



FLIGHT QUALIFIED DIGITALLY CORRECTED DIFFERENTIAL PRESSURE TRANSDUCER

Model 8300

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

FEATURES:

- High accuracy, 0.08% RSS standard (0.05% RSS available)
- Extremely lightweight, <8 oz.
- Mechanical isolation tube eliminates zero shift
- Cavity material options for special environments
- Zero shift with line pressure <1%
- 0-5 Vdc Isolated or 0-10 Vdc Isolated digitally corrected output
- Non-Oil filled
- Serial port (RS-232) controlled zero & span adjustment

Typical Applications:

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



Heritage Includes

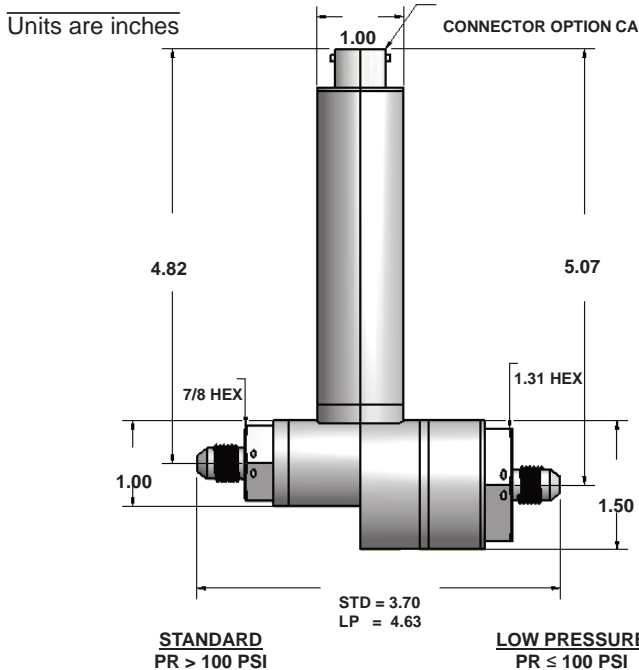
- NASA
- Lockheed Martin

All GP:50 Aerospace pressure 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 9001:2008

Designed to: MIL-STD-810F All Methods
MIL-STD-461E

SEE INSTALLATION MANUAL FOR PINOUT ASSIGNMENT BASED ON ELECTRONICS OPTIONS



WIRING CODE

	PIN OUT FOR OPTIONS 4, 6
A	+ EXC.
B	+ SIG. OUT
C	- SIG. OUT
D	- EXC.
E	TX
F	RX



Pressure, Level & Temperature Transmitters & Transducers

U.K. Distributor; Interface Force Measurements

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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	15 thru 1000 PSID / bi-directional or uni-directional
FS Output at Rated Pressure	0-5 Vdc Isolated or 0-10 Vdc Isolated Digitally corrected output
Differential Overload Pressure	1500 PSI may be applied to either port, 10,000 lb option
Zero Shift	<1% FSO with line pressure applied
Excitation or Input Voltage Reverse Polarity Protected	+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	316SS (Inconel, Hastelloy optional)
Temperature Compensation	-10°F to +160°F standard, custom available
Operating/Environmental Temperature	-30°F to +170°F / -30°C to +255°C, -65°F to +250°F option
Weight	8 oz. (some options may affect weight)
Pressure Port	MS 33656-4 (M) standard
Electrical Connector	PTIH-10-6P
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: 8300-4-RH-A-CA/FD/GH

OUTPUT

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

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:

- 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)
- GF Expanded process temperature range, -65 to 250°F (±2% FSO/100°F)
- GK Inconel Pressure Cavity
- GL Cleaning for oxygen service
- GP Hastelloy Pressure Cavity
- MS Bi-Directional
- MR Non-Standard Wiring