



Pressure, Level & Temperature Transmitters & Transducers

2770 Long Road, Grand Island, NY 14072 USA

Tel. (716) 773-9300 • Fax (716) 773-5019

sales@gp50.com • www.gp50.com

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, $\pm 0.3\%$ RSS Terminal ($\pm 0.1\%$ RSS available)
- 0-5 Vdc, 0-10 Vdc and 4-20 mA outputs (Isolated output options)
- “B+” & “S” class electronics available
- Up to 4,500 psi of secondary containment rating
- 10X overload option
- Temperature output options
- High shock & vibe rated
- Exotic wetted parts optional

Typical Applications:

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

Heritage Includes:

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



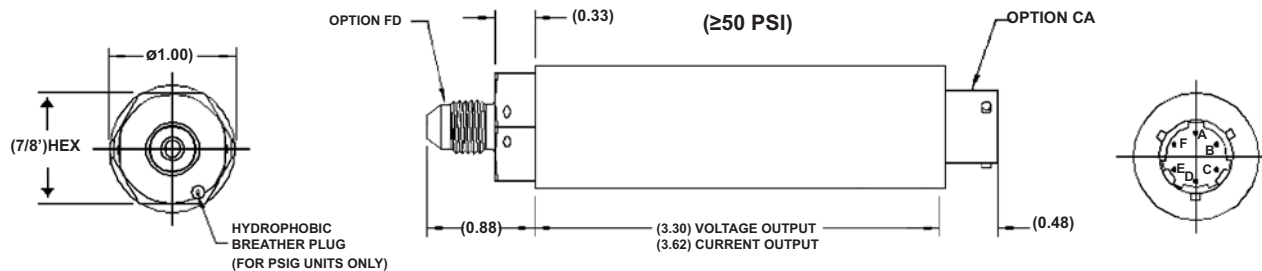
Shown at the left for pressure ranges 50 thru 15,000 psi, shown at the right for pressure ranges <50 psi.

GP:50 Aerospace transducers are manufactured and tested to the following MIL-STD & MIL-Spec to insure the highest quality:

- NIST Traceability and Calibration..... ANSI-Z540-1
- Workmanship J-001 / NASA 8739.3 standards
- Quality System ISO 9001:2008

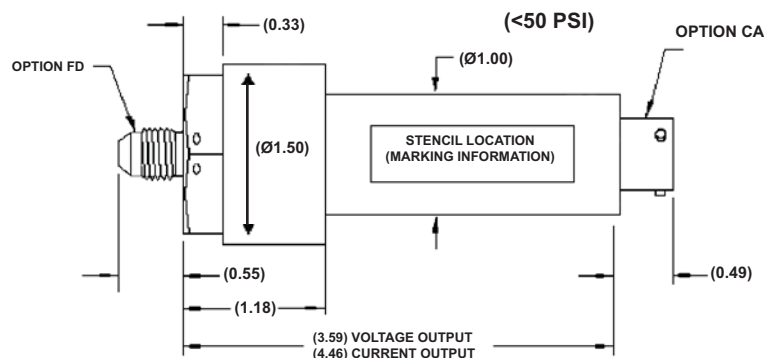
Transducer Design Meets: MIL-STD-810F All Methods
MIL-STD-461E

SEE INSTALLATION MANUAL FOR PINOUT ASSIGNMENT BASED ON ELECTRONICS OPTIONS



Units are inches

WIRING CODE



PIN	4-20 MA	4-WIRE MV/V & VDC ISOLATED	4- WIRE VDC NON-ISOLATED *	3-WIRE VDC
A/1	+EXC/SIG	+EXC	+EXC	+EXC
B/2	N/C	+SIG	+SIG	+SIG
C/3	N/C	-SIG	-SIG *	N/C
D/4	-EXC/SIG	-EXC	-EXC *	-EXC/-SIG
E/5	N/C	N/C	N/C	N/C
F/6	N/C	N/C	N/C	N/C

* COMMONS JUMPED

STANDARD WIRING.
OPTIONS MAY AFFECT PIN OUT

A5SL-7200.00 Rev F

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

2770 Long Road, Grand Island, NY 14072 USA

Tel. (716) 773-9300 • Fax (716) 773-5019

sales@gp50.com • www.gp50.com

Specifications reflect standard product, other improved performance / mechanical / electrical / options available, consult factory for more information. Modifications may alter specs / space qualification.

