



FLIGHT QUALIFIED DIFFERENTIAL PRESSURE TRANSDUCER

Model 7300

Designed for the tough challenges and environmental rigors of space propulsion and aviation pressure testing.

FEATURES:

- High accuracy and reliability
- Extremely lightweight, <8oz.
- Mechanical isolation tube eliminates zero shift
- Cavity material options for special environments
- RTD temperature or shunt output option
- Zero shift with line pressure <1%
- Low and high level outputs, 4-20 DCmA
- Non-oil filled

Heritage Includes:

- NASA
- Lockheed Martin (EELV)
- Johns Hopkins APL
- Shuttle Upgrade
- Boeing
- Northrop Grumman - ABL



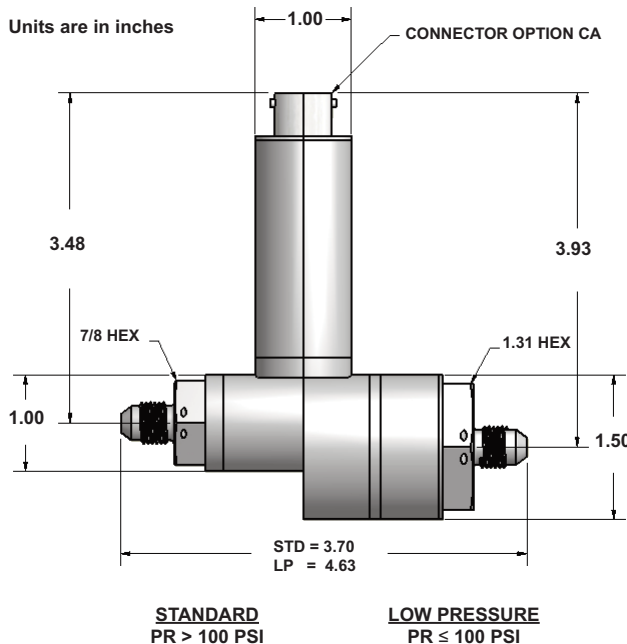
- High accuracy, Rugged Field Test Applications and Vehicles
- Space Qualified Flight Hardware Requirements
- Satellites
- Launch Vehicles

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..... MIL-STD - 45662A
- Workmanship J-001 / NASA 8739.3 standards
- Quality System ISO 9001:2000

Transducer Design Meets: MIL-STD-810F
MIL-STD-461E

SEE INSTALLATION MANUAL FOR PINOUT ASSIGNMENT BASED ON ELECTRONICS OPTIONS



WIRING CODE:

	4-20 mA PIN OUT FOR OPTION 3	0-5 Vdc PIN OUT FOR OPTIONS 2,4
A/1	+ EXC. / SIG. OUT	+ EXC.
B/2	NC	+ SIG. OUT
C/3	NC	- SIG. OUT
D/4	- EXC. / SIG. OUT	- EXC.
E/5	RTD (OPTIONAL)	RTD (OPTIONAL)
F/6	RTD (OPTIONAL)	RTD (OPTIONAL)

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-7300.00 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	15 thru 1,000 PSID / bi-directional or uni-directional
FS Output at Rated Pressure	3 mV/V at 10 Vdc / 0-5 Vdc / 4-20 dcmA / 0-5 Vdc isolated / 0-10 Vdc
Differential Overload Pressure	1500 PSI may be applied to either port, 10,000 lb optional
Zero Shift	< 1% FSO with line pressure applied
Excitation or Input Voltage Reverse Polarity Protected	+10 thru +15 Vdc nonisolated, +18 thru +36 Vdc isolated
Non-Repeatability	<0.1% FSO
Non-Linearity	<0.1% FSO (Terminal Method)
Hysteresis	<0.2% FSO
Thermal Error	Zero <0.5% / 100F Span <0.5% / 100F
Static Accuracy BFSL	<0.3% FSO (RSS)
Total Error	1.3% (All 5 parameters)
Wetted Materials	316SS (Inconel, Hastelloy optional)
Temperature Compensation	-10°F to +160°F standard, custom available
Operating/Environmental Temperature	-30°F to +170°F / -34°C to +80°C
Weight	8 oz. (some options may affect weight)
Pressure Port	MS 33656-4 (M) standard
Electrical Connector	PTIH-10-6P
Response Time	Under 4 ms
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: 7300-2-RH-D-CA/FD/GH

OUTPUT

- 1 3 mV/V
- 2 0-5 Vdc 4 wire hookup (Non-Isolated)
- 3 4-20 dcmA
- 4 0-5 Vdc Isolated
- 5 0-10 Vdc 4 wire hookup (Non-Isolated)
- 6 0-10 Vdc Isolated
- 7 2 mV/V
- 8 10 mV/V
- 9 0-5 Vdc 3 wire hookup (Non-Isolated)
- 10 0-10 Vdc 3 wire hookup (Non-Isolated)

PRESSURE RANGE (PSI)

- PP 0-15 RD 0-200
- PR 0-20 RF 0-300
- PO 0-25 RH 0-500
- PT 0-30 RK 0-750
- PV 0-50 RM 0-1,000
- PZ 0-100
- RB 0-150

Contact factory for non-standard pressure ranges.

PRESSURE TYPE

- D Differential

OPTIONS

CONNECTORS

- CA PTIH-10-6P Bendix
- CI D38999/27YB98PN
- DB D38999/27YA35PN

PORTS

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

MISC:

- GB Alternate full scale outputs
- GD 10X Proof Pressure (may affect overall performance, not available with options D, GF, GK, GP)
- 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

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