



**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

**DUAL TEMPERATURE & PRESSURE TRANSDUCER**

**Model 7880**

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

**FEATURES:**

- High accuracy, 0.3% RSS standard (0.1% available)
- -100°F to +250°F standard medium
- Lightweight, 8 ounces
- Hydrogen and LOX compatibility
- Custom probe lengths, 1.55" standard
- Designed to meet vibration and shock per MIL-STD-810
- 2 second time response for temperature, 0.5 sec optional
- 100 ohm platinum RTD standard

**Typical Applications:**

- High Vibration Environments
- Manifolds, Propulsion Systems
- Military and Defense Applications

**Heritage Includes:**

- NASA
- Lockheed Martin
- EELV
- Johns Hopkins
- Shuttle Upgrade
- Boeing
- TRW-ABL
- Arkin Industries
- United Defense

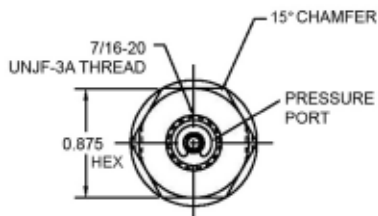
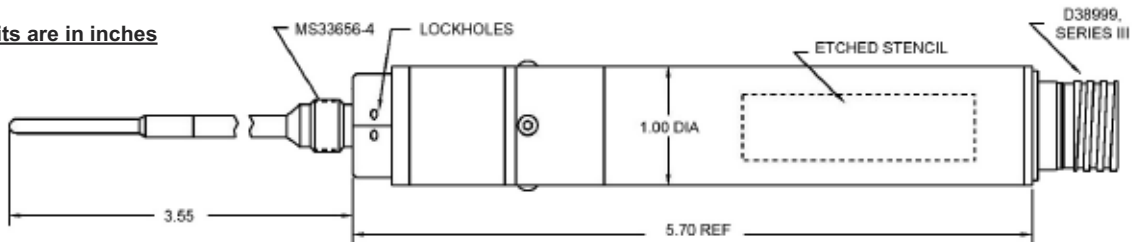


All GP:50 Aerospace pressure transducers are manufactured and tested to the following MIL-STD and MIL-Spec standards to insure the highest quality assurance:

- NIST Traceability and Calibration..... MIL-STD-45662A
- Workmanship ..... J-001 / NASA 8739.3 standards
- Quality System ..... ISO 9001:2008

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

Units are in inches



**WIRING CODE**

	4-20 mA PIN OUT	Vdc PIN OUT
A	+ EXC./SIGNAL OUT	+ EXC.
B	NC	+SIGNAL OUT
C	NC	-SIGNAL OUT
D	- EXC./SIGNAL OUT	- EXC.
E	SHUNT OPTION	SHUNT OPTION
F	SHUNT OPTION	SHUNT OPTION

A5SL-7880.00 Rev B

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.



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

<b>Ranges</b>	15 thru 15,000 PSIA, PSIG or PSISG options
<b>FS Output at Rated Pressure</b>	0-5 Vdc / 4-20 dcmA / Isolated ptions
<b>Temperature Output</b>	100 ohm 2 wire platinum RTD standard 1000 ohm 2 wire platinum RTD optional
<b>Excitation or Input Voltage Reverse Polarity Protected</b>	18 to 36 Vdc
<b>Non-Repeatability</b>	<0.1% FSO
<b>Non-Linearity</b>	<0.2% FSO
<b>Hysteresis</b>	<0.2% FSO
<b>Static Accuracy RSS (Pressure)</b>	<0.3% FSO RSS, 0.1% optional
<b>Static Accuracy (Temperature)</b>	3% FSO, 1% optional
<b>Pressure Medium (Wetted Materials)</b>	316SS (Inconel, Hatelloy, Monel optional)
<b>Operating/Environmental Temperature</b>	-100°F to +250°F / -75°C to +120°C
<b>Weight</b>	8 oz. (approx.)
<b>Electrical Connector</b>	MIL PTIH-10-6P, D38999 series III
<b>Response Time</b>	< 4ms pressure, 2 seconds for temperature (0.5 sec optional)
<b>Meets MIL-STD-461/462 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: 7880-2-RH-G-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

#### RANGE (PSI)

- PP 0-15            RK 0-750
- PR 0-20            RM 0-1000
- PO 0-25            RO 0-1500
- PV 0-50            RR 0-2000
- 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            SB 0-15,000

Contact factory for non-standard pressure ranges.

#### 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 D38999/27YB98N
- DB D38999/27YA35PN

##### PORTS

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

##### MISC:

- D Improved Accuracy to 0.1% Pressure, and 1% Temperature
- GB Alternate Full Scale Outputs
- GH 100% Internal Shunt
- GK Inconel Pressure Cavity
- GL Cleaning for oxygen service
- GP Hastelloy Pressure Cavity
- QU Monel Pressure Cavity
- JB 1000 ohm 2 wire RTD
- ME Shunt Cal, 80% Internal
- QV Improved response time to 0.5 seconds