



# AEROSPACE DIFFERENTIAL PRESSURE TRANSDUCER

## Model 7400

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

- Ground Support Systems
- Ground & Engine Test
- Aircraft Systems / Avionics

### FEATURES:

- High accuracy and high repeatability
- Stainless steel housing and sealed electronics
- Mechanical stops for overload protection
- Cavity material options for special environments
- RTD temperature or shunt output option
- 2000 PSI line pressure, 10,000 lb option
- Low and high level outputs, 4-20 DCmA

### Heritage Includes:

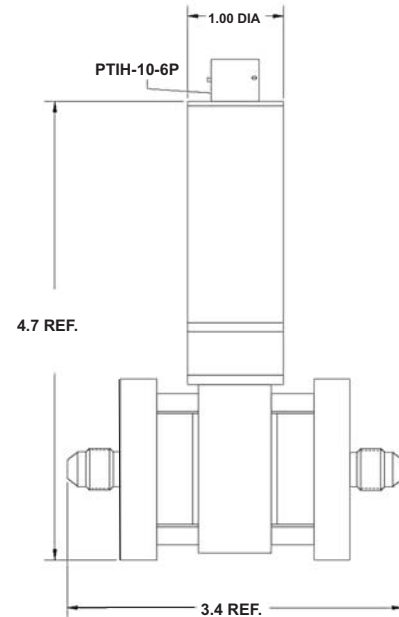
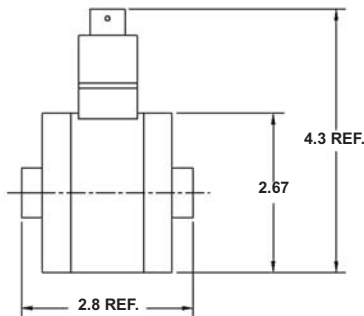
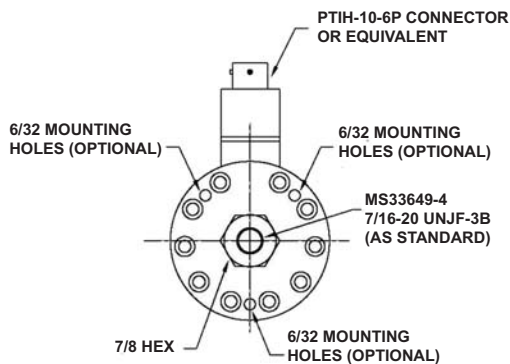
- NASA
- Lockheed Martin (EELV)
- EELV
- Johns Hopkins APL
- Shuttle Upgrade
- Boeing
- TRW-ABL
- Northrop Grumman



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

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



	4-20 mA PIN OUT	0-5 Vdc PIN OUT
A	+ EXC. / SIG. OUT	+ EXC.
B	NC	+ SIG. OUT
C	NC	- SIG. OUT
D	- EXC. / SIG. OUT	- EXC.
E	RTD (OPTIONAL)	RTD (OPTIONAL)
F	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.



# 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 5,000 PSID / bi-directional or uni-directional
FS Output at Rated Pressure	0-5 Vdc / 4-20 dcmA / 0-10 Vdc
Proof Pressure	1.5X pressure range (may be applied to either side)
Burst Pressure	2.0X pressure range (may be applied to either side)
Maximum Line Pressure	7500 PSI
Zero Shift	<1% FSO with line pressure applied
Excitation or Input Voltage	+18 thru +36 Vdc isolated
Non-Repeatability	<0.1% FSO
Non-Linearity	<0.1% FSO
Hysteresis	<0.2% FSO
Static Accuracy BFSL	0.2% FSO BFSL
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 +77°C -65°F to +250°F option
Weight	3.5 lbs. (some options may affect weight)
Pressure Port	MS 33656-4 (M) standard 7/16-20
Electrical Connector	PTIH-10-6P
Mechanical Stops	Optional for proof pressure > 1.5X pressure range
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: 7400-2-RH-D-CA/FD/GH

### OUTPUT

- 2 0-5 Vdc 4 wire hookup
- 3 4-20 dcmA
- 4 0-5 Vdc Isolated
- 5 0-10 Vdc 4 wire hookup
- 6 0-10 Vdc Isolated
- 9 0-5 Vdc 3 wire hookup
- 10 0-10 Vdc 3 wire hookup

### PRESSURE RANGE (PSI)

- |          |            |
|----------|------------|
| PJ 0-5   | RD 0-200   |
| PN 0-10  | RF 0-300   |
| PP 0-15  | RH 0-500   |
| PR 0-20  | RK 0-750   |
| PO 0-25  | RM 0-1,000 |
| PT 0-30  | RO 0-1,500 |
| PV 0-50  | RR 0-2,000 |
| PZ 0-100 | RS 0-3,000 |
| RB 0-150 | RV 0-5,000 |

### 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
- 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
- MS Bi-Directional

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