



Pressure, Level & Temperature Transmitters & Transducers

2770 Long Road, Grand Island, NY 14072 USA

Tel. (716) 773-9300 • Fax (716) 773-5019

sales@gp50.com • www.gp50.com

DIGITALLY CORRECTED SUBMERSIBLE PRESSURE TRANSDUCER Model 8500

Designed for the tough challenges and environmental rigors
of oilfield, downhole, and deep sea ocean applications.

FEATURES:

- Submersible to 22,000 feet seawater (options may affect operating depth)
- Optional reference standards, PSIA, PSIS, PSIG, PSID
- 0-5 Vdc Isolated or 0-10 Vdc Isolated digitally corrected output
- Cavity material options for special environments
- High accuracy, 0.08% RSS standard (0.05% RSS available)
- Designed for over 1,000,000 continuous cycles
- Serial port (RS-232) controlled zero & span adjustment

Typical Applications:

- Depth / Level Sensing
- Seawater Submersible, DSRV's and ROV's
- Oil Platform and Downhole Applications
- Ocean Pump Stations

Heritage Includes:

- University of Texas
- Woods Hole Oceanography Institute
- Phoenix International

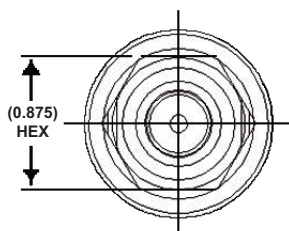
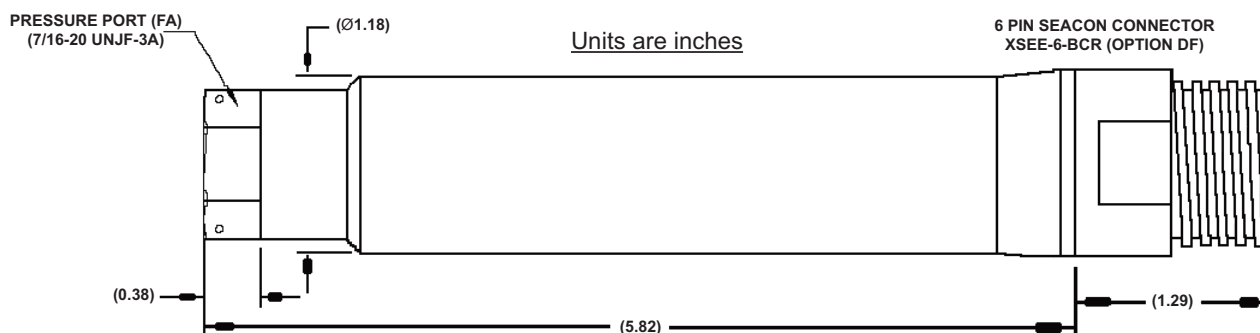


All GP:50 Aerospace differential transducers are manufactured and tested to the following MIL-STD and MIL-Spec standards to insure the highest quality assurance:

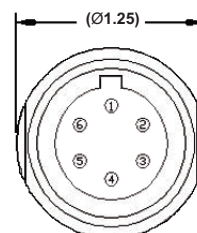
- NIST Traceability and Calibration ANSI-Z540-1
- Workmanship J-001 / NASA 8739.3 standards
- Quality System ISO 9001:2008

Designed to: MIL-STD-810F For Shock/Vibration/Acceleration

SEE INSTALLATION MANUAL FOR PINOUT ASSIGNMENT BASED ON ELECTRONICS OPTIONS



	0-5 VOLTS PIN OUT FOR OPTIONS 4, 6
A/1	+ EXC.
B/2	+ SIGNAL
C/3	- SIGNAL
D/4	- EXC.
E/5	RS 232 TX
F/6	RS 232 TX



A5SL-8500.00 Rev C

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.



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

Ranges	50 thru 15,000 PSIA, PSIG or PSISG options
Proof Pressure	1.5X Pressure Range
Burst Pressure	3.0X Pressure Range
Excitation or Input Voltage	+10 thru +15 Vdc non-isolated, +18 thru +36 Vdc isolated
Non-Repeatability	<0.04% FSO
Non-Linearity	<0.05% FSO
Hysteresis	<0.05% FSO
Thermal Error	Zero 0.225% FSO / 100°F Span 0.225% FSO / 100°F
Static Accuracy RSS	<0.08% FSO RSS, 0.05% optional
Total Error	<0.5% (All 5 Parameters)
Wetted Materials	316 SS (Inconel, Hastelloy optional)
Temperature Limits Compensated Operating	-10°F to +180°F (-20°C to +80°C) expanded range optional -20°F to +190°F (-30°C to +90°C)
Weight	8 oz. (some options may affect weight)
Pressure Port	SAE 4 (M), options available
Electrical Connector	SEACON XSEE-6-BCR 6 pin connector
Shunt Cal 80% optional	Internal
Response Time	500 ms (12 BIT Processor)
Meets MIL-STD-461 EMI/RFI	Some options will affect EMI/RFI rating

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: 8500-4-RH-A-DF/FJ

OUTPUT

- 2 0-5 Vdc 4 wire (Non-Isolated)
- 4 0-5 Vdc 4 wire (Isolated)
- 5 0-10 Vdc 4 wire (Non-Isolated)
- 6 0-10 Vdc Isolated
- 9 0-5 Vdc 3 wire (Non-Isolated)
- 10 0-10 Vdc 3 wire (Non-Isolated)

RANGE (PSI)

- | | |
|------------|-------------|
| PV 0-50 | RO 0-1,500 |
| PZ 0-100 | RR 0-2,000 |
| RB 0-150 | RT 0-3,000 |
| RD 0-200 | RV 0-5,000 |
| RF 0-300 | RX 0-7,500 |
| RH 0-500 | RZ 0-10,000 |
| RK 0-750 | SB 0-15,000 |
| RM 0-1,000 | |

Contact factory for non-standard pressure ranges

PRESSURE TYPE

- A Absolute, ref to vacuum
- SG Sealed Gauge, ref to 14.7 psia

OPTIONS

CONNECTORS

- DF XSEE-6-BCR (standard)
- DG XSJJ-7-BCR

PORTS

- FA MS33649-4, 7/16-20 (F)
- FD MS33656-4, 7/16-20 (M)
- FJ 1/4" NPT

MISC:

- D Improved Static Accuracy to 0.05%
- GB Alternate Full Scale Outputs
- GD 10X Proof Pressure (may affect overall performance, not available with options D,GF,GK,GP)
Option GD (Not available on low pressure transducer)
Expanded process temperature range, -65 to 250°F (±1% FSO/100°F)
- GF Inconel Pressure Cavity
- GK Cleaning for oxygen service
- GP Hastelloy Pressure Cavity
- MS Bi-Directional
- QU Monel Pressure Cavity
- MR Non-Standard Wiring