

EXTREME HIGH-TEMPERATURE TRANSDUCER



Extreme High-Temperature Transducer

MODEL 7770

FEATURES:

- Rated to +500 °F (+260 °C) process temperatures
- Designed to 2000 PSI (138 BAR) system pressure
- Lightweight, 8 oz. (0.2 kg)
- Hydrogen and LOX compatibility
- Up to 0.5 second temperature response time
- Platinum RTD
- Remote electronics via stainless steel armored flex

APPLICATIONS:

- High temperature gas measurement
- Propulsion Systems
- Military and Defense Applications

PRODUCT OVERVIEW:

The Model 7770 Series from GP:50 is a family of extreme high-temperature transducers, offering consistent measurement accuracy in temperatures up to +500 °F (+260 °C). Their lightweight, all stainless steel construction incorporates on-board isolated electronics, which are remotely mounted via stainless steel armor jacketed flex tubing. The onboard electronics are designed to offer a high-level 4-20 mA, 0 to 5 Vdc, or 0 to 10 Vdc output. Direct transducer mounting can also provide greater process media measurement accuracy. The high-reliability of the Model 7770 Series has been field-proven over 25 years and hundreds of applications.

FIELD OPTIONS:

- Custom temperature probe lengths
- 0 to 5 Vdc, 0 to 10 Vdc (3-wire and 4-wire isolated or (non-isolated or 4-20 mA output available)
- Cleaned for oxygen service
- Alternate remote electronic cable lengths

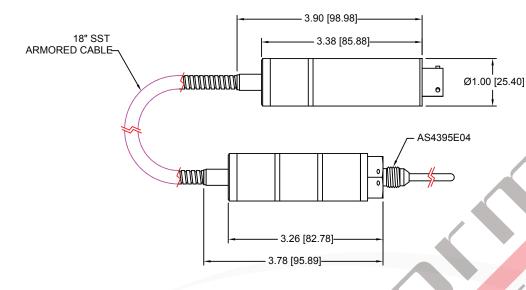




GP:50 MODEL 7770

DIMENSIONAL DRAWING

All dimensions are in inches (mm)



STANDARD WIRING

PIN	VDC	4-20mA
A/1	+EXC	+EXC/SIG
B/2	+SIG	N/C
C/3	-SIG	N/C
D/4	-EXC	-EXC/SIG
E/5	N/C	N/C
F/6	N/C	N/C

REFERENCE SPECIFICATIONS

ELECTRICAL

- Output Signal: 0 to 5 Vdc, 0 to 10 Vdc (isolated or non-isolated) and 4-20 mA
- Supply Voltage: 18 to 36 Vdc
- Temperature Output: 100Ω 2-wire platinum RTD standard (Optional 1,000 Ω 2-wire platinum RTD)
- Response Time: <2 sec (optional 0.5 sec)
- Connection: MIL PTIH-10-6P (optional D38999 series III)
- Circuit Protection: meets MIL-STD-461/462 EMI/RFI, some options will affect EMI/RFI rating

MATERIALS OF CONSTRUCTION

- Probe: 17-4 stainless steel
 - (Optional Inconel, Hastelloy and Monel)
- Housing: 316 stainless steel
- Flex Tubing: 18" armored capillary tube

ACCURACY

Static Accuracy: $\pm 3\%$ FSO (Optional +1% FSO)

MECHANICAL

- Process connection: AS4395E04 pressure port
- Probe Length: 1.55" (custom lengths available)

TEMPERATURE RANGES

+70 °F to +500 °F (+20 °C to +260 °C)

SYSTEM PRESSURE

Up to 2000 PSI (138 BAR)

OPTIONAL

- NIST Traceability/Calibration: ANSI-Z540-1
- Workmanship: J-001/NASA 8739.3 standard
- Quality System: ISO 9001:2008

All specifications are for reference purposes only. In the interests of continuous product improvement, all specifications are subject to change without notice. Please contact GP:50 for assistance with your application.

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