
- Mechanical stops for overload protection
- Cavity material options for special environments
- 10,000 PSI external pressure capable

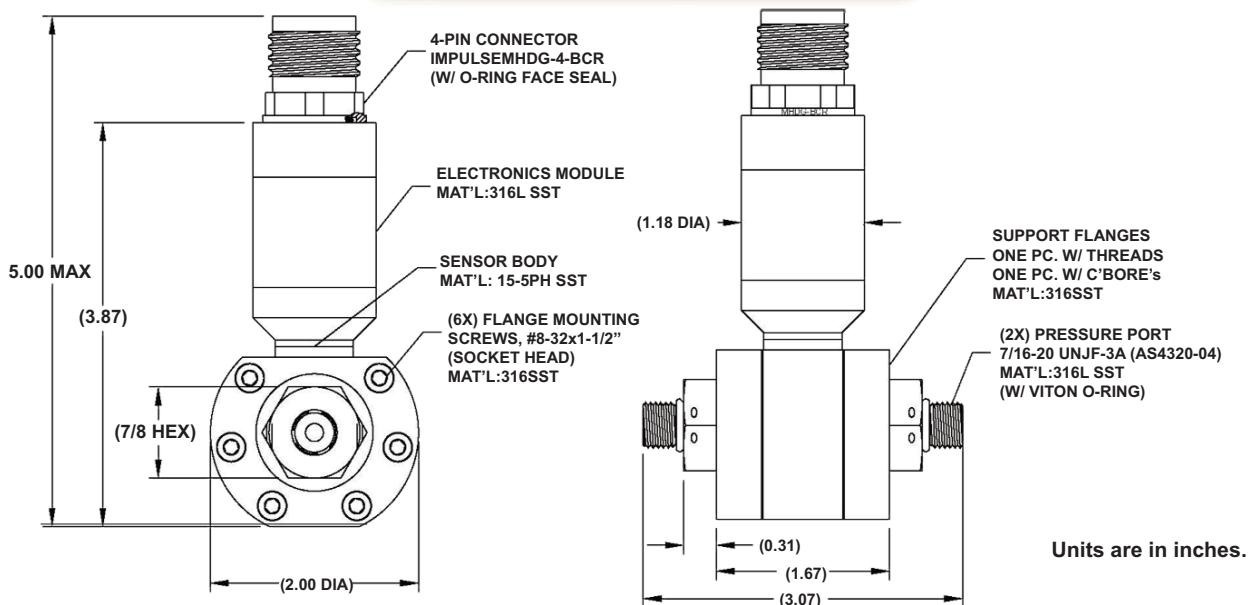


The Model 7540 pressure transducers is manufactured and tested to the following MIL-STD and MIL-Spec standards to insure the highest quality assurance:

- NIST Traceability and Calibration..... ANSI-Z540-1
- Workmanship ..... J-001 / NASA 8739.3 standards
- Quality System ..... ISO 9001:2000

Designed to: MIL-STD-810C&E

	4-20 mA PIN OUT	0-5 Vdc or 0-10 Vdc PIN OUT
PIN 1	+ EXC./SIGNAL	+ EXC.
PIN 2	N/C OR OPTIONAL RTD	+ SIGNAL
PIN 3	N/C OR OPTIONAL RTD	- SIGNAL
PIN 4	- EXC./SIGNAL	- EXC.



GP:50 reserves the right to make product improvements and amendments to the product specifications stated throughout this brochure without prior notification. Please contact the factory on all critical dimensions and specifications for verification.

A5SL-7540.00 Rev B



# Pressure, Level & Temperature Transmitters & Transducers

Specifications reflect standard product, improved performance/mechanical options available. Modifications may alter specs, consult factory for more information.

Ranges	5 thru 5,000 PSID / bi-directional or uni-directional
FS Output at Rated Pressure	0-5 Vdc / 4-20 dcmA / 0-10 Vdc
Proof Pressure	1.5X pressure range (may be applied to either side)
Burst Pressure	2.0X pressure range (may be applied to either side)
Maximum Line Pressure	7,500 PSI
Maximum Depth Pressure	10,000 PSI (22,000 feet of seawater)
Zero Shift	<1% FSO with line pressure applied
Excitation or Input Voltage Reverse Polarity Protected	+18 thru +36 Vdc isolated
Non-Repeatability	<0.1% FSO
Non-Linearity	<0.1% FSO
Hysteresis	<0.2% FSO
Static Accuracy BFSL	0.2% FSO BFSL
Wetted Materials	316SS, 15-5PH (17-4PH), Inconel, Monel optional)
Temperature Compensation	-10°F to +160°F standard, custom available
Operating/Environmental Temperature	-30°F to +170°F / -34°C to +77°C -65°F to +250°F option
Weight	3.5 lbs. (some options may affect weight)
Pressure Port	MS 33656-4 (M) standard 7/16-20
Electrical Connector	MHDG-4-BCR 4 pin Impulse connector
Mechanical Stops	Optional for proof pressure > 1.5X pressure range
Response Time	Under 4 ms
EMI/RFI Protection	Optional

## ORDERING GUIDE:

Some options will affect dimensions, consult factory if important.  
Use the following codes to identify desired item.

MODEL	OUTPUT	RANGE	PRESSURE TYPE	OPTIONS
●	—	●	—	●

Example: 7540-2-RH-D-DN/FD/GH

### OUTPUT

- 2 0-5 Vdc 4 wire hookup
- 3 4-20 dcmA
- 4 0-5 Vdc Isolated
- 5 0-10 Vdc 4 wire hookup
- 6 0-10 Vdc Isolated
- 9 0-5 Vdc 3 wire hookup
- 10 0-10 Vdc 3 wire hookup

### PRESSURE RANGE (PSI)

- |          |            |
|----------|------------|
| PJ 0-5   | RD 0-200   |
| PN 0-10  | RF 0-300   |
| PP 0-15  | RH 0-500   |
| PR 0-20  | RK 0-750   |
| PO 0-25  | RM 0-1,000 |
| PT 0-30  | RO 0-1,500 |
| PV 0-50  | RR 0-2,000 |
| PZ 0-100 | RS 0-3,000 |
| RB 0-150 | RV 0-5,000 |

### PRESSURE TYPE

- D Differential

### OPTIONS

#### CONNECTORS

- DF XSJJ-7-BCR (7 pin Seacon connector)
- DH XSJJ-2-BCR (2 pin Seacon connector)
- DJ XSJJ-4-BCR (4 pin Seacon connector)
- DN MHDG-4-BCR (standard, 4 pin Impulse connector)

#### PORTS

- FA MS33649-4, 7/16-20 (F)
- FD MS33656-4, 7/16-20 (M)

#### MISC:

- GF Expanded process temperature range, -65 to 250°F (±2% FSO/100°F)
- GH 100% Internal Shunt
- GK Inconel Pressure Cavity
- GL Cleaning for oxygen service
- GP Hastelloy Pressure Cavity
- JA 100 ohm 2 wire RTD
- JB 1000 ohm 2 wire RTD
- ME Shunt cal, 80% Internal
- MS Bi-Directional
- QU Monel 500 sensor, 400 wetted parts

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