

# TEMPERATURE TRANSDUCER

## Model 7800

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



- 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

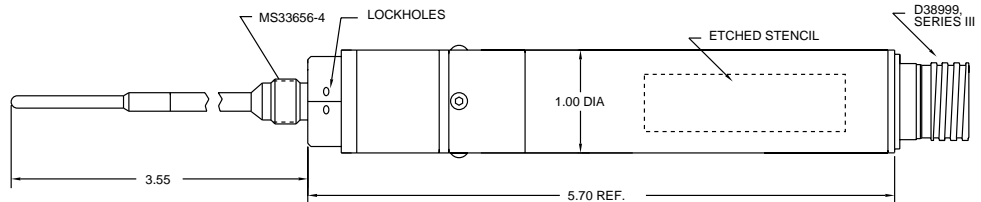
### FEATURES:

- -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

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

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



Units are in inches.

4-20 mA PIN OUT	Vdc PIN OUT
A = + EXCITATION / SIG. OUT	A = + EXCITATION
B = N / C	B = + SIG. OUT
C = N / C	C = - SIG. OUT
D = - EXCITATION / SIG. OUT	D = - EXCITATION
E = SHUNT OPTION	E = SHUNT OPTION
F = SHUNT OPTION	F = SHUNT OPTION

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	-100°F to +250°F / -75°C to +120°C
FS Output	3 mV/V @ 10 Vdc / 0-5 Vdc / 4-20 dcmA / Isolated options
Temperature Sensor	100 Ohm 2 wire platinum RTD standard, 1000 Ohm 2 wire platinum RTD optional
Excitation or Input Voltage	18 to 36 Vdc
Reverse Polarity Protected	
Static Accuracy RSS	3 % FSO RSS, 1% optional
Weight	8 oz. (approx.)
Electrical Connector	MIL PTIH-10-6P, D38999 series III
Response Time	2 seconds, 0.5 sec optional
Meets MIL-STD-461/462 EMI/RFI	Some options will affect EMI/RFI rating
Flex Tubing	18" Armored Capillary Tube
System Pressure	Designed for up to 2000 psi system 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 D38999/27YB98PN
- 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)