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**

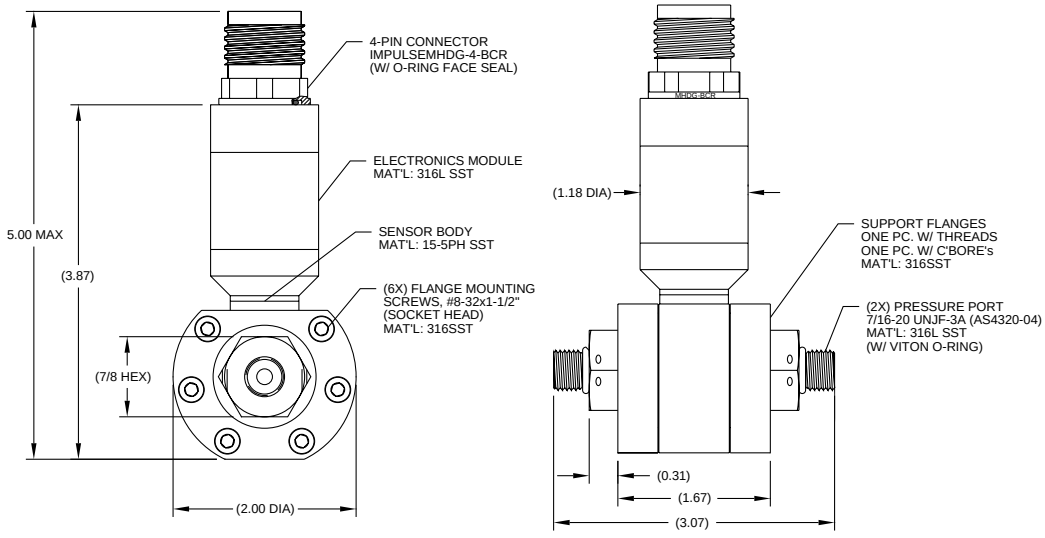
FEATURES:

- 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 transducer 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 = + EXCITATION / SIGNAL	PIN 1 = + EXCITATION
PIN 2 = N / C or optional RTD	PIN 2 = + SIGNAL
PIN 3 = N / C or optional RTD	PIN 3 = - SIGNAL
PIN 4 = - EXCITATION / SIGNAL	PIN 4 = - EXCITATION

Units are in inches. See reverse side for specifications and ordering guide.

2770 Long Road, Grand Island, NY 14072 USA
Tel. (716) 773-9300 • Fax (716) 773-5019 • E-mail: sales@gp50.com • Website: www.gp50.com

SPECIFICATIONS

These specifications are the standards to which the units are normally constructed. Alterations may be easily and readily accomplished by the standard modification code or by discussion with the factory. Traceability, customer ATP, additional testing and construction options are available. We invite your inquiry.

Ranges	5 thru 5000 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	7500 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

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	0-1000
PT	0-30	RO	0-1500
PV	0-50	RR	0-2000
PZ	0-100	RS	0-3000
RB	0-150	RV	0-5000

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)
(made with an adapter)

MISC:

GF Expanded Temperature Range, -65 to +250°F
(Compensated to ± 2% FSO/100°F)
GH 100% Internal Shunt
GK Inconel Pressure Cavity
GL Cleaning for oxygen service
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

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

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