Ranges	0-5 thru 0-15,000 PSIA, PSIG, PSIV or PSISG options
Proof Pressure	1.5 X with (25 psia min.) 10 X optional
Burst Pressure	3.0 X (15 X optional)
Secondary Containment Rating	4,500 psi for ranges ≥ 50 psi, 2,400 psi for ranges < 50 psi
Zero Balance / Span Balance	$\pm 0.5\%$ FSO Each
Static Accuracy RSS (Non-linearity, Hysteresis, Non-Repeatability)	$< \pm 0.3\%$ FSO RSS ($< \pm 0.1\%$ FSO optional)
Non-Repeatability	$< \pm 0.1\%$ FSO
Non-Linearity (Terminal)	$< \pm 0.2\%$ FSO
Hysteresis	$< \pm 0.2\%$ FSO
Thermal Error	Zero $\pm 0.5\%$ FSO / 100° F Span $\pm 0.5\%$ FSO / 100° F
Total Error Band (all 5 parameters)	$\pm 1.3\%$ FSO ($\pm 1.0\%$ FSO optional)
Response Time	< 4 ms
Excitation Voltage	18V-36 Vdc (other excitations available)
Input Current	4 -Wire Isolated Vdc Options - 45mA nominal / Non-Isolated Vdc -10mA nominal
Output Current (VDC Units)	2 mA max for $< 0.1\%$ FSO attenuation
Load Impedance (4-20mA Units)	1,350 ohms max. at 36 Vdc, 750 ohms max. at 24 Vdc, 300 ohms max. at 18 Vdc
Temperature Limits Compensated Operating	-10°F to +180°F (-23°C to +82°C) -20°F to +190°F (-29°C to +88°C)
Random Vibration	> 75 G RMS (20 Hz to 2,000 Hz)
Sinusoidal Vibration	7.5 G's from 5 Hz to 100 Hz
Shock	$> 4,000$ G's
Constant Acceleration	5 G's for 30 minutes
Wetted Parts	316 SST & 15-5 sensor (Inconel, Hastelloy optional)
Pressure Port	MS 33656-4 (M) standard
Electrical Connector	PTIH-10-6P (MIL D38999 series) standard
Weight	4 oz. (some options may affect weight)
Design meets MIL-STD-810F	25 Grms / 100 G's pk/pk/3500 G Pyroshock / 12g

ORDERING GUIDE:

MODEL	OUTPUT	RANGE	PRESSURE TYPE	OPTIONS
●	+	+	+	●/●/●

Some options will affect dimensions, consult factory if important.
Use the following codes to identify desired item.

Example: 7200-2-RH-A-CA/FD/GH

OUTPUT

- 2 0-5 Vdc (Non-isolated, 4 wire hookup)
- 3 4-20 mA (Recommended for long cable runs)
- 4 0-5 Vdc (Isolated, 4 wire hookup)
- 5 0-10 Vdc (Non-isolated, 4 wire hookup)
- 6 0-10 Vdc (Isolated, 4 wire hookup)
- 9 0-5 Vdc (3 wire hookup)
- 10 0-10 Vdc (3 wire hookup)

Isolated = Input isolated from Output signal

PRESSURE RANGE (PSI) Contact factory for non-standard ranges

* CAN DIA 1.5"

PJ	0-5 *	RB	0-150	RR	0-2,000
PN	0-10 *	RD	0-200	RT	0-3,000
PP	0-15 *	RF	0-300	RV	0-5,000
PR	0-20 *	RH	0-500	RX	0-7,500
PO	0-25 *	RK	0-750	RZ	0-10,000
PV	0-50	RM	0-1,000	SB	0-15,000
PZ	0-100	RO	0-1,500		

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 compensated 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 Platinum RTD, 0.0385 alpha
- JB 1000 ohm 2 wire Platinum RTD, 0.0385 alpha
- ME Shunt Cal, 80% Internal
- MR Non-Standard Wiring