



SUBSEA DIFFERENTIAL PRESSURE TRANSDUCER

MODEL 7540

FEATURES:

- Ranges from 30 thru 7,500 PSID (2 thru 517 BAR)
- Up to 10K PSI (689 BAR) line and proof pressure
- Depths to 30K ft WC (9,144 meters)
- Compact, seawater rated design
- Manufactured to MIL-spec requirements
- NIST traceable
- Optional improved accuracy to $\pm 0.05\%$ FSO (BFSL)

APPLICATIONS:

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

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 manufactured and tested to stringent MIL and MIL-spec standards for high-reliability within extreme environments.

FIELD OPTIONS:

- 0-5 Vdc, 0-10 Vdc or 4-20 mA output
- Optional digital output (CANbus, 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
- RS232 and CANbus options available, consult factory

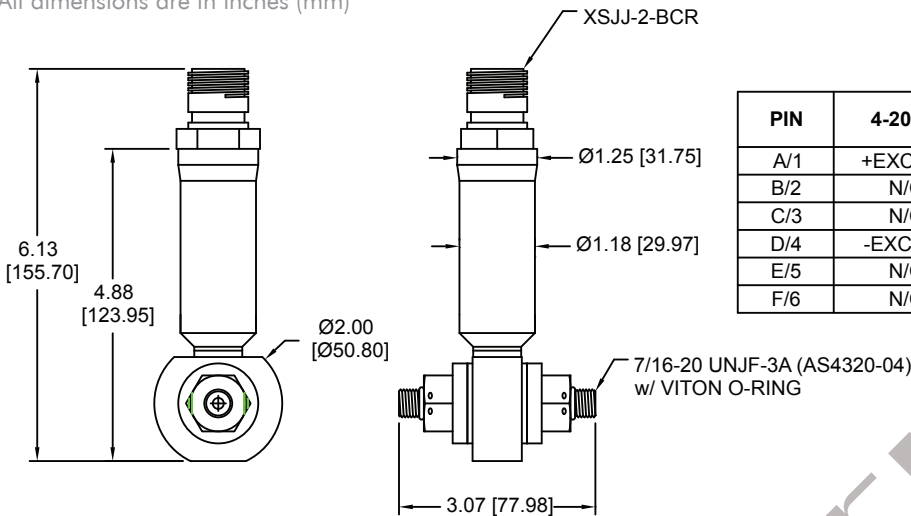


Model 7540
Subsea Differential Pressure Transducer

GP:50 MODEL 7540

DIMENSIONAL DRAWING

All dimensions are in inches (mm)



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

REFERENCE SPECIFICATIONS

ELECTRICAL	MECHANICAL
<ul style="list-style-type: none"> Output Signal: 0-5 Vdc, 0-10 Vdc and 4-20 mA (CANBus RS485 and USB) Supply Voltage: 18 to 36 Vdc (Vdc output) 9 to 36 Vdc (4-20 mA output) Load Impedance (4-20 mA): 1,350 Ω max. at 36 Vdc 750 Ω max. at 24 Vdc 300 Ω max. at 18 Vdc Output Current (0 to 5 Vdc): 2 mA max for <0.1% FSO attenuation Input Current: 10 mA nominal 4-wire isolated Vdc output - 45 mA nominal Response Time: <4 ms Connection: XSJJ-2-BCR (Seacon 2-pin) standard, other options available, consult factory 	<ul style="list-style-type: none"> Process connection: 7/16-20 UNJF-3A (AS4320-04) For ranges \geq 10K PSI: High pressure coned per Autoclave Engineers F-250C Proof Pressure: 1.5X 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: 3K PSI (207 BAR), optional 10K PSI (689 BAR) Line Pressure Effect (Zero): <\pm1% FSO at 1K PSI (69 BAR) <\pm2.5% FSO at 3K PSI (207 BAR) <\pm5% FSO at 10K PSI option (689 BAR) Approximate Weight: 2 lb (0.9 Kg) (some options may affect weight)
STATIC ACCURACY (BFSL) (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)	PRESSURE RANGES
<ul style="list-style-type: none"> Static Accuracy: <\pm0.3% FSO, \pm0.10% FSO or \pm0.05% FSO Zero balance/span balance: \pm0.5% FSO Non-repeatability: <\pm0.1% FSO Hysteresis: <\pm0.2% FSO Non-linearity: <\pm0.2% FSO Thermal Error: \pm0.5% FSO/100 °F Total Error Band: \pm1.3% FSO (includes all 5 parameters) 	<ul style="list-style-type: none"> 30 thru 7,500 PSID (2.1 thru 517.1 BAR) bidirectional or unidirectional
MATERIALS OF CONSTRUCTION	THERMAL SPECIFICATION
<ul style="list-style-type: none"> Wetted Parts: 316L stainless steel Housing: 316L stainless steel (optional Inconel, Hastelloy or Monel) 	<ul style="list-style-type: none"> Compensated Ambient: -30 °F to +160 °F (-34 °C to +71 °C) Operating Ambient: -40 °F to +190 °F (-40 °C to +88 °C) NIST Traceability/Calibration: ANSI-Z540-1 Workmanship: J-001/NASA 8739.3 standard Quality System: ISO 9001:2008

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.