



# FLIGHT QUALIFIED HIGH LEVEL PRESSURE TRANSDUCER

## Model 7200 “B+” and “S” Class Electronics Available

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

### FEATURES:

- High accuracy, 0.3% RSS standard (0.1% RSS available)
- Proprietary mechanical isolation of the sensor for zero stability
- Cavity material options for extreme environments
- 10X overload option
- Isolated, 0-5 Vdc, 0-10 Vdc, 4-20 mAdc outputs
- 100 ohm or 1000 ohm platinum RTD temperature options
- 100 G's Pk/Pk (3500 G shock), 1 Hr / Axis qualified
- 24 Grms 1Hr / Axis (3500 G shock) qualified
- Over 1,000,000 continuous cycles
- “B+” and “S” class electronics available
- Cleaning to MIL-STD-1246 available

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

### Heritage Includes:

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



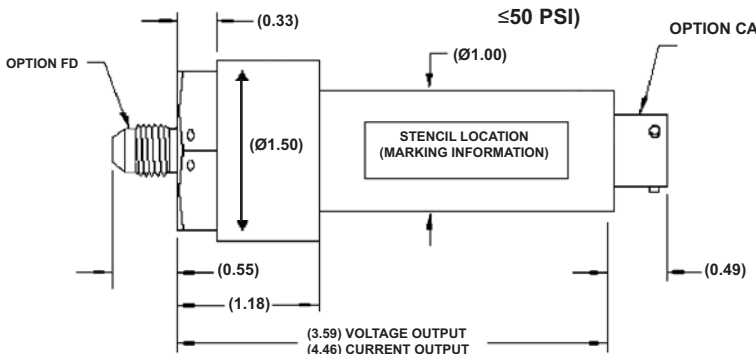
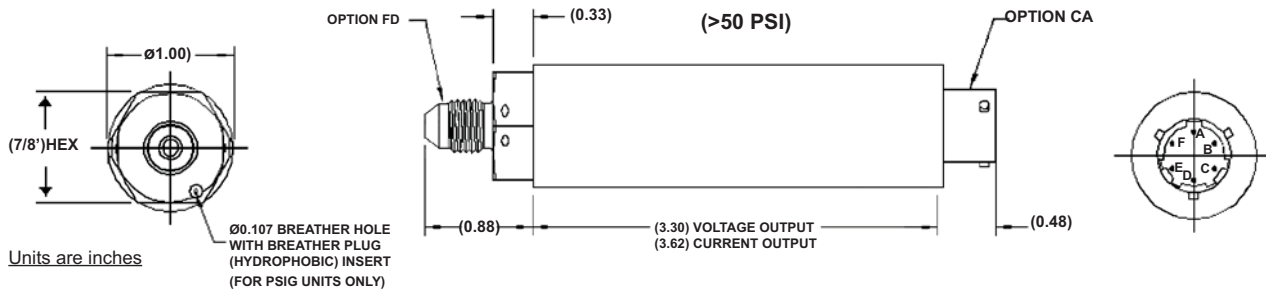
Shown at the left for pressure ranges 50 thru 15,000 psi, shown at the right for pressure ranges <50 psi.

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

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

SEE INSTALLATION MANUAL FOR PINOUT ASSIGNMENT BASED ON ELECTRONICS OPTIONS



	PIN OUT FOR OPTION 3	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)

- NOTES:
1. WEIGHT = 5.0 OZ WITH MODULE
  2. HIGH LEVEL 0-5 VDC OR 0-10 OUTPUT
  3. 5000 OHM GAUGES
  4. -65° TO +250°F OPTIONAL COMPENSATED TEMPERATURE RANGES

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.

<b>Ranges</b>	3 thru 15,000 PSIA, PSIG or PSISG options
<b>FS Output at Rated Pressure</b>	0-10 Vdc / 0-5 Vdc Isolated / 4-20 mA 2 Wires and Isolation Option
<b>Temperature Output</b>	100 ohm 2 wire platinum RTD optional 1000 ohm 2 wire platinum RTD also available
<b>Proof Pressure</b>	1.5X with (25 psia min) 10X optional
<b>Burst Pressure</b>	3.0X (4500 secondary containment) (300 min) 15X optional
<b>Excitation or Input Voltage</b> Reverse Polarity Protected	18V-36Vdc Unregulated
<b>Non-Repeatability</b>	<0.1% FSO
<b>Non-Linearity</b>	<0.2% FSO
<b>Hysteresis</b>	<0.2% FSO
<b>Thermal Error</b>	Zero $\pm$ 0.5%/100F Span $\pm$ 0.5%/100F
<b>Static Accuracy RSS</b>	<0.3% FSO RSS, 0.1% optional
<b>Error Band (all 5 parameters)</b>	1.3% FSO, 1.0% optional
<b>Pressure Medium (Wetted Materials)</b>	316SS port, 15-5 sensor (Inconel, Hastelloy optional)
<b>Temperature Compensation</b>	-10°F to +180°F / -20°C to +80°C, expanded range optional
<b>Operating/Environmental Temperature</b>	-20°F to +190°F / -30°C to +90°C
<b>Weight</b>	5 oz. (some options may affect weight)
<b>Pressure Port</b>	MS 33656-4 (M)
<b>Electrical Connector</b>	PTIH-10-6P, MIL D38999 series III
<b>Shunt Cal 80% / 100% Optional</b>	Internal $\pm$ 0.5% FS
<b>Vibration, Shock, Acceleration F</b> Design meets MIL-STD-810 requirement	25 Grms / 100G's pk/pk/3500 G Pyroshock /12g
<b>Response Time</b>	Under 4 ms
<b>Meets MIL-STD 461 EMI/RFI</b>	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: 7200-2-RH-A-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\* RH 0-500
- PN 0-10\* RK 0-750
- PP 0-15\* RM 0-1,000
- PR 0-20\* RO 0-1,500
- PO 0-25\* RR 0-2,000
- PV 0-50 RT 0-3,000
- PZ 0-100 RV 0-5,000
- RB 0-150 RX 0-7,500
- RD 0-200 RZ 0-10,000
- RF 0-300 SB 0-15,000

Contact factory for non-standard ranges  
\*Can dia. 1.5"

**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)
- FD MS33656-4, 7/16-20 (M)
- FJ 1/4" NPT (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 D, GP, GF, GK)
- GF Expanded process temperature range, -65 to 250°F ( $\pm$ 2.3% 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
- MR Non-Standard Wiring

2770 Long Road, Grand Island, NY 14072 USA

Tel. (716) 773-9300 Fax (716) 773-5019 E-mail:sales@gp50.com website:www.gp50.com