



FLIGHT QUALIFIED LOW LEVEL PRESSURE TRANSDUCER

Model 7100

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

- Satellites: Commercial and defense
- Ground & Engine Test
- Launch Vehicles
- Aircraft Systems / Avionics



FEATURES:

- High accuracy, 0.3% RSS standard (0.1% RSS available)
- Nominal 3mV/V output, up to 100 mV/V with options
- Mechanical isolation prevents contact shifts
- Space and flight qualified
- Cleaning to MIL-STD-1246 available
- Multiple output option
- Input leads can be reversed or shorted without circuit damage
- 4500 psi secondary containment

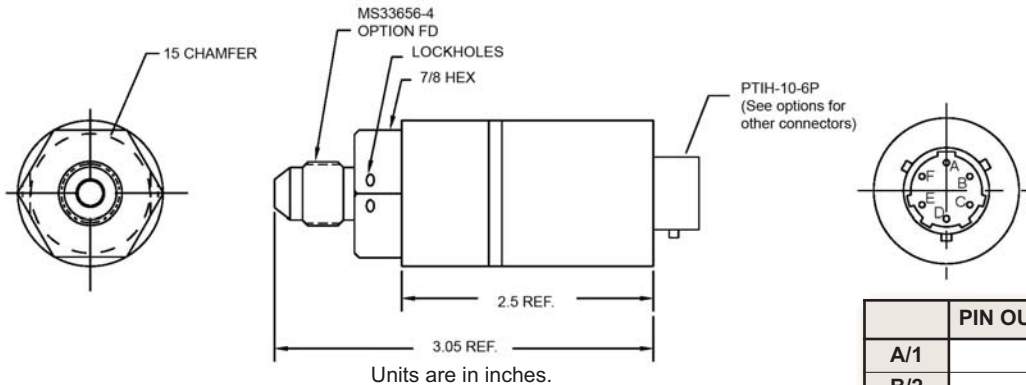
Heritage Includes:

- NASA
- Lockheed Martin (EELV)
- EELV
- Johns Hopkins APL
- Shuttle Upgrade
- Boeing
- TRW-ABL
- Dept. of Defense

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 9001:2000

Designed to: MIL-STD-810C&E
MIL-STD-461/462D&E



	PIN OUT FOR CONNECTOR
A/1	+ EXC.
B/2	+ SIGNAL
C/3	- SIGNAL
D/4	- EXC.
E/5	RTD (OPTIONAL)
F/6	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-7100.00 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	5 thru 20,000 PSIA, PSIG or PSISG options
FS Output at Rated Pressure	3 mV/V at 10 Vdc, other options available
Temperature Output	100 ohm 2 wire platinum RTD optional 1000 ohm 2 wire platinum RTD also available
Proof Pressure	1.5X with 25 psia min, 10X optional
Burst Pressure	2.0X (4500 psi secondary containment) (300 min)
Excitation or Input Voltage	3.5 to 15 Vdc
Non-Repeatability	<0.1% FSO
Non-Linearity	<0.2% FSO
Static Accuracy RSS	<0.3% FSO RSS, 0.1% optional
Error Band (all 5 parameters)	1.5% FSO, 0.75% optional
Pressure Medium (Wetted Materials)	316SS port, 15-5 sensor (Inconel, Hastelloy optional)
Temperature Compensation	-10°F to +180°F / -20°C to +80°C, expanded range optional
Operating/Environmental Temperature	-20°F to +190°F / -30°C to +90°C
Weight	4 oz. (some options may affect weight)
Pressure Port	MS 33656-4 (M)
Electrical Connector	PTIH-10-6P, MIL D38999 series III
Shunt Cal 80% Option	Internal
Vibration, Shock, Acceleration Design meets MIL-STD-810C&E requirement	25 Grms / 100G's Pk/Pk/ 3500 G Pyroshock / 12g
Response Time	Under 4 ms
Meets MIL-STD 461/462 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: 7100-1-RH-A-CA/FD/GH

OUTPUT

1 3 mV/V
7 2 mV/V
8 10 mV/V

PRESSURE RANGE (PSI)

PR 0-20	RM 0-1,000
PO 0-25	RO 0-1,500
PV 0-50	RR 0-2,000
PZ 0-100	RT 0-3,000
RB 0-150	RV 0-5,000
RD 0-200	RX 0-7,500
RF 0-300	RZ 0-10,000
RH 0-500	
RK 0-750	

PRESSURE TYPE

A Sealed Absolute, ref to vacuum
G gauge, ref to atmosphere
SG Sealed Gauge, ref to 14.7 psia

OPTIONS CONNECTORS

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

PORTS

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

MISC:

D Improved Static Accuracy to 0.1% and Total Error Band to 1.0%
GB Alternate full scale outputs
GD 10X Proof Pressure (may affect overall performance, not available with options GP, GF, GK)
GF Expanded process temperature range, -65 to 250° F (±2% FSO/100° F)
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

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