



# 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

## TEMPERATURE TRANSDUCER

### Model 7800

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

#### FEATURES:

- -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, 0.5 sec optional
- 100 ohm platinum RTD standard

#### Typical Applications:

- High Vibration Environments
- Extreme or Harsh 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

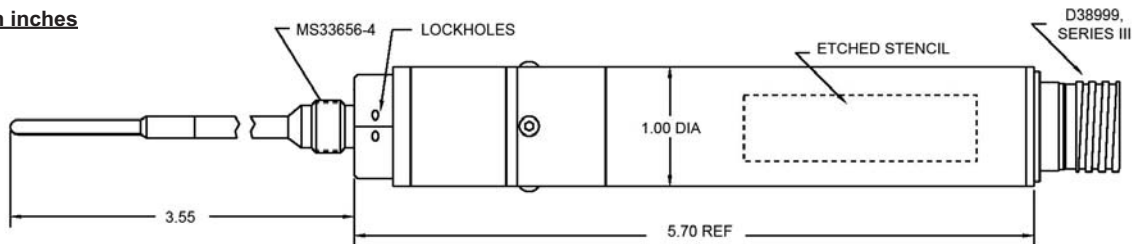


All GP:50 Aerospace pressure transducers are manufactured and tested to the following MIL-STD and MIL-Spec standards to insure the highest quality assurance:

- 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
<b>A</b>	+ EXC./SIGNAL OUT	+ EXC.
<b>B</b>	NC	+SIGNAL OUT
<b>C</b>	NC	-SIGNAL OUT
<b>D</b>	- EXC./SIGNAL OUT	- EXC.
<b>E</b>	SHUNT OPTION	SHUNT OPTION
<b>F</b>	SHUNT OPTION	SHUNT OPTION

A5SL-7800.00 Rev A

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>	-100°F to +250°F / -75°C to +120°C
<b>FS Output</b>	3 mV/V at 10 Vdc / 0-5 Vdc / 4-20 dcmA / Isolated pions
<b>Temperature Sensor</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>Static Accuracy RSS</b>	3% FSO RSS, 1% optional
<b>Weight</b>	8 oz. (approx.)
<b>Electrical Connector</b>	MIL PTIH-10-6P, D38999 series III
<b>Response Time</b>	2 seconds, (0.5 sec optional)
<b>Meets MIL-STD-461/462 EMI/RFI</b>	Some options will affect EMI/RFI rating
<b>Flex Tubing</b>	18" Armored Capillary Tube
<b>System Pressure</b>	Designed for up to 2000 psi sytem pressure. Higher system pressure designs available, contact factory.

### ORDERING GUIDE:

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

MODEL	OUTPUT	OPTIONS
●	+	●

Example: 7800-2-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

#### OPTIONS

##### CONNECTORS

- CA PTIH-10-6P Bendix
- CI D38999/27YB98N
- DB D38999/27YA35PN

##### PORTS

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

##### MISC:

- D Improved Static Accuracy to 1%
- GB Alternate Full Scale Outputs
- GH 100% Internal Shunt
- GL Cleaning for oxygen service
- JB 1000 ohm 2 wire RTD
- ME Shunt Cal, 80% Internal
- QV Improved response time to 0.5 seconds

##### FLEX TUBING:

- GT 30" Armored Capillary Tube
- HS 9" Armored Capillary Tube
- HV 24" Armored Capillary Tube
- HY 12" Armored Capillary Tube
- MT Non-standard Armored Capillary Tube (50" max)