



# CRYOGENIC TEMPERATURE TRANSDUCER

## Model 7710

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

### FEATURES:

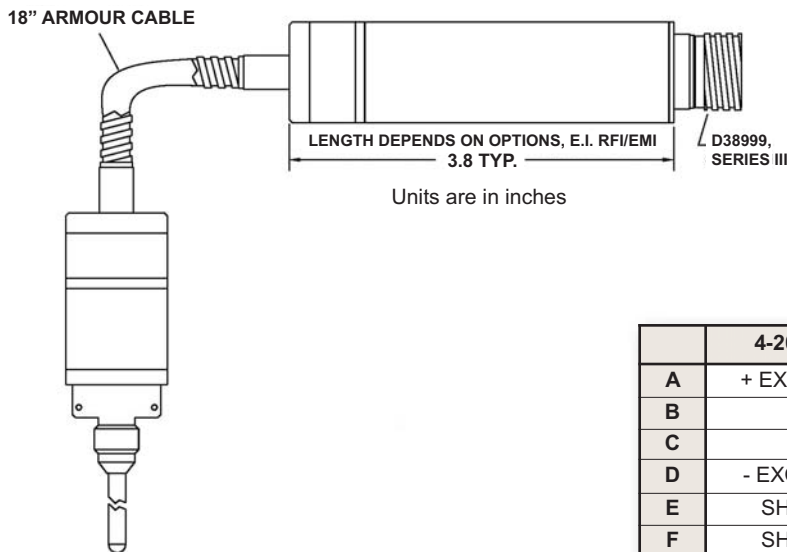
- -320°F to +70°F standard medium
- High accuracy, 3% FSO standard (1% available)
- Lightweight, 8 ounces
- Hydrogen and LOX compatibility
- Custom probe lengths, 1.55" standard
- Designed to meet vibration and shock per MIL-STD-810
- 2 second time response, 0.5 sec optional
- 100 ohm platinum RTD standard



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



|   | 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 |

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>   | -320°F to +70°F / -200°C to +20°C  |
| <b>FS Output</b>  | 3 mV/V at 10 Vdc / 0-5 Vdc / 4-20 dcmA Isolated options  |
| <b>Temperature Sensor</b>   | 100 ohm 2 wire platinum RTD standard,<br>1000 ohm 2 wire platinum RTD optional                             |
| <b>Excitation or Input Voltage<br/>Reverse Polarity Protected</b> | 18 to 36 Vdc   |
| <b>Static Accuracy</b>  | 3% FSO 1% optional   |
| <b>Weight</b>   | 8 oz. (approx.)  |
| <b>Electrical Connector</b>                                       | MIL PTIH-10-6P, D38999 series III optional   |
| <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 system pressure.<br>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: 7710-2-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)

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