

DIGITALLY CORRECTED DIFFERENTIAL PRESSURE TRANSDUCER

Model 8400

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



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

Heritage Includes:

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

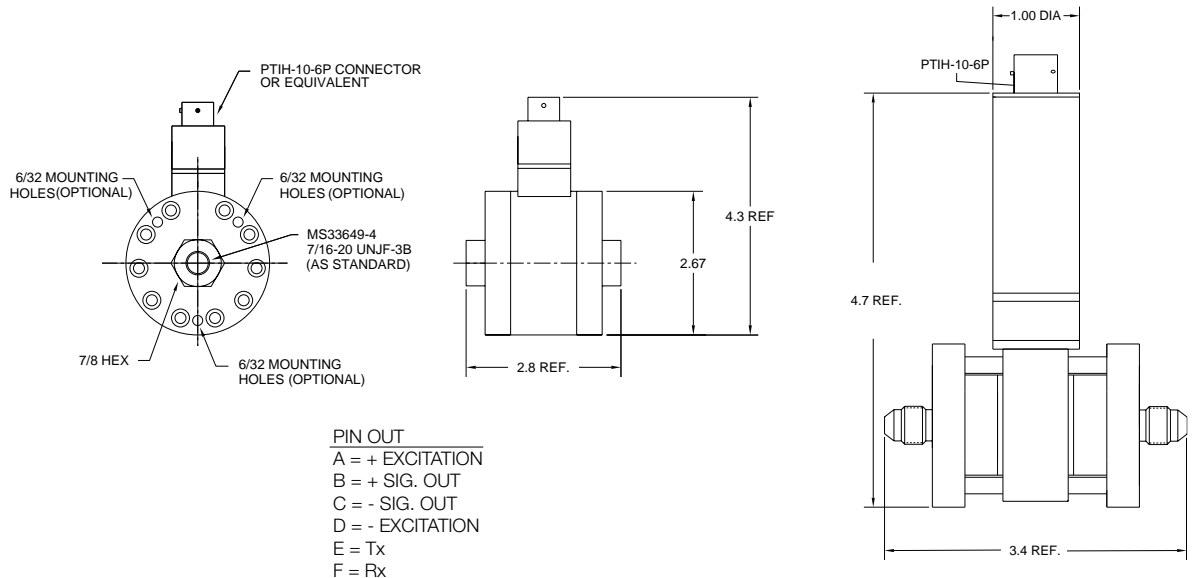
FEATURES:

- High accuracy, 0.08% RSS standard (0.05% RSS available)
- Stainless steel housing and sealed electronics
- Mechanical stops for overload protection
- Cavity material options for special environments
- 2000 PSI line pressure, 10,000 lb option
- 0-5 Vdc Isolated or 0-10Vdc Isolated digitally corrected output
- Serial port (RS-232) controlled zero & span adjustment

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



Units are in inches. See reverse side for specifications and ordering guide.

SPECIFICATIONS

These specifications are the standards to which the units are normally constructed. Alterations may be easily and readily accomplished by the standard modification code or by discussion with the factory. Traceability, customer ATP, additional testing and construction options are available. We invite your inquiry.

Ranges	5 thru 5000 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	2000 PSI may be applied to either port, 10,000 lb option
Zero Shift	< 1% FSO with line pressure applied
Excitation or Input Voltage	+10 thru +15 Vdc nonisolated, +18 thru +36 Vdc isolated
Reverse Polarity Protected	
Non-Repeatability	< 0.04% FSO
Non-Linearity	< 0.05% FSO
Hysteresis	< 0.05% FSO
Static Accuracy BFSL	0.08% FSO RSS, 0.05% optional
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	3.5 lbs. (some options may affect weight)
Pressure Port	MS 33656-4 (M) standard
Electrical Connector	PTIH-10-6P
Mechanical Stops	Optional for overload protection
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: 8400-4-RH-D-CA/FD/GH

OUTPUT

4 0-5 Vdc Isolated
6 0-10 Vdc Isolated

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	0-1000
PT	0-30	RO	0-1500
PV	0-50	RR	0-2000
PZ	0-100	RS	0-3000
RB	0-150	RV	0-5000

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)
(made with an adapter)

MISC:

D Improved Static Accuracy to 0.05%
GB Alternate Full Scale Outputs
GF Expanded Temperature Range, -65 to +250°F
(Compensated to ± 2% FSO/100°F)
GH 100% Internal Shunt
GK Inconel Pressure Cavity
GL Cleaning for oxygen service
GP Hastelloy Pressure Cavity
HM 10,000 psi Base Pressure Range Girdle. (Proof pressure
10X FSO or 10,000 psi, whichever is less. Burst pressure
15X FSO or 10,500 psi, whichever is less.)
ME Shunt Cal, 80% Internal
MS Bi-Directional