



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

EXTREME HIGH TEMPERATURE TRANSDUCER

Model 7770

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

FEATURES:

- +70°F to + 700°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 for temperature, 0.5 sec optional
- 100 ohm platinum RTD standard

Typical Applications:

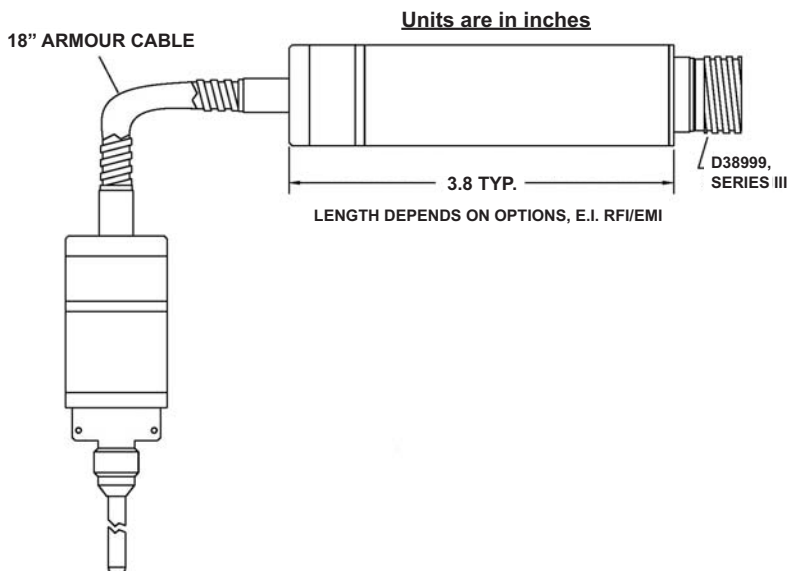
- High Vibration Environments
- Extreme or Harsh Environments
- Manifolds, Propulsion Systems
- Military and Defense Applications



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



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-7770.00 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.

| | |
|---|---|
| Ranges | +70°F to +700°F/ +20°C to +370°C |
| FS Output | 3 mV/V at 10 Vdc / 0-5 Vdc / 4-20 dcmA / Isolated ptions |
| Temperature Sensor | 100 ohm 2 wire platinum RTD standard 1000 ohm 2 wire platinum RTD optional |
| Excitation or Input Voltage Reverse Polarity Protected | 18 to 36 Vdc |
| Static Accuracy | 3% FSO 1% optional |
| Weight | 8 oz. (approx.) |
| Electrical Connector | MIL PTIH-10-6P, D38999 series III optional |
| 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 sytem pressure. |

ORDERING GUIDE:

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

| MODEL | OUTPUT | OPTIONS |
|-------|--------|---------|
| ● | + | ● |

Example: 7770-2-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)