



## SUB SEA PRESSURE / LEVEL TRANSDUCER



Model 7500  
Sub Sea Pressure / Level Transducer

### MODEL 7500

#### FEATURES:

- Depth rated to 30K ft WC (9,144 meters)
- Pressure ranges up to 20K PSI (1,379 BAR)
- High accuracy 0.3% RSS (0.1% RSS available)
- Compact, sea water rated design
- Designed to meet \*MIL-Spec requirements ANSI-Z540-1
- 316L, Inconel and Hastelloy material options

#### APPLICATIONS:

- Military and commercial ROV's
- Subsea oil and gas
- Naval exploration
- Ground and engine testing

#### PRODUCT OVERVIEW:

The Model 7500 from GP:50 is a rugged, sub-sea rated pressure transducer, tested to 30,000 FT sea water. The highly corrosion resistant design meets the tough environmental challenges of offshore oil and gas, Naval and ROV applications. Designed to meet stringent MIL-Spec standards the Model 7500 provides years of highly accurate, reliable use.

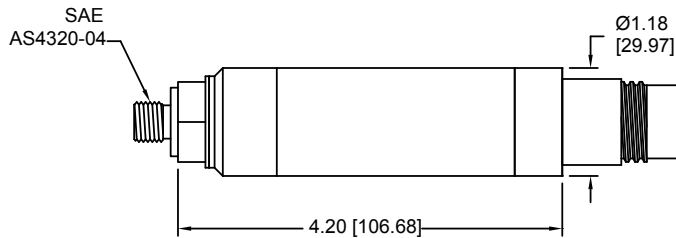
#### FIELD OPTIONS:

- 0 to 5 Vdc, 0 to 10 Vdc or 4-20 mA output
- RS232, RS485 and Can protocols available
- Inconel, 316L or Hastelloy wetted parts
- Temperature output options
- Wide selection of subsea rated electrical and process connections

# GP:50 MODEL 7500

## 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

- **Output Signal:** 0 to 5 Vdc, 0 to 10 Vdc or 4-20 mA (optional digital protocols)
- **Supply Voltage:** 18 V to 36 Vdc (others available)
- **Load Impedance (4-20 mA):** 1,350  $\Omega$  max. at 36 Vdc, 750  $\Omega$  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 - 10mA nominal
- **Response Time:** 2 ms typical
- **Connection:** XSJJ-2-BCR (Seacon 2-pin) standard, options available

### ACCURACY (HYSTERESIS, NON-LINEARITY & REPEATABILITY @ +70 °F)

- **Static Accuracy (RSS):** <  $\pm 0.3$  FSO,  $\pm 0.1$  FSO and 0.05% FSO available
- **Zero/span balance:**  $\pm 0.5\%$  FSO
- **Non-repeatability:** <  $\pm 0.1$  FSO
- **Hysteresis:** <  $\pm 0.2$  FSO
- **Non-linearity:** <  $\pm 0.2$  FSO
- **Thermal Error:**  $\pm 0.5\%$  FSO/100 °F
- **Total Error Band:**  $\pm 1.3\%$  FSO (includes all 5 parameters)

### MATERIALS OF CONSTRUCTION

- **Wetted Parts:** 17-4 PH stainless steel (Inconel, Hastelloy and Monel available)
- **Housing:** 316L stainless steel

### MECHANICAL

- **Process connection:** SAE AS4320-04 (M) (7/16-20 UNF) (options available)
- **Proof Pressure:** 1.5X pressure range or 22.5K PSI (1,551 BAR), whichever is less
- **Burst Pressure:** 3.0X pressure range or 23.5K PSI (1,620 BAR), whichever is less
- **Random Vibration:** >25 G RMS (20 Hz to 2,000 Hz)
- **Sinusoidal Vibration:** >7.5 G's 5 Hz to 100 Hz
- **Constant Acceleration:** 5 G's for 30 minutes
- **Approximate Weight:** 12 oz (0.3 kg) (some options may effect weight)

### PRESSURE RANGES

- 0 to 50 thru 0 to 20K PSI (3.4 thru 1,379 BAR)

### THERMAL SPECIFICATION

- **Compensated:** -30 °F to +160 °F (-34 °C to +71 °C)
- **Operating:** -50 °F to +190 °F (-54 °C to +88 °C)
- **Storage:** -65 °F to +250 °F (-53 °C to +121 °C)
- **Effect on Zero/Span:**  $\pm 1.0\%$  FSO/100 °F (Improved to  $\pm 0.5\%$ /100 °F available)
- **NIST Traceability/Calibration:** ANSI-Z540-1
- **Workmanship:** J-001/NASA 8739.3 standard
- **Quality System:** ISO 9001:2008

\*Options may affect Mil-specifications.

Please consult factory for your specific needs.

**Standard configurations shown.  
Please consult factory for other options.**

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